

## Relationship between Computer Self-efficacy and Electronic Library Use among LIS Undergraduates in Universities in Southern Nigeria

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### Abstract

*The study examined the relationship between computer self-efficacy and electronic library use among library and information science undergraduates in universities in Southern Nigeria. One research question guided the study while one research hypothesis was tested at a 0.05 level of significance. The correlational research design was adopted for the study. The population of the study was 10,345 Library and Information Science (LIS) undergraduates from ten federal, seventeen state and eight private universities in Southern Nigeria. The study adopts purposive and quota sampling techniques to determine the sample size of 1,017 used for the study. Two instruments: the Undergraduates' Computer Self-Efficacy Questionnaire (UCSQ) and Undergraduates' Electronic Library Use Questionnaire (UELUQ) were used for data collection. The overall reliability indexes for the two instruments were 88 and .89 respectively using Cronbach alpha. Pearson's Product Moment Correlation Coefficient (PPMC) and simple linear regression were used to analyse the data. The findings revealed that there was a very low positive relationship between LIS undergraduates' computer self-efficacy and their use of electronic libraries. It further showed that there was a significant positive relationship ( $df; 1,981$ ) =  $36.37p < 0.05$  between computer self-efficacy and electronic library use among LIS undergraduates. It was recommended that the teaching of computer skills to LIS undergraduates in universities be promoted. This is to ensure that the low level of electronic library resource usage among LIS undergraduates changed to a high one and is sustained for their adequate academic prowess.*

**Keywords:** Computer Self-Efficacy, Electronic Library Use, Library and Information Science, Undergraduates, Universities and Southern Nigeria

### Introduction

An electronic library is a multi-disciplinary concept that shares various branches of computer science and other subjects such as data management, information retrieval, library science, document management, information systems, the web, image processing, and artificial intelligence. The multi-disciplinary nature of the electronic library engenders flexibility in the

concept which makes it difficult to have a singular definition of an electronic library. However, the format, form and nature of the library give a clearer picture of what an electronic library means. An electronic library is a library in which collections are stored in electronic or digital formats (as opposed to print, microform, or other media) and accessible by computers and telecommunication gadgets. The content may be stored locally, or accessed remotely via electronic systems and computer networks (IFLA, 2012). The electronic library possesses the same functions and goals as the traditional print-based library and the difference lies in the electronic part of the term which indicates merely that the material is stored and accessed electronically.

Comprehensively, the electronic library can be defined as an organization which provides the resources, including the specialized staff, to select, structure, offer intellectual access to, interpret distribute, preserve the integrity of, and ensure the persistence over time of collections of electronic works so that they are readily and economically available for use by a defined community or set of communities. The rationale for the adoption of electronic libraries in universities is solely to provide electronic and online information resources for staff, researchers and students. This provision is to enhance educational development and provide educational information resources for effective teaching, learning and research activities because users may not visit the library directly or physically for reference. Electronic library achieves their objectives by creating opportunities for users to access and retrieve appropriate information that caters for their information needs (Anyim, 2018).

The electronic library enables library users to directly access electronic data via telecommunications networks since the resources are available in digital format; where there is no paper and the information resources (indexes, journals, and reference materials including online reference services) are accessed through computer networks or the internet. Electronic library resource consists of materials that are computer – controlled, including materials that require the use of a peripheral (e.g., a CD-ROM player or drive) directly connected to a computerized device. However, adequate knowledge in the use of computers is paramount if undergraduates are to use electronic libraries effectively and efficiently because the cognition, proficiency and capacity to use the computer without computer phobia are of great importance to harness electronic library resources in this 21<sup>st</sup> century (Bringula, Sarmiento & Basa, 2017). Today, the electronic library is regarded as a powerhouse where information is stored, generated and transferred electronically to fulfil users' needs. For optimum and satisfactory use of electronic libraries undergraduates should have adequate knowledge of computers to access its electronic resources to fully achieve their information needs. To this end, undergraduates' knowledge ability in the use of computer devices is a vital key to the effective use of electronic library resources. An impediment to the use of the electronic library, particularly its electronic resources is the lack of computer competency which affects most undergraduates' self-efficacy in searching the relevant resources to satisfy their information needs. The proficiency of undergraduates in the use of computers in accessing electronic library resources to a larger extent depends on the undergraduate level of computer self-efficacy which is the competency they need to effectively utilization of library electronic collections.

Computer self-efficacy is concerned with self-capability and self-worth toward the use of a computer (Bandura, 2012). Computer self-efficacy as an individual's self-confidence and ability to perform a behaviour or task. Anyim(2018) asserted that computer self-efficiency is the knowledge and ability a person has to use computers and technology According to Fabunmi and Awoyemi (2017), computer self-efficacy has to do with judgments about one's capability to successfully perform a specific task using the computer. Individuals who do not see themselves as having the capability to accomplish a task will likely not engage in such tasks. Thus, the frequency of computer use is a key factor which has a direct bearing on self-efficacy. Undergraduates using computers must possess the ability to apply their computer skills and knowledge to a wider range of computer-related activities or operations when faced with a particular task. This is because self-efficacy beliefs are task-specific, subjective, and situation-dependent including the extent and perceived ability of an individual to use the computer (Adeniran, 2017).

In the same vein, an undergraduate self-efficacy toward an application can decline during periods of inactivity with that particular application. No wonder, heightened self-efficacy may cause students to spend little effort toward learning new computer concepts because of their vast knowledge of using the computer (Odede & Zawedde, 2018). Students with high computer self-efficacy are more likely to explore new technologies, software or databases than others (Bello&Ajoyiyon, 2021). Thus, such students with high computer self-efficacy would be more likely to take advantage of electronic library information resources when compared to students with low computer self-efficacy, as the latter may lack confidence or shy away from using computer-based information resources. Computer self-efficacy has an important influence on an individual's possibility of the outcomes of using computers, their passionate reactions to computers as well as their certain computer use.

More so, adequate user computer self-efficacy may bring about user satisfaction in using the electronic library which jointly predicts and contributes significantly to the academic performance of undergraduates. Thus, students will utilize the electronic library information resources if they have the necessary computer self-efficacy. Wierzbicki (2018) affirmed that self-efficacy is divided into two types, general self-efficacy (GSE) and specific self-efficacy (SSE) determine the undergraduate level of academic productivity. He added that both GSE and SSE denote beliefs about one's ability to achieve the desired outcome, but the constructs differ in scope. However, this study is interested in general self-efficacy that deals with varieties of situations or tasks. Additionally, generalized self-efficacy pertains to an individual's coping ability (Lemelle & Scielzo, 2012), which has been predicted that those who are better and able to cope with stressful situations are likely to experience satisfaction in their academic productivity.

It is worth noting, that despite the significance of electronic libraries as providers of authoritative scholarly resources in a convenient and unrestricted manner, studies have shown that usage of electronic libraries is not up to the level expected or is simply underutilized (Kwadzo, 2015; Akussah, Asante & Adu-Sarkodee, 2015; Yamson, Appiah & Tsegah, 2018; Ebijuwa&Mabawonku, 2019). Also, some undergraduates believe that their search skills are inadequate for the computerized electronic library information resources due to their low level of computer proficiency, and even though more undergraduates use electronic libraries there is still

the majority of them who lag in their confidence and/or desire to use computers and telecommunication gadget (Omosekejimi, Eghworo&Ogo, 2015; Oladokun &Adeoye, 2022).In addition, findings have also revealed that students with a high level of computer self-efficacy use the electronic library more because computer self-efficacy is associated with attitudes toward computer technologies. (Daramola, 2016; Umar, Azeez&Haruna, 2020; Ebijuwa&Mabawonku,2019).The extent to which undergraduate demonstrates confidence in the use of a computer can also determine the extent to which they will use electronic library resources since the resources are accessed via computers.

However, undergraduates' must also strive to arm themselves with the computer skills necessary for the exploration of electronic library resources. This became imperative because the skills that have become increasingly important in the pursuit of higher education will affect how undergraduates handle the increasing electronic library resources including the way the resources are been used for learning. Thus, the level of ICT skills possessed by undergraduates will determine their level of usage of electronic library resources in the information age. To this end, with the availability of ICT facilities in university libraries, it is expected that undergraduates who possess the skills to operate computers would find it easy to use electronic library information resources to meet their required information needs in the libraries. This study, therefore, examined the relationship between computer self-efficacy and electronic library use among library and information science undergraduates in universities in Southern, Nigeria.

### **Research Objectives**

Specifically, the objective of the study was to determine the relationship between Computer self-efficacy and electronic library use among LIS undergraduates in universities in Southern Nigeria.

### **Research question**

The following research question was formulated to guide the study:

What is the relationship between computer self-efficacy and electronic library use among LIS undergraduates in universities in Southern Nigeria?

### **Research Hypotheses**

The following null hypotheses were formulated to guide the study

*H<sub>0</sub> 1* There is no significant relationship between LIS undergraduate computer self-efficacy and electronic library use in universities in Southern Nigeria

### **Literature Review**

#### **Use of Electronic Library**

The electronic library has significantly transformed information handling and management in academic environments and university libraries in particular. Kude (2013) opined that an electronic library also known as a web-based library is a library consisting of electronic materials

and services with walls as well as without walls depending on the way the users access it. The foregoing means that an electronic library eliminates physical boundaries of data storage, access, retrieval and dissemination of information to users within and across the globe with the use of an internet network. Owolabi, Idowu, Okocha and Ogundare (2016) mentioned that an electronic library is a set of documents available through electronic means by the use of digital or telecommunication technologies that allow for the retrieval, archiving, preservation, and dissemination of electronic documents. Electronic library refers to the process of translating a piece of information such as a book, sound recording, picture or video into bits (Umaru, Aghadiuno & Mamo, 2018).

According to Fabunmi, Paris and Fabunmi (2016), electronic library use can be seen as the process of using electronic resources in the library via electronic medium. They further established that electronic library use gives users reliable and accurate information for the right user. In addition, the use of electronic library information resources helps students to be well-informed and up-to-date in their respective thematic areas, unlike print information resources that are not updated regularly. Yudina (2018) defines electronic libraries as information systems that allow reliable storage and effective use of various collections of electronic documents (text, image, sound, video, etc.), localized in the system itself, as well as accessible to it through telecommunications networks. Borisova, Mikidenko and Storozheva (2020) define electronic library use as the process of staying off-library to access electronic resources from diverse ends via the use of fingertips, computers and telecommunication gadgets. Thus, students can access information around the globe, particularly through the Internet for their scholarly work. Information can be accessed from different parts of the globe without any geographical and time limitations. The electronic library information resources can be subscribed through consortia/publisher updates, modifications and alterations could easily be effected, and made available in various files and formats for use.

Tofi (2019) asserted that electronic library use has created opportunities for global access to information, enhanced the speed of service, increased the number of users served, increased the quality of the information provided, and offered new opportunities for undergraduate students to find relevant information. The use of an electronic library enables undergraduates to access current international literature as soon as it is published on the Internet from a different location. Electronic library information resources consist of information provided in electronic formats such as CDROM, databases, flash drives, e-books e-journals, online databases, Online Public Access Catalogues, institutional repositories, e-prints, World Wide Web; WIFI; search engines; online indexes; video CDs VSAT based Internet connectivity; portals and another computer based electronic networks (Ekhanuere, Olayinka, Taiwo, Alonge & Obono, 2015; Ekere, Omekwu, Obiora, & Chidinma, 2016). Electronic library information resources can be searched, browsed, accessed, copied, downloaded quickly and customized, linking feature facilitates links within the documents as well as outside of the documents (Owolabi, Idowu, Okocha & Ogundare, 2016). Students can use electronic library resources simultaneously, and it is possible to monitor the usage of electronic information resources to some extent (Tlakula & Fombad, 2017).

In the context of this study, electronic library use can be seen as the use of information resources in the library electronic section via an electronic medium, computer and Internet connectivity. These information resources that are used electronically in the library include; e-books, e-journals, e-print, e-conference proceedings, e-thesis and dissertations, CD-ROMs, offline databases, online databases, Internet access, institutional repositories, Online Public Access Catalogues, email reference services, ask-a-librarian, virtual reference desk, pathfinders online.org, frequently asked questions, question point reference services, user orientation and feed-back, online current awareness, electronic reference sources just to mention but a few. Electronic library use allows students to have access to global information resources, beck and call most especially the Internet for their academic prowess.

### **Computer Self-Efficacy of Undergraduates**

Computer self-efficacy is based on self-efficacy. The term self-efficacy as seen by Hopper (2019) refers to an individual's confidence in their ability to complete a task or achieve a goal. It is a person or level of confidence about his/her ability or capability to carry out or attain a set goal and produce results while computer self-efficacy is the degree of an individual's perceived ability to use a computer. Self-efficacy consists of three dimensions strength, magnitude and generalizability. Strength refers to the confidence possessed by an individual in his ability in various computing tasks; magnitude is an individual with high computer self-efficacy, while generalizability reflects the scale to which judgment is limited to a particular computing action (Bandura, 2012). Computer self-efficacy plays a positive and significant role among individuals in making decisions involving computer adoption and usage. Dabas and Pandey (2015) referred to computer self-efficacy as an individual's self-evaluation or personal assessment of one's ability to use a computer gadget for a variety of tasks.

Computer self-efficacy is the perception of performing specific computer-related tasks within the domain of general computing. Champa (2016) stressed that the high computer self-efficacy of the individual is more likely to increase the use of a computer and decrease an individual's computer anxiety. Mensah and Lebbaeus (2013) opined that computer self-efficacy is when an individual believes that he or she is capable of performing a task with the use of a computer. Hauser, Paul, Bradley and Jeffrey (2012) affirmed that computer self-efficacy is divided into general and specific; general computer self-efficacy refers to the belief that a subject can perform well across a variety of computer tasks while specific computer self-efficacy refers to the belief that the subject can perform well using a particular technology such as programming and database development. Hsia, Chang and Tseng (2014) propounded that computer self-efficacy is the perceived ease of use of a computer to perform a task. This perceived ease of use of the computer is born out of the daily use of the gadget to perform a specific task.

Computer self-efficacy is a significant determinant of performance which operates partially, independent of the level of skills possessed. It also involves a generative capability in which an individual must organize cognitive, social and behavioural sub-skills into integrated courses of action. As such, an undergraduate student who possesses a high level of computer self-efficacy

might use the computer more (Oyewole, 2017). Computer self-efficacy is divided into two different levels which include; general and advanced. General computer self-efficacy refers to an individual's judgment of his or her ability to perform across multiple computer application domains. Hauser, Paul, Bradley and Jeffrey (2012) proclaimed that general computer self-efficacy refers to the belief that a subject can perform well across a variety of computer tasks. Specific computer self-efficacy refers to the belief that the subject can perform well using a particular technology such as programming, database development, etc. Advanced computer self-efficacy refers to an individual's perception of efficacy in performing specific computer-related tasks within the domain of general computing.

There are also four identified principal sources of computer self-efficacy according to Lunenburg (2011) citing Bandura (1997), and Antoine (2011), which are mastery experience or past performance, vicarious experience, verbal persuasion, and physiological states or emotional cues. Mastery experience or past performance, occurs when people try to do something and are successful. According to Bandura (1994), mastering experience is the most effective way to boost self-efficacy since students are more likely to believe they can do something new if it is similar to something they have done. Vicarious experience means when one watches someone like himself accomplish something, he would like to attempt similar tasks. Verbal persuasion means that people are more likely to perform a task when they are persuaded verbally that they can achieve or master a task. Physiological states or emotional cues show 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.

In addition, Teo and Ling-Koh (2010) pointed out that computer self-efficacy has three dimensions which include basic computer skills, media-related skills, and web-based skills. These dimensions show the extent to which an individual can use a computer. Sam, Othman, and Nording (2011) asserted that the frequency of use of computer likely increase computer self-efficacy because the more you use a computer system the better and well-informed your speed and level of usage increase. In terms of academic prowess, Schlebusch (2018) emphasized that soaring computer self-efficacy levels are an important factor in assisting students to be academically successful in the present technological era. Umar, Azeez and Haruna (2020) concluded that computer self-efficacy is the belief in one's ability to perform a desired outcome using a computer. In the context of this study, computer self-efficacy can be defined as an individual's decision toward his or her capability of computer use. Thus, this belief has an influence on the choice of activities, degree of effort expended, and persistence of effort to use the computer

### **Computer Self-Efficacy and Use of Electronic Library Undergraduates**

This area examines articles that are related to the study and are based on the opinions and positions of different authors. However, the review of the literature has shown that not much has been done by researchers to test computer self-efficacy and the electronic library use of undergraduates. Few studies have defined aspects of computer self-efficacy and the use of library resources and services that are electronic. Oyewole and Oladepo (2017), opined that computer self-efficacy is a significant determinant of performance which operates partially, independent of

the level of skills possessed to use an electronic library. They further pointed out that computer self-efficacy involves a generative capability in which an individual must organize cognitive, social and behavioural sub-skills into integrated courses of action. As such, an undergraduate student who possesses a high level of computer self-efficacy might use the electronic library more.

Loar (2018), opined that computer self-efficacy is associated with a variety of positive learning processes and outcomes of using electronic information in the library. Aktag (2015), acknowledged that the more the duration of computer usage increased the computer self-efficacy level of students and also the use of electronic libraries. Wolverton, Guidry-Hollier and Lanier(2020), affirmed that electronic library resources are technology dependent, and there is, therefore, a need for computer self-efficacy to use them. Undergraduate students are expected to use electronic library resources while at the university to improve the quality of their academic work. For them to be successful in the use of the available electronic library resources, undergraduate students need to acquire and practice the skills necessary to explore electronic libraries. To fully maximize the potential of electronic library resources, there is a need for computer literacy. This is necessary considering that searching in the electronic environment requires knowledge of the structure of databases and requires instructions which must be input into the computer by the searcher.

The electronic nature of electronic library resources, however, demands that undergraduates be confident and skilled in the use of computers (Umar, Azeez & Haruna, 2020). They further established that the use of electronic library resources by students in developed countries is well-recognized, while their use in less developed countries is still in its infancy. Several reasons such as low bandwidth, erratic power supply, inadequate provision of computers, and low computer self-efficacy were reported to be attributed to the low frequency of utilization of electronic library resources in developing countries by the authors. Hauser, Paul, Bradley and Jeffrey (2012) explained that the level of skills possessed by the student is a significant determinant of computer self-efficacy in order to operate partially or independently. This involves a generative capability in which an individual must organize cognitive, social and behavioural sub-skills into integrated courses of action while using the computer. Several findings have established that in determining the level of computer self-efficacy and electronic library use, there is evidence that undergraduate computer self-efficacy level is high (Oyewole & Apotiade, 2016; Fabunmi, & Awoyemi, 2017; Eserada, Okolo & Ideh, 2019; Alahakoon & Somaratne, 2020; Olawale & Popoola, 2021).

The use of electronic library resources, it can, therefore, be assumed that students with high computer self-efficacy would be more likely to take advantage of electronic library resources when compared to students with low computer self-efficacy, as the latter may lack confidence or shy away from using computer-based resources (Giles & Kent, 2016; Chen, 2012). According to Champa, (2016), computer self-efficacy is an essential factor to consider in terms of using electronic library resources that are computer-based and information-oriented. Nevertheless, frequent use of computers is likely to increase the computer self-efficacy level of a student when using the computer. This was deduced by Clayton, Njoroge, Reed and Suh (2017) that students have lower computer self-efficacy today than students from ten years ago.

Similarly, Aktag (2015) established that the duration of computer usage increased the computer self-efficacy level of students and also the use of electronic library resources. Pellas (2014) asserted that computer self-efficacy is an important factor that influences electronic library resource utilization in the technological world and that the extent to which undergraduate demonstrates confidence in the use of a computer can also determine the extent to which they will use electronic library resources since the resources are accessed via computers. In other words, the level of computer self-efficacy possessed by undergraduates will determine their level of usage of electronic library resources.

**Literature Review (Empirical Review)**

**Relationship between computer self-efficacy of undergraduates and electronic library use**

S/N	Author (s)/Year	Title of Article	Study Area	Method	Findings
1	Bello & Ajoviyon (2021)	Influence of computer self-efficacy on the use of electronic information resources among Polytechnics students	Ogun State, Nigeria	Survey research	Revealed that students will utilize the electronic information resources if they have the necessary computer self-efficacy.
2	Umar, Azeez & Haruna (2020)	Relationship between computer self-efficacy and use of electronic information resources by undergraduate students of the Federal University of Kashere	Gombe State, Nigeria	Descriptive survey research design	Revealed that the extent to which each sampled student's use of electronic information resources is often directly proportional to the level of his/her computer self-efficacy.
3	Ebijuwa & Maba wonku (2019)	Computer self-efficacy as a predictor of undergraduates' use of electronic library resources in Federal Universities	South-West Nigeria	Descriptive survey research design/	Revealed that there was a significant relationship between computer self-

					efficacy and use of electronic library resources ( $r = 0.13, p < 0.05$ ). The finding also pointed that computer self-efficacy influenced undergraduates' use of electronic library resources in federal universities in South-west, Nigeria.
4	Sadiku, Issa, Salman, Omopupa & Rabin (2017)	Influence of users' computer self-efficacy and perceptions on satisfaction with electronic libraries in universities in Nigerian	Northern, Nigerian	Descriptive survey research	Revealed that computer self-efficacy of users with electronic libraries were high, even though their perceptions of electronic libraries were low. There was a strong relationship between computer self-efficacy and satisfaction with electronic library ( $r(951) = .164, p = .000$ ), a

					positive correlation between perceptions and satisfaction with electronic library (r (951) = .334, p = .000). It was therefore concluded that the satisfaction of users with electronic libraries in the universities in Northern Nigeria would largely be influenced by their level of computer self-efficacy and perception.
5	Oyedapo, Shabi & Awominure (2019)	Influence of self-efficacy on electronic resource utilization by undergraduates in three Nigerian universities.		Descriptive survey research design	Revealed that undergraduates in federal universities possessed a high level of self-efficacy. The finding further pointed that undergraduates' level of e-library resources utilization was low. However, the study established a

					statistically significant relationship between self-efficacy and e-library utilization, a statistically significant difference in e-library utilization of undergraduates in the three selected universities.
6	Tella, Tella, Ayeni&Omoba (2007)	Investigation on self-efficacy and use of electronic information as predictors of academic performance		Descriptive survey research design	Revealed that significant correlation exists among use of electronic information, self-efficacy and academic performance with electronic information ( $r = 0.2779^*$ ) and self-efficacy ( $r = 0.1559^*$ ). The reason for this relationship or correlation may be because academic performance often depends on students' personality variables
7	Nwosu,	Computer self-efficacy,		Correlati	Revealed that

	Achukwu, Akuezuilo&Uzoekwe(2015)	computer-related technology dependence and online learning readiness of undergraduate students		Qualitative research design	there was a significant relationship between computer self-efficacy, and computer-related technology dependence of undergraduates ( $r=.323$ , $p<.05$ ). It was also deduced from the findings, that the use of electronic libraries by undergraduates is a function of computer self-efficacy.
8	Olawale&Popoola (2021)	Investigate computer self-efficacy and facilitating conditions as correlates of behavioural intention to use electronic information resources by MBA students	Federal Universities in Nigeria	Descriptive survey research design	Revealed a positive relationship between perceived behavioural control or computer self-efficacy of electronic information resources and MBA students' behavioural intention to use electronic information resources in Nigeria Universities ( $r$

					= .276, n= 1015, p (.000). The finding further revealed that computer self-efficacy is positively related to use of electronic library information resources.
9	Oyewole&Oladipo (2017)	Examine the influence of information needs and computer self-efficacy on the use of electronic reference services by undergraduate students in a Nigerian University	Federal University of Technology, Akure.	Descriptive survey research design	Highlighted that there is a significant positive relationship between computer self-efficacy and the use of electronic reference services by undergraduates
10	Eserada, Okolo&Ideh (2019)	Computer self-efficacy as a determinant to the use of online public access catalogue: a case study of selected universities	Niger Delta	Descriptive survey research design	Established that the major access points through which information is accessed using OPAC are Author, Title and Subject access points, Keyword search, Simple search, basic search, Boolean search method and phrase. The

					findings also exhibited that a positive computer self-efficacy may be more akin to using OPAC in an electronic library.
12	Wu & Yeh (2012)	Examined the effects of undergraduate students' competence on usage of library electronic collections at National Taiwan University (NTU)	Taipei		Revealed that most of the students were not confident about their capabilities in using library electronic resources. A low correlation was found between students' levels of computer competencies and their frequency, familiarity and perceived importance of electronic resources.
13	Israel & Edesiri (2016)	Undergraduates' computer skills and the use of online information resources, a case study of Library and Information Science Students	Delta State University, Nigeria.	Descriptive survey method	Revealed that 98.5% agreed that computer skills enhance their use of online information resources as well as being confident in using online information

					resources due to their level of computer skills respectively
14	Sadiku&Kpako (2017)	Examined the relationship between computer self-efficacy and use of electronic resources by students in Nigerian university libraries	One University each was selected from the six geopolitical zones in Nigeria.	Descriptive survey research	Established that computer self-efficacy and the use of e-resources had a significant influence on the satisfactory use of libraries, but the use of e-resources was more significant to the satisfaction of library users. The finding further added that students who were computer-competent expressed interest in using the library's electronic resources and at the same time exhibited higher self-efficacy in electronic library use.
15	Omwanghe&Ogiamien (2021)	Examination of computer self-efficacy as a predictor of the use of automated library systems by users in	Edo State	Descriptive survey research	Revealed that library users in the university libraries understudy

		university libraries			have a high computer self-efficacy. The findings further revealed that there is a significant relationship between computer self-efficacy and the use of automated library systems by library users.
16	Nwobu, Oyewole & Apotiade (2016)	A case study on computer self-efficacy as a correlate of online public access catalogue use also expressed a relationship between OPAC and computer self-efficacy, especially in the Nigeria context	Federal College of Education (Technical) Lagos, Nigeria	Descriptive research design	Revealed that most of the respondents 125 (61.6%) searched the OPAC through the title and 53 (26.1%) used the OPAC twice a week. The finding also revealed that the majority of the study had high computer self-efficacy, as there was a significant positive relationship between computer self-efficacy and the use of OPAC (r =

					.430**; df = 202; p< 0.01). Based on the findings, was deduced that the use of the Online Public Access Catalogue (OPAC) by students has a lot of advantages and computer self-efficacy is a factor that could determine its effective utilization.
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**METHODS**

**Research Design**

The correlational research design was adopted for this study. The correlation research design according to Nworgu (2015) refers to a design that seeks to establish what relationship exists between two or more variables, as well as indicate the direction and magnitude of the relationship between the two variables. In correlation research, data are collected to determine the degree of relationship that exists between two or more variables. The choice of this design is relevant and appropriate because it seeks to establish a relationship between the two variables (computer self-efficacy and electronic library use).

**Area of the Study**

The study was conducted in Southern, Nigeria. The area consists of three geopolitical zones which include South-East, South-West and South-South. This study is more concerned with the tertiary level of education in the area. Specifically, there were 10 federal, 17 state and 8 private universities at the time of this study. Furthermore, all the universities in Southern Nigeria have functional electronic library systems that are equipped with adequate computers, Internet connectivity and bandwidth for students, staff and researchers’ utilization. More so, the rationale behind the choice of universities in Southern Nigeria for this study was informed by LIS

undergraduates' underutilization of electronic libraries when they are supposed to be pace-setters to other undergraduates in the use of electronic library information resources.

### Population of the Study

The population of this study consists of all 10, 345 LIS undergraduates from ten federal, seventeen state and eight private universities in Southern, Nigeria (LIS HOD Office, 2020/2021 Academic Session). The study was carried out using LIS undergraduates because they are the future of the librarianship profession in universities. The table below is the population distribution of respondents according to the institution.

**Table 1: Population Distribution Respondents by Institution**

S/ N	Name of Institution	Ownership	No. of Reg. LIS Undergraduates					Zone
			100L	200 L	300 L	400 L	Total	
1	Michael Okpara University of Agriculture, Umudike, Abia State	Federal	74	59	44	37	214	South-East
2	NnamdiAzikiwe University, Awka, Anambra State.	Federal	90	105	119	43	357	
3	University of Nigeria, Nsukka, Enugu State.	Federal	65	63	78	90	298	
4	Abia State University, Uturu, Abia State.	State	85	94	78	49	306	
5	Anambra State University of Science and Technology, Uli, Anambra State.	State	11	19	21	23	74	
6	Ebonyi State University, Abakaliki, Ebonyi State	State	54	63	0	0	117	
7	Enugu State University of Science and Technology, Enugu, Enugu State.	State	118	98	105	81	402	
8	Imo State University, Owerri, Imo State	State	129	95	72	56	352	
9	Madonna University Okija, Anambra State	Private	3	1	6	2	12	South-South
10	University of Portharcourt	Federal	113	95	89	95	392	
11	University of Benin, Benin City, Edo State.	Federal	88	79	62	65	294	
12	University of Calabar, Cross River State.	Federal	120	137	115	117	489	
13	University of Uyo, Akwa Ibom State.	Federal	102	98	72	69	341	
14	Niger Delta University, Wilberforce Island Bayelsa	State	51	47	0	0	98	

15	Cross River State University of Science and Technology, Calabar, Cross River.	State	216	118	96	59	489	<b>South-West</b>
16	Delta State University, Abraka, Delta State.	State	115	127	121	118	481	
17	Ignatius Ajuru University of Education, Rumuolumeni, Rivers State.	State	102	88	71	55	316	
18	Rivers State University, Port-Harcourt	State	105	119	205	85	514	
19	Rivers State University of Science and Technology, Nkpolu Rivers State.	State	122	110	103	81	416	
20	Ambrose Ali University, Ekpoma Edo State.	State	48	39	32	33	152	
21	Benson Idahosa University, Benin City, Edo State.	Private	71	58	47	38	214	
22	AdekunleAjasin University, Akungba, Ondo State	State	73	69	51	54	247	
23	Federal University of Oye-Ekiti, Ekiti State.	Federal	78	64	47	30	219	
24	University of Ibadan, Ibadan, Oyo State.	Federal	115	137	121	159	532	
25	University of Agriculture, Abeokuta, Ogun State.	Federal	115	83	55	45	298	
26	Ekiti State University, Ado Ekiti, Ekiti State.	State	69	58	44	42	213	
27	Tai Solarin University of Education, Ijebu- Ode, Ogun State	State	90	81	68	73	312	
28	Lagos State University, Ojo, Lagos State.	State	92	87	74	62	315	
29	Adeleke Ajasin University, Akungba Akoko, Ondo State	State	185	0	0	0	185	
30	Adeleke University, Ede, Osun State.	Private	92	73	52	54	271	
31	Ajayi Crowther University, Ibadan, Oyo State.	Private	88	84	71	77	320	
32	Babcock University, Ilishan-Remo, Ogun State.	Private	110	92	79	91	372	
33	Crescent University, Ogun, Ogun State.	Private	63	51	42	58	214	
34	Fountain University, Oshogbo,	Private	61	54	41	49	205	

	Osun State.							
35	Leed City University, Ibadan, Oyo State.	Private	97	86	69	64	316	
			<b>3,210</b>	<b>2,731</b>	<b>2,350</b>	<b>2,054</b>	<b>10,345</b>	

*Sources: 2020/2021 Academic Session Retrieved from Universities LIS Departmental Office.*

### Sample and Sampling Technique

The sample size for this study is 1,017 undergraduates. This was derived by taking 10% of the entire population. It should be noted that Ebonyi State University Abakaliki, Niger Delta University, Wilberforce Island and Adekunle Ajasin University have been excluded from this study because they do not have a 200-400 level of study at the time of this study. Therefore, the total population figure for the three universities has been removed from the sample. Also, the entire population of Madonna University, Okija was used as a sample since the population figure is small. The sample is regarded as adequate because Seaberg (1988) and Grinnell and Williams (1990) suggested that, “in most cases a minimum of 10% sample should be sufficient for controlling sampling error”. However, combinations of sampling techniques were used for this study. Firstly, the purposive sampling technique was used to sample the 10%. Secondly, the quota sampling technique was used to determine the sample size for each university as well as the levels of study. See the tabular representation of sample size according to level and institutions

### The Study Sample Size

S/N	Name of Institution	100 level	200 level	300 level	400 level	Total
1	Michael Okpara University of Agriculture, Umudike, Abia State	7	6	4	4	21
2	NnamdiAzikiwe University, Awka, Anambra State.	9	11	12	4	36
3	University of Nigeria, Nsukka, Enugu State.	7	6	8	9	30
4	Abia State University, Uturu, Abia State.	9	9	8	5	31
5	Anambra State University of Science and Technology, Uli, Anambra State.	1	2	2	2	7
6	Enugu State University of Science and Technology, Enugu, Enugu State.	12	10	11	8	41
7	Imo State University, Owerri, Imo State	13	10	7	6	36
8	Madonna University Okija, Anambra State	3	1	6	2	12
9	University of Portharcourt	11	10	9	10	40
10	University of Benin, Benin City, Edo State.	9	8	6	7	40
11	University of Calabar, Cross River State.	12	14	11	12	49
12	University of Uyo, Akwa Ibom State.	10	9	7	7	33
13	Cross River State University of Science and Technology, Calabar, Cross River.	22	12	10	6	50
14	Delta State University, Abraka, Delta State.	12	13	12	12	49

15	Ignatius Ajuru University of Education, Rumuolumeni, Rivers State.	10	9	7	6	29
16	Rivers State University, Port-Harcourt	11	12	21	9	53
17	Rivers State University of Science and Technology, Nkpolu Rivers State.	12	11	10	8	41
18	Ambrose Ali University, Ekpoma Edo State.	5	4	3	3	15
19	Benson Idahosa University, Benin City, Edo State.	7	6	5	4	22
20	AdekunleAjasin University, Akungha, Ondo State	7	7	5	5	24
21	Federal University of Oye Ekiti, Ekiti State.	8	6	5	5	24
22	University of Ibadan, Ibadan, Oyo State.	12	14	12	16	54
23	University of Agriculture, Abeokuta, Ogun State.	12	8	6	5	31
24	Ekiti State University, Ado Ekiti, Ekiti State.	7	6	4	4	21
25	Tai Solarin University of Education, Ijebu-Ode, Ogun State	9	8	7	7	31
26	Lagos State University, Ojo, Lagos State.	9	8	7	6	30
27	Adeleke University, Ede, Osun State.	9	7	5	5	26
28	Ajayi Crowther University, Ibadan, Oyo State.	9	8	7	8	32
29	Babcock University, Ilishan-Remo, Ogun State.	11	9	8	9	37
30	Crescent University, Ogun, Ogun State.	6	5	4	6	21
31	Fountain University, Oshogbo, Osun State.	6	5	4	5	20
32	Leed City University, Ibadan, Oyo State.	10	9	7	6	31
<b>Total</b>						<b>1,017</b>

### Instrument for Data Collection

The questionnaire was used as an instrument for data collection. The questionnaire is divided into two sections entitled “Undergraduates’ Computer Self-Efficacy Questionnaire” (UCSQ) and “Undergraduates’ Electronic Library Use Questionnaire” (UELUQ) respectively was used to collect data from the respondent. The computer self-efficacy scale was adapted from Murphy’s (1989) self-efficacy scale. While, the electronic library use scale was adapted from Umar, Azeez and Haruna’s (2020) computer self-efficacy and electronic resources use scale.

### Reliability of the Instrument

To ascertain the internal consistency of the items, the instruments were administered to 20 LIS undergraduates in the Federal University of Technology Minna, Niger State of Nigeria, which is not part of the researchers’ area of the study because they share similar characteristics. Data collected were analyzed using the Cronbach Alpha method to measure the internal consistency and reliability of the instrument. The alpha value of the reliability of the instrument resulted in

the coefficient of each cluster, cluster A876.21 and B885.15 of the different clusters for each of the two instruments respectively. The overall reliability indexes for the two clusters A and B was 88 respectively. These reliability coefficients were considered high enough for the instruments.

**Method of Data Collection**

The data will be administered to the respondents personally by the researcher with the help of one research assistant in each LIS Department in the Universities under study. The research assistants who are staff of the LIS Department in the Universities were briefed on how to administer and retrieve the questionnaires from the respondents. The spot method of administration was employed by the researcher.

**Method of Data Analysis**

The data collected was analyzed using inferential statistics. The research question was analyzed using Pearson’s Product Moment Correlation Coefficient (PPMC) and the hypothesis was tested using simple linear regression. The decision on the research question was based on the values assigned to the different statements. In deciding the research question, Nwana's (2007) opinion was used, thus the correlation coefficient (r) with the score:

- 0.00- 0.20               =Very low relationship
- 0.20- 0.40               =Low relationship
- 0.40- 0.60               =Moderate relationship
- 0.60-0.80               =High relationship
- 0.80-0.90               =Very high relationship
- 1.00                       =Perfect relationship

**Presentation of Results**

**Research Question:** What is the relationship between computer self-efficacy and electronic library use among LIS undergraduates in universities in Southern Nigeria?

**Hypothesis:** There is no significant relationship between LIS undergraduate computer self-efficacy and electronic library use in universities in Southern Nigeria.

*Table 1. Pearson r on Undergraduates’ Computer Self-efficacy and Electronic Library Use*

Variables	N	Computer Self-efficacy	Electronic Library Use	P-value	Remark
Computer Self-efficacy	983	1.00	.19	>0.05	Significant Positive Relationship
Electronic Library Use	983	.19	1.00		

Table 1 presents Pearson's correlation ( $r$ ) between undergraduates' computer self-efficacy and their electronic library use and the summary of regression analysis. The correlation coefficient ( $r$ ) of .19 shows that there was a very low positive relationship between LIS undergraduates' computer self-efficacy and their use of the electronic library. The table further revealed that the relationship was significant,  $f(df;1,981) = 36.37p < 0.05$ . Since the  $p$ -value was less than 0.05, the null hypothesis was rejected. The analyses of research question one and hypothesis one indicated that there is a significant positive relationship between computer self-efficacy and electronic library use among LIS undergraduates.

### Discussion of Findings

The finding of this study corroborates Oyewole and Oladepo (2017) highlighting that there is a significant positive relationship between computer self-efficacy and the use of electronic reference service by undergraduates in the Federal University of Technology Akure (FUTA), Ondo State, Nigeria. The finding of this study substantiates Omwanghe and Ogiemien (2021) that there is a significant relationship between computer self-efficacy and the use of automated library systems by library users. The finding of this study approves Olawale and Popoola (2021) that computer self-efficacy is positively related to the use of electronic library information resources.

Similarly, this finding aligns with that of Oyedapo, Shabiand Awominure (2019) that there is a significant relationship between self-efficacy and electronic library utilization by undergraduates. This finding was further buttressed by the finding of Ebijuwu and Mabawonku (2019) who found that there was a significant relationship between computer self-efficacy and the use of electronic library resources by undergraduates in federal universities in South-West, Nigeria. This finding also agrees with Nwosu, Achukwu, Akuezulo and Uzoekwe (2015) that there was a significant relationship between computer self-efficacy and computer-related technology dependence of undergraduates. Thus, computer self-efficacy and computer-related technology dependence predicted students' electronic library use and online learning readiness in the university environment. However, the result of this finding disagrees with Wu and Yeh (2012) who found a low correlation between students' levels of computer competencies and their frequency, familiarity and perceived importance of electronic information resources.

### Conclusion

The main thrust of this study was to investigate the correlation between computer self-efficacy and electronic library use among LIS undergraduates in universities in Southern Nigeria. Thus, electronic library use is an extremely complex concept that is influenced by the computer self-efficacy factor, however, the present study concludes that computer self-efficacy significantly correlates with electronic library use among LIS undergraduates in universities in Southern, Nigeria.

## Recommendations

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

- 1 Electronic library use thrives in an electronic environment and as such the university management should provide an enabling environment (adequate funding, training on electronic resources and internet facilities) and funding bodies should support university library management financially towards actualizing these electronic services.
- 2 The university authorities and the Nigeria Library Association (NLA) including the Nigeria University Commission (NUC) should collaborate to tailor the LIS curriculum to reflect information and communication technological courses with innovations prevalent in this 21<sup>st</sup> century like what is obtainable in developed world. Also, they should ensure that the teaching of computer skills to LIS undergraduate in universities is promoted. This is to ensure that the low level of electronic library resource usage among LIS undergraduate changed to high and is sustained for their adequate academic prowess.

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