

Full Length Research

# Information Literacy Skills and Use of Electronic Reference Services by Undergraduates in Selected Tertiary Institutions in Abeokuta, Ogun State, Nigeria

<sup>1</sup>Adebiyi, Abidemi A. and <sup>2</sup>Dr. E. Madukoma

<sup>1</sup>Department of Information Resource Management, Babcock University, Ilishan Remo, Ogun State, Nigeria

<sup>2</sup>Department of Information Resource Management, Babcock University, Ilishan Remo, Ogun State, Nigeria

Accepted 10 May 2021

## Abstract

The study evaluated the influence of information literacy skills on the use of electronic reference services among undergraduates in selected tertiary institutions in Abeokuta, Ogun State, Nigeria. The population figures obtained from the institutions' registries showed that there are one thousand, two hundred and thirty-four (1,234) final year undergraduates in the selected tertiary institutions in Abeokuta, Ogun State. A total of 308 study instrument was distributed proportionately among final year undergraduates in the selected tertiary institutions. Primary data sources were used in this study and were collected through a structured questionnaire. A self-structured questionnaire was used to elicit required information from the respondents. Data collected for this study was coded and analyzed through the use of SPSS V. 21. The findings revealed that the main purposes of use of e-reference services were to follow blog discussion on subject area of interest via the internet access for information (mean = 2.82), the study concluded that information literacy skills are major predictors of e-reference services among undergraduates in tertiary institutions in Abeokuta, Ogun State, Nigeria. This study recommended that, Undergraduates should be encouraged more to use electronic reference services in Nigeria through meetings, workshops, training and seminars.

**Keywords:** information literacy skills, use of electronic reference services, undergraduates, tertiary institutions

*Cite This Article As:* Adebiyi, A.A., Madukoma, E. (2021). Information Literacy Skills and Use of Electronic Reference Services by Undergraduates in Selected Tertiary Institutions in Abeokuta, Ogun State, Nigeria. *Inter. J. Acad. Res. Educ. Rev.* 9(4): 181-190

## INTRODUCTION

Information plays important role in different spheres of human endeavors such as education, research and development, decision and policy making. Information is key to the wellbeing of humanity and stand as a major determinant of decision making. Okiki (2011) posited that information is the pivot on which the survival of any society rests. Nowadays, information could be accessed through a range of information and communication technology tools. Information and communication technology have transformed almost all

human activities and has made a significant impact on teaching and learning especially in higher education and also has improved the flow of information to academic communities (Olubanke, Bosede & Aderonke, 2015). ICT has changed the philosophy of information from unitary to global access, and has availed librarians the options of handling varied information sources conveniently and effortlessly. Before the explosion of information and communication technology, librarians faced the problem of how to cater and fulfill the demand of users in minimum span of time. However, with the emergence of ICT and its

integration into teaching and learning, libraries had to reconsolidate, reshape, redesign and repackage their services and information products by incorporating ICT based products and services, leading to the emergence of services such as the e-reference service or digital reference service among others (Malik & Mahmood, 2014).

E-reference service is one of the fastest growing and innovative services developed in libraries in contemporary times all over the world. An e-reference service occurs when a question is received electronically and responded to electronically by a librarian (Sloan, 2012). It is therefore, an internet-based question-and-answer services that connect users with experts and subject expertise (Ekwelem, Okpala, Igbokwe & Ekwelem, 2018). E-reference service is a way of increasing access to library services in a manner that is not dependent on physical visits to the Library. Among library professionals, e-reference service is a new type of service based on the same question-and-answer type of assistance provided in traditional in-person reference. Oluwabiyi (2017) maintained that e-reference services, i.e., the provision of reference services using electronic means, involve collaboration between a library user and a librarian, in a computer-based medium. The service can utilize various media, including email, web forms, chat, video, web customer call center software, voice over internet protocol among others. Such media are utilized to connect people with people who can answer questions and support the development of skills in specialized areas of knowledge acquisition. Oluwabiyi (2017) posits that e-reference services allows librarians to help patrons access information in a virtual environment, using various methods. Although it lacks the face-to-face communication that has been an integral part of reference services, the reference techniques used and the scope of the librarian's role have remained the same (Sloan, 2012), as patrons can send queries anywhere and receive answers from the reference librarian without necessarily visiting the library in person (Madukoma, 2015).

All over the world, electronic reference service has become a universal feature of libraries in the twenty-first century. Malik and Mahmood (2014) affirmed that many libraries in different parts of the world are offering or advancing towards e-reference services with the intention to meet users' needs anytime anywhere. Zickuhr, Rainie and Purcell (2013) found in their study that a notable share of Americans say they would embrace even wider uses of technology at libraries which include but are not limited to online research services, such that allows patrons to pose questions and get answers from librarians. Elahi and Islam (2014) affirmed that mobile devices and application provide access to information in the comfort of people's homes and offices, using their cellular phones or personal digital assistance. This has become so because of the present jet information age in which students and other information seekers want services that are fast and

efficient, making the model of providing services through a physical reference desk obsolete (Nicholas, 2011).

Students, especially undergraduate live in a 24/7 world and seek services that cater to their life style, including those rendered in libraries (Elahi & Islam, 2014). They want library services that will assist them in completing their assignments whether they be in or off-campus, and at any time of the day (Nicholas, 2011). To meet up with this trend, which is in line with the core objective of their existence, academic libraries in most developed nations have long transited beyond the usual physical services rendered to users and have incorporated online platforms through which users can access the same services without necessarily being in the library physically. Oyedapo and Ojo, (2013) observed that the emergence of ICT, electronic information resources (EIRs) have become widely used and accepted among scholars and have increased tremendously in volume around the globe. Also, Madukoma (2015) noted that the fast growth and advancement of ICTs has led to massive and progressive changes in the services offered and delivered to library clients across the globe. The application of ICTs such as computers, internet, e-mail as well as other networked technologies, therefore, has opened up new and wider possibilities and opportunities to global library and information services and products which the traditional library cannot provide. However, as Unegbu (2013) observed, developing countries in Africa and other continents where the needed gadgets to facilitate such services are either not available or are too expensive to afford due to poverty are finding it difficult to render such advanced services to yearning students and other library users. In some cases where some of the gadgets for such services are available, library users may not be aware, while some that are aware may lack necessary information literacy skills to access them.

Oluwabiyi (2017) posited that electronic reference services involve personal assistance provided to library users seeking information via electronic means like the internet and smart phones. Despite that the usage of internet on computers and smartphone have advanced in many developing countries, majority among the populace lack an awareness of the possibilities available through these devices. E-reference services implies that users of library request and have access to reference sources such as dictionaries, abstracts, encyclopedias, bibliographies, and more to help meet their information needs and provide answers to specific questions, such as brief facts, statistics, technical instructions, background information or direct users to additional information sources through e-mail, chats, video conferencing and others. However, with inadequate information literacy skills and lack of awareness, the use of electronic reference service and other automated library services among undergraduates in developing nations including Nigeria is still low, as Ekwelem, Okpala, Igbokwe and Ekwelem

(2018) observed, e-referencing service is still in its infancy in Nigeria and in many other developing countries in Africa.

Although the use of e-reference and other library information services affords researchers and students the opportunity to access global information resources, especially through the internet for their scholarly work, retrieving current literature for studies and preparation for examinations, carry out class assignments, research projects, and to communicate and collaborate with peers and teachers via e-mail or by following blog discussions (Adeniran, 2013), literature has revealed low usage of electronic reference resources (ERSs) by undergraduates in Nigeria (Ekwelem, Okpala, Igbokwe & Ekwelem, 2018). The low usage has manifested in different ways such as: performance shortfalls in research output and productivity, limitation to needed information, non-request of library information services via electronic means - text messages, reference chat, and e-mail, among others. The use of electronic resources and services by undergraduates in Nigerian universities comes with a couple of challenges like the nation's poor telecommunications infrastructure which has been a subject of debate for researchers and higher institutions (Adomi, 2005) and is still a major issue till date. In the face of poor telecommunications infrastructure, poor user skills in navigating e-resources, high cost of internet subscription and restricted access to e-resources and services are also major challenges plaguing the use of electronic resources especially e-referencing among undergraduates in Nigerian universities.

Colaklar and Aras (2015) were of the view that some of the electronic reference services that library provides are: E-mail based reference interaction, web-based reference interaction, chat-based reference interaction, video-conferencing based reference interaction, and Collaborative Digital Reference Services (CDRS). Elahi and Islam (2014) suggests that e-mail is the most prevalent medium of electronic reference service. E-mail reference service is very popular in large research and academics institutions, users send the library an e-mail with a reference query, the library in turn replies by e-mail, phone, fax or letter as the case may require. In recent times webpages of libraries are coming with "Ask a Librarian" option whereby online users can send direct queries to the library and receive almost an instant answer (Elahi & Islam, 2014). Many libraries and information centers are extensively using e-mail facility to provide online reference service (Dafiohgor, 2012).

Oluwabiyi (2017) averred that through video-conferencing, another e-reference platform, librarians and users are able to use both text and speech for reference transactions. Instead of a window for the textual exchange, there is a window in which librarians and users can see each other while conducting a face-to-face interview. In utilizing a web form for the purpose of e-referencing, Elahi and Islam (2014) posited that it has to be accessed from the library homepage or the

reference webpage and fields filled in by the user before the form is finally submitted back to the library. Answers are usually provided by email, phone or post. Web forms consist of a few compulsory categories e.g. for personal and contact details and several additional. In Collaborative Digital Reference Services (CDRS), two or more libraries team up to offer reference services using any of the above online formats. The user would send to a member library his or her request, which would be forwarded to the library best able to answer the question. A library may get a question routed to it because it has particular strengths in its collection that match the needs of the user. Or a member library might get a question routed to it because it happens to be open when the user makes his or her request (Colaklar & Aras, 2015).

Iroaganachi and Ilogho (2012) reported that the use of e-reference sources is very beneficial in achieving students' educational outcomes. The reason is due to the fact that they contain information that is always authentic, accurate, and more reliable. When students use e-reference sources, they will find information quickly and efficiently to complete their assignments and do their research, which in turn helps in improving students' academic performances. However, students' ability to carry out research using electronic reference materials is literarily dependent on the role of librarians to properly organize the e-reference resources for easy accessibility, enhanced usability and level of awareness created on the availability of these electronic reference sources (Herget & Hierl, 2017). Therefore, the ability of library clientele to use e-reference services might be as a result of the level of awareness they have regarding the availability of such services. Dafiohgor's (2012) survey on problems and prospects of electronic resources usage in Nigerian academic libraries found that 57% of students sampled could not use a computer, and that the use of database was low due to lack of awareness.

Information literacy has as well been identified as a factor militating against students' optimum utilization of e-reference services in academic institutions (Namugera, 2014). Whereas information in academic libraries was previously based upon the collection of physical library materials, it is now increasingly the case that academic libraries have moved into the virtual arena. It is in this light that students are expected to possess information literacy skills as they pursue academic success. In the field of library and information science (LIS), literacy skills are very vital to knowledge acquisition and its competence. These competencies are called 'information literacy' (IL). It is seen as the absolute critical literacy skill for the 21st century that foster the realization of most personal, academic and professional goals as well as for economic development. It is believed that IL can help bridge the digital divide, strengthen the employability of a workforce, counter information overload, and support evidence-based policy and decisions in governments and the professions (Corrall, 2013).

UNESCO (2009) was of the view that information literacy deals with the knowledge of one's information concerns and needs, and the ability to identify, locate, evaluate, organize and effectively create, use and communicate information to address issues or problems at hand. It is a prerequisite for participating effectively in the information society, and is part of the basic human right of lifelong learning. Information literacy is often viewed as an "ongoing process that is meant to be facilitated throughout a whole life, because it is a core educational goal that is "common to all disciplines, learning environments, and all levels of education" (Boekhorst, 2013, cited in Virkus, 2016:28). For library users to be seen as competent, they must first be information literate. Being competent and information literate enhances personal growth, self-actualization, empowerment and social inclusion. Which means that information literacy is also an important factor in the workplace (Adeleke & Emeahara, 2016).

Information literacy involves a continuous learning process that cut across abilities and knowledge, values, several other terms and combination of terms. (Parang, Raine and Stevenson 2000, cited in Okiki O.C 2013) posited that information literacy skills enables individuals to recognize not only when information is needed, but also the different kinds of information that are needed. It provides users of information resources with methods by which they can cope with the huge quantity of information coming from all directions, through all varieties of information resources. It can then be assumed that information literacy skills are needed by Nigerian academics for quality research output. Julien and Williamson (2010) believe that an information literate person today should possess specific online searching skills such as the ability to select appropriate search terminology, logical search strategy and appropriate information evaluation skills. These are critically lacked by many undergraduates in Nigeria today.

Considering the complexity associated with the use of electronic services, students require information literacy skills to access and use information. Adeleke and Emeahara, (2016) noted that growth in literature, its volume, variety and complexity has put severe constraints on users' ability to search for needed information. The complexity of electronic reference services has also led to tedious and rigorous searches, which tend to discourage the students who lack the requisite skills thereby leading to low usage of e-references and other automated library services in many parts of Nigeria. Although most students have their own laptops, iPads or mobile phones which exposes them to the use of technology, their use of such electronic devices do not guarantee knowledge of information literacy skills needed to access web-based resources from online library platforms as many students are not even aware that such platforms exist online. Therefore, being aware and acquiring requisite information literacy skills are essential for students,

especially undergraduates as to enable thrive academically. This would not only give value to the result of their research work but also ensure that they do not engage in copying and pasting and other forms of plagiarism, which have characterized students' use of online resources (Trip, 2010).

## STATEMENT OF THE PROBLEM

In many institutions of higher learning, undergraduates constitute the greater percentage of library users and unrestricted access to library holding will not only increase their use of the resources but will also enhance their information literacy skills. The literature has revealed that undergraduates generally prefer to use the digital library services when compared with their interest in the traditional analogue library services (Adeniran 2013, Oluwabiyi, 2017; Adeleke & Emeahara, 2016; Ekwelem, et al, 2018). while this is expected considering the global transition from analogue to the digital library services, undergraduates in many institutions of higher learning in Nigeria usually experience restricted access to and use of the e-reference resources and services probably due to their low level of information literacy skills. Thus, access to these digital collections initially meant to enhance learning outcomes of the undergraduates now becomes unattainable and by extension has resulted in low use of the e-reference services. This current study therefore aimed at investigating the influence of information literacy skills on the use of electronic reference services among undergraduates in selected tertiary institutions in Abeokuta, Ogun State, Nigeria.

## Objective of the Study

The general objective of this study is to investigate the influence of information literacy skills on the use of electronic reference services among undergraduates in selected academic libraries in tertiary institutions in Abeokuta, Ogun State, Nigeria. The specific objectives of the study are to:

1. determine the electronic reference services frequently used by students in tertiary institutions in Abeokuta, Ogun State;
2. determine the purpose of use of e-reference services by undergraduate students;
3. ascertain the level of information literacy skills of undergraduates in selected tertiary institutions in Ogun State;

## RESEARCH QUESTIONS

The study provided answers to the following research questions:

1. what are the electronic reference services frequently used by undergraduates in the selected tertiary institutions in Abeokuta, Ogun State?
2. for what purpose do undergraduates use e-reference services?
3. what is the level of information literacy skills of undergraduates in selected tertiary institutions in Abeokuta, Ogun State?

## METHODOLOGY

This study made use of descriptive survey research design. The population of this study is made up of final year undergraduates in the selected tertiary institutions

domiciled in Abeokuta, Ogun State, which are: Federal University of Agriculture, Moshood Abiola Polytechnic and College of Education. The population figures obtained from the institutions' registries showed that there are one thousand, two hundred and thirty-four (1,234) final year undergraduates in the selected tertiary institutions in Abeokuta, Ogun State. A total of 308 study instrument was distributed proportionately among final year undergraduates in the selected tertiary institutions. Primary data sources were used in this study and were collected through a structured questionnaire. A self-structured questionnaire was used to elicit required information from the respondents. Data collected for this study was coded and analyzed through the use of SPSS V. 21.

## RESULTS

### Analysis of Research Question

**Research question one:** What are the electronic reference services frequently used by undergraduates?

**Table 1: Frequency of Use**

Parameters	Daily	Twice a week	Once a week	Occasionally	Never	Mean	Std Dev.
Telephone	239(85.1)	6(2.1)	12(4.3)	23(8.2)	1(0.4)	4.63	0.92
Online Chat	209(74.4)	52(18.5)	3(1.1)	15(5.3)	2(0.7)	4.61	0.82
Email	147(52.3)	52(18.5)	21(7.5)	59(21.0)	2(0.7)	4.01	1.23
Video Conferencing	85(30.2)	59(21.0)	31(11.0)	96(34.2)	10(3.6)	3.40	1.33
Online database	84(29.9)	49(17.4)	33(11.7)	85(30.2)	30(10.7)	3.26	1.43
Web Form	75(26.7)	11(3.9)	41(14.6)	112(39.9)	42(14.9)	2.88	1.45
<b>Weighted Mean Score = 3.80</b>							

**Source: Field Survey, 2021**

Mean of  
 3.5 - 4.0 = Very high,  
 2.5 - 3.49 = High  
 2.0 - 2.49 = Moderate  
 1.0 - 1.99 = Low

Table 1 revealed a generally high frequency of use of electronic reference services by undergraduates in selected tertiary institutions in Abeokuta with a weighted mean score of 3.80 on the scale of 5 points. The table further revealed that Telephone is the most frequently used electronic reference service (mean=4.63), closely followed by Online Chat (mean = 4.61), Email (mean = 4.01). Others used electronic reference service includes video conferencing (Mean = 3.40), online database (mean = 3.26) and web form (mean = 2.88). Hence, the extent of use of electronic reference services among undergraduate students is high with the weighted mean score of 3.80. This implies that the students' frequently making use of electronic reference services the respective institutions.

**Research question two:** For what purpose do undergraduates use e-reference services?

**Table 2.** Purpose of use of e-reference services

Parameters	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	Std Dev
I follow blog discussion on subject area of interest via the internet access for information	74(26.3)	113(40.2)	63(22.4)	31(11.0)	2.82	0.95
I use the online database provided by the library for my research	42(14.9)	132(47.0)	85(30.2)	22(7.8)	2.69	0.82
I use video conferencing to hold face to face interaction with the reference librarian so as to augment my class notes	72(25.6)	102(36.3)	53(18.9)	54(19.2)	2.68	1.06
I use the online database in the library for my assignments	54(19.2)	111(39.5)	74(36.3)	42(14.9)	2.63	0.96
I use the chat reference for sourcing information in the library	32(11.4)	94(33.5)	114(40.6)	41(14.6)	2.42	0.87
I use the email reference interaction for research	21(7.5)	121(43.1)	85(30.2)	54(19.2)	2.39	0.88
Web form for writing term paper	21(7.5)	95(33.8)	112(39.9)	53(18.9)	2.3	0.86
<b>Weighted Mean Score = 2.56</b>						

**Source: Field Survey, 2021**

Table 2 revealed that the main purposes of use of e-reference services were to follow blog discussion on subject area of interest via the internet access for information (mean = 2.82), followed by use the online database provided by the library for my research (mean = 2.69), use video conferencing to hold face to face interaction with the reference librarian so as to augment my class notes (mean = 2.68), use the online database in the library for my assignments (mean = 2.63), use the email reference interaction for research (mean = 2.42), use the chat reference for sourcing information in the library (mean = 2.39), and Web form for writing term paper (mean = 2.30). The implication of this findings is that the students had diverse purposes of use of e-reference services in their respective institutions/ some of these reasons may be academic related or for other purposes.

**Research question three:** What is the level of information literacy skills of undergraduate in Abeokuta, Ogun State?

**Table 3.** Level of Information Literacy Skills

Column1	Very High level	High level	Low Level	Very Low Level	Mean	Std Dev.
I can define the information I need	83(29.5)	167(59.4)	31(11.0)	0(0.0)	3.19	0.61
I can select the information that is most appropriate to my needs	73(26.0)	177(63.0)	31(11.0)	0(0.0)	3.15	0.59
I have the ability to use information to answer questions and/or solve problems	62(22.1)	156(55.5)	53(18.9)	10(3.6)	2.96	0.74

**Table 3. Continuation**

I have the ability to identify different sources of information	72(25.6)	144(51.2)	44(15.7)	21(7.5)	2.95	0.84
I have the capability to organize, apply and communicate information to others	61(21.7)	155(55.2)	54(19.2)	11(3.9)	2.95	0.75
I can synthesize and build upon existing information	41(14.6)	164(58.4)	65(23.1)	11(3.9)	2.84	0.71
I can determine the authoritativeness, correctness and reliability of the information sources	50(17.8)	155(55.2)	55(19.6)	21(7.5)	2.83	0.8
I can initiate how and where to find the information I need	51(18.1)	145(51.6)	65(23.1)	20(7.1)	2.81	0.81
I can synthesize newly gathered information with previous information	41(14.6)	153(54.4)	65(23.1)	22(7.8)	2.76	0.79
I have the ability to select search strategies by date, subject and language	31(11.0)	186(66.2)	33(11.7)	31(11.0)	2.77	0.8

**Weighted Mean Score = 2.92**

**Source: Field Survey, 2021**

Mean of

- 3.5 - 4.0 = Very high,
- 2.5 - 3.49 = High
- 2.0 - 2.49 = Moderate
- 1.0 - 1.99 = Low

Table 3 revealed a generally high level of information literacy skills with weighted mean score of 2.92 on the scale of 4 points. The table further reveals that the highest level of information literacy skills were define the information needed (mean = 3.19), closely followed by selecting the information that is most appropriate to their needs (mean = 3.15), ability to use information to answer questions or solve problems (mean = 2.96), ability to identify different sources of information (mean = 2.95), capability to organize apply and communicate information to others (mean = 2.95), synthesize and build upon existing information (mean = 2.84), determine the authoritativeness, correctness and reliability of the information sources (mean = 2.83), initiate how and where to find the information needed (mean = 2.81), synthesize newly gathered information with previous information (mean = 2.77) and ability to select search strategies by date, subject and language (mean = 2.76). The implication of this result is that students level of information literacy skills seems to determine the extent to which undergraduates will explore the power of e-resources reference services

## DISCUSSION OF FINDINGS

The study investigated the influence of information literacy skills on the use of electronic reference services among undergraduates in selected academic libraries in Abeokuta, Ogun State, Nigeria. The discussion section is based on the major findings from the research questions and the hypotheses formulated and tested.

Dafiohor (2012) survey on problems and prospects of electronic resources usage in Nigerian academic libraries found that 57% of students sampled could not use a computer, that the use of database was poor, due to lack of awareness.

Abinew and Vuda (2013) carried out an empirical survey on acceptance and use of electronic library services in universities. Respondents were asked about their awareness of the available e-library services. Majority (57.97%) responded "to some extent" to indicate that they have only limited awareness about the existence of e-libraries resources and did not know well and in detail. 20.65% of respondents do not know anything about the existence of the e-library services at all. Only 21.38% of the respondents were well aware of

the existence of the e-library services, while less than 10% puts it to use in some way.

In the same vein, Sefeh and Nosrat (2007) carried a survey to investigate the relationships between awareness and use of digital resources among students in Isfahan University of Medical Sciences. A questionnaire was design with Descriptive survey design using questionnaire was randomly used. Two hundred and fifty (250) users of the Medical libraries and information centers affiliated to Isfahan university of Medical Sciences were taken for survey. The results found that 70 percent of students were aware of digital resources, but 69 percent have used them; 62 percent were aware of offline databases and 19 percent were only using them through Central library LAN network. About 70 percent were aware of online databases, accessible via central library web site and 53 percent have used them in total 87 percent of students felt that the available data met their information needs.

Likewise, Kwadzo (2015) in her study on awareness and usage of e-databases by geography and resource development information studies graduate students in the University of Ghana, concluded that the students were aware of the availability of subscribed databases. However, awareness level was generally greater than usage. This suggest that awareness may be only a necessary condition but not sufficient for use of library resources. Also, Thanuskodi and Ravi (2011) in their study on uses of digital resources by faculty and research scholars of Manonmaniam Sundaranar University, found out that about 67.14% of the faculty members were familiar with the use of digital resources. The study also reported that majority of the faculty members used digital resources for research purpose. Moreover, faculty members were observed to have developed keen interest in learning the required skills for the usage of digital resources through self-study. Popoola and Zaid (2006) in their study of faculty awareness and use of library information products and services in Nigerian universities opined that how well a University library is able to render effective information services like, lending, referral, indexing and abstracting, current awareness to mention a few has functional relation with the resources available at its disposal.

With regards to frequency of use, the finding of this study revealed that Telephone is the most frequently used electronic reference service, closely followed by Online Chat, Email. Others used electronic reference service includes video conferencing, online database and web form. Hence, the extent of use of electronic reference services among undergraduate students is high with the weighted mean score index of 3.80. These findings agree with the study of Sohail (2012) in his study of use of library resources by students in University of Kalyani opined that guidance in the use of library resources and services was a necessary help to students to meet their information needs. Going by the nature of these resources, its effective utilization particular in academic libraries requires specialized skill, in terms of service and knowledge of these

resources.

Sithole, Chisita, and Jagero (2015) conducted a study on information literacy evaluation. The study aimed at evaluating the effectiveness of the information literacy skills course on the use of various information formats in an African university. The survey research design was employed by researchers. The questionnaire instrument was distributed to 150 students in 6 faculties of which 76 were returned and used for analysis. The findings of the study revealed that electronic reference resources and services usage is a practice that is still in its infancy at the university. This indicates that skills required in using electronic reference sources and services among undergraduate seem to be limited. Sithole, Chisita and Jagero (2015) observed that some students lacked knowledge on how to effectively use e-journals and e-books in university libraries. Oyedapo and Ojo (2013) carried out in a study on the use of electronic resources in Obafemi Alowowo University and reported very low usage of electronic resources. The major reason reported to contribute to the low utilization of electronic resources was limited searching skills. Adeleke and Emeahara (2016) investigated the relationship between information literacy and use of e-resources by postgraduate students of the University of Ibadan, Nigeria. The study was aimed at determining the level of electronic information literacy skills possessed by the postgraduate students of the university; investigate what kind of electronic resources and services available to postgraduate students of the university; determine the level of usage of electronic information resources and services by the postgraduate students for academic purposes and lastly, to find out the relationship between information literacy skills of postgraduate students. The survey design was used while questionnaire was used for data collection. The study found that over two-third of the postgraduate students' information literacy skills level is high. The result of the study revealed that internet use skills ranked high among postgraduate students of the University of Ibadan. This indicates that postgraduate students of the University of Ibadan can surf the internet without any difficulty.

With regards to purpose of use of e-reference services, the finding of this study revealed that the major purpose of use of e-reference services were to follow blog discussion on subject area of interest via the internet access for information, use video conferencing to hold face to face interaction with the reference librarian so as to augment my class notes, use the online database provided by the library for my research, use the online database in the library for my assignments, use the email reference interaction for research, use the chat reference for sourcing information in the library, and Web form for writing term paper. Nkrah and Atuase (2018) conducted a study on the use of electronic resources by postgraduate students of University of Cape Coast. The findings revealed that most of the postgraduate students were aware of the e-resources in the library. The findings of



this study also revealed that most postgraduate students rather preferred to access information from Google scholar, and other web-based databases more frequently than the databases in the library.

As regards the level of information literacy skills, the finding revealed high level of information literacy skills with weighted mean score of 2.92. The table further reveals that the highest level of information literacy skills were define the information needed, selecting the information that is most appropriate to their needs, ability to use information to answer questions or solve problems, ability to identify different sources of information, capability to organize apply and communicate information to others, synthesize and build upon existing information, determine the authoritativeness, correctness and reliability of the information sources, initiate how and where to find the information needed, synthesize newly gathered information with previous information and ability to select search strategies by date, subject and language. The information literacy skills course equips students with the necessary skills and knowledge to enable them to use the library's information resources effectively, legally and ethically and also engage in lifelong learning (Sithole, Chisita & Jagero, 2015). Sithole, Chisita, and Jagero (2015) conducted a study on information literacy evaluation. The study aimed at evaluating the effectiveness of the information literacy skills course on the use of various information formats in an African university. The survey research design was employed by researchers.

## CONCLUSION

The study also concluded that there is limited computer and ICT infrastructure to accommodate as many students that are willing to use the e-reference services the same time. Hence, this calls for purchase of more computers to enhance effective use of the e-reference services across the selected tertiary institutions. Lastly, the study concluded that information literacy skills are major predictors of e-reference services among undergraduates in tertiary institutions in Abeokuta, Ogun State, Nigeria.

## RECOMMENDATION

This study has explored a wide range of theoretical, empirical and policy issues. Consequently, the following recommendations are suggested for policy intervention:

1. Undergraduates should be encouraged more to use electronic reference services in Nigeria through meetings, workshops, training and seminars
2. Student should be encouraged to sharpen their information literacy skills by putting it into more use.
3. Efforts should be made by institution library authorities to put in place latest e-references services and make it accessible for students.

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