

Digital Literacy Skills and Utilization of Electronic Information Resources in University Libraries in Delta and Edo States

Irene, O. Gbemudu-Ughwumiakpor Ogaga

Dennis Osadebay University, Library, Asaba. Delta State, Nigeria

Nelson Edewor

Dennis Osadebay University, Library, Asaba. Delta State, Nigeria

Abstract

The study investigated nexus between digital literacy skills and utilization of electronic information resources in university libraries in Delta and Edo states. It was guided by two (2) specific objectives, two (2) research questions and two (2) null hypotheses. It adopted the correlational research design, with a population of one hundred and thirty-six (136) academic librarians from twenty (20) public and private university libraries. The total enumeration sampling technique was used since the study population was small and quite manageable. The instrument for data collection was the researcher's developed and expert's validated structured questionnaire, with a cumulative reliability index of 0.88 determined with the use of the Spearman-Brown prophecy formula. The data collection process yielded 92% response rate from a total of 125 validly completed copies. The data collected were analyzed using descriptive statistics of frequency counts, mean, standard deviation and Pearson Product Moment Correlation for answering the research questions and analyzing the relationship between the variables, while the simple linear regression was used for testing the null hypotheses at 0.05 level of significance. The findings of the study revealed that digital literacy skills such as online search skills, social media skills of the librarians were moderately high and have a positive significant relationship with the utilization of electronic information resources across the university libraries in Delta and Edo States, Nigeria. The study concluded that digital literacy skills have a positive significant relationship with utilization of electronic information resources among librarians in university libraries in Edo and Delta States, Nigeria. Based on the findings, the study recommended among other measures that management of universities should make digital literacy skills mandatory requirements for appointment of librarians in the university libraries.

Keywords: Digital literacy skills, electronic information resources, university libraries, academic librarians

Introduction

University libraries are operating in an era where digitization and technology transformations are shaping the overall performance of library functions and services in all ramifications. As important organs in any university system, university libraries have the core mandate of ensuring the generation, processing, dissemination and preservation of information resources for the attainment of the vision, mission and objectives of the universities. They are the fulcrum through which the objectives of teaching, learning, research and community services of the university revolve (Amadi et al., 2020; Ibegwam, 2015). University libraries are critical to the academic health, intellectual vitality and effectiveness of any university, meaning that the state of health and excellence of the universities depend largely on the state of the university libraries.

University libraries are further considered as major contributors to the growth of knowledge, enhancing the development of human capacity, and promoting communication for the advancement of knowledge and society development. They serve the information, educational, research and recreational needs of both undergraduate and postgraduate students as well as faculty and other information users within the university community (Abubakar et al., 2021). As a matter of fact, university libraries as all-important information and knowledge hubs, have been seriously challenged by the advancement in information and communication technologies, which has great impact on the provision of information resources in both print and electronic formats for the satisfaction of users' needs. This reality typically calls for a deliberate paradigm shift by librarians toward the acquisition of emerging sets of skills such as digital literacy skills for enhanced utilization of electronic information resources as the evolving tools for effective job performance.

Utilization of electronic information resources makes optimum job performance of librarians in the university libraries possible. Utilization of electronic information resources is considered as the effective application or deployment of electronic information resources to satisfy a definite information need. It opens up greater opportunities for better access to current and up-to-date electronic information resources for enhanced services delivery in university libraries. It automatically increases the speed, quality and accuracy of job performance of librarians. In this wise, Akwang and Udoh (2024) defined utilization of electronic information resources as the actual application or deployment of electronic information resources by information users, including librarians to meet specific information needs. Omotayo, as cited in Nwankwo et al. (2023); as well as Udoh et al. (2023) opined that utilization of electronic information resources refers to the ability of information users to adopt and adapt new technologies to achieve defined purposes or set goals. Effective utilization of electronic information resources is paramount in assisting librarians in performing their jobs. However, effective utilization of electronic information resources for effective job performance of librarians is determined by numerous factors, and the chief of such factors is the digital competencies or digital literacy skills of the librarians.

Consequently, digital literacy skills are essential skillsets for professional effectiveness and efficient job performance. Digital literacy skills represent one of the most pragmatic skills, abilities and competencies required for effective functionality and result-oriented digital transformations. Digital literacy skills is an integrated term frequently used interchangeably with digital fluency, digital competencies, and digital proficiencies (Falloon, 2020; Spante et al., 2018; Yo, 2021). Gilster, as cited in Udoh and Okafor (2022) described digital literacy skills as a set of skills to

access the internet, find, manage and edit digital information; participate in communications; and engage in an online information and communication network; or ability to appropriately use and evaluate digital resources, tools and services in lifelong learning processes.

Digital literacy skills and utilization of electronic information resources can be considered as sine-qua-non for effective job performance of librarians in university libraries. This underscores the position of Abbas and Siddique (2020) who emphasized the necessity of digital literacy skills for efficient utilization of electronic information resources of librarians in university libraries. Despite the importance of digital literacy skills, observation have shown that librarians' job performance in university libraries usually falls short of expectations due to low digital literacy skills. This observed lack of adequate digital literacy skills has posed severe challenges in acquiring, organizing, retrieving, disseminating and utilizing electronic information resources to enhance librarians in university libraries. Therefore, since the exact degree of the relationship between the various components, indices or indicators of digital literacy skills and utilization of electronic information resources among librarians in university libraries in Delta State is not certain empirically, this study intends to unravel the puzzle and fill available research gap.

Statement of the Problem

Digital literacy skills are necessary requirements in utilizing electronic information resources for enhanced service delivery by librarians. This is not debatable because the 21st century libraries and librarians are confronted with several gains and challenges of digital transformation, which demands a direct response from librarians in all areas of their job functions and responsibilities. In fact, the demand for digital literacy skills is becoming more preponderant as the needs for digital library collections, digital services delivery, cloud-based services, virtual assistance and chatbot services via artificial intelligence (AI), instant communication, high-speed information access and retrieval as well as other technology-driven services are emerging in an unprecedented magnitude.

However, despite the importance of digital literacy skills on the utilization of electronic information resources for services delivery of librarians, it is observed that most librarians in Nigeria university libraries lack digital literacy skills, which negatively affect their ability to operate computers, manage electronic mails, develop and manage library website or interact with library users through the internet. Furthermore, observation has shown that most librarians don't have the ability to automate library resources, use teleconferencing platforms, or manage hardware and software for effective job functions like institutional repositories management. Based on this backdrop, therefore, this study examines nexus between digital literacy skills and utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria.

Objectives of the Study

The objectives of the study are, to:

- i. determine the relationship between online search skills and utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria;
- ii. examine the relationship between social media skills and utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria.

Research Questions

The following research questions will guide the study:

- i. What is the relationship between online search skills and utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria?
- ii. What is the relationship between social media skills and utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria?

Hypotheses

The following null hypotheses will be tested at 0.05 level of significance.

H0₁: There is no significant relationship between online search skills and utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria.

H0₂: There is no significant relationship between social media skills and utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria.

Literature review

Digital literacy skills are essential skills and competencies for effective professional, intellectual, educational, social and economic engagement in the 21st century. They are interrelated and interconnected skillsets with great impetus for information management and job performance. According to Okeji et al. (2020), digital literacy skills refer to the ability to understand information and perform tasks digitally, in a digital environment, and includes skills and knowledge that are crucial to daily life within multiple industries, professions and careers. Similarly, Udoh et al. (2020) defined digital literacy skills as the whole gamut of life skills necessary for full, effective and productive participation in the media-saturated and information-rich society. In the same vein, Bawden, as cited in Udoh et al. (2020) construed digital literacy skill as the embodiments or conglomeration of attitudes, understanding and skills to handle or communicate information and knowledge effectively, using some digital media and formats. It entails an individual's ability to find, evaluate, utilize, share and create content using information technologies and the Internet

(Shannon, 2017); as well as encompasses a wide range of skills and competencies that are necessary to succeed in an increasingly digital world (Edewor & Agbro, 2024). Digital literacy skills involve the ability to use digital technologies, communication tools or and computer networks to locate, evaluate, use and create information.

Digital literacy skills embed the ability to use a computer to find, manipulate, and communicate information; ability to identify information in different types of formats and media such as films, databases, the internet, etc.; ability to critically evaluate information and media sources for accuracy, reliability and credibility; and the ability to use digital tools and information ethically and safely (Ukachi, as cited in Okeji et al., 2020). Digital literacy skills are deeper understanding of digital technologies and the application of such digital technologies in solving problems. This implies that digital literacy skills exceed mere possession of information technology skills to explain a richer, deeper, and more confidence set of digital practices, identities and behaviours in a digital environment. They are induced skills and competencies as they evolve proportionately with the advancement in digital technologies. It involves the capability of individuals to use technology to create, navigate, disseminate, evaluate and store information using relevant digital tools and doing it legally and ethically with consideration to privacy issues (Okeji et al., 2020). This further underscores that position of Sambo et al. (2022), who noted that digital literacy skills are competencies needed to learn and use various software applications and digital tools conveniently for meeting academic and life goals, managing and solving basic computer problems, communication skills, managing personal information on networks, and the application of digital technologies. They are necessary set of competencies needed for adequate participation in the present knowledge society such as online skills search skills, social media skills, etc

Online search skills are essential digital literacy skills and competencies for the search, access, retrieval and utilization of electronic information resources. Online search skills can be used interchangeably with Internet search skills or Web search skills (Akwang et al., 2024; Kurt & Emiroglu, 2018; Saidu, 2023). Online search skills are fundamental component of digital literacy skills for enhanced utilization of electronic information resources and job performance by librarians in university libraries. Akwang and Udoh (2024) described online search skills as a set of skills or proficiencies used in constructing precise and vivid search queries by librarians for specific information need. In the same vein, Granite School District (2025) defined online search skills on the basis of vivid abilities such as ability to think before searching, ability to keep it simple, ability to be specific, ability to use words that are likely to appear on that webpage, and ability to narrow the search results by using quotation marks, Boolean Operators (AND, OR, and NOT), filtering, etc. This is further affirmed by Xie, as cited by Saidu (2023), who considered online search skills as the ability to systematically all set of different approaches that take into account both planned and situational elements in online information search and retrieval.

Online search skills are of great essence to research and effective engagement by librarians in the information-saturated age. In this wise, Kurt and Emiroğlu (2018) observed that online search skills are significant abilities to easily and rapidly access and retrieve accurate and reliable information for various information management processes such as generation, analysis, evaluation and decision-making. Online search skills embolden librarians' ability to utilize Boolean operators, phrase searching, proximity search, fuzzy search, stemming, truncation searches, and wildcard searches in order to improve their overall job performance and meeting users' information and research needs. This integrated skillsets also include operational internet

skills, formal internet skills, informal internet skills and strategic internet skills (Van Deursen, as cited in Abdulkadir & Mohammed, 2016). They are paramount in effective research and scholarship engagements as well as knowledge sharing within online collaborative forums. These skillsets can be acquired through self-education or trial and error, formal academic degree programmes, information literacy programmes, short courses, workshops, online tutorials, webinars, through friends or social network sites (Tariq et al, 2021).

Social media skills are important component of digital literacy skills for utilization of electronic information resources . As a matter of fact, social media skills have become indispensable and critical skillsets for today's social media-controlled environment. Saidu and Sani (2022) defined social media as effective tools for redefining and transforming university library services in the 21st century through cooperation and knowledge sharing using open access platforms. Social media are groups of internet-based applications builds on the ideological and technological foundations of Web 2.0, which allows the creation and exchange of user generated content (Dikka & Chukwudum, 2017; Richard et al., 2024). Using social media in university libraries has the capability of revolutionizing information generation and dissemination, including electronic information resources. Social media platforms can be used in all areas and functions of the university libraries including marketing and promotion of library services, current awareness services (CAS), selective dissemination of information (SDI), reference services, user education, resource sharing, collaboration, multimedia sharing, etc. (Adetola & Okeoghene, 2016; Bakare & Umar, 2018). They are also very useful in planning and implementing outreach services, building a strong online community, creating a good institutional visibility, as well as networking with other libraries (Saidu & Sani, 2022)

Utilization of Electronic Information Resources

Utilization of electronic information resources refers to the deployment or application of electronic information resources for the attainment of a specific purpose. According to Atinmo, as cited in Okonoko and Eruvwe (2021), utilization is the ability to make effective and independent use of resources and services, which implies that the resources and services are to be in the appropriate format and language for utilization. It extends to the frequency of use of the resources, services and the concomitant utility or satisfaction derived from the resources and services. Utilization means making effective, efficient, maximum or practical application of resources or services to fulfil a purpose. Utilization also refers to the reported use of information sources, including electronic information resources in the university library by users such as students, lecturers, or researchers, etc. (Ani et al., 2022)

Otuza (2024) described utilization of electronic information resources as the act of accessing and using digital information sources like online databases, e-journals, e-books, and websites to retrieve relevant information for research, learning, or other purposes, Utilization of electronic information resources (EIRs) is critical to research and the entire process of learning and teaching as they provide array of qualitative and quantitative information that students, academics, researchers and scholars rely on for satisfying their informational, research, educational and recreational needs. Utilization of electronic information resources connotes the use of electronic information resources with full extent of getting required information through the internet, which manifests in the frequency, strategies, and browsing, exploring and searching trends to find out desired electronic information. Utilization of electronic information resources differs from person

to person and from one corporate organization to the other according to their information needs and other socio-economic imperatives (Uhegbu, as cited in Okeuhie et al., 2021). Electronic information resources are utilized to satisfy users' information, educational, research and recreational needs. Utilization of electronic information resources is primarily based on requisite tools and skills.

Research Method

The correlational research design was adopted for this study. The population of this study consisted of one hundred and thirty-six (136) academic librarians from twenty (20) university libraries comprising public and private university libraries in Delta and Edo States, Nigeria. The population comprises only academic librarians. The sample size of this study was one hundred and thirty-six (136) academic librarians from 20 university libraries in Delta and Edo States, Nigeria. The total enumeration (complete census) sampling technique was adopted for the study. This implied that the researcher used the entire study population as the sample size for the study. This was because the study population is small and manageable for the study.

The researcher employed a self-developed-structured questionnaire to collect data for the study. The questionnaire was titled, *“Digital Literacy Skills and Utilization of Electronic Information Resources among Librarians Questionnaire (DLSUEIRLQ)”*. The questionnaire was designed on the basis of 4 points rating scale of Strong Agree (SA); Agree (A); Disagree (D) and Strongly Disagree (SD). The researcher employed for the purpose of administering the questionnaire) from each of the university library collected data for the study through personal visitations to the twenty (20) university libraries from Delta and Edo States. The researcher took time to explain the purpose of the research to the research assistants to guide them on how to go about the administration of the questionnaire. Before distributing the questionnaire in each of the university library, the researcher sought and obtained the consent of the Heads of the various university libraries (the University Librarians or their representatives) to have easy access to the various divisions, departments/units of the university libraries. The researcher also solicited the cooperation of the respondents, and where necessary, explained issues that were not clear to them, without influencing their personal judgement in responding to the questions to enhance the overall response rate. 136 copies of the questionnaire were distributed to the respondents in accordance with number of the academic librarians in the respective university libraries in Delta and Edo States.

The data collected for this study were analysed quantitatively. The descriptive statistics of frequency counts, mean and standard deviation with a criterion mean of 2.50 were used to answer the research questions while Pearson's Product Moment Correlation (PPMC) coefficient were used to examine the relationships between the studied variables. Also, the simple linear regression inferential statistic was used to test the null hypotheses at 0.05 level of significance. These statistical tools were suitable and appropriate for analysing the data of this study because the study involves collection of data on a 4-point rating scale of Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2 and Strongly Disagree (SD) = 1. The results of the analyses were presented in tables to show the range of agreement and relationship or degree of correlation between the studied variables. However, the decision rules held that the null hypotheses (H_0) be rejected if the p-value is less than 0.05, otherwise accepted. This implies that when the p-value was greater than the level of significance (0.05), the null hypothesis (H_0) was accepted, and when it was less than the level

of significance, the null hypothesis (H_0) was rejected. Meanwhile, the degree or strength of the relationship of the variables was determined and interpreted using Creswell's correlation coefficient scale which states that correlation coefficient (r) $\pm 0.00 - 0.20$ = very low relationship, $\pm 0.21 - 0.40$ = low relationship, $\pm 0.41 - 0.60$ = moderate relationship, $\pm 0.61 - 0.80$ = high relationship, while $\pm 0.81 - 1.00$ = very high relationship (Creswell, 2014).

Results and Analysis of Data

The results of the study were presented in tables to show various elements and diverse attributes of the respondents as well as responses to the research questions. Result shows that 136 copies of questionnaire were distributed proportionately across 20 university libraries in Delta and Edo States. Out of the 136 copies distributed, a total of one hundred and twenty-five (125) copies representing 91.91% (approximated to 92%) response rate were completed and retrieved with valid and useful information for the study, while 11 copies making up 8% were lost. Meanwhile, the entire analyses were based on 100% since the percentage of lost was not significant.

Research Question 1:

What is the relationship between online search skills and utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria?

Table 1: Mean and standard deviation responses on the online search skills for utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria (n = 125)

S/N	Item Statements	SA	A	D	SD	Mean	Dev. Std	Remarks
1	I have the ability to navigate various search engines like Google, Chrome, Firefox, etc.	63	58	4	0	3.47	0.56	Agreed
2	I know how to keep my search simple using appropriate keywords	62	54	9	0	3.42	0.63	Agreed
3	I can search the Internet using Boolean operators such like AND, OR, and NOT	43	54	28	0	3.12	0.75	Agreed
4	I know how to search using phrase searching	35	80	10	0	3.20	0.57	Agreed
5	I can search using proximity search techniques	52	50	23	0	3.23	0.74	Agreed
6	I can use stemming search strategy to search beyond specific and related search terms	7	17	47	54	1.82	0.87	Disagreed
7	I know how to search with truncation searching technique	11	16	77	21	2.14	0.80	Disagreed
8	I have the ability to search using wildcard technique of placing symbols	12	21	64	28	2.14	0.87	Disagreed

	within a word to find variations of the word in a document								
9	I know how to construct multiple search queries to optimize my searching	36	59	24	6	3.00	0.82	Agreed	
Grand Mean						2.84		Agreed	
Criterion Mean						2.50			

Source: Researcher's Field Survey, 2025

Data in Table 1 shows the frequency and standard deviation responses on the online search skills for utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria. It indicates a higher grand mean of 2.84 against the criterion mean of 2.50. It specifically shows that majority of the librarians have high online search skills in the areas of navigating various search engines like Google, Chrome, Firefox, etc. (3.47, 0.56); keeping search simple by using appropriate keywords (3.42, 0.63); using proximity search techniques (3.23, 0.74); using phrase searching techniques (3.20, 0.57); searching the Internet with Boolean operators such like AND, OR, and NOT (3.12, 0.75), among other online searching capabilities. On the contrary, the result reveals that some of the librarians were deficient in other areas of online search skills such as using truncation searching technique (2.14, 0.80); using wildcard technique of placing symbols within a word to find variations of the word in a document (2.14, 0.87); and using stemming search strategy to search beyond specific and related search terms (1.82, 0.87). The result indicates that the overall online search skills of the librarians for utilization of electronic information resources is moderately high across the university libraries in Delta and Edo States, Nigeria.

Table 2: Correlation coefficient of the relationship between online search skills and utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria

		OSSs	UEIRLs
OSSs	Pearson	1	0.159
	Sig (2-tailed)		.001
	N	125	125
	R ²	(0.025) 25%	
UEIRLs	Pearson	0.159	1
	Sig. (2-tailed)	.001	
n		125	125

OSSs = Online Search Skills

UEIRLs = Utilization of Electronic Information Resources by Librarians

N = Number of Observation

R = Correlation Coefficient

R^2 = Coefficient of Determination

Data in Table 2 shows a correlation coefficient (r) of 0.159 which is positive within the coefficient limit of $\pm 0.00 - 0.20$, indicating that online search skills relates with the utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria. The coefficient of determination ($R^2 = 0.025$) further shows that 25% of the utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria, could be accounted for by online search skills. This result is validated by the test of hypothesis 1 as shown in Table 2.2.1 below.

Research Question 2:

What is the relationship between social media skills and utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria?

Table 3 Mean and standard deviation responses on the social media skills for utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria (n = 125)

S/N	Item Statements	SA	A	D	SD	Mean	Dev. Std	Remarks
1	I have the ability to create user-generated contents using social media handles such as X, Facebook, etc.	20	64	35	6	2.78	0.77	Agreed
2	I can exchange of user-generated contents using social media handles such as X, Facebook, Instagram, etc.	30	64	21	10	2.91	0.85	Agreed
3	I know how to create public profiles for my library using social media handles such as library blog, etc.	37	49	28	11	2.90	0.93	Agreed
4	I can share information about library services on my library website	7	19	62	37	1.97	0.82	Disagreed
5	I can do a podcast of library services on social media handles such as X, Facebook, YouTube, etc.	19	18	82	6	2.40	0.80	Disagreed
6	I know how to advertise library services using the library blog	19	37	53	16	2.47	0.90	Disagreed
7	I have the ability to evaluate information available on social media handles such as Facebook, Instagram etc., for benefit of library users	49	59	17	0	3.26	0.68	Agreed
8	I know how to create pictures and videos of library services for users using YouTube, TikTok, etc.	21	20	51	33	2.23	1.02	Disagreed

9	I can share my scholarly publications on social media platforms such as LinkedIn, Mendeley, ResearchGate, etc.	50	49	24	2	3.18	0.79	Agreed
10	I know how to use zoom and YouTube in sharing innovative services of my library	8	35	52	30	2.17	0.87	Disagreed
11	I know how to edit social media contents to fix users' needs	87	38	0	0	3.70	0.46	Agreed
Grand Mean						2.72	Agreed	
Criterion Mean						2.50		

Source: Researcher's Field Survey, 2025

The data in Table 3 reveals the mean and standard deviation responses on the social media skills for utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria. It shows that the librarians have high social media skills for editing social media content to fix users' needs (3.70, 0.46); evaluating information available on social media handles such as Facebook, Instagram etc., for benefit of library users (3.26, 0.68); sharing scholarly publications on social media platforms such as LinkedIn, Mendeley, ResearchGate, etc. (3.18, 0.79); exchanging user-generated contents using social media handles such as X, Facebook, Instagram, etc. (2.91, 0.85); creating public profiles for the library using social media handles such as library blog, etc. (2.90, 0.93); and creating user-generated contents using social media handles such as X, Facebook, etc. (2.78, 0.77). On the contrary, the result shows librarians' low social media skills indicated by their disagreement in areas of having the skills to advertise library services using the library blog (2.47, 0.90); do podcast of library services on social media handles such as X, Facebook, YouTube, etc. (2.40, 2.80); create pictures and videos of library services for users using YouTube, TikTok, etc. (2.23, 1.02); use zoom and YouTube in sharing innovative services of my library (2.17, 0.87); and share information about library services on my library website (1.97, 0.82). Meanwhile, the overall result shows a higher grand mean of 2.72 against the criterion mean of 2.50, indicating moderate high social media skills of the librarians for utilization of electronic information resources across the university libraries in Delta and Edo States, Nigeria.

Table 4: Correlation coefficient of the relationship between social media skills and utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria

		SMSs	UEIRLs
SMSs	Pearson	1	0.236
	Sig (2-tailed)		.001
	n	125	125
	R ²	(0.057) 56%	
UEIRLs	Pearson	0.236	1
	Sig. (2-tailed)	.001	
n		125	125

SMSs = Social Media Skills

UEIRLs = Utilization of Electronic Information Resources by Librarians

N = Number of Observations

R = Correlation Coefficient

R² = Coefficient of Determination

Data in Table 4 reveals a correlation coefficient (r) of 0.236 which is positive within the coefficient limit of $\pm 0.21 - 0.40$, and indicates that social media skills relate with the utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria. The coefficient of determination ($R^2 = 0.057$) further shows that 57% of the utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria, could be accounted for by social media skills.

Discussion of findings

Discussion of Findings

The findings of the study are discussed in line with the specific objectives as follows:

Online search skills have a positive significant relationship with the utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria

The finding of the study in Tables 3, 4, and 5 revealed that the overall online search skills of the librarians is moderately high and have a positive significant relationship with the utilization of electronic information resources across the university libraries in Delta and Edo States, Nigeria. It indicated that online search skills such as the ability to navigate various search engines like Google, Chrome, Firefox, etc.; keep online search simple using appropriate keywords; search the Internet using Boolean operators such like AND, OR, and NOT; search the Web using proximity search techniques; construct multiple search queries to optimize online searching, among other online search capabilities significantly correlate with the utilization of electronic information resources among librarians in university libraries in Edo and Delta States, Nigeria. This result specifically revealed that librarians in the university libraries can effectively utilize electronic information resources for enhanced services delivery if they improve their moderate online search capabilities. It further implies that librarians can utilize electronic information resources in the

university libraries for enhanced academic activities such as teaching, learning and research activities if their digital literacy skills are improved upon to enable them take full advantage of the digital revolution and shape their overall job performance and services delivery in the university libraries. This finding further implies that the librarians possessed only moderate level of digital literacy skills in the area of online search skills, which may have direct and indirect negative implications on their overall ability to galvanize effective digital library services and utilization of electronic information resources for enhanced users' satisfaction as well as their personal and professional growth in this digital era. This finding is in agreement with Akwang and Udoh (2024a), which revealed that librarians' online search skills have positive significant relationship with the use of electronic information resources for research activities in public university libraries in South-East, Nigeria. It also aligns with previous studies by Osisanwo and Josephs (2020); as well as Abdulkadir and Mohammed (2016), which indicated that there is a significant relationship between the web search skills and the use of online information resources by librarians since web search skills facilitate the ease of utilizing e-books, e-journals, online dictionary of LIS (ODLIS), directory of open access repositories, etc., for enhanced services delivery and job performance.

Social media skills have a positive significant relationship with the utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria

The findings of the study in Tables 4.1.7, 4.1.8 and 4.2.3 revealed that the overall social media skills of the librarians is moderately high and have a positive significant relationship with for utilization of electronic information resources across the university libraries in Delta and Edo States, Nigeria. It showed that social media skills such as the ability to edit social media content to fix users' needs, evaluate information available on social media handles such as Facebook, Instagram etc., for benefit of library users, share scholarly publications on social media platforms such as LinkedIn, Mendeley, ResearchGate, etc., exchange user-generated contents using social media handles such as X, Facebook, Instagram, etc., create public profiles for the library using social media handles such as library blog, etc., and creating user-generated contents using social media handles such as X, Facebook, etc., significantly correlate with the utilization of electronic information resources among librarians in university libraries in Edo and Delta States, Nigeria. The result indicated that effective social media competencies enhance the utilization electronic information resources for improved services delivery in the university libraries. This implies that if the social media skills of the librarians are not strong enough, it may hinder the possibility of providing satisfactory services to users and at the same, hinder their professional and intellectual growth especially in a digital world where social media tools are becoming pervasive with strong influence in all aspects of communication, interactivity and services delivery in the university libraries. This finding partly agrees with Oyovwe-Tinuoye et al. (2022), which discovered that a positive perception of the use of WhatsApp for the enhancement of services delivery by librarians, noting that librarians are knowledgeable on the use of WhatsApp for dissemination of library services such as user education/orientation, reference services, instant feedback about the library, announcement, research help services, extension and outreach services. The finding of this study also partially aligns with Akwang (2021), which found that librarians perceived that Web 2.0 technologies as useful for enhanced job performance but noted a low level of web technologies adoption across various academic libraries in Akwa Ibom State, Nigeria.

Conclusion and Recommendations

This study investigated nexus between digital literacy skills and utilization of electronic information resources among librarians in university libraries in Edo and Delta States, Nigeria. It was guided by six (6) specific objectives, six (6) research questions and corresponding hypotheses. In consideration with the studied variables, a correlational research design was adopted. The population of study was one hundred and thirty-six (136) academic librarians from twenty (20) university libraries, covering public and private, that is, federal, state and private universities in Edo and Delta States, Nigeria. Based on the overall results of the study, it was concluded that digital literacy skills have a positive significant relationship with the utilization of electronic information resources among librarians in university libraries in Delta and Edo States, Nigeria. It revealed that the overall online search skills, and social media skills, online collaboration skills and and have a positive significant relationship with the utilization of electronic information resources across the university libraries in Delta and Edo States, Nigeria. Based on the findings the following recommendations:

- i. Management of universities should make digital literacy skills mandatory requirements for appointment of librarians in the university libraries. This is because if librarians are not digitally literate, the utilization of electronic information services for enhanced job performance and services delivery will not be given considerable and deserved attention.
- ii. Management of universities should provide constant power supply including dedicated power source and other necessary digital facilities in order to enhance the utilization of electronic information resources among librarians in the university libraries.
- iii. Management of university libraries should ensure regular training and retraining of librarians to enable them improve their digital literacy skills for enhanced utilization of electronic information resources.

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