Correlation Analysis of the Relationship between Demographic Variables, Computer Self-Efficacy, and Information-Seeking Behavior of Nigerian University Students

Tunde Toyese Oyedokun[1] ![ORCID], Medinant Dolapo Laaro[2] ![ORCID], Zainab Olanihun Ambali[3] ![ORCID],

Olabisi Fadeke Adesina[3] ![ORCID]

[1](Ag. University Librarian), Thomas Adewumi University, University Library, Kwara State, Nigeria
[2](College Librarian), Kwara State College of Arabic and Islamic Legal Studies, College Library, Kwara State, Nigeria
[3](Academic Librarian), University of Ilorin, University Library, Kwara State, Nigeria

Corresponding author : Tunde Toyese OYEDOKUN
E-mail : tunde.oyedokun@tau.edu.ng

ABSTRACT

The study evaluated demographic variables, computer self-efficacy, and information-seeking behavior of undergraduate students at the University of Ilorin, Ilorin, Nigeria. The study used a descriptive survey design of the correlational type, and the instrument for collecting data was a questionnaire. Undergraduates of the University of Ilorin, Ilorin, Nigeria constitute the unit of analysis and their population stood at 45,885. Multi-stage sampling techniques that include stratified and purposive sampling were adopted. The sampling size was set at 394, but 366 returned questionnaires were found useful for analysis. The result of findings on the level of computer self-efficacy among undergraduate students at the University of Ilorin indicated that students are highly versed in using computers as a tool, sorting out information from search results, knowing how to access information databases and information repositories, and easily finding the information they need with their computer skills. On students' information-seeking behavior, most users agreed that they consult the library when seeking information that could assist them in their course of study and academic program, and they are willing to pay for relevant information and always check for currency and relevance of the information sources they're using. There is a strong and significant positive relationship between computer self-efficacy and information-seeking behavior. There is no significant relationship between demographic variables and computer self-efficacy. Likewise, there was no significant relationship between demographic variables and information-seeking behavior.

Keywords: Computer self-efficacy, information-seeking behavior, demographic variables, undergraduate students

1. INTRODUCTION

Institutions of higher learning are growing more and more reliant on modern technology, particularly with the use of computers as tools for information gathering, searching, and exploration. The unrestricted dissemination of information is improved by digital information, and as a result, computer use has received more attention. An electronic device called a computer is used to digitize, store, document, and retrieve electronic information sources and can be used to network with other computers in order to share information resources and, more crucially, for academic and research purposes. As such, computer use has become increasingly pervasive in today's digital age as a tool for information search and information retrieval, and as such has proven to be an essential educational tool. Students must therefore have computer self-efficacy skills in order to perform effectively in their information-seeking tasks.

Computer self-efficacy is defined by Adekunjo and Unuabor (2018) as the degree to which a person believed that they could use a computer and the related technologies to carry out general or specialized information processing activities. Furthermore, computer self-efficacy is crucial since its operational knowledge would give students a higher chance of educational excellence. Computer self-efficacy, in a more technically restricted sense, refers to people's perceptions, beliefs, and assessments of their capacity to use computers and other electronic devices like laptops and smartphones, as well as internet browsing, to carry out specific tasks and resolve uncertainties. This demonstrates unequivocally how crucial it is for students to be computer-literate. Computer self-efficacy is a foundational component of students' usage and mastery of computers for information retrieval and searching that is built on an already established feeling of self-efficacy (Abdullah & Mustafa, 2019). Any student at a higher level who wants to excel and progress academically in this digital age should be able to explore the digital environment (Chen, 2017).

However, if computer self-efficacy refers to an assessment of one's own computer skills, then this idea may affect one's information-seeking behavior, readiness, and persistence of effort in information searching. Going by forgoing assumption, students' behavioral reactions also, such as their attitude toward computer use, are impacted by their computer self-efficacy. Given the low confidence in their own abilities, some students may feel puzzled or anxious when using computers; On the other hand, those with a high level of computer self-efficacy tend to be more interested in and inclined to use computers for both broader and specific tasks. Whatever the case, one's decision on what behavior to engage in while seeking information, the search effort, persistence in attempting that information-seeking, and the effectiveness of the information search are all driven by one's computer self-efficacy. Information searching, browsing, sourcing, and navigation are all included in the information-seeking process. We seek information to broaden our knowledge about our environment, increase our understanding of subjects of interest in the world, and to pursue professional and personal goals.

Information-seeking is a complex process that involves social, informational, and interactive behavior. It is a deliberate search for information that aims to achieve specific objectives by gathering data from designated information sources. Needs assessment, problem clarification, source selection, query design, search execution, result analysis, question answering, and review are all parts of this process and method for solving problems. Because of this, finding or searching for information to resolve uncertainty is not always an easy task. Information searchers have two options: they can either handle their own processes directly or use an intermediary. In order to solve problems, the information seeker analyzes, extracts, and integrates the required knowledge with what is already available. The process might well be repeated if the issue isn't resolved. However, this is due to the internal limitations of the person; either the drive to continue seeking out more information or the decision to stop.

Information-seeking behavior is an omnibus term that includes a range of activities designed to convey information demands together with the effort focused on information searching, selection, and assessment processes, up to the final use of such information. An individual's persistent tendency and attitude toward sourcing and gathering information for personal use and/or knowledge update can be characterized as information-seeking behavior. In essence, it involves actively looking through available information in the hopes of discovering the answer to a particular question. According to Tubachi (2018), the processes that establish users' information needs, search habits, and subsequent usage of that information can be summed up as information-seeking behavior. In a nutshell, information-seeking behavior is concerned with figuring out how a person searches for and uses information, the channels they use, and the variables that determine how they use it.

Information users engage in information-seeking behavior in response to needs they perceive and, in doing so, place demands on formal or informal information sources or services, with varying degrees of success. When a person perceives a need for information in the context of their environment and realizes that there is a knowledge gap that needs to be filled in order to solve an issue, they engage in information-seeking behavior in an effort to address the perceived need. A multitude of information systems, whether manual or computer-based, may be evaluated during

the search process. In the context of the current study, university students are expected to be able to recognize their information needs, search for information, and choose and assess the information that is available before using it. Due to the need to complete coursework, prepare for lectures, seminars, and workshops, and produce final-year research projects, students' information-seeking behavior is typically deliberate.

Be that as it may, self-efficacy influences individuals' thinking patterns, emotions, and behavior, whereas the information-seeking behavior of students is not an exception to this. This is more reason why information searching goes beyond mastering a set of information search techniques but rather includes emotional state during the search, vicarious experiences of others, and social feedback received from people that determine the success of the performance of a search (Bronstein & Tzivian, 2013). More importantly, information-seeking behavior is motivated by the searcher's sense of self-efficacy. With the introduction of computers, particularly their use in managing and handling information, along with new formats for information sources, information retrieval tools, and information search techniques, students are now expected to be computer self-efficacious.

In today's digital age, the effective use of information and communication technologies (ICTs) is crucial for academic success and professional growth. Nigerian university students, like their counterparts around the world, rely heavily on computers and the Internet to access information, complete assignments, and engage in various academic activities. However, the extent to which students effectively utilize these resources is influenced by their demographic characteristics and their level of computer self-efficacy. While studies have explored the relationship between demographic variables, computer self-efficacy, and information-seeking behavior in various contexts, limited research has focused on Nigerian university students. Nigeria, with its diverse population and rapidly growing ICT sector, presents a unique context for investigating these relationships. Understanding the interplay between demographic variables, computer self-efficacy, and information-seeking behavior among Nigerian university students can provide valuable insights into the factors that influence their use of technology and their information-seeking practices.

Given the dearth of research in this specific context, this study aims to examine the correlation between demographic variables, computer self-efficacy, and information-seeking behavior among Nigerian university students. By investigating these relationships, we seek to contribute to the existing body of knowledge on the factors influencing students' engagement with technology and their information-seeking practices. The findings of this study will not only provide insights into the Nigerian context but also have implications for educational institutions, policymakers, and researchers interested in promoting effective technology use and information literacy among university students.

1.1. Statement of the Research Problem

Many studies examined students' information-seeking behavior from a variety of angles in an effort to comprehend how they find and use information, the sources they use, and the factors that either discourage or encourage information use, such as psychosocial factors, socioeconomic factors, availability and access to information systems, among other things. This is because information-seeking behavior is an area of dynamic interest that fascinates information scientists, communication scientists, sociologists, and psychologists, and as a result, there has been a lot of research done in that subject area (Giade, Khalid & Abdullah, 2018; Suki & Suki, 2016; El-Maamiry, 2016; El-Maamiry, 2016; El-Maamiry, 2016; Bronstein, 2014; Bronstein & Tzivian, 2013).

Many factors affect students' information-seeking behavior, it is desirable to understand the reasons for which information is needed, the environment in which they operate, their skills in identifying the needed information, the channels and sources preferred for acquiring information, and barriers to information use. Additionally, a user's information-seeking behavior is influenced by their level of education, source awareness, experience, access to libraries and other information sources, and the length of time spent seeking information. However, only a few studies have found a link between computer self-efficacy and information-seeking behavior when performing specific tasks on a computer (Adekunjo & Onuabor, 2018; Malliari, 2012). As of when this study was carried out, there is a dearth of studies on correlation analysis of the relationship between demographic variables, computer self-efficacy and information-seeking behavior among university students, specifically in Africa and by extension, in Nigeria. It is in light of this that this study was carried out to fill the empirical gap observed in the literature and general body of knowledge.

1.2. Objective of the Study

The study's broad objective is to establish a relationship between demographic variables, computer self-efficacy, and information-seeking behavior among students at the University of Ilorin. The specific objectives are to:

1. ascertain the degree of computer self-efficacy among undergraduate students at the University of Ilorin in Ilorin, Kwara State, Nigeria;

2. ascertain the information-seeking behavior of undergraduate students of the University of Ilorin, Ilorin, Kwara State, Nigeria;

3. establish the relationship between computer self-efficacy and information-seeking behavior of undergraduate students of the University of Ilorin, Ilorin, Kwara State, Nigeria;

4. establish the relationship between demographic variables (gender, course of study, and study level) and computer self-efficacy of students of the University of Ilorin, Ilorin, Kwara State; and

5. establish the relationship between demographic variables (gender, course of study, and study level) and information-seeking behavior of University of Ilorin students.

2. LITERATURE REVIEW

Information is essential and a fundamental component in the accomplishment of human endeavor. A hazy sense of something being missing led to the discovery of facts that helped clear up confusion, making it a crucial tool. Information is a source of knowledge that people use to try to improve their lives. Information need, according to Doraswamy (2017), is an understanding of an increasingly vague awareness of something missing in one's existing knowledge base. Perceived gaps in one's knowledge area are focused on the need for information. A person's desire for knowledge is influenced by three things: their reasons for looking for information, the use they will make of it once they find it, and how they will use it after they have it. The main motivation for people to seek out information is a need for it. When there is a perception that something is lacking, which prompts the search for information, an information need is created. A person with an information need has a particular gap in his or her understanding of the world, or what we would refer to as a lack of preparation to engage meaningfully in interactions with the environment. In support of this, Khan and Shafique (2011) emphasized that an individual's or group's desire to discover and receive information to meet a need is known as having an information need.

Acknowledging the reason for information search, the totality of human behavior in relation to the sourcing and channel of information and communication is what is referred to as information-seeking behavior. In corroboration of the foregoing, Tubachi (2018) associated information-seeking behavior with a purposeful search for information. A specific type of problem-solving behavior known as information-seeking entails identifying and analyzing the information needed to formulate search strategies, carry out the search, and assess the outcome. Information-seeking behavior refers to the seeker's psychological actions that include looking for, finding, obtaining, and using information. Information seekers actively and purposefully seek out current information from library resources, including online sources. In agreement with that, Padma, Ramasamy, and Sakthi (2013) emphasized that efforts geared toward identifying information needs, obtaining such information, assessing it, and deciding on what information to use to satisfy those needs are collectively referred to as information-seeking behavior. In a nutshell, information-seeking behavior primarily focuses on who needs what information, what kind of information, for what purpose, and how information is accessed, evaluated, and used.

Beliefs about one's own capacity for success affect how people feel, think, act, and motivate themselves. In many aspects, having a strong sense of efficacy improves one's ability to achieve things. High-confidence individuals regard challenging tasks as tasks to be completed rather than as threats to be averted. Such a successful viewpoint encourages intrinsic interest and total immersion in activities. Such individuals establish high standards for themselves and remain steadfastly committed to them. When they fail, they intensify and continue their attempts. They swiftly regain their sense of effectiveness after failures or losses. They attribute failure to insufficient effort or deficient knowledge and skills, which are attainable (Suki & Suki, 2016).

Technology has altered how we communicate, educate ourselves, and act in relation to the efficacy expectation of the conviction that one can carry out behavior necessary to produce desired results (Bandura, 2012). When using technology, self-efficacy is particularly important because, if a person is not confident in their own abilities, they will quickly give up all learned skills when they don't see immediate results. Computer self-efficacy was developed to integrate self-efficacy into performing general and specific tasks on or with a computer. The belief that a person has about their knowledge, skills, and capacity to use a computer to carry out specific tasks is what is referred to as computer self-efficacy. On yet another ground, computer self-efficacy is the assessment of one's capacity to utilize a computer that is not based on past performance but rather on potential future performance. It goes beyond simple component sub-skills, such as basic operating system performance, and instead incorporates judgment of the ability to apply those skills to broader and specific tasks. Additionally, it excludes basic sub-skills, such as inputting formulas in a spreadsheet or formatting drives and diskettes. Instead, it takes into account assessments of the ability to apply those skills to more complex and elaborate tasks, like searching for information, analyzing data, and writing reports. Both generic and task-specific computer self-efficacy are discussed in the literature. In contrast to broad computer

self-efficacy, which frequently encompasses a variety of computer applications, task-specific computer self-efficacy is most closely aligned with Bandura's original definition of self-efficacy (Hatlevik, Throndsen, Loi & Gudmundsdottir, 2018; Kass, 2014).

Computer self-efficacy is an individual's belief in their ability to use computers to perform specific tasks successfully. Students' computer self-efficacy levels significantly influenced their engagement with technology and their overall academic performance. Computer self-efficacy is important in predicting students' intention to use technology and their adoption of ICTs. Also, an important factor is information literacy skills in navigating and utilizing information effectively. In consonance with forgoing, Brostein (2014) pinpointed that higher levels of computer self-efficacy were positively correlated with proactive information-seeking behavior among university students. Similarly, Kanjiani (2021) demonstrated that computer self-efficacy significantly influenced individuals' engagement in online information-seeking and their perceived usefulness of information sources.

In summary, the reviewed literature highlights the significance of information need, information-seeking behavior, and computer self-efficacy in the context of university students. It emphasizes the role of computer self-efficacy in influencing students' engagement with technology and information-seeking behavior. Understanding these concepts can contribute to improving students' information literacy skills and their ability to effectively access and utilize information resources. The literature emphasizes that information need arises when individuals have a perceived gap in their knowledge or understanding, prompting them to search for information to fill that gap. Information-seeking behavior is described as purposeful and problem-solving behavior, where individuals actively search for, obtain, and use information to satisfy their needs. The literature also highlights the importance of beliefs about one's own capacity for success, referred to as self-efficacy, in influencing individuals' behavior and motivation. Specifically, computer self-efficacy is identified as an individual's belief in their ability to successfully use computers to perform specific tasks. The literature review indicates that higher levels of computer self-efficacy are positively associated with proactive information-seeking behavior.
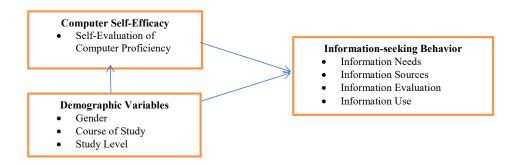
2.1. Conceptual Framework

Figure 1. Conceptual model on the relationship between computer self-efficacy, demographic variables and information-seeking behavior.

Figure 1 demonstrates the relationships between the study's variables and identifies the direction of the enquiry, which can be referred to as the study's conceptual framework. The conceptual model compared the variables' relationships. Using a computer to do an information search makes a wider variety of informational resources accessible on a worldwide scale. The ability to look for information online at any time and from any location means that there are no time restrictions on information searches. It provides quick access to current and relevant information. Understanding computer self-efficacy can help to shed light on students' information-seeking behavior with regard to the usefulness of computers. Students' confidence in their computer skills may influence their capacity to properly retrieve accurate and relevant information. Perhaps an information seeker's conviction in their computer's ability to find information impacts their aptitude and conduct in doing so (Suki & Suki, 2016). Student information-seeking behavior and computer self-efficacy are influenced by demographic factors. Students' levels of computer skill and information-seeking behaviors may be influenced by characteristics like gender, academic inclination, and course level.

2.2. Empirical Studies

Suki and Suki (2016) researched how perceived self-efficacy affected information retrieval; they found that social feedback had the biggest impact, followed by one's own self-evaluation and emotional state. Similarly, El-Maamiry

(2016) examined self-efficacy in the information-seeking behavior of students at the State University of Zanzibar, Tanzania. The results showed that mastery experience received the highest ratings, followed by vicarious experience, emotional state, and social feedback, with social feedback receiving the lowest ratings. The results of the analysis revealed considerable differences between students at various levels of study and departments, with seniors having more self-efficacy than juniors and computer science students having higher self-efficacy than students in the natural sciences. Similar to the foregoing, Berkant's (2016) study examines how faculty of education students perceive their computer self-efficacy as well as how they feel about using computers in the classroom. This study uses a correlational survey model and is descriptive in nature, and 414 students from a Turkish university's faculty of education made up the unit of analysis. The findings reveal that students who own their own personal computers have more positive computer attitudes and higher computer self-efficacy beliefs; that class level variables have no effect on students' computer attitudes and self-efficacy beliefs; and that the amount of time spent each day using a computer and prior computer experience are related to both computer attitudes and self-efficacy beliefs. Finally, the results show that male students have higher computer self-efficacy beliefs.

Bronstein (2014) investigated the self-efficacy perceptions of Israeli library and information science students with respect to their information-seeking behavior based on Bandura's four sources of self-efficacy information through an online survey of 205 students that anonymously completed the questionnaire. The research's findings demonstrate that participants reported high levels of self-efficacy and that three of the four sources of self-efficacy data were crucial in helping them establish those beliefs. No gender-based differences were found in self-efficacy perceptions or a number of socio-demographic factors. Age, educational level, and the sources with greater influence were shown to be significantly correlated. Postgraduate students claimed that their mastery experiences, affective states, and social feedback had a greater impact on them.

Okoh and Ijiekhuamhen (2014), research on Federal University of Petroleum Resources students' information-seeking behavior and the researchers employed a standardized questionnaire to gather information. The frequency, bar chart, and percentage methods were used to evaluate the data collected for ease of comprehension. The study's findings show that the majority of the respondents conduct their research using Google, print textbooks, library resources, and social media. Poor search skills, unstable electricity, and a lack of computer literacy were found to be variables impacting respondents' information-seeking behavior. Likewise, Fasola and Olabode (2013) conducted research on students' information-seeking behavior at Ajayi Crowther University in Oyo, Nigeria. Their findings showed that 66% of respondents sought information for academic purposes, 62.8 % of respondents preferred to seek and use information resources at libraries, and that (55.4%) wanted information materials relevant to their course of study. Most respondents (53.2%) said they were satisfied with the library's ability to meet their information needs.

3. Methodology

This is quantitative research, and a descriptive survey design of the correlational type was adopted. The target population of this study consisted of all the undergraduates at the University of Ilorin, and according to the report of the academic planning unit of the university, as of the 2020/2021 academic session, the total number of undergraduates in the University of Ilorin was 45,885. The sampling technique adopted for this study is multi-stage sampling, first with stratified random sampling because of the heterogeneous nature of the target population, where every strata of the population must be duly represented. On this note, the researcher grouped the targeted population alongside undergraduate students' faculties. The second stage of sampling is purposive sampling, when five faculties, namely, the Faculty of Arts, Faculty of Communication and Information Sciences, Faculty of Engineering, Faculty of Management Sciences, and Faculty of Life Sciences, are selected from fifteen faculties at the University of Ilorin, Ilorin, Nigeria. The selected faculties represent the four branches of knowledge, namely, arts and humanities, engineering and technology, social sciences, and pure sciences.

The sample size for the study is 366, which is acceptable according to Israel's (2003) sample size determination table with a precision of ±7% for a population size of 50000. The sample size was allocated proportionately. The researcher ensures that the five selected faculties are represented in the sample and that only those respondents that are available and willing to participate in the study constitute the sample size. The instrument for data collection was a structured and validated questionnaire. The researcher administered 30 copies of the questionnaire to the undergraduates at Kwara State University, Malete, using the split-half odd number method to determine the reliability coefficient of the instrument, and the Cronbach Alpha yielded a reliability co-efficient of 0.723 for computer self-efficacy and 0.734 for information-seeking behavior, which was considered reliable and credible for subsequent administration. The researcher personally administered the questionnaire with the help of two trained research assistants. The data collected for the

study was analyzed using descriptive and inferential statistics such as frequency counts, percentages, mean score, standard deviation, and Product Moment Correlation (PPM).

4. ANALYSIS AND INTERPRETATION

In this section, we present a comprehensive analysis of the correlation between demographic variables, computer self-efficacy, and information-seeking behavior among Nigerian university students. The study investigates the intricate interplay between these factors to shed light on the dynamics that influence students' utilization of information resources in the digital age. The Tables below encapsulate the descriptive and statistical correlation coefficients obtained from the survey responses of a diverse sample of undergraduate students of the University of Ilorin, Ilorin, Nigeria. Each correlation coefficient represents the strength and direction of the linear relationship between specific demographic variables, levels of computer self-efficacy, and various dimensions of information-seeking behavior.

Table 1. *Demographic Characteristic of the Respondents*

		Frequency	Percentage
Gender:			
	Male	197	53.8
	Female	169	46.2
Total		**366**	**100**
Age:			
	16-20	141	38.5
	21-25	173	47.3
	26-30	29	7.9
	31 and Above	22	6
Total		**366**	**100**
Level of Study:			
	100 Level	56	15.3
	200 Level	92	25.1
	300 Level	106	29
	400 Level	82	22.4
	500 Level	30	8.2
Total		**366**	**100**
Faculties:			
	Arts	101	27.6
	Engineering and Technology	74	20.2
	Social Science	60	16.4
	Life Science	81	22.1
	Communication and Information Sciences	50	13.7
Total		**366**	**100**

Source: Field Survey

Table 1 presents the demographic characteristics of the respondents. In terms of the gender demographic, male participants constitute the majority group with 197 (53.8%), while their female counterparts constitute the least group with 169 (46.2%). On the age of respondents, the majority of participants fall within the age range of 21–25 with 173 (47.3%), followed by the age range of 16–20 with 141 (38.5%), and the age range of 26–30 with 29 (7.9%). While participants within the age range of 31 & above constitute the least group with 22 (6%), The majority of the respondents are in the 300 level of their academic program with 106 (29%) representatives, followed by the 200 level with 92 (25.1%), the 400 level with 82 (22.4%), and the 500 level students constitute the least group with 30 (8.2%). On the faculty of respondents, the majority of the participants are from the Faculty of Art with 101 (27.6%); followed by the Faculty of Life Science with 81 (22.1%); followed by the Faculty of Engineering & Technology with 74 (20.2%); and the Faculty of Social Sciences with 60 (16.4%). Participants from the Faculty of Communication and Information Sciences constitute the least group with 50 (13.7%).

The majority of the participants in the study are male, comprising 53.8% of the respondents. This suggests that the findings and conclusions drawn from the study may reflect the experiences and perspectives of male students more prominently. The distribution of participants across different age ranges indicates that the majority of respondents fall within the age range of 21-25, followed by the age range of 16-20. These findings imply that the study primarily focuses on young adults and may not capture the experiences of older students. The distribution of participants across different academic levels and programs provides insights into the sample composition. The study primarily includes undergraduate students in their intermediate years of study. The representation of different academic levels and programs allows for analysis of potential variations in computer self-efficacy and information-seeking behavior based on these factors.

Research Question 1: What is the level of computer self-efficacy of undergraduate students in the University of Ilorin, Ilorin, Kwara State, Nigeria?

Table 2. *Level of Computer Self-Efficacy*

S/N	Statements	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	Std. D
1	I am self-reliant when it comes to searching for information using a computer.	155 (42.1%)	156 (42.6%)	34 (9.3%)	21 (5.7%)	3.22	.84
2	I can easily find the information I need with my computer skills	135 (36.9%)	173 (47.3%)	21 (5.7%)	37 (10.1%)	3.11	.72
3	I'm confident of the quality of information in my search results	164 (44.8%)	188 (51.4%)	5 (1.4%)	9 (2.5%)	3.38	.47
4	A computer enables me to search for information better.	155 (42.3%)	139 (38%)	51 (13.9%)	21 (5.7%)	3.17	.87
5	I have mastered Boolean operators, truncation, and wildcat which assisted me in information searching on the internet.	128 (35%)	181 (49.5%)	49 (13.4%)	8 (2.2%)	3.17	.74
6	I'm sure I can select the right keyword for each and every information search.	133 (36.3%)	186 (50.8%)	40 (10.9%)	7 (1.9%)	3.21	.71
7	I know how to access information databases and information repositories.	101 (27.6%)	204 (55.7%)	56 (15.3%)	5 (1.4%)	3.09	.69
8	Sorting out information from search results can be problematic for me sometimes	90 (24.6%)	201 (54.9%)	65 (17.8%)	10 (2.7%)	3.02	.68
9	I am very versed in using a computer as a tool	78 (21.3%)	204 (55.7%)	74 (20.2%)	10 (2.7%)	2.96	.54
	Average Mean Score					**3.15**	

Source: Field survey

Note: The coefficients for each response category represent the numerical values assigned to those categories. Strongly Agree: Assigned a coefficient of 4, Agree: Assigned a coefficient of 3, Disagree: Assigned a coefficient of 2, and strongly Disagree: Assigned a coefficient of 1. These coefficients represent the levels of agreement or disagreement associated with each response category.

The statistical method used is descriptive statistics, specifically mean scores, to analyze and discuss participants' level of computer self-efficacy. The statistical method used is descriptive analysis. Descriptive statistics involves summarizing and presenting data to provide insights into the central tendency, variability, and distribution of a dataset. In this case, the mean scores of different variables are being discussed to understand the participants' perceptions of their computer self-efficacy.

Table 2 presents the participants' responses on their level of computer self-efficacy. From the nine variables used to measure users' level, only five variables scored a mean above the average mean score (AMS=3.15). I'm confident of the quality of information in my search results has the highest mean score (X=3.38); followed by I am self-reliance when it comes to searching information using a computer with a mean score (X=3.22); followed by I'm sure I can select the right keyword for each and every information search with a third ranking of a mean score (X=3.21). I have masterered Boolean operators, truncation and, wildcat which assisted me in information searches on the internet and Computer enables me to search information better ranked fourth and fifth with a mean score (X=3.17) and (X=3.17) respectively. I am very versed in using a computer as a tool ranked the least in ninth position with a mean score (X=2.96); followed by Sorting out information from search results can be problematic for me sometimes in eighth position with a mean score (X=3.02). I know how to access information databases and information repositories and I can easily find the information I need with my computer skills ranked seventh and sixth respectively with a mean score (X=3.09) and (X=3.11). The implications highlight the varying levels of computer self-efficacy among participants and identify specific areas of strength and areas that may require improvement. These insights can help inform interventions or training programs to enhance participants' computer skills and self-efficacy in information retrieval and processing.

Research Question 2: What is the information-seeking behavior of undergraduate students in the University of Ilorin, Ilorin, Kwara State, Nigeria?

The statistical method used is descriptive statistics, specifically mean scores, to analyze and discuss participants' level of information-seeking behavior. The statistical method used is descriptive analysis, similar to the previous interpretation.

Table 3 presents the participants' responses to their level of information-seeking behavior. From the nine variables used to measure users' level, only five variables scored a mean above the average mean score (AMS=3.27). Participants had the highest seeking behavioral level on willingness to spend a maximum amount of time in seeking information with a mean score (X=3.42); followed by extracting information only from relevant and useful sources, which ranked second

Table 3. *Level of Information-seeking Behavior*

S/N	Statements	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	Std. D
1	I sought information that could assist me in my course of study and academic program.	124 (33.9%)	192 (52.5%)	46 (12.6%)	4 (1.1%)	3.20	.68
2	I consult the library when I'm seeking information.	118 (32.2%)	189 (51.6%)	55 (15%)	4 (1.1%)	3.15	.70
3	The Internet is my companion and first port of call when in need of information.	153 (41.8)	167 (45.6)	39 (10.7%)	7 (1.9%)	3.28	.74
4	In acquiring information, I also make use of informal sources (media, friends, and family)	150 (41%)	179 (48.9%)	34 (9.3%)	3 (0.8%)	3.31	.67
5	I'm willing to spend the maximum amount of time seeking information.	168 (45.9)	186 (50.8)	10 (2.7)	2 (0.5)	3.42	.58
6	I'm willing to pay for relevant information.	118 (32.2)	209 (57.1)	34 (9.3)	5 (1.4)	3.20	.67
7	I support the open access initiative because of free access to full-text documents.	132 (36.1)	211 (57.7)	23 (6.3)	-	3.30	.59
8	I always checked for currency and relevance of the information sources I'm using	109 (29.8)	223 (60.9)	31 (8.5)	3 (0.8)	3.20	.65
9	I always extract information only from sources I found useful and relevant.	149 (40.7)	196 (53.6)	19 (5.2)	2 (0.5)	3.34	.61
	Average Mean Score					**3.27**	

Source: Field survey

with a mean score (X=3.34) and making use of informal sources such as family and friends with a mean score (X=3.31), which ranked third. I support open access initiatives because of free access to full-text documents and The Internet is my companion and first port of call when in need of information ranked fourth and fifth with a mean score (X=3.30) and (X=3.28) respectively. I consult the library when I'm seeking information ranked the least at ninth position with a mean score (X=3.15); followed by I always checked for currency and relevance of the information sources I'm using, which ranked eighth with a mean score (X=3.20). I'm willing to pay for relevant information and I sought information that could assist me in my course of study and academic program ranked seventh and sixth with a mean score (X=3.203) and (X=3.197) respectively. The implications reveal the diversity in participants' information-seeking behaviors, including their time investment, source selection, support for open access, reliance on the Internet, and limited use of the library. Understanding these behaviors can inform the design of information resources and services that align with participants' preferences and facilitate effective information-seeking practices.

Research Question 3: Is there a relationship between computer self-efficacy and information-seeking behavior of students of the University of Ilorin, Ilorin, Kwara State, Nigeria?

Table 4. *Relationship between Computer Self-Efficacy and Information-seeking Behavior*

	Variables	1	2	$\bar{x}$	SD.
1	Computer Self-Efficacy	1	.459**	16.66	3.09
2	Information-seeking Behavior	.459**	1	15.62	3.20

**. Correlation is significant at the 0.01 level (1-tailed)

*. Correlation is significant at the 0.05 level (2-tailed)

The test of hypothesis used is the Pearson correlation coefficient (r) to assess the relationship between Computer Self-Efficacy and Information-seeking Behavior. The correlation coefficient is represented by the value of .459**, which indicates a positive and significant correlation between the two variables. The correlation coefficient ranges from -1 to 1, where values closer to 1 represent a strong positive correlation, values closer to -1 represent a strong negative correlation, and values close to 0 represent no correlation.

Table 4 above, posits there is a strong significant positive relationship between computer self-efficacy and information-seeking behavior among undergraduate students at the University of Ilorin (r =.459, p<.01).

Research Question 4: Is there a relationship between demographic variables (gender, age, level of study, and faculty) and computer self-efficacy of students of the University of Ilorin, Ilorin, Kwara State, Nigeria?

Table 5. *Relationship between Computer Self-Efficacy and Information-seeking Behavior*

	Variables	1	2	3	4	5	$\bar{x}$	SD.
1	Gender	-					1.46	.50
2	Age	-.078	-				1.81	.82
3	Level of Study	-.025	.302**	-			2.83	1.18
4	Faculty	.170**	-.120*		-		2.74	1.42
5	Computer Self-Efficacy	.044	-.081	-.083	.067	-	16.66	3.09

**. Correlation is significant at the 0.01 level (1-tailed)

*. Correlation is significant at the 0.05 level (2-tailed)

The test of hypothesis used in Table 5 is the Pearson correlation coefficient (r) to examine the relationship between Demographic Variables (Gender, Age, Level of Study, and Faculty) and Computer Self-Efficacy.

Table 5 shows that there is no significant relationship between demographic variables and computer self-efficacy [gender (r =.044, p<.05); age (r = -.081, p<.05); level of study (r = -.83, p<.05) and faculty (r =.067, p<.05)]. However, there is a strong positive significant relationship between age and level of study (r =.302, p<.01), gender and faculty (r =.170, p<.05), and age and faculty (r = -.120, p<.05).

Research Question 5: Is there a relationship between demographic variables (gender, age, level of study, and faculty) and information-seeking behavior of students of the University of Ilorin, Ilorin, Kwara State, Nigeria?

Table 6. *Relationship between Demographic Variables and Information-seeking Behavior*

	Variables	1	2	3	4	5	$\bar{x}$	SD.
1	Gender	-					1.46	.50
2	Age	-.078	-				1.81	.82
3	Level of Study	-.025	.302**	-			2.83	1.18
4	Faculty	.170**	-.120*		-		2.74	1.42
5	Information-seeking Behavior	-.016	-.072	-.034	.091	-	15.62	3.20

**. Correlation is significant at the 0.01 level (1-tailed)

*. Correlation is significant at the 0.05 level (2-tailed)

The test of hypothesis used in Table 6 is the Pearson correlation coefficient (r) to examine the relationship between Demographic Variables (Gender, Age, Level of Study, and Faculty) and Information-seeking Behavior.

Table 6 shows that there is no significant relationship between demographic variables and information-seeking behavior [gender (r= -.016, p<.05); age (r= -.072, p<.05); level of study (r= -.034, p<.05) and faculty (r= .091, p<.05)]

5. DISCUSSION

Out of the nine variables used to measure users' level of computer self-efficacy, only five variables scored a mean above the average mean score (AMS) of 3.15. This indicates that participants' perceptions and confidence levels vary across different aspects of computer self-efficacy. The variable "I'm confident of the quality of information of my search results" received the highest mean score (X=3.38). This suggests that participants generally feel confident about the accuracy and reliability of the search results they obtain through computer-based information searches. The variable "I am self-reliant when it comes to searching information using a computer" ranked second with a mean score (X=3.22). This implies that participants feel capable and independent in conducting information searches using computer technology. The variable "I'm sure I can select the right keyword for each and every information search" ranked third with a mean score (X=3.21). This indicates that participants express confidence in their ability to choose appropriate keywords to retrieve relevant information during their searches. Participants reported having familiarity with Boolean operators, truncation, and wildcards, which assist them in information searches on the internet. These variables ranked fourth and fifth with mean scores of (X=3.17) and (X=3.17) respectively. This suggests that participants have some level of knowledge and expertise in utilizing these search techniques. The variable "I am very versed in using the computer as a tool" ranked the lowest in ninth position with a mean score (X=2.96). This implies that participants may perceive themselves to have a relatively lower level of expertise or proficiency in using a computer. The variable "Sorting out information from search results can be problematic for me sometimes" ranked eighth with a mean score (X=3.02). This indicates that participants occasionally face difficulties in organizing and extracting relevant information from search results. Participants expressed moderate confidence in their ability to access information databases and repositories, as reflected in the seventh and sixth rankings with mean scores of (X=3.09) and (X=3.11) respectively.

This suggests that they possess a certain level of competence in finding the information they need using their computer skills.

On students' information-seeking behavior, from the nine variables used to measure users' level of information-seeking behavior, only five variables scored a mean above the average mean score (AMS) of 3.27. This indicates that participants' behaviors and preferences in information-seeking vary across different aspects. The variable "willingness to spend the maximum amount of time in seeking information" received the highest mean score (X=3.42). This suggests that participants demonstrate a high level of commitment and are willing to invest considerable time in their information-seeking activities. The variable "extracting information only from relevant and useful sources" ranked second with a mean score (X=3.34). This implies that participants prioritize obtaining information from sources that are deemed relevant and trustworthy, indicating a discerning approach to information selection. Participants reported making use of informal sources such as family and friends for obtaining information. This variable ranked third with a mean score (X=3.31), indicating that participants perceive these sources as valuable and accessible in their information-seeking process. Participants expressed support for the open access initiative due to the availability of free access to full-text documents. This variable ranked fourth with a mean score (X=3.30), suggesting a positive attitude towards the accessibility and availability of information. The variable "The Internet is my companion and first port of call when in need of information" ranked fifth with a mean score (X=3.28). This implies that participants heavily rely on the Internet as their primary source of information, emphasizing its convenience and accessibility. The variable "I consult the library when I'm seeking information" ranked the lowest in ninth position with a mean score (X=3.15). This suggests that participants may not frequently utilize traditional library resources in their information-seeking behavior, opting for other sources instead. Participants reported slightly lower attention to checking the currency and relevance of the information sources they use. This variable ranked eighth with a mean score (X=3.20), indicating a potential area for improvement in critically evaluating the information's timeliness and relevance. Participants expressed a moderate willingness to pay for relevant information. This variable ranked seventh with a mean score (X=3.203), suggesting that while participants recognize the value of information, their inclination to pay for it may not be particularly high. Participants indicated a moderate level of seeking information that could assist them in their course of study and academic program. This variable ranked sixth with a mean score (X=3.197), highlighting the importance placed on acquiring information relevant to their educational pursuits.

A strong and significant positive relationship was found between computer self-efficacy and information-seeking behavior. This implies that as the level of computer self-efficacy increases, the level of information-seeking behavior will also increase and vice versa. This result aligned with the study of Okoh and Ijiekhuamhen (2014) which identifies computer proficiency as part of the factors that influence students' information-seeking behavior.

No significant relationship was found between participants' demographic variables (gender, age, level of study, and faculty) and computer self-efficacy; or demographic variables (gender, age, level of study, and faculty) and information-seeking behavior. The findings of the study are partially consonant with the findings of a study carried out by Bronsten (2014) who reported that correlations between self-efficacy percepts and several socio-demographic variables revealed no gender-based differences. Also, Berkant (2016) study reported that class-level variables have no effect on students' computer attitudes and self-efficacy beliefs, and that the amount of time spent each day using a computer and prior computer experience are related to both computer attitudes and self-efficacy beliefs. Meanwhile, the study is in contrast to El-Maamiry's (2016) study which reported considerable differences between students at various study levels and departments, with seniors having more self-efficacy than juniors and computer science students having higher self-efficacy than students in the natural sciences. The reason for this disparity may be the mandatory tablet given to all undergraduate students of the University of Ilorin, Ilorin, Nigeria, regardless of their course of study, combined with the availability of internet connection on the university campus, which means students are connected to the internet and well acquainted with information searching online.

6. CONCLUSION

The study investigated the interrelationship between demographic variables, computer self-efficacy, and information-seeking behavior of undergraduates at the University of Ilorin, Ilorin, Nigeria with the premise that, with the belief in one's knowledge of computer operation and application, undergraduate students would record success with their information search, information retrieval, information evaluation, and information utilization, perhaps with some degree of influence from demographic and academic factors. Computer self-efficacy was found to inform undergraduate students' decisions as to what information-seeking behavior to undertake when in need of information. But demographic variables, on the other hand, were found to be unrelated to what inspires computer self-efficacy of students and even information-seeking behavior of undergraduates at the University of Ilorin, Ilorin, Nigeria. Academically, students'

information-seeking behavior entails deliberate information-seeking since they must finish course assignments, get ready for lectures, seminars, and workshops, and write research projects for their final year. The impact of their computer proficiency on their information-seeking behavior, therefore, is crucial to their academic achievement.

7. RECOMMENDATIONS

The succeeding recommendations are given based on the report of findings below:

1. Despite participants' overall confidence in the quality of search results, there is a need to further develop their skills in critically evaluating the accuracy and reliability of the information they retrieve. Training programs or workshops focused on information evaluation techniques can be provided to improve participants' ability to assess the credibility of search results.
2. Participants demonstrated moderate confidence in accessing information databases and repositories. It is important for the university library to ensure easy access to relevant and reliable information sources, including online databases, academic journals, and other reputable resources. Providing access to such resources can empower participants to make the most of their computer skills and enhance their information-seeking capabilities.
3. Sorting out information from search results is still problematic for some students, hence, information literacy skills needed to be prioritized for students.
4. Creating opportunities for participants to engage in collaborative learning and knowledge sharing can be beneficial. This can involve setting up discussion forums, online communities, or workshops where participants can share their experiences, challenges, and strategies for effective information searching. Peer learning can help participants learn from each other and gain valuable insights and techniques for improving their computer self-efficacy.
5. Participants expressed a preference for extracting information only from relevant and useful sources. To further enhance their information literacy, it is recommended to provide training on critical evaluation skills, enabling students to assess the credibility, reliability, and relevance of different information sources. This can empower them to make informed decisions about the sources they rely on for their academic work.
6. Although participants reported lower utilization of library resources, efforts should be made to increase awareness and promote the value of libraries as valuable information hubs. This can involve collaborating with librarians to develop engaging library orientations, workshops, and targeted outreach programs that highlight the benefits and resources available in the library.
7. Since computer self-efficacy was found to be positively related to information-seeking behavior, it is crucial to provide educational interventions that enhance students' computer proficiency. This can involve offering computer literacy courses, workshops, or online tutorials that cover basic computer skills, internet navigation, and effective use of information search tools. By improving computer proficiency, students can feel more confident and capable in utilizing technology for information-seeking purposes.

ORCID IDs of the authors

Tunde Toyese Oyedokun	0000-0001-5306-038X
Medinant Dolapo Laaro	0000-0003-2717-1523
Zainab Olanihun Ambali	0000-0001-9070-7592
Olabisi Fadeke Adesina	0000-0002-8000-5623

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