ATTITUDES AND BEHAVIOURS OF MEDICAL STUDENTS TOWARDS E-LIBRARY UTILIZATION AT EKITI STATE UNIVERSITY, ADO EKITI, NIGERIA

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Abstract

The study investigated the attitude and behaviour of medical students towards e-library utilization in College of Medicine, Ekiti State University, Ado-Ekiti, Nigeria. The study adopted descriptive research of the survey type. The population of the study consisted of 245 medical students of the institution, with 155 respondents selected as sample size based on Yamane (1964) model. Instrument for data collection was self-designed questionnaire, well validated and the internal consistency was examined using Cronbach’s alpha that yielded overall reliability coefficient of 0.84. Data collected were analyzed using frequency count and percentage to answer all the research questions while the hypotheses were analyzed using Pearson’s Product Moment Correlation at $p < 0.05$ level of significance. The findings revealed that e-resources were fairly available in college of medicine library, and the level of respondents’ awareness was moderate, while the attitude of the respondents towards utilization of e-library was positive, and behavior vary among students. Also, there are significant positive relationships between the availability, awareness and utilization of e-library resources; but there is no significance relationship between medical students’ attitude and utilization of e-library. The study concluded that medical students’ attitudes and behaviour sometimes influence medical students’ e-Library utilization. The study recommended that medical students should possess information competency skills to be able to use the computer and other related technological infrastructure for e-library utilization.

Keywords: e-library, resources availability, utilization, attitude, medical students
Introduction
The growth and impact of the information technology industry on the daily life of human beings has been immense, especially on education and training. It is an inseparable part of many individual lives and a promising medium for improving human knowledge. The types of e-learning applications and processes are internet-based learning, computer-based learning, virtual classrooms and digital collaboration. Content is delivered by the internet, intranet/ extranet, audio or video tape, satellite television (TV), and compact disc read-only memory (CD-ROM). This learning may be self-paced or instructor-led, such as media in the form of text, image, animation, and streaming video and audio.

Library’s collection comprises printed document as well as electronic information resources. The electronic documents can be stored, accessed, and delivered as and when required; therefore the services of libraries are not confined within the four walls but are integrated into local, regional, national, and international networks. The use of e-resources has been increasing rapidly across the world and users are increasingly expected to use these resources in order to fulfill their requirements. Herman (2015) pointed out that integration of electronic media into academic work is progressively harnessing the new technologies to scholarly information activity of the medical students in an increasingly electronic environment. According to Enakrire and John (2016), the dynamics of globalization, plus the introduction of information and communication technologies (ICT) resulted in a tidal wave of information that has, in many cases, overwhelmed many countries around the world.

Ekiti state university (EKSU) medical library is a relative young library established in 2013, to aid the development of the college of medicine and accreditation of its programmes. It combines classical facilities with modern technology. The university medical library has an active role in enhancing the academic achievements of lecturers and students, and majority of the library users are medical students. The library subscribes to medical databases such as HINARI, Free Medical Journals.com, Freefulltext.com, and so on. Most accesses to the virtual and offline resources of the library are taking place during the academic year.

Rusell (2012) explained that e-library as a means of easily and rapidly accessing books, archives and images of various types are now widely recognized by commercial interests and public bodies alike. Traditional libraries are limited by storage space, Digital library have the potential to store much more information, simply because digital information requires very little physical space to contain it. An important advantage to digital conversion is increased accessibility to users. They also increase availability to individuals who may not be traditional patrons of a library, due to geographic location or organizational affiliation. Elibrary is an online database of digital objects that can include text, still images, audio, video, or other digital media formats. Objects can consist of digitized content like print or photographs, as well as originally produced digital content like word processor files or social media posts. In addition to storing content, digital libraries provide means for organizing, searching, and retrieving the content contained in the collection. Digital libraries can vary immensely in size and scope, and can be maintained by individuals or organizations. The digital content may be stored locally, or
accessed remotely via computer networks. These information retrieval systems are able to exchange information with each other through interoperability and sustainability (Koehler, 2013).

The electronic library has become increasingly substantial components of academic libraries. This is due to the growing development of information technology and its impact on collection development policies in Libraries (Nataranjan & Santhi, 2012). In view of this, libraries have transformed into digital and virtual libraries where books, journals and magazines have changed into ebooks, e-journals, and e-magazines (Akpojotor, 2016). This has increased the global dissemination of information such that, e-journals, e-books, e-databases, web resources, e-serials amongst others are easily accessible in remote areas. The content of libraries is no more restricted to traditional printed resources such as books, magazines or journals but to online resources and other electronic-driven materials (Yebowaah & Plockey, 2017). The use of electronic library resources does not however take the place of printed resources but facilitates it through access to large stock of library materials (Okazie, 2016). The change that has occurred in the world of ICT is what has shifted the content of libraries resources from printed information to online information resources. Electronic resources give new dimension to learning and have affected education in many ways (Bajpai et al. 2016). In spite of the role of electronic resources; it appears that users of Tamale Technical University library seem not aware of the existence of e-resources in the library and its services have not been fully utilized. This has grossly affected effectiveness of research activities and thus requires improvement in terms of awareness creation to sustain adequate usage.

Electronic library resources facilitate an effective provision of information to all calibre of users, promote collaborative efforts in research; using communication network tools and encourages generation and dissemination of knowledge. The use of electronic information resources have been carried out by students, research scholars, and teachers of various institutions all over the world (Olatokunbo, 2012). They have enhanced accessibility, increased usability, effectiveness and established new ways for information users in using information for more productivity in their endeavors and offer a multitude of advantages to the readers as well as to the knowledge seekers, enabling them to get satisfied with thirst of information needs. Electronic information resources like e-books, digital libraries, online journal, magazine, e-learning tutors, on line test e-journals, e-discussions, e-news, data archives and e-mail on line chatting can be accessed through computers or other electronic devices directly connected to the computer such as a CD-ROM drive or remotely via network such as the internet. Having access to relevant resource is highly essential for a user, who is a significant component in an information system. Recent global advances in communications infrastructure, digital media, network services, and electronic commerce present transformational opportunities and fundamental challenges for libraries. Developments in these areas appear to offer opportunities for increasing and enhancing library service offerings, reducing costs, and for improving organizational performance (Young, 2014). Akpojotor (2016) opined that electronic resources solved storage problems and controls the flood of information by eliminating physical limitations of storing data, access, retrieval and distribution of information to several users within the shortest possible time.
The rapid growth of new technologies has changed the information seeking behaviour of users and reduced the cost and time of searching for information in the library. Electronic information resources can be defined as the electronic representation of information which can be accessed via electronic system and computer network (Johnson, Hurd, Blecic & Weller, 2012). The study further buttress that electronic information sources can be seen as the most recent development in academic libraries and that they are available in various forms like e-books, digital libraries, online journal magazine, e-learning tutors and online test. Application of information communication technology (ICT) in libraries has given enough opportunities for the provision of eresources and its dissemination to suit the needs of its patrons (Nataranj & Santhi, 2012).

Medical students are acquiring university education and training for lifelong learning to serve as information providers and medical practitioners. Hence it is vital for medical students to acquire information literacy competencies to enable them to discern when and why information is required, where to find it, how to evaluate, use and communicate information ethically and legally. Lifelong learning will help a medical student to have a profound understanding of how and where to find information, and also the ability to evaluate if that information is important or not, and how best that information can be integrated into solving the problem. Information literacy enables students’ to get used to and comprehend course content and widen their study further than the classroom, this will make students become more autonomous and will help them to take good control over their own learning activities. Nevertheless, medical students need knowledge and competence to explore the information resources of the university library. Due to the importance of technology in the provision of information in the 21st Century, information literacy can no more be considered or be defined without taking into consideration technology literacy. For individuals to function in an information rich, technology infused world, it is imperative, for everyone to be ICT literate because Information and Communication Technology (ICT) literacy will empower and allow individual or groups and indeed medical students to work productively in their search for information (Sahak & Saad, 2012).

Aguolu & Aguolu (2012) argue that availability should be viewed from both national and instructional levels. They attribute the lack of availability of information resources to the steady proliferation of universities: federal, state, and private, along with increases in students and faculty, and the diversification of courses and academic and research programs, without adequate information resources to meet the actual and information needs. A study by Marama & Ogunrombi cited in Ankrah & Atuase (2018) confirms high unavailability of library and information science (LIS) collections in most Nigerian university libraries, which had a negative effect on the use of information resources in the libraries studied. Unomah cited by Quadri (2014) conducted a study at the former Bendel State University to determine the unavailability rate in the library and to find out its causes. The survey revealed an unavailability rate of 34 percent. A similar study by Okiy (2014) showed an unavailability rate of only 7.5%. Iyoro (2014) found that availability of serials at the University of Ibadan was 94 percent, with 242 of 256 respondents agreeing that serial publications are available and readily accessible. The provision of electronic information resources varies among disciplines. They are most available in the
sciences and medicine and least in the social science and humanities.

Torma and Vakkari (2014) observed that the availability of relevant electronic resources affects how frequently scholars use them. Rosenberg (2015) noted that access of Nigerian university libraries to the EBSCO Host online database was first made possible by NULIB Consult, which is a consortium for the Committee of University Librarians of Nigerian Universities (CULNU). The study observed that electronic information resources are better provided through consortia efforts the main benefits are that of rationalization and cost savings. They observed that a consortium can comprise both large and small institutions and both public and academic libraries through a wide area network (WAN). This observation is in agreement with the position of CULNU, which formed a consortium, NULIB, through which Nigerian university libraries subscribe to electronic resources and services, among many of its other activities.

Many studies have been undertaken on electronic databases in the areas of awareness, usage, relevance, access, preference, orientations and training, and evaluation among others. It is found in the literature that there are sometimes a gap between awareness and usage of digital resources. Either users are aware of the resources and use them, users are aware and do not use them, or users they are unaware of them and therefore do not use them. Studies by Nisha and Ali, (2013), found that clients were aware of and used the edatabases available to them. For example, Chirra and Madhusudhan (2012) in a survey on use of electronic journals by doctoral research scholars of Goa University, India, revealed that all (100%) the respondents were aware of the e-journals of the Consortium and accessed them. Studies by Okello-Obura (2010) on the other hand found that respondents were not aware of most of the e-resources provided for them in their respective institutions and therefore affected their usage. Manda (2005) for example reported that PERI resources provided in academic and research institutions in Nigeria were underutilized because potential users were not aware of the resources due to lack of publicity. A deduction from a study by Anaraki and Babalhavaei (2013) was that when students are not aware of the existence of e-resources in their library system they tend to use general search engines to meet their information needs. They found that only 16% of the medical students in Iran were well acquainted with the e-resources of the integrated digital library (IDL) portal provided for them. Ahmed (2013b) also found that postgraduate students from Bangabandhu Sheikh Mujib Medical University (BSMMU) and undergraduate students from Bangladesh University of Engineering and Technology used free electronic resources more than university subscribed resources because of lack of awareness of subscribed ones.

Other studies by Asemi and Riyahiniya (2007), argued that though awareness may lead to usage of a database, this is not always the case. It could happen that users’ awareness level may be higher than usage. They reported that awareness level of their respondents about online resources was more than usage. For example, Okello-Obura (2010) found that whilst 23.2% were aware of Medline database only 17% used it. Also whilst 60.8% were aware of HINARI, only 38.8% used it. Swain (2010) pointed out that awareness could be influenced by the interest and exposure that a user or a student has in the database. In his study of students’ keenness on the use of e-resources in the Business School of Orissa, India, he found that 62.5% of students were aware of EBSCO, 52.6% aware of Emerald and
below 40% were aware of other databases. Libraries can have the greatest number of resources but if patrons are not using them they are worth nothing and a waste of resources. It is for this reason that usage of e-databases is critical in relation to its provision. Various studies have been conducted on the usage of e-databases concerning whether they are being optimally utilised or not. Factors such as convenience, familiarity, exposure, infrastructure, search skills, relevance, and training, have been cited as factors influencing usage of edatabases.

**Utilization of electronic library by medical students**

Wu and Chen (2012) studying how graduate students perceive, use, and manage electronic resources in the National University of Taiwan found that usage varied according to the subject background of the student. They, for example found that humanities students perceived the resources less important compared to students of other disciplines. Similar assertions – that disciplinary differences can influence the use databases - were made.

Sinh and Nhung (2012) argued that users’ behaviour will influence the usage of edatabases, and that factors that influence usage of databases are the purpose of usage, preferred types of materials, ways to learn the search, search techniques, and difficulties and expectations in using the databases. Thus, in their survey on searching behaviour of users of six online databases subscribed to by the Central Vietnam National University in 2011 reported that 87.5% requested for full-text articles as compared with 12.5% who requested for abstracts. Similar finding was reported by Coombs (2005) that full-text databases were preferred to other databases. Even among the full-text databases some are preferred to others because of the information architecture of the sites.

Anandhalli and Shakuntala (2014) investigated students’ attitude towards the utilization of e-resources in medical college libraries of Davangere, Karnataka and the result showed that medical students visit the library once a week (72.84%) and spent more than two hours during their each visit (82.78), and then visit mainly for the purpose of consulting reference books and other reading materials.

Ahmed (2013) in studying use of electronic resources by students and faculty in universities in Bangladesh found that respondents were not satisfied with the subscribed resources because of limited access to back issues; poor IT infrastructure; difficulty in finding required information; inability to access from home, slow download speed and online access problems. Mbabu, Bertram and Varnum (2013) in their study arrived at similar findings including limited number of titles available to the users. Chu and Law (2005) postulated that knowledge, search expertise and usage of databases by students grow as they progress in their studies. Thus, familiarity with and usage of different databases developed as students’ progress in their studies and this familiarity is gained through instruction and promotion of the databases to them. The changing trend of users’ need and attitude to information is virtually forcing librarians to succumb to the collection and development of electronic resources. Thus, it has been the rights of users to know more about the availability and management of electronic resources (Dadzie, 2015).

**Attitudes and behaviours of students towards e-library utilization**

Attitudes represent the conceptual value of these technologies in the minds of students, and
not the values of the technologies themselves. Attitudes are “inclinations and feelings, prejudices or bias, preconceived notions, ideas, fears and convictions about any specific topic”. According to Spacey, Goulding and Murray, (2013), positive attitudes are fundamental in implementing new technologies. In other to utilize the growing range of information from electronic sources, students must acquire the right attitude and practice the skills necessary to exploit them. Dutton (2014) suggested that skills required to maximize the potential of electronic resources are much greater than those required for searching printed sources. These skills include a knowledge of the structure of the database and the instructions which must be input into the computer by the researcher, as well as an understanding of the ways in which the instructions are linked with one another. To this end, Brophy (2013) stated that users do not often appreciate the skills required to search these sources, stating they are deceptively easy to use.

According to Swain and Panda (2009), the attitude to information is gradually shifting from the printed documents to electronic resources and thus, it has been the prerogative to know the details of the availabilities and organization of e-resources like online journals and databases, electronic theses and dissertations (ETDs), government publications, online newspapers, etc. Attitude towards a particular phenomenon can enhance or mar human approach to such phenomenon. Positive attitudes are widely recognized as a necessary condition for effective use and integration of information Technology in teaching and learning.

Volovici, Fratila, Bera, & Moisil (2016) reported that years ago, the librarian was a true consultant, giving advices and recommending to students the best journals and books to read but today, students are going on the net and ask Google. This attitude is prone to misleads as not all information found on the web is correct. It was expected that having access to the digital library, a greater percentage of students will consult more than the recommended bibliography.

Volovici et al. (2016) carried out an exploratory study aimed to assess the impact of the digital library on student learning behaviour. Students, from almost all faculties and found that all students (100%) at the faculty of medicine and pharmacy were accessing the digital library 1-2 times per week, and over 96% are staying on the net 2-3 hours a week.

As stated by Zimmermann (2010) “Resources Are Not; They Become” which suggests that the recognition or awareness of the presence of resources without its utilization is meaningless. In this regard the concept of utilization of electronic library resources is significant to students who are the beneficiaries of the resources. Cambridge English Dictionary (2017) therefore defines ‘utilization’ to mean the act of using something in an effective way with the sole purpose of achieving a certain objective. Therefore, utilization of electronic library resources is not only a choice but inevitable in the era of information technology (Dar, 2017).

The challenges encountered by medical students in utilizing e-library

Popoola (2014) gave lack of time as the main reason given for not using electronic resources. Unfamiliarity with computerized searching comes next. Chisenga (2014) carried out a survey of the use of ICTs in ten African Public Library Services. The survey found that, although most libraries had internet connectivity, very few were offering web-based information services to their users. The study however, identifies four barriers to the
effective provision of electronic resources in those libraries, namely: lack of strategic planning; lack of adequate or reliable funding; lack of use of Internet to provide information services to users and a lack of consistent training for users in new ICT services. According to Yebowaah and Plockey (2017) some factors were identified as challenges associated with the use of e-resources in the Library. From the results, 42 respondents representing 52.5% of the sample population indicated that they always have problems with the password. Low internet speed as a challenge has been encountered by 31 respondents representing 38.8% of the study. Other challenges such as inadequate staff in the Library and lack of assistance from the librarians were mentioned by 10 respondents each representing 12.5%. About 9 respondents denoting 11.3% said inadequate computers in the Library was a barrier to their effective usage of the Library. Five (5) representing 6.3% indicated that there was no or low bandwidth while the remaining 2 respondents amounting to 2.5% maintain that the attitude of staff in the library was also challenge. Due to development in ICT in the 21st century, use of Internet resources has tremendously increased in academic institutions around the world. According to Henderson and MacEwan (2015) electronic resources have exploded in popularity and use and enable innovation in teaching.

Among the challenges faced by the respondents include difficulty to identify relevant database to meet their information needs (51%), lack of access to e-resources (61%), persistent power failure (64.7%) and limited bandwidth (54.3%). Equally, OkelloObura and Magara (2008) investigated electronic information access and utilization at the East African School of Library and Information Science, Makerere University, Uganda. Out of the 250 targeted students, 190 responded, giving a response rate of 76%. The study revealed that users derived a lot of benefits from electronic resources, gaining access to a wider range of information and improved academic performance as a result of access to quality information.

Statement of the Problem
The value of a library, electronic or traditional, could be determined by the extent of accessibility and utilization of its resources. This can be measured by use statistics derived from such library. A rich library, with large volumes of information resources, both physical and electronic, that cannot be accessed or effectively utilized is meaningless. The concept of electronic library evolved out of the need to overcome the challenges associated with the physical library and usher the information seekers, irrespective of their location and time, into the global world of electronic information resources. However, Enakrire (2012) observation and research indicate that medical students encounter difficulty when using e-library resources which could be attributed to the fact that they lack search or retrieval competencies for exploiting resources. Medical students seem not to be utilizing these e-resources available to them, mostly due to lack of or inadequate awareness of e-resources, thus, making the level of use of resources very low. Likewise, information retrieval tools are often used on a trial and error basis, thereby resulting in time wasting. No matter how rich or enormous the resources provided by the library, without the competencies to use them, these resources will end up wasted.

However, at the College of Medicine library, Ekiti State University, preliminary investigation and users’ statistics revealed that
medical students do not frequently utilize e-resources. They visit the library to read books and journals for class assignment and in preparation for examination while they utilized e-resources occasionally, and mostly for social media use. Therefore, it is pertinent to carry out a research to investigate the attitude and behaviour of medical students towards e-library utilization in college of medicine at Ekiti State University (EKSU), Ado-Ekiti, Nigeria.

**Purpose of the Study**

The main purpose of the study is to investigate the attitude and behaviour of medical students towards e-library utilization in college of medicine, Ekiti State University (EKSU), Ado-Ekiti, Nigeria. Specifically, the study aimed to:

i. determine the level of e-resources availability at EKSU medical e-library?

ii. determine the level of medical student’s awareness of e-resources in EKSU medical e-library?

iii. examine the attitudes and behaviour of students towards utilization of the available e-resources in EKSU medical e-library?

iv. determine the level of utilization of e-library resources by medical students in EKSU?

v. identify the challenges encountered by medical students in accessing e-resources in EKSU?

**Research Questions**

The following research questions were raised for the study:

**Research Questions**

i. What is the level of e-resources availability at Ekiti state university (EKSU) medical e-library?

ii. What is the level of medical student’s awareness of e-resources in EKSU medical e-library?

iii. What is the attitudes and behaviour of students towards utilization of the available e-resources in EKSU medical e-library?

iv. What is the level of utilization of e-resources by medical students in EKSU medical e-library?

v. What are the challenges encountered by medical students in accessing e-resources in EKSU medical e-library?

**Research Hypotheses**

1. There is no significant relationship between the availability and utilization of e-resources by medical students in EKSU medical e-library.

2. There is no significant relationship between medical students’ awareness and utilization of e-resources in EKSU medical e-library.

3. There is no significant relationship between medical students’ attitude and utilization of e-resources in EKSU medical e-library.

4. There is no significant relationship between medical students’ behaviour and utilization of e-resources in EKSU medical e-library.

**Method**

The study investigated the attitude and behaviour of medical students towards e-library utilization in College of Medicine, Ekiti State University, Ado-Ekiti, Nigeria. The research design for this study is descriptive survey research. The population of the study was 245 medical students of Ekiti State University, Ado Ekiti, Nigeria (at all levels of study as at the time of this study). The population of the study consisted of 245 medical students of the institution, with 155 respondents selected as
sample size based on Yamane (1964) model. The formula is given as: 
\[ n = \frac{N}{1 + Ne^2} \]
Where: \( n \) = sample size; \( N \) = the population size; \( e \) = level of significance. Instrument for data collection was self-designed questionnaire, well validated by two professional librarians and a statistician. The internal consistency was examined using Cronbach’s alpha that yielded overall reliability coefficient of 0.84, using 4-likert scale of Strongly Agree (SA), Agree (A), Strongly Disagree (SD) and Disagree (D). 155 questionnaires were administered on the respondents, while 120 were found valid representing 77.4%. Data collected were analyzed using frequency count and percentage to answer all the research questions while the hypotheses were analyzed using Pearson’s Product Moment Correlation at \( p < 0.05 \) level of significance.

**Results**
To determine the level of availability of e-resources in College of Medicine Library, Ekiti State University, Ado- Ekiti (low, moderate and high), the mean score and standard deviation were used. The low level of availability of e-resources tyhe Library, was determined by subtracting the standard deviation score from the mean score (15.33 – 2.861 = 12.47). The moderate level of availability of e-resources was determined by the mean scores (15.33) while the high level of availability of e-resources was determined by adding the means score and the standard deviation score (15.33 + 2.861 = 18.16). Therefore, the low level of availability of e-resources in College of Medicine Library, Ekiti State University starts from 5 to 12.47, the moderate level of availability of e-resources starts from 12.48 to 18.15 and the high level of availability of e-resources is from 18.16 to 20. The level of availability of e-resources in College of Medicine Library, Ekiti State University is presented in table 1.

<table>
<thead>
<tr>
<th>Level of availability of e-resources</th>
<th>Frequency</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Low (5-12.47)</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Moderate (12.48-18.15)</td>
<td>86</td>
<td>71.67</td>
</tr>
<tr>
<td>High (18.16-20)</td>
<td>10</td>
<td>8.33</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100</td>
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</tbody>
</table>

Table 1 presents the level of availability of e-resources in Ekiti State University College of Medicine e-library. The result shows that out of 120 respondents sampled, 24 representing 20% had low level. Those who had moderate level were 86 representing 71.67% while those with high level were 10 representing 8.33%. This showed that the level of availability of e-resources in Ekiti State University College of Medicine elibrary was moderate.

**Research Question 2:** The level of medical students’ awareness of e-library resources To determine the level of medical students’ awareness of e-library resources in Ekiti State University (low, moderate and high), the mean score and standard deviation were used as applied in research question1. The low level of medical students’ awareness of e-library resources (16.12 – 2.748 = 13.37), The moderate level (13.38 to 18.86), high level of medical students’ awareness of elibrary resources (18.87 to 20) as illustrated in table 2.

<table>
<thead>
<tr>
<th>Level of awareness of e-library resources</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (13.37)</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Moderate (13.37 - 18.86)</td>
<td>86</td>
<td>71.67</td>
</tr>
<tr>
<td>High (18.87 - 20)</td>
<td>10</td>
<td>8.33</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100</td>
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</table>

Table 2: Level of Medical Students’ Awareness of E-library Resources in Ekiti State University.
Table 2 presented the level of medical students’ awareness of e-library resources in Ekiti State University. The result shows that out of 120 respondents sampled, 18 representing 15% had low level of awareness. Those who had moderate level of awareness were 79 representing 65.83% while those with high level of awareness were 23 representing 19.17%. This showed that the level of medical students’ awareness of e-library resources in Ekiti State University was moderate.

**Research Question 3:** Attitude and behaviour of students towards utilization of the e-library.

The negative attitude and behaviour of the respondents towards utilization of the elibrary was determined by scores below the mean score (15.29) while the positive attitude and behaviour of students towards utilization of the e-library was determined by the mean score and scores above the mean score. Therefore, the negative attitude and behaviour of students towards utilization of the e-library starts from 5 to 15.28 and the positive attitude and behaviour of students towards utilization of the e-library in College of Medicine, Ekiti State University is from 15.29 to 20. The attitude and behaviour of students towards utilization of the e-library in College of Medicine, Ekiti State University is presented in Table 3.

<table>
<thead>
<tr>
<th>Level of medical students’ awareness of elibrary resources in Ekiti State University</th>
<th>Frequency</th>
<th>Percentage (%)</th>
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</thead>
<tbody>
<tr>
<td>Low (5-13.37)</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Moderate (13.38-18.86)</td>
<td>79</td>
<td>65.83</td>
</tr>
<tr>
<td>High (18.87-20)</td>
<td>23</td>
<td>19.17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>100</strong></td>
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<thead>
<tr>
<th>Attitude towards Utilization of Elibrary</th>
<th>Mean Score</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative (5 – 15.28)</td>
<td>15.29</td>
<td>48</td>
<td>40</td>
</tr>
<tr>
<td>Positive (15.29 – 20.00)</td>
<td>72</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>100</strong></td>
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Table 3 showed that out of 120 respondents sampled, 48 representing 40 percent had negative attitude and behaviour towards utilization of the e-library while those who had positive attitude and behaviour towards utilization of the e-library were 72 representing 60 percent. This showed that the attitude and behaviour of students towards utilization of the e-library in College of Medicine, Ekiti State University was positive.

**Research Question 4:** Level of utilization of library resources by the respondents

The level of utilization of library resources by the respondents was determined by subtracting the standard deviation score from the mean score ($14.98 - 3.007 = 11.97$) utilization was determined by the mean scores ($14.98$) while the high level of utilization of the respondents was determined by adding the mean score ($14.98 + 3.007 = 17.99$). Therefore, the low level of utilization of library resources by medical students in Ekiti State University starts from 5 to 11.97, the moderate level of utilization starts from 11.98 to 17.98 the high level of utilization of library resources by the respondents is from 17.99 to 20.

The level of utilization of library resources by medical students in Ekiti State University is presented in Table 4.

<table>
<thead>
<tr>
<th>Level of Utilization of Library Resources</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (5-11.97)</td>
<td>13</td>
<td>10.84</td>
</tr>
<tr>
<td>Moderate (11.98-17.98)</td>
<td>97</td>
<td>80.83</td>
</tr>
<tr>
<td>High (17.99-20)</td>
<td>10</td>
<td>8.33</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4 presented the level of utilization of library resources by medical students in Ekiti State University. The result shows that out of 120 respondents sampled, 13 representing 10.84% had low level of utilization. Those who had moderate level of utilization were 97 representing 80.83% while those with high level of utilization were 10 representing 8.33%. This showed that the level of utilization of library resources by medical students in Ekiti State University was moderate.

**Research Question 5:** Challenges encountered by medical students in utilizing e-library
Table 5: Mean rating of Challenges Encountered by Medical Students in Accessing E-library Resources

<table>
<thead>
<tr>
<th>S/N Item</th>
<th>N</th>
<th>Agree</th>
<th>Disagree</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Lack of trained professional to assist when utilizing e-library</td>
<td>115</td>
<td>83</td>
<td>32</td>
<td>26.7</td>
</tr>
<tr>
<td>2 Lack of interest among medical students and information professionals</td>
<td>119</td>
<td>92</td>
<td>27</td>
<td>22.5</td>
</tr>
<tr>
<td>3 Low level of computer literacy among medical students</td>
<td>119</td>
<td>79</td>
<td>40</td>
<td>33.3</td>
</tr>
<tr>
<td>4 Lack of well-equipped e-library for medical students to access</td>
<td>118</td>
<td>83</td>
<td>35</td>
<td>29.3</td>
</tr>
<tr>
<td>5 Inadequate training on how to effectively use the e-library</td>
<td>119</td>
<td>89</td>
<td>30</td>
<td>25</td>
</tr>
</tbody>
</table>

Mean Cut-Off = 2.72

Table 6: Pearson’s Product Moment Correlation showing the Relationship between the Availability and the Utilization of E-library Resources

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>r_{cal}</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of E-resources</td>
<td>120</td>
<td>15.33</td>
<td>2.861</td>
<td>0.460*</td>
<td>0.000</td>
</tr>
<tr>
<td>Utilization of E-resources</td>
<td>120</td>
<td>14.98</td>
<td>3.007</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 showed that 69.2% of the respondents agreed that there is lack of professionals to assist when utilizing the e-library. Also, 76.7% of the respondents agreed that the medical students of Ekiti State University lack interest in the utilization of e-library while 65.8% of the respondents agreed that there was low level of computer literacy among the medical students. In addition, the table shows that 69.2% of the respondents agreed that there is lack of well-equipped e-library for medical students to access information. Finally, the table shows that 74.2% of the respondents agreed that there is inadequate training on how to effectively use the e-library among medical students of Ekiti State University.

Testing of Hypotheses:

**Hypothesis 1:** There is no significant relationship between the availability and the utilization of e-library resources by medical students in Ekiti State University.

**Hypothesis 2:** There is no significant relationship between medical students’ awareness and the utilization of e-library resources in Ekiti State University.
Table 7: Pearson’s Product Moment Correlation showing the Relationship between Medical Students’ Awareness and the Utilization of E-library Resources

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>r_{cal}</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of E-library Resources</td>
<td>120</td>
<td>16.12</td>
<td>2.748</td>
<td>0.562*</td>
<td>0.000</td>
</tr>
<tr>
<td>Utilization of E-library Resources</td>
<td>120</td>
<td>14.98</td>
<td>3.007</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( P < 0.05 \) (Significant)

Table 7 showed that \( r_{cal} = 0.562; p<0.05 \). Thus, the null hypothesis is not accepted. This implies that there is a significant relationship between medical students’ awareness and the utilization of e-library resources in Ekiti State University.

**Hypothesis 3:** There is no significant relationship between medical students’ attitude and the utilization of e-library in Ekiti State University.

Table 8: Pearson’s Product Moment Correlation showing the relationship between medical students’ attitude and utilization of e-library resources

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>r_{cal}</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Students’ Attitude</td>
<td>120</td>
<td>15.29</td>
<td>3.000</td>
<td>0.537</td>
<td>0.257</td>
</tr>
<tr>
<td>Utilization of E-library Resources</td>
<td>120</td>
<td>14.98</td>
<td>3.007</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( P < 0.05 \) (Significant)

Table 8 showed that \( r_{cal} = 0.537; p>0.05 \). Thus, the null hypothesis is accepted. This implies that there is no significant relationship between medical students’ attitude and the utilization of e-library in Ekiti State University.

**Discussion**

The result of this study showed that the level of medical students’ awareness of e-library resources in Ekiti State University, Ado-Ekiti, Nigeria was moderate. Thus, this contradicts the findings of Ojo and Akande (2005) on medical students level of awareness of resources in the University College of Medicine, Ibadan, Nigeria where students awareness level of e-library resources were low, and against that of Abinew and Vuda (2013) in Akpojotor (2016) that awareness of e-library resources by medical students is quite low and there is limited awareness about the existence of e-library resources.

The result of the finding shows that the attitude and behaviour of students towards utilization of the e-library in Ekiti State University is positive which correlates with Swan & Panda (2009) opined that the attitude to information is gradually shifting from the printed document to electronic resources and thus it has been the prerogative to know the details of the availability and organization of e-resources like online journals and databases. Attitude towards a particular phenomenon can enhance human approach to such phenomenon. However, this study revealed that there is no significant relationship between students’ attitude and e-resources utilization. This negates the finding of Spacey, Goulding and Murray, (2013) which submitted that positive attitudes are fundamental in implementing new technologies.
and in order to utilize the growing range of information from electronic sources, students must acquire the right attitude and practice the skills necessary to exploit them. However, the finding of this study shows that the level of utilization of library resources by medical students in Ekiti State University is moderate in agreement with that of Adeniran (2013).

On the challenges encountered by medical students in accessing electronic library resources in Ekiti State University, the result shows that 69.2% of the respondents agreed that there is lack of professionals to assist medical students in utilizing the e-library. Also, 76.7% of the respondents agreed that the medical students of Ekiti State University lack interest in the utilization of e-library while 65.8% of the respondents agreed that there was low level of computer literacy among the medical students. All these agreed with Okello-Obura and Magara (2008); Yebowaah and Plockey (2017) which identified some factors as challenges associated with the use of e-resources in the Library among which were those revealed by this study.

**Conclusion**

Medical students in College of Medicine, Ekiti State University were quite aware of availability of e-library resources with positive attitudes and behaviour towards the utilization of the e-library. They had moderate level of utilization of the resources with few challenges identified in the course of accessing electronic library resources, which included; lack of interest among medical students, low level of computer literacy among medical students, and lack of well-equipped e-library.

**Recommendations**

It was therefore recommended that; medical students generally and particularly in EKSU should be trained in the basics of using the computer and other related technological infrastructure to further improve their competency skills level, while the University authorities and medical schools should provide state of the art infrastructures/ equipment and subscribe to current medical databases to fascinate the use of e-library resources in their medical libraries.

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