

COMPUTER SKILLS AS A DETERMINANT OF LECTURERS' UTILIZATION OF SCHOLARLY ELECTRONIC PUBLICATIONS IN LIBRARY SCHOOLS IN UNIVERSITIES NIGERIA.

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Abstract

The study focused on computer skills as a determining factor of lecturers' utilization of scholarly electronic publications in library schools in Universities in Nigeria. The study examined the influence of computer skills on lecturers' utilization of electronic publications. The study was guided by a research question and a null hypothesis. Correlational design was adopted for the study. Data collected were analysed by using descriptive and inferential statistics. Findings show that there is a moderate positive relationship between computer skills and lecturers' utilization of electronic publications for research. It was therefore, recommended that since the utilization of electronic publications for research is highly influenced by the lecturers' level of computer skills, there is need for regular training of the lecturers especially those in university environment to enable them acquire computer literacy skills. It was also recommended that all the computer utilization variables should be considered very important for effective utilization of electronic publications as each factor can influence to some extent the level of computer utilization by lecturers.

Keywords: computer skills, electronic publications, Utilization, Library schools, Nigerian Universities.

Introduction

Computer skill is a factor that influences lecturers' utilization of scholarly electronic publications for research purposes. It is important that lecturers possess these computer skills to enable them compete effectively in it. This is because the advancement of technology has significantly transformed the academic landscape, particularly in the realm of scholarly communication and information dissemination. Scholarly electronic publications, encompassing e-books, e-journals, online databases, and institutional repositories, have become indispensable resources for academic staff in universities. These resources are pivotal for research, teaching, and professional development, offering immediate access to a wealth of information that was once restricted by physical and geographical barriers. However, the effective utilization of these resources is intricately tied to the possession of adequate computer skills.

The concept of computer skills is synonymous with digital literacy, ICT fluency, ICT literacy, technological and e-literacy and 21st century skills (Markauskaite, 2006). Computer literacy skills, according to McCartan as cited in Selwyn (2007) are "the ability to use the computer as a multipurpose tool appropriately". Malpiedi (2009) proposed that computer literacy could be considered to mean possessing the understanding and skills necessary to live in a society

depends upon computer technology. However an operational definition of computer literacy given by Zin, Zaman, Judi, Mukti, Amin, Sahra, Ahmad AND Ayob, 2010) is “an understanding of computer characteristic, capabilities and application as well as an ability to implement this knowledge in the skilful, productive use of computer applications suitable to individual roles in society”.

The rapid advancement of technology has transformed the landscape of education, particularly in higher learning institutions. In Nigeria, the integration of electronic publications into academic curricula has become increasingly significant, especially in library schools. This shift necessitates that lecturers possess adequate computer skills to effectively utilize these electronic resources. This paper explores the relationship between computer skills and the utilization of electronic publications by lecturers in library schools across Nigerian universities. Computer literacy skills are the ability to use the computer as a multipurpose tool appropriately (Selwyn, 2007). Malpiedi (2009) proposed that computer literacy could be considered as possessing the understanding and skills necessary to live in a society that depends upon computer technology. However, an operational definition of computer literacy given by Zin, Zaman, Judi, Mukti, Amin, Sahra, Ahmad, and Ayob (2010) is: 'An understanding of computer characteristics, capabilities, and applications, as well as an ability to implement this knowledge in the skillful, productive use of computer applications suitable to individual roles in society.

With the increase in access to the Internet, definitions of computer literacy skills have expanded to include the ability to use e-mail, graphical interfaces such as Netscape, online publishing and the ability to evaluate the content of online materials. The acquisition of these computer skills among library and information science lecturers in Nigeria has, to a certain extent, increased their utilization of electronic publications for research (Corl, 2006). Though these definitions vary in the degree of exactness it should be admitted that a common feature among them is emphasis on skills and competences gained by the learner and the need to function adequately in a computer dominated society (Selwyn, 2007).

Several authors have come up with different computer literacy skills needed to fit into the technologically driven society. McDonald (2014) in his contribution, highlights the following computer literacy skills required in using the computer based technologies to manipulate, create, store and retrieve information to express ideas and communicate with others. These skills among others include: ability to type sentences, change text alignment, change margin and line spacing, understand cut, copy and paste, others are the understanding of data base, spread sheet, etc. Ugwuanyi (2009) similarly states the required computer skills for this age to include: knowing various computer operations such as turning computer on, opening a folder, coping a file from one disk to another, scanning etc. He goes on to state that the ability of lecturers to use software such as creating a new word processor document, modifying an existing word processor document, printing out document among others can help them to utilize electronic publications for research.

Furthermore, sending an e-mail message, using a word to find specific information, taking part in an online discussion or chatting (videoconferencing), and sending attachments with an e-mail. Also included are having www skills which include: using a www search engine e.g. yahoo.google, MSN etc using keywords or phrases to search for information on the www, using more advanced search techniques than key words or phrases (Ugwuanyi, 2009). The ability to operate computer systems to perform personal job related task, use web browsers and searching on the internet to retrieve information needs and communicating with others by sending and receiving e-mails is essential part of every one's skills especially those in academics.

One will need to harness the internet in all types of work whether it is research on any topic or plain sorting for information. For this purpose, Ekwelem (2010) explains that, one needs to know what is a search engine and how it works; what is a keyword and how it works; how to open browsers and how to use a link in order to utilize scholarly electronic publications for research. Also, contributing, Nicholars as cited in Ugwuanyi (2009) states some skills such as the ability to understand the general structure of a web address; equate URL with web address; use prepared bookmarks; use and understand the feature of browser e.g. back, forward, stop, search, refresh, history, home, buttons address bar, loading status; use and understand hyper links/navigation buttons; choose appropriate sites from a search; interpret information from a website; cite any electronic Sources and to determine whether information is current, accurate and reliable.

Statement of the Problem

In today's digital age, computer skills are a cornerstone of academic and professional success. The ability to navigate the digital environment, use productivity software, manage digital files, and access online platforms has become essential for academics, including lecturers in library schools. For lecturers to fully leverage scholarly electronic publications, they must possess fundamental computer skills such as conducting advanced searches, retrieving and organizing digital resources, and using citation management tools. These competencies ensure that lecturers can efficiently locate and utilize relevant information to enhance their research outputs and instructional quality.

The benefits of possessing strong computer skills are manifold. Lecturers with adequate computer proficiency can access a broader range of scholarly materials, collaborate with peers globally through digital platforms, and stay abreast of the latest developments in their fields. This not only improves the quality of their research but also enriches the learning experience for their students. Furthermore, it enables them to participate in international academic discourse, contributing to their professional growth and the visibility of their institutions on a global scale.

Conversely, a lack of computer skills presents significant challenges. Lecturers who struggle with basic digital literacy may face difficulties in accessing electronic publications, leading to delays in research and limited exposure to current academic trends. This deficiency can also

hinder their ability to integrate technology into their teaching, reducing their effectiveness in delivering a modern and engaging curriculum. Additionally, such limitations may isolate them from collaborative opportunities and diminish their competitiveness in the increasingly digital academic environment.

Given the critical role that computer skills play in the utilization of scholarly electronic publications, this study aims to explore how these skills influence the adoption and effective use of these resources among lecturers in library schools in Nigerian universities. For instance, lecturers lacking proficiency in advanced search techniques may struggle to retrieve relevant academic materials from online databases, leading to incomplete or suboptimal research. Similarly, challenges in using citation management tools can result in disorganized references, impacting the quality of their academic writing. Furthermore, the inability to navigate institutional repositories may prevent access to unique scholarly works, thereby limiting their academic output and growth. By identifying the gaps and challenges, such as limited familiarity with database interfaces, insufficient knowledge of advanced search strategies, or difficulties in using digital tools like citation managers, the study seeks to provide insights that can inform targeted training programs. These programs will aim to ensure that lecturers are equipped to maximize the potential of electronic scholarly resources in their academic and professional pursuits.

Purpose of the Study

The main objective of the study was to examine computer skills as determinants of lecturers' utilization of electronic publications in library schools in Universities in Nigeria. The research question that guided the study is:

- 1) What is the coefficient of relationship between computer skills and library science lecturers' utilization of electronic publications?

Hypothesis

One null hypothesis is formulated and tested at 0.05 level of significance.

H_{01} : There is no significant coefficient of relationship between computer skills and utilization of electronic publications by library science lecturers in Nigerian universities.

Literature Review

Some empirical studies have been carried out on computer utilization variables in Nigeria.

The study by Emiri (2015) assessed computer literacy skills among librarians in a study by Ademodi and Adepoju (2009) and it discussed computer skills among librarians in academic libraries in Ondo and Ekiti States. The findings showed that only one third of respondents have received formal computer training which suggested that very few librarians

have the necessary computer skills. Similarly, a study by Ebele, Ejedafiru and Oghemetega (2013) looked at the information/ICT literacy levels and skills among librarians in Madonna University Library, Okija. From the study, it was found that the librarians did not have information/ICT skills because of major challenges facing them such as funds, time, environment among others. Another study by Padmamma (2013) assessed the manpower problem and computer literacy competence among degree college libraries in South-South zone, Nigeria. The study found that the libraries did not have IT trained manpower as the majority of the libraries are in need of library professionals who are computer literate. Another study by Fat and Adetimirin (2017) examined the influence of computer literacy skills on OPAC use by undergraduates in two universities in Nigeria. The findings showed that undergraduates' level of computer literacy is not pre-condition for their OPAC use. This implies that being computer literate does not necessarily inform a high level of OPAC use. Amadi (2016) conducted research on computer literacy skills among librarians in university libraries in the South-South zone.. The study found that the librarian's level of computer literacy skills has enabled them to update information through the internet and also improved their ability to perform library functions and services. The study by Abdullahi and Haruna (2008) discussed computers skills utilization for information services delivery in university libraries in Adamawa State. The study showed that computer skills are indispensable tools for effective service delivery and functions in academic libraries. The study is related to the present study as both see computer skills as influencing factors considered as indispensable tools to enhance productivity. The study by Musa (2016) assessed the impact of computer literacy skills on the librarians' work productivity in university libraries in Kwara and Kogi States, Nigeria. The findings showed that the ability to type and print a document, ability to use input devices like mouse/arrow key, use of internet surfing, ability to navigate the Internet/www using functional keys among others have impacted positively on the librarians' work effectiveness. It was discovered that librarians acquired computer literacy skills through IT programmes, and formal education.

A study by Ola (2009) examined the level of computer skills among librarians in academic libraries in Osun and Lagos States. The findings showed that only twenty-eight (28) out of the forty five (45) respondents have received formal computer training, which is an indication that the level of computer skills acquisition among the librarians is low. A study by Tunde (2012) looked at the ICT literacy skills among librarians in Benue State University Library. From the study, it was found that the librarians did not have ICT skills because of certain militating factors such as lack of funds, insufficient ICT facilities, lack of time, among others.

Another study by Paul (2013) assessed the computer literacy competence among university librarians in South-East zone, Nigeria. The study found that the university libraries have IT trained manpower as the majority of the libraries are in need of library professionals who are computer literate. Another study by Asuaju (2015) examined the influence of computer literacy skills on electronic resources utilization by postgraduates in universities in North-West, Nigeria. The findings showed that postgraduates' level of computer literacy is not pre-

condition for their electronic resources' utilization. This implies that being computer literate does not necessarily inform a high level of online resources utilization.

Methodology

This study examined computer skills as determinants of lecturers' utilization of electronic publications in library schools in universities in Nigeria. It is limited to all library and information science lecturers in the 24 public university library schools in Nigeria. It covered scholarly electronic publications such as online-journals, e-books, e-conference proceedings, CD-ROM databases, e-abstracts and open access journals, e-catalogues (OPAC) and e-archives that are accessible through the Internet. Computer utilization variables such as computer skills, institutional factors, usefulness of electronic publications, usability of the computer system, and utilization of scholarly electronic publications were also covered in this study. The target population for this study comprised 378 lecturers in the 24 public university library schools in Nigeria. The universities were chosen for the study because they are the largest government funded tertiary institutions in Nigeria and so it is assumed that scholarly electronic publications are more likely to be available at these universities. Research question 1 was answered using coefficient of determination (r^2) and Pearson "r". Hypotheses 1 was tested using t-test of significance of correlation.

RESULTS

the result of data analyses which was organized using the research question and hypothesis.

Coefficient of relationship between computer skills and lecturers' utilization of electronic publications

RQ₁: What is the coefficient of relationship between computer skills and lecturers' utilization of electronic publications? and **Ho₁:** There is no significant coefficient of relationship between computer skills and utilization of electronic publications by library science lecturers in Nigerian universities.

Table 1

Sample size (n), correlation coefficient index (r), coefficient of determination (r^2)

lecturers' utilization of electronic publications * computer skills

N	R	r^2	Remarks
352	0.57	0.32	Moderate Positive Relationship

Table 1.2

Sample size (n), correlation coefficient index (r), coefficient of determination (r^2), alpha level (α), degree of freedom (df) and t-test of significance of correlation between variables

N	r	r^2	A	df	t_{cal}	t_{tab}	Remarks/Decision
352	0.57	0.32	0.05	350	12.961	1.96	Moderate + Relationship: Reject H_0

Table 1a shows the coefficient of relationship between computer skills and lecturers’ utilization of electronic publications. The result revealed that the sample size used for the analysis is 352, and the coefficient of relationship is 0.57. This coefficient explains a moderate positive relationship between computer skills and lecturers’ utilization of electronic publications. The coefficient of determination is 0.32 indicates that 32% of the variation in lecturers’ utilization of electronic publications can be explained or be determined by their computer skills.

Further analysis (inferential analysis) in table 1b, presented the degree of freedom as 350. Furthermore, the t-calculated value of 12.961 is greater than the t-tabulated value of 1.96. This led to the rejection of the null hypothesis and accepting the alternative hypothesis, thus concluding that the relationship between computer skills and lecturers’ utilization of electronic publications is significant.

Concerning Educational Implications of the Study, having carried out this study on ‘computer utilization variables as determinants of lecturers’ utilization of electronic publications for research in Nigerian university library schools’ and findings made, it can be deduced that these findings have implications that the result of the coefficient of relationship indicated that there is a moderate positive relationship between computer skills and lecturers’ utilization of electronic publications for research. The implication here is that the level of computer skills possessed by library and information science lecturers will continue to influence to a certain extent; their utilization of electronic publications

Conclusion

In conclusion, computer skills are a critical determinant of lecturers’ utilization of electronic publications in library schools in Nigerian universities. Enhancing these skills through targeted training and improved infrastructure will not only benefit lecturers but also enrich the academic experience for students. As technology continues to evolve, it is imperative that educators adapt to these changes to remain effective in their teaching and research endeavors.

Recommendations

The result of the findings indicated that the utilization of electronic publications for research is highly influenced by the lecturers’ level of computer skills. To enhance the utilization of electronic publications among lecturers in library schools, it is essential to implement

comprehensive training programs focused on improving computer skills. Universities should invest in workshops and seminars that provide hands-on experience with digital resources. Furthermore, improving technological infrastructure, such as providing reliable internet access and access to necessary software, will facilitate greater engagement with electronic publications.

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