

**LITERATURE REVIEW ON INFORMATION LITERACY SKILLS, COMPUTER SELF-EFFICACY AND ELECTRONIC INFORMATION RESOURCES USE BY UNDERGRADUATES IN UNIVERSITY LIBRARIES, NIGERIA**

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**ABSTRACT**

*The study review literature on information literacy skills, computer self-efficacy and electronic information resources use by undergraduates in University Libraries, Nigeria. Students need information for a variety of activities and the university library is a resource center for providing a wide range of electronic resources that can meet any academic purpose. However, the use of electronic resources is largely dependent on the information literacy skills and computer self-efficacy of the students. An empirical review was carried out to examine information literacy skills, computer self-efficacy and electronic information resources use by undergraduates in University Libraries, Nigeria. More than 50 literature were reviewed. The study reveal that the quality and volume of academic work is largely influenced by the knowledge and skills possessed in the use of e-library resources. It therefore concluded that students in tertiary institutions need to update their information literacy skills and computer self-efficacy.*

**Keywords:** University library, ICT facilities, information literacy skills, computer self-efficacy and electronic information resources

**Introduction**

University library, as an institution, is considered as the custodian of knowledge where undergraduate students from diverse disciplines obtain knowledge and assistance for self-improvement. Acquisition of knowledge is necessary for better understanding and contribution in community matters. One of the places where undergraduates acquire this knowledge is a university which is known as a custodian of knowledge where students from diverse disciplines obtain knowledge and skills for individual development. The

acquisition of knowledge is essential for a better understanding and contribution in society matters and prepares one for participation for the future community (Suwan & Panda, 2013).

Studies have shown that the introduction of Information Communication Technology (ICT) facilities in the university libraries has tremendously enhanced information generation, access, storage and dissemination (Mohammed & Philip 2017). Dissemination of timely and up-to-date information is made easier with the advent of these technologies which aid the transmission of information through electronic information resources. Tofi (2019) opined that “the rapid advancement of Information and Communication Technology (ICT) has brought revolutionary changes in the university library giving rise to a number of options to the user community to handle varieties of information sources conveniently and effortlessly”. As a result electronic information resources have become the lively substance to the modern libraries reserve in satisfying needs of students, teachers and researchers with minimum risk and time (Dare 2017). However, Electronic Information Resources are very important in university libraries, where most libraries that provide access to this service gain competitive advantage.

Electronic information resources are information documents that can only be accessed in the library electronically, using information communication technologies (ICT) facilities (Obuh, 2011). Examples of electronic resources of information that are frequently accessed by students include: Internet, CD-ROM databases, online databases, online public access catalogue (OPAC), electronic journals, electronic books and digitized documents. With the development of information communication technologies (ICT), electronic information resources have come to be generally used and accepted by scholars and have improved greatly in volume over the places in the world (Oyedapo & Ojo, 2013). Electronic information resources use requires information literacy skills. To use the available electronic information resources, students must acquire and use the skills to explore them; this will help undergraduate students to effectively search and have access to needed information.

*American Library Association* (2013, p. 2), said information literacy is a set of capabilities enabling users to “identify at what time information is needed and have the skill to evaluate, locate and use efficiently the necessary information”. However, information literacy skill is progressively more important in the present environment of rapid technological change and increasing information resources. On the other hand, this is challenging for users as they are faced with diverse, abundant information selections in their academic studies, in the place of work and in their personal lives. Ottong (2005) stated that information literacy is an understanding of and set of abilities allowing individuals to identify when information is needed, and have the ability to evaluate, locate and use efficiently the needed information. In general, information literacy skill programs that take place in university libraries vary from user education to library orientation. Information literacy means obtaining the skills needed to find, interpret, select, evaluate, organize and use information for a specific purpose (Kuhlthau, 2012). Since electronic resources depend on technology, there is need for computer self-efficacy. Computer self-efficacy is a key factor to consider when using computer-assisted electronic resources. The perceived self-efficacy of the computer is likely to increase computer use and reduce the person's anxiety about the computer.

Computer self-efficacy is related to judgments in terms of individual's capacity to perform a specific task with the computer successfully. This is the belief in individual's abilities in using the computer to organize and take the necessary steps to administer it in future situations (Bandura, 1999). It is not just about the skills you have, it also involves the judgments and the trust that individuals have regarding the skills one owns. The computer self-efficacy is an essential determinant of performance that works partially regardless of skill level. In the use of electronic information resources, it can, therefore, be expected that students with high computer self-efficacy would be expected to take advantage of using electronic information resources when compared to students with low computer self-efficacy, as the later may lack the confidence or shy away from using computer-based resources. It must be highlighted that self-efficacy is not a measure of skills rather, it reflects what people believe, he/she can do with the skills they have. Therefore, computer self-efficacy focuses on what one thinks he can do now or in the future using the computer.

### **Literature Review (Conceptual Review)**

#### **Electronic Information Resources Use**

Electronic information resource for the study is the dependent variable and the indicators for this variable include: purpose of use and frequency of use. The purposes for students' use of electronic resources are mostly for academic activities. They include: research and completion of assignments (Thanoscodi, 2012). Electronic information resources are utilized by students in the universities for several academic purposes. These purposes according to Ukachi (2013) include: doing class assignments, writing term papers, augmenting class works, retrieving current literature for studies, following blog discussions on the subject area of interest, searching for scholarship opportunities, searching for internship placement and for research purposes. Similarly, the study of Osaheni, Oshiotse and Momoh (2016) revealed the reasons for using e-resources to include: research, study, assignment. Others reasons mentioned were examination and lastly for pleasure. The study to a large extent conforms to Ansari and Zuberi (2010) that opined from their study that e-resources are mostly used for research, to prepare lectures note and for gaining subject knowledge.

Electronic information resources refer to electronic information resources materials that are available in university libraries. According to Saye (2001), they are the resources that are generated by some electronic media and are accessible to a large number of users both locally and externally via electronic channels or the Internet. These resources include all types of digital collections in the form of online databases, e-books, electronic journals, the Online Public Access Catalog (OPAC) and the Internet (Swain & Panda 2013). Electronic Information Resources, according to Ku (2008), require access to the computer, either through a mini-computer, a main computer, or any other type of computer that can be installed locally or remotely via the Internet. Electronic information resources are often used as an expression synonymous with other terms such as electronic resources, virtual resources, online resources and digital resources (Ku 2008). Electronic information resources have proven useful to the academic community in both developed and developing countries. Javier and Calvor (2014) defines electronic information resources that comprise any hardware and software for storing, transmitting and using information and files for digital content that is stored. These include e-mail, audio systems, local databases, externally accessible databases, CDs, DVDs, videos, recorded magnetic media, digital movies, photo files, and other digital information.

Electronic information resources are valuable research tools that accompany or compliment printed resources in a traditional library. The benefits include access to information may be limited to the user due to geographic location or resources, access to current information and numerous links to additional resources or related content (Dadzie, 2015). The opinions of students using electronic resources are convincing. On the other hand, it is necessary to know computers and recovery techniques to effectively explore these resources. It is therefore necessary to identify the computer skills that students need to access the library's electronic resources (Okello-Obura & Magara, 2008). Tila, Tella, Ayeni and Omoba (2007) noted that learners' capability to effectively retrieve and find information is a transferable capability that is useful in their future life and allows successful and positive use of academic electronic resources. The ability to explore the digital environment is a prerequisite for academic success today. Students are increasingly being asked to use electronic resources at the university. To take advantage of a growing stock of electronic resources, students must acquire and apply the skills they need to use them. Learning skills are necessary in a technological environment and can be improved through the use of innovative learning strategies (Lawson, 2005).

#### **Information Literacy Skills of Undergraduate**

Information literacy skill for the study is one of the independent variables and the indicators for this variable include: information identification, location, evaluation, synthesis and use.

Information identification refers to the ability of undergraduate students to recognize the types of information needed in order to solve their problem. They must have a clear understanding of what is needed in order to answer that question. The information seeking strategy stages require students first to identify all the possible sources of information (electronic information resources) (Eisenberg & Berkowitz 1990). Identification refers to undergraduate students' ability to identify a personal need for information. An

undergraduate student understands that new information and data is constantly being produced and that there is always more to learn. Information literate involves developing a learning habit so new information is being actively sought all the time that ideas and opportunities are created by investigating/seeking information the scale of the world of published and unpublished information and data (Bent, Gannon-Leary & Webb, 2007).

Identify Information needs. The awareness that information is required to solve problems in the university, to understand civic needs, and to provide for the library and well-being of undergraduate students and community is the first component of ILS. This is the first step also in differentiating ILS from the passive reception of given information. This awareness of need is not a static capacity but one that needs to be applied to each and every situation as it arises. Undergraduate students choose to accept some information as given, while recognizing that other claims need to be questioned and tested by seeking additional information or confirming the accuracy of that information supplied (*Association of College and Research Libraries* 2000).

Identification of information means the ability of undergraduate student to: Identify a lack of knowledge in a subject area, identify a search topic / question and define it using simple terminology, articulate current knowledge on a topic, recognize a need for information and data to achieve a specific end and define limits to the information need, use background information to underpin the search, take personal responsibility for an information search and the ability to manage time effectively to complete a search (*SCONUL Advisory Committee on Information Literacy* 1999).

Location comprised traditional bibliographic skills. Students must not only find individual resources such as e-books, e-magazines, e-reference materials, and Web sites, but also find the information within each source through the use of tables of contents, indexes, opac and other resource-specific tools. Undergraduate students can locate and access the electronic information resources he/she need (Vitae 2010). Ability of undergraduate students to locate different types of electronic information resources that is available. The characteristics of the different types of electronic information resources available to them and how they may be affected by the format (digital, print), the publication process in terms of why individuals publish and the currency of information issues of accessibility of the services that are available to help and how to access them (Bent, 2008).

Locate of information. The skills required to locate information depend on the context in which undergraduate students is applying their IL skills, in the university library, the electronic information resources in databases. In these circumstances, there is usually some assurance of the quality of the information source. However, increasingly undergraduate students seek information using internet search engines where there is often no filter on the quality of the information located. When information is evaluated it can be established to lack accuracy and credibility. Education and training are needed to help undergraduate students acquire the skills to not just locate, but also to evaluate information sources (Nvegi, 2007).

Location comprised the ability of undergraduate students to locate and access the electronic information resources and data they need (Bent, Gannon-Leary, & Webb, 2007). The ability of undergraduate to understands how electronic information resources is organized, digitally, how libraries provide access to electronic information resources, how digital technologies are providing collaborative tools to create and share information. The issues involved in collecting new and the different elements of a citation and how undergraduate students describe and use electronic information resources (Catts, 2007). Undergraduate students need to know how to locate and use of abstracts, the need to keep up to date with new electronic information resources, the difference between free and paid for electronic information resources, the risks involved in operating in a virtual world and the importance of appraising and evaluating search results(*SCONUL Advisory Committee on Information Literacy* 1999).

Locating information comprised range of searching techniques available for finding information. The differences between search tools, recognizing advantages and limitations; Why complex search strategies can make a difference to the breadth and depth of information found; The need to develop approaches to searching such that new tools are sought for each new question (not relying always on most familiar electronic information resources); The need to revise keywords and adapt search strategies

according to the electronic information resources available and / or results found; The value of controlled vocabularies and taxonomies in searching. Students should be able to Scope their search question clearly and in appropriate language; Define a search strategy by using appropriate keywords and concepts, defining and setting limits; Select the most appropriate search tools Identify controlled vocabularies and taxonomies to aid in searching if appropriate; Identify appropriate search techniques to use as necessary; Identify specialist search tools appropriate to each individual information need (Bent, Gannon-Leary, & Webb, 2007).

Synthesis refers to the organization of information from multiple sources and presents the information (Rader, & Allan (2006). Undergraduate students can organize information professionally and ethically. Undergraduate students can organize and make use of bibliographical software if appropriate to manage information; Cite electronic sources using suitable referencing styles; Create appropriately formatted bibliographies; Demonstrate awareness of issues relating to the rights of others including ethics, data protection, copyright, plagiarism and any other intellectual property issues; Meet standards of conduct for academic integrity; Use appropriate data management software and techniques to manage data and the responsibility to be honest in all aspects of information handling and dissemination (e.g. copyright, plagiarism and intellectual property issues) (Vitae 2010).

Evaluation is the ability to appraise each electronic information resources from deferent components to determine which are best for them to use. Undergraduate students can review the research process, compare and evaluate information (Eisenberg & Berkowitz, 1990). To maximize the potential of electronic information resources, the computer must be known. This is necessary because research in the electronic environment requires knowledge of the structure of databases and instructions that the researcher must enter into the computer. The ability to review the research process and compare and evaluate electronic information resources and data, undergraduates should understand the electronic information resources landscape of their learning/research context, issues of quality, accuracy, relevance, bias, reputation and credibility relating to information and data sources and how electronic information resources is evaluated and published, to help inform personal evaluation process (Rader, & Allan (2006).

Evaluation means the ability to: Distinguish between different electronic information resources and the information they provide; Choose suitable material on their search topic, using appropriate criteria; Assess the quality, accuracy, relevance, bias, reputation and credibility of the electronic information resources found Assess the credibility of the data gathered; Read critically, identifying key points and arguments; Relate the information found to the original search strategy; Critically appraise and evaluate their own findings and those of others; Know when to stop (Vitae 2010).

Use of information refers to the utilization of the available information resources in the university library. Undergraduate students can apply the knowledge gained, present the results, synthesize both old and new information to create new knowledge and disseminate it in a variety of ways. Ability to apply the knowledge gained (Anday 2006). Undergraduate students use the electronic information resources, synthesizing new and old information and data to create new knowledge and disseminating it in a variety of ways. Undergraduate students should understand the follow before using information: The difference between summarizing and synthesizing, different forms of writing/ presentation style can be used to present information to different communities, data can be presented in different ways and the personal responsibility to store and share electronic information resources, personal responsibility to disseminate information & knowledge; How their work will be evaluated; The processes of publication, the concept of attribution that individuals can take an active part in the creation of electronic information resources through traditional publishing and digital technologies.

Use of information, the ethical practice applies to the creation and distribution of information, and to its use by undergraduate students. It is inevitable that there will be bias in the creation and distribution of information because each author brings their values and norms to the way they create and represent their knowledge. Such bias may be unintended in some cases, but it is not surprising that university library may deliberately suppress 'bad news' or put a 'spin' on the information they distribute (Kruger, 1996). An information literate society is one whose students are able to evaluate information sources and it follows that

such students will question all sources of information. In disseminating information received from others, those who are information literate should flag the potential bias in the original sources rather than transmitting claims without qualification (ALA, 2005, Bundy, 2004).

Information Use helps undergraduate students to found address the original question, summarize documents and reports verbally and in writing. Incorporate new information into the context of existing knowledge, analyze and present data appropriately. Synthesis and appraise new and complex information from different sources, communicate effectively using appropriate writing styles in a variety of formats and communicate effectively verbally. Select appropriate publications and dissemination outlets in which to publish if appropriate and develop a personal profile in the community using appropriate personal networks and digital technologies (Anday 2006). Undergraduate students should be able to: Use a range of retrieval tools and resources effectively, construct complex searches appropriate to different electronic information resources, access full text information, read and download online material and data, use appropriate techniques to collect new data, keep up to date with new information, engage with their community to share information, identify when the information need has not been met and use online (Bent, 2008).

### **Computer self-efficacy of undergraduate students**

Computer self-efficacy for the study is the second independent variable and the indicators for this variable include: Mastering experience, vicarious experience, verbal persuasion and somatic and emotional state. According to Bandura (1999) proposes four kind of experience may influence an individual's belief which affects the individual's performance. The first and most potent source of self-efficacy information is performance accomplishment. Simply put, if a person has performed the task successfully in the past, she is more likely to believe she can do it again. Therefore, undergraduates' previous experiences have a powerful influence on their beliefs that they can cope with using again. Mastering experience is the most reliable source of self-efficacy expectations because they are based on the individual's own personal experiences of mastery or failure for the given task.

Mastering experience: This occurs when people try to do something and are successful; he/she is more likely to believe she can do it again. According to Bandura (1994), mastering experience are the most effective way to boost self-efficacy since people are more likely to believe they can do something new if it is similar to something they have done. Mastering experience refers to the confidence in using EIRs by undergraduate students as the most effective way to boost self-efficacy since people are more likely to believe they can do something new if it is similar to something they have done. Vicarious experience is another factor that influences self-efficacy (Bandura 1994).

The second source of self-efficacy information is vicarious experience. If a person is exposed to others' successful achievement of a particular task, then she is more likely to think "I can do that, too," particularly if she identifies with the model. Vicarious experiences can be categorized into live modeling versus symbolic modeling vicarious experiences. Live modeling experiences are those experiences in which the individual is a direct observer, i.e., physically present at the model's performance of the task. Undergraduate students who have been present at university library (live modeling vicarious experience) would presumably have a strong identification with the librarians, either due to social similarities, regular attendance or, most likely, both (Craig, 1968); however, this type of vicarious experience in our culture is less available to most undergraduate than are symbolic modeling vicarious experiences.

Symbolic modeling vicarious experiences are representations of the task in symbolic form, e.g., through the written word, pictures, videos, verbal accounts. Because symbolic modeling vicarious experiences are more plentiful in our culture, they could be assumed to have a pervasive effect on American students and their beliefs about their electronic information resources use capabilities. Symbolic experiences exert their effects through elicitation of images in the parturient mind, interpreted through the shared meanings and associations of the symbolically enacted task (Bates & Turner, 1985).

The concept of vicarious experience is that when one watches someone like himself successfully accomplish something, he would like to attempt similar tasks. Whereas when one observes someone like himself fail, this threatens self-efficacy. The more one associates with the person being watched, the greater

the influence on the belief that one's self can also accomplish the behavior being observed. Vicarious Experience as belief or knowledge in using EIRs by undergraduate students is another factor that influences self-efficacy.

Verbal persuasion is the third source of self-efficacy information. This is the encouragement or discouragement received from others related to the individual's ability to perform the task at hand. "Yes, you can do it?" can positively impact a person's perception of his/her ability. The nonverbal cues given by the persuasive others may or may not be consistent with the verbal messages given and can therefore enhance or dilute the effectiveness of this source of self-efficacy information. Self-efficacy expectancies based on verbal persuasion are likely to be weak and short-lived because expectations are created without an underlying authentic experiential base to support them (Bandura, 1977). Effective verbal persuasion can be rendered only by those who make the commitment to be "with students" throughout in the library, as these signs of discouragement must be recognized and addressed immediately as they occur. The short-lived positive effects of verbal persuasion—"You can do this, you are doing this!" may need to be repeated many times.

**Verbal Persuasion:** The concept of verbal persuasion is that people are more likely to perform a task when they are persuaded verbally than they can achieve or master a task. Conversely, when people are told they do not have the skills or ability to do something, they tend to give up quickly.

Somatic and Emotional State is the fourth and final source of self-efficacy information. Whether one will be successful or fail in a task depends to a large extent on the physical and emotional state in which someone attempts to do something (Bandura, 1994). Pajares (2012) noted that stress, anxiety, and fear affect self-efficacy negatively and can lead to a self-fulfilling prophecy of failure or inability to perform the feared tasks. Fear and anxiety create emotional arousal, which in turn affects a person's perceived self-efficacy in coping with the situation (Bandura & Adams, 1977). This refers to undergraduate students' state of fear in using EIRs, whether one will be successful or fail in a task depends to a large extent on the physical and emotional state in which someone attempts to do something.

Self-efficacy is a major determinant of whether an individual will even attempt to deal with a difficult situation (Bandura, 1977). Yet it is doubtful that undergraduate students are consciously agreeing to undertake the stressful tasks of using e-resources. The teaching and learning process has recently changed due to the convergence of various technological, educational and pedagogical developments (Bonk & King, 1998, Marina, 2001). Technology challenges the limits of educational structures that traditionally facilitate learning. Recent advances in computing, the use of EIRs, the use of personal computers, productivity programs, the use of multimedia resources and networks have led to the development and implementation of new educational strategies. Innovative in the last ten years teachers who are committed to integrating technology into the learning process feel that this will improve learning and better prepare students for work on the 21st century (Butzin, 2000, Hobson, Simms, Reiser 2001 & Knezek 2002). For example, university students' confidence in their ability to use your computer can also determine their level of using the computer and EIRs. Computer self-efficacy according to Compeau and Higgins (1995) refers to the belief of a person's ability, his skills on the computer in a wider range of tasks to assume. These are judgments about a person's ability to successfully perform a specific task on a computer. Believe in the ability to use the computer to organize and execute the action needed to handle potential situations (Bandura, 1999). It's not just about the skills you have, but also the judgments you can make about your abilities.

**Literature Review (Empirical Review)**

S/ N	Author/ Year	Title of Article	Study Area	Method	Findings	Research Gap
	<b>EIRs Use</b>					
1	Ebijuwa and Mabawonku, (2019)	Demographic Variables and Academic Discipline as Determinants of Undergraduates' Use of Electronic Library Resources in Federal universities in South-west, Nigeria	Ibadan	Quantitative	University libraries should ensure that undergraduates optimize the use of electronic library resources irrespective of age, gender or academic discipline.	The empirical evidence on some demographic variables (age, gender) and academic discipline on use of electronic resources are not currents. There need to repeat the same study with current literature.
2	Ismaila (2019)	Information literacy skills on the Use of electronic resources by Undergraduates students of University of Ilorin and kwara State University malet, Kwara State, Nigeria	Kwara State, Nigeria	Quantitative	Undergraduate students lacked computer skills, searching skills, and sufficient training in the use of electronic resources.	The research was conducted on undergraduate. There is need for study in the postgraduate level.
3	Akpovire, Olawoyin, Adebayo, and Esse (2019)	Role of information literacy Skills on use of information resources by medical students in Lagos state	Lagos state, Nigeria	Quantitative	The Universities authority should provide state of the art infrastructures/ equipment's and all necessary things like ICT.	The study limited to medical students only, other faculties not included.
4	Ternenge, Tofi and Kashimana (2019)	Availability, Accessibility, and Use of Electronic Information Resources for Research by Students in Francis Sulemanu Idachaba Library University of Agriculture, Makurdi Benue state, Nigeria	Benue state, Nigeria	Quantitative	Efforts should be made by the University Administrators and Library Management to improve on the bandwidth and enhance the internet connectivity so as to enable students have easy access to online e-resource.	The Study Focus on Student in University of Agriculture, Makurdi, not Benue State, Universities.
5	Adebayo, and Omole (2019)	Roles of Health Information Managers on the use of Electronic Eesources in Building a Healthy Nation	Ondo state, Nigeria	Quantitative	The availability of accurate, timely, reliable, and relevant health Information is the most fundamental step towards informed public health action.	The study was in health information management. There is need of similar study in university library
6	Ankrah and Atuase (2018)	Use of electronic resources by postgraduate students of University of Cape Coast, Ghana	Ghana	Quantitative	The findings revealed that most of the postgraduate students were aware of the e-resources in the library.	The influence of information literacy skill on the use of EIRs needs to be carried out.
7	Olawale and Tope (2017)	Use of Electronic Reference Services by Undergraduates in a Nigerian University	Nigerian University	Quantitative	Findings revealed that, there were inadequate computers with Internet facilities for the use of the students. The study	Although the study is on Electronic Reference Services in university, it concentrates on the

					also established that students lack searching skills to enable them to maximally utilize the resources.	Reference Services and not on the general library services.
8	Mohammed and Philip (2017)	Availability and utilization of electronic information databases for research by agricultural scientists in federal university libraries in north central Nigeria	North-central Nigeria	Quantitative	The study indicated that two thirds of the students used the electronic information databases for their academic research work.	The study is in North-central. There is need for similar study in North-west, Nigeria.
9	Adeleke and Kenneth (2017)	Availability, Use and Constraints to Use of Electronic Information Resources by Students at the University of Ibadan	Ibadan State, Nigeria	Quantitative	The study revealed that users derived much of benefits from use of electronic resources.	There is need for more empirical research to expound more on the role of Electronic Information
10	Mamo and Amidu (2017)	Library resources use by lecturers of College of Agriculture, Lafia, Nasarawa State, Nigeria	Nasarawa State, Nigeria	Quantitative	Academic staff unlike other staff depends largely on the availability of suitable facilities, including adequate library resources.	The study was on College of Agriculture, Lafia, Nasarawa State, Nigeria. Not university.
11	Olajide and Adio (2017)	Utilization of University library resources by undergraduate students at the Federal University Oye-Ekiti, Nigeria	Oye-Ekiti, Nigeria	Quantitative	They found that library resources like abstract, indexes, yearbooks, atlas were neither satisfactory nor readily available for use.	The need to include academic staff of the university.
12	Lefuna (2017)	Access to and use of electronic information resources in academic libraries of the Lesotho Library Consortium (LELICO).	Lesotho	Try angulation	Findings revealed lack of guidelines and e-resources collection development policies.	The study was conducted in Lesotho. There need for similar study in Nigeria.
13	Daniel and Kacholom (2017)	User education, computer literacy and information and communication technology accessibility and use of e-resources by postgraduate students in Nigerian University Libraries.	Nigerian University Libraries	Quantitative	The study found that a few of the students had no knowledge in the use of e-resources and could not use it while those using the e-resources could access it by themselves.	The need to study User education, computer literacy and use of e-resources by undergraduate students in Nigerian University Libraries.
14	Suleiman and Kazbor (2017)	Easy access and use of electronic databases at the Faculty of Medicine at the University of Ghana	Ghana	Quantitative	The study found that the use of the database was low due to lack of knowledge.	The study was not carried out in Nigeria. There is need study on Easy access and use of electronic databases at the Faculty of Medicine, focusing on Nigeria.
15	Edem and Egbe (2016)	Usage of electronic resources in the University of Calabar Library by postgraduate students	Calabar, Nigeria	Quantitative	Findings which indicated that electronic resources were heavily utilized.	The need to study Usage of electronic resources in the National Library of Nigeria.

16	Roland, Saheed and Edith (2016)	Electronic Information Resources (EIR) Adoption in Private University Libraries.	Nigerian Private University Libraries	Quantitative	The findings of the study revealed that, the use of the e-resources by the students varies significantly with age, gender and level of study.	The study was in Private University Libraries. There need of similar study in public library.
17	Halima (2016)	Digital resources utilization by social science researchers in Nigerian Universities.	Nigeria	Quantitative	The findings of the study revealed that the most common problem identified by majority of respondents is slow access speed.	The study was in Nigerian Universities. There need of similar study in collages of education.
18	However, Daniel and Airen (2015)	Computer literacy on postgraduates' use of e-resources in Nigerian University Libraries	Ibadan, Nigeria	Quantitative	The findings revealed that majority of students have been used e-resources but most of them were unaware how to use various e-resources for their academic activities.	The is need for more studies on the importance of Computer literacy on undergraduates' use of e-resources in Nigerian University Libraries
19	Karunarathna (2015)	Electronic resources by law degree students at Anuradhapura Regional Centre of the Open University of Sri Lanka	Sri Lanka	Quantitative	Findings revealed that lack of computer skills and English language skills have also been affected to the usage of e-resources.	The study was Electronic resources by law degree students at University of Sri Lanka. Not Nigerian based.
20	Hajara and Olatoye (2015)	Usage of e-resources for teaching and learning at Federal University, Dutsin-Ma, Nigeria.	Katsina, Nigeria	Quantitative	The findings showed that the use of electronic resources in teaching and learning is common.	The need to study Usage of e-resources for teaching and learning at National Library of Nigeria.
	<b>ILS&amp;Use EIR</b>					
21	Ekong and Ekong (2018)	Impact of information literacy skills on the use of e-library resources among tertiary institution students in Akwa ibom state, Nigeria	Akwa ibom state, Nigeria	Quantitative	The result showed that majority of the students surveyed felt that using this resource saved them time, and found it relatively easy to use.	The study was on impact of information literacy skills on the use of e-resources among tertiary institution students. Academic Staff not included
22	Fosnacht (2017)	Reliability and validity of the National Survey of Student Engagement's Experiences with Information Literacy module, an assessment instrument	USA	Quantitative	The results indicated that information literacy activities are positively and significantly correlated with student engagement and students' perceived gains.	Study is not Nigerian based and other factor that may likely contribute to Information Literacy e.g ICT need to studied as it relate to the use of EIR.
23	Toyo (2017)	Undergraduates' information literacy skills and the use of electronic resources in Delta State University, Abraka, Nigeria	Delta State, Nigeria	Quantitative	Undergraduate students possessed low level of information literacy which affects their ability to utilize required information resources for academic success.	The study was in Nigerian Universities. There need of similar study in collages of education.
24	Kumari and Mallaiiah (2017)	Digital information literacy skills among faculty members of engineering colleges in Manalore, Karnataka	Ghana	Quantitative	The study finds the digital information resources used by the faculty members to get information relating to their own areas.	The study was conducted in India. There is need for similar study in Nigeria.

25	Xu and Chen (2016)	Traditional basic literacy skills of reading, writing, among the teachers in central Taiwan and Fujian Province	Taiwan	Quantitative	The findings revealed that information literacy reveals significantly positive effects on information technology integrated instruction.	Study is not in Nigerian. There is need for similar study in Nigeria.
26	Adeleke and Emeahara (2016)	Information Literacy and use of e-resources by postgraduate students of the University of Ibadan	Ibadan, Nigeria	Quantitative	The study found that over two-third of the postgraduate students' information literacy skills level is high.	The study was in Nigerian Universities. There need of similar study in collages of education.
27	Issar, Amusan, Olarongbe, Igwe and Oguntayo (2015)	IL competence of the final year undergraduate student at the University of Ilorin, Nigeria.	Ilorin, Nigeria	Quantitative	Majority of the respondents had information needs on their academic engagements like class assignments and project writing.	The study focus only on final year students.
28	Ramamurthy, Siridevi, Santhiram, Nandyal and Ramu (2015)	Information literacy and search skills of students in five selected Engineering Colleges in Chittoor district, Andhra Pradesh, India	India	Quantitative	Findings revealed that the respondents had low knowledge of information literacy skills and showed high deficiency in identifying diverse information sources.	The study focus on selected engineering colleges in India, other collages not included e.g collage of management studies.
29	Santharooban and Premadasa (2015)	Information literacy on Faculty of Health Care Sciences of Eastern University, Srilanka	Srilanka	Quantitative	The study revealed that: the model may be used to train the students before commencing PBL session or by integrating the model with PBL.	The study was in HealthCare sector. There need of similar study in faculty of education.
30	Sithole, Chisita, and Jagero (2015)	Information Literacy Evaluation in Africa University	Africa	Quantitative	The findings of the study revealed that e-resources usage is a practice that is still in its infancy at the University.	The need to explore the computer self-efficacy evolution in Africa University
	<b>CSE&amp;UseEIR</b>					
31	Nwobu, Oyewole and Apotiade (2018)	Computer self-efficacy of Federal College of Education Technical	Ibadan, Nigeria	Quantitative	Most of the respondents had a very high level of computer self-efficacy.	The study focus on Federal College of Education Technical. State College of Education not included.
32	Oyewole, and Oladepo (2017)	Information Needs and Computer Self Efficacy as Factors Influencing Use of Electronic Reference Services by Undergraduates in a Nigerian University	Ondo state, Nigerian	Quantitative	The library's management should organize periodic workshops where experts will be invited to train the librarians on how to render these services electronically.	The study focus only on students and the Librarian in charge of the electronic reference service in the institution's library. Other head of unit are excluded
33	Odede and Odede (2016)	Undergraduate students' computer skills and the use of online learning resources by the students of library and	Delta state, Nigeria	Quantitative	Findings of the study revealed that majority of the participants frequently make use of online resources.	The study was in Nigerian Universities. There need of similar study in collages of education.

		information science in Delta state university, Nigeria				
34	Abubakar and Adetimirin (2015)	Influence of computer literacy on postgraduates' use of e-resources in Nigerian University Libraries	Nigerian	Quantitative	The findings of the study showed that the postgraduates' computer literacy level was high.	There is need for similar study in qualitative method in Nigeria.
35	Emwanta and Nwalo (2013)	Influence of computer literacy and subject background on the use of electronic resources by undergraduate students in universities in South-western Nigeria	South-western Nigeria	Quantitative	Majority of the respondents had the skills to use the computer to access the Internet but do not possess the skills to explore other electronic resources.	There is need for similar study among postgraduate students in the same universities in South-western Nigeria.
36	Esfahani and Chang (2012)	Computer and information literacy skills are an issue affecting graduate students' use of electronic information resources	Australia	Quantitative	The study found that the level of students' computer and information literacy skills determines their utilization of electronic information resources.	The study was not carry out in Nigeria. There is need for another study in Nigeria
37	Emwanta and Nwalo (2012)	Influence of computer literacy and subject background on use of electronic resources by undergraduate students in universities in South-western Nigeria	South-western Nigeria	Quantitative	The study The study found that their respondents did not possess e-resources use skills which hindered the use of e-resources.	There is need for another study focusing on Northern, Nigeria.
38	Phillips (2010)	Bringing out the Best: Utilizing Bandura's Model of Self-Efficacy to Expand Current Concepts of Coaching Efficacy	USA	Quantitative	Increase a coach's sense of efficacy by targeting specific sources of coaching efficacy will lead to more effective coaches and future generations of athletes	There is need for more empirical research on Self-Efficacy.

## CONCLUSION

The influence of information literacy skills, computer self-efficacy and electronic information resources use by undergraduates is paramount to the academic performance of the students. The ability to find and retrieve information effectively is a transferable skill useful for future endeavour as well as enabling the positive and successful use of the electronic resources while in the university. The study revealed that undergraduate students do not highly utilize the available electronic resources and the subject background has not influenced the use of electronic resources. This is because they lack awareness of the available electronic resources in the library. While computer literacy greatly influences use of e-resources, subject to background is the reverse, this is because of some inhibiting factors on the use of e-resources which cut across unavailability and inaccessibility of e-resources, lack of awareness and training, lack of requisite computer skills and unstable power supply.

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