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ICT Competence and Use of Digital Library by Post Graduate Students of Ignatius Ajuru University of Education Rumuolumeni, Port Harcourt, Rivers State

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Abstract

This study was conducted to determine the relationship between ICT competence and the use of digital library by postgraduate students of Ignatius Ajuru University of Education (IAUE) in Rivers State, Nigeria. The study adopted a Correlation design. The population of the study comprised 1800 postgraduates in Ignatius Ajuru University of Education. Simple random sampling technique was used to select 210 Postgraduates. Four specific objectives, four research questions and four null hypotheses were formulated to guide the study. A structured questionnaire was designed for data collection. Simple Linear Regression was used to answer the research questions and test the null hypotheses at 0.05 level of significance. The result obtained revealed a significant relationship between internet browsing competence and use of digital library, the strength of relationship was ($R = .841$); Electronic Database competence and use of digital library, the strength of relationship was ($R = .713$); Social media (LinkedIn & Pinterest) competence and use of digital library, the strength of relationship was ($R = .890$); and content sharing competence and use of digital library the strength of relationship was ($R = .820$). From the findings, the study concluded that there is a significant relationship between ICT competence and the use of digital library among postgraduate students of Ignatius Ajuru University of Education, Rivers State, Nigeria. The study recommends among others that effective steps should be taken to encourage the postgraduate students to utilize the electronic databases so that the huge sum invested in subscribing for these databases will not be a waste. It was further recommended that library management should organise a training workshop on the importance of electronic databases, its uses and how to filter search by keywords. IAUE Digital library should lecture users on the importance of information sharing, through the use of Pinterest, LinkedIn and content sharing as they are the heavy hitter of information promulgation.

Keywords: ICT, ICT Competence, Digital library, Postgraduates

Introduction

Technological advancement, which promises better, easier, faster, and more effective communication have taken over the globe; people are living in a world where everything is being

shaped by digital involvement. Information and Communication Technology (ICT) is speedily changing and transforming people's ways of life; the way people communicate, think, discuss, and what they read and how they write. It is gradually penetrating, influencing, and having a physical effect on individual works, studies, and personal lives especially in the academic sector. Educators are hastily recognizing the need to equip students with the necessary ICT experiences that will enable them become ICT competent and contributing members of the global community.

ICT competence is the comprehensive knowledge of the use of the computer to do certain things like to retrieve, to access, to store and to transfer or disseminate information through the internet, online or offline. It is also the Knowledge of the internet or social media for work, business, research, leisure and communication. According to Caluza, et al (2017), ICT competence contributes to the enhancement of learning, reforming education systems/methods, increasing access to learning, improving the management of education and enhancing teaching techniques. Bajpai & Margam (2019) added that the adoption of different ICT techniques in various walks of life has brought about efficiency in all info-transactions such as acquiring, organization, storing, retrieving, dissemination and security of information. However, Library and Information Science professionals have leveraged the opportunity to discharge their duties efficiently. This therefore resulted to the term "digital library" in librarianship.

A Digital library is a collection of documents, like books, journals, magazine articles, papers, images, sound files, compact disks, a CD-ROM disk, and videos arranged or organized in a digital form and made available on the Internet. Perdana & Prasajo (2019) defined digital library as a library that stores information in digital form or fulfilment of information needs in digital format, from external information sources, shared among registered patrons and the general users. Digital libraries are those encoded journals, books, text, media, images, etc. in digital format, they are encoded so that they can be stored, retrieved, and read by using a computer. Perdana & Prasajo (2019) added that many universities have implemented digital libraries as supporting facility for student learning activities. Compared to conventional libraries, digital libraries provide more benefits for each user, such as easy access to several research results; no space and time limitations, users can access a digital library with their own hand-held devices everywhere and every time.

Universities all over the world placed high emphasis on qualitative and quantitative research work to fulfil their mission of teaching, learning, research and cultural development. The measure of value placed on any University is determined by the access to right information and the level of ICT competence of students and faculties. Hence, it is crucial for Postgraduates to update their ICT skill and become competent in all ICT related matters to be able to work efficiently and effectively in the digital library environment.

Statement of the problem

The aim of a digital library in every academic institution is to offer library services that do not confine users to the regular old-fashioned, hard-book, page-to-page research work. A Digital library offers patrons with wide range of electronic information resources and it encourages e-learning, e-research with accurate and timely information.

Therefore, for students to be able to utilise a digital library and its information content effectively, there must be some level of competency on the use of ICT as recent personal observations showed that postgraduates do not utilize digital library resources made available to them by the university, rather, they prefer sending their assignments and research works to the cybercafés scattered around the institution for a fee. This common attitude by postgraduates however depicts high level of incompetency on the use of ICT-based resources. Hence, the study is set to **assess** the relationship between ICT competence and use of digital libraries by postgraduates in Ignatius Ajuru University of Education, Port Harcourt.

Objectives of the Study

The general objective is to examine the relationship between ICT competence and the use of digital library by postgraduates in Ignatius Ajuru University of education. The specific objectives are to:

1. Examine the relationship between Internet browsing competence and the use of Digital Library.
2. Ascertain the relationship between Electronic database competence and the use of Digital Library.
3. Find out the relationship between Social media (LinkedIn and Pinterest) competence and the use of Digital Library.
4. Ascertain the relationship between content sharing Competence and the use of Digital Library.

Research Questions

1. What is the relationship between Internet Browsing Competence and the Use of Digital Library?
2. What is the relationship between Electronic databases Competence and the Use of Digital libraries?
3. What is the relationship between Social Media (LinkedIn and Pinterest) Competence and the Use of Digital Library?
4. What is the relationship between content sharing Competence and the Use of Digital libraries?

Research Hypotheses

1. There is no significant relationship between Internet Browsing Competence and the Use of Digital Library.
2. There is no significant relationship between Electronic databases Competence and the Use of Digital Library.
3. There is no significant relationship between Social Media (LinkedIn and Pinterest) Competence and the Use of Digital Library.
4. There is no significant relationship between content sharing Competence and the Use of Digital Library.

Review of related literature

ICT Competence and use of digital library

ICT is a broad subject with evolving concepts, any product that enables users to access, store, retrieve, manipulate, communicate, transmit, or receive information electronically in a digital form (e.g., personal computers including smartphones, digital television, email, or robots) is known as Information Communication Technology (Mathur, 2017). In library perspective, it is the acquisition, analysis, manipulation, storage and distribution of information; and the design and provision of equipment and software for these purposes. The development and availability ICTs in libraries have today not only increased and broadened the impact of information resources and brought them to their doorsteps, but also placed more emphasis on effective and efficient services. Application of ICT in libraries has indeed continued to ease and promote quick and timely access and transfer of information resources that are found dispensed round the globe.

ICT competence is the comprehensive knowledge of the use of the computer to do certain things such as retrieve, access, store, transfer, or disseminate information through the internet, online or offline. It is also the Knowledge of the internet or social media for work, business, research, leisure, and communication. Buckingham (2016) referred to ICT competence as a set of skills that enables individuals to operate effectively in information retrieval task in technology-oriented environment. Researchers have identified certain skills as useful and needed in order to be competent in this digital age. An ICT competent person is a person who can evaluate and use information critically from relevant and authoritative sources online (Buckingham, 2016). According to Omehia et al (2021), ICT competencies are those computer skills and knowledge required to exploit information services in the wake of new technology. ICT competence is the perfect acquisition of knowledge and skills to manoeuvre information search, information retrieval, information delivery with the use of computer. Bawden (2018) defined ICT competence as the set of attitudes, understanding and skills to handle and communicate information and knowledge effectively, in a variety of media and formats. A person also can perform tasks effectively and efficiently in a digital environment. ICT competence programs are an essential element of media education, it involve basic learning tools, a curriculum in critical thinking and creativity.

The new working environment has become a competitive one and many players are now involved in information provision which include, Internet cafe, mobile communication medias, ICT staff, and many others in the information profession (Wittmer, 2011). Some of these players especially the internet café providers lack the necessary librarian skills to provide quality information to academic library customer (Stubbings & McNab, 2019). Thus, librarians need to update continuously their skills on internet browsing to be able to function maximally and competitively in an ICT environment especially in academic libraries. Students need competence that will enable them use ICT for management of library and information resources. However, a significant ICT competence gap among information professionals in Nigeria has been identified by Aschroft & Watts (2015). They went further and posited that the competence gap has resulted in serious under-utilisation of electronic resources in many libraries in Nigeria. Islam & Islam (2017) noted that librarians are expected to possess the following ICT knowledge and competence: operating system, packages and programming languages, web awareness, technical competence, knowledge of online services, technical competence, subject knowledge and elementary programming languages competence. CD-ROMs/OPAC search competence, web and

other electronic databases, search competence, database management, web development, management of multiple media, metadata competence, knowledge of standards such as Z39.50 and Dublin Core, word processing skills, spread sheet competence, database competence, electronic presentation competence, web navigation competence, website design competence, e-mail, management competence.

A Digital library is the collection of content, text, scanned images, numeric or number data, graphics, audio, and video recordings that give access to digital collection for easy information retrieval. Digital libraries give researchers easy access to information at a push of a button. Dadzie (2005) opined that digital resources are convenient because one can access data from the library, cyber café, offices, and homes any time of the day or night. The lack of library use by some students has made awareness of the available digital library resources low. Frequency of library use by students is another factor influencing use of digital resources with similar implications for librarians.

There are many benefits attached to using a digital library; according to Perdana & Prasajo (2019), a digital library is a solution to the challenges of technological development. Some universities use digital libraries as a backup system for students learning activities. Unlike conventional libraries, digital libraries provide more benefits to users, such as easy access to all research results and others. With a digital library, patrons can easily find the information they need. However, there is round-the-clock remote access to information irrespective of geographical location. Lastly, users can access the collection using their own devices or mobile android phones everywhere every time especially when the digital library is online-based.

Internet browsing competence and use of digital library

The term internet coined from a concept inter-networking that denotes interaction between networking of computers. It is an avenue where diverse networks freely share information across the globe. The Internet is generally a worldwide network of computers communicating through an agreed-upon protocol (rules for the exchange of information)

It provides access to the most diversified source of information hosted by individuals and various organisations worldwide on a vast network of servers. The international network is a technology that has gradually become an enormous part of people's daily activities. Internet connectivity has improved tremendously over the last decades, and is available everywhere such as homes, offices, travels and schools (Ellore et al., 2014).

Taking into account access and usage of internet by postgraduate students in Nigeria, Olatokun (2018) indicated that most students believed the internet to be far better and convenient than their school libraries. Scholars saw the internet as a source of general knowledge; therefore, it has helped in improving their reading culture and their academic performance. The browsing of internet sometimes used as a supplementary learning material and has led to an improvement in students' academic performance Siraj *et al.*, (2015). Browsing according to Kolmar (2021) is the process of viewing pages one at a time and navigating between them sequentially using hyperlinks. While Searching refers to the entering of a search query (usually a list of one or more

keywords) to a search engine and the subsequent scanning and selection of links from the results received.

Graduate students see the library as a favourable environment for studies, and a source of relevant and realistic information for research. However, they prefer browsing the internet to the library because of the fact that the latter provides readily information at all times, faster access to information and large amount of information (Kakkar, 2014). Browsing internet is of great significance to a developing country (Akande & Bamise, 2017). The internet updates and organizes current information for easy search, and this has contributed significantly to students' academic laurels (Kumah, 2015). The browsing of the internet creates awareness of the importance of the world around students (Ogedebe, 2012). The browsing of the Internet for learning is seen as a means to improve accessibility, efficiency and quality of learning by facilitating access to resources and service as well as remote exchanges and collaboration (Kamba, 2019).

Electronic Database Competence and use of Digital library

Electronic Database is a computer-based collection or listing of information which includes professional peer-reviewed journal articles that are organized in a systematic way with searchable elements or fields, which allows fast and easy search. Akinola et al (2018) Cited Ani & Ahiauzu (2008) electronic databases are collection of electronic information sources (e-journals or eBooks) by publishers from various fields or disciplines, while some databases are provided free of charge to libraries in developing countries, others require some fees for subscription” Electronic databases are gradually becoming popular among librarians, researchers, and library patrons due to its flexibility, accuracy, currency, and wide range of information. Online or web-based databases are widely available to library patrons worldwide, and many patrons can tap into these databases from their computers or electronic devices anywhere in the world. Akpojotor (2016) as cited by Akinola, Shorunke & Ajayi et al (2018) stated that awareness and use of electronic information resources are important, as this will keep postgraduate students on alert of the obtainable source through which they can access the required information. Musa, Ahmad & Yunusa (2015), stated that Electronic information resources are becoming popular than traditional print resources due to the portability, flexibility, and instant availability of up-to-date information for this reason; libraries are spending a substantial amount of their budgets on online resources. According to Adeoye, (2017) the heavy workload of students moves them into searching for information in electronic database resources in the university libraries and to benefit from these search, students require digital literacy skills. Musa, Ahmad & Yunusa (2015), examined the use of electronic information resources by the Academics. the study discovered that African Journals Online (AJOL), Directory of Open Access Journal (DOAJ), and Bio Med Central were the types of electronic database used by the Academics in some universities but due to Lack of information literacy skill, the university library should create awareness among researchers on the available online databases by Conducting training and retraining programs, Organizing conferences, seminars, and workshops to increase the use of these services.

This study of Akinola, Shorunke & Ajayi et al (2018) investigated the awareness and use of electronic databases by postgraduates. The findings showed that 66.4% of the postgraduate students were generally aware of electronic databases but few of the students were aware of the electronic databases available in the university. The researcher discovered that the respondents used electronic databases to a high extent for carrying research work, literature searching, generate new information and to update knowledge. Results from the analysis revealed that regular use of electronic databases by postgraduate scholars was low. The study recommended that librarians should educate postgraduate students on the availability of electronic databases in the institution and its benefits.

Social Media competence and use of digital library

Social media as the name implies is using media to be social, to interact, share ideas, thoughts, information, share content and to communicate socially through the media. Social media is internet based and grants users access to electronic communication content. According to Google dictionary Social media is websites and applications that enable users to create and share content or to participate in social networking. Wigmore (2021) defines Social media as a collective term that is used for websites and applications that focus on communication, community-based input, interaction, content sharing and collaboration, social networking, social bookmarking, etc. People use social media to stay in touch or communicate with loved ones and friends, businessmen and women use social media to market and promote their businesses, students, lecturers and researchers use social media for content sharing and information dissemination. Some examples of social media that the researcher will discuss in this study are LinkedIn and Pinterest.

Web 2.0 principles and technologies propose several opportunities for libraries to serve their users and to reach out beyond the confines and websites of the establishments, to reach prospective recipients where they happen to be undertaking. We review it online by choice. borrow locally, request from a far or sell as appropriate to clients' needs and circumstances. According to Davis (2015), Web 1.0 took people to information; Web 2.0 will take information to the people. Recently, librarians used Web 2.0 applications more regularly than ever, anywhere and anytime. Applications like video sharing tools, instant messenger, online communities, blogs, and web conferencing devices are gaining in popularity. Librarian uses them to create their own contents on the web, contribute and collaborate with others, and develop social networks via multiple formats of media and representation (O'Reilly, 2015).

LinkedIn Learning is a library of excellent video lessons on a variety of software and commercial topics. The University account gives one access to all of it free. The subtitled tutorials include exercise files. On-screen controls mean one decides the pace of one learning. LinkedIn videos can be viewed on a personal computer or download on the tablet app. You can view the videos on your PC, Mac or download the tablet app. The website uses statistical methods to join, link, or connect patrons with potential contacts and relevant groups. (Albrecht, 2011). LinkedIn users can feel comfortable connecting with casual acquaintances or new links and not worry about people viewing personal information or personal pictures, aside from a profile picture, since users do not post this kind of content on site. From a branding

perspective, LinkedIn offers users the opportunity to create a professional profile and sculpt it in a manner that is attractive to employers and takes advantage of endorsements and recommendations by colleagues, professors, and supervisors. Unlike a resume, formatting is never an issue because LinkedIn uses forms that contacts may fill out and then post to one's profile in a standard format (Okoro, 2012).

Pinterest, a pin board-style social photo-sharing website, has become a popular site for many individuals who collect images that help them plan, organize, and explore any topic of interest. Launched in March 2010, Pinterest now has over 11 million users and still growing. Librarians and educators are starting to explore this new type of social media and how it can be used to connect with and inspire their patrons and students elopement in their fields and to converse with other interested parties in an informal way. Pinterest functions as a digital pin-board. It lets users post images and videos either from the internet, while viewing a website or by using a URL, and add user-created photos, both of which are referred to as pinning. Pinterest provides a bookmark let script (downloadable "pins this" button users can add to their browsers) that allows users to pin virtually any image or video found on the Internet. An image or video referred to as a pin and organized onto categorized user-created boards. Patrons may add a description of up to 500 characters to a pin. Already existing pins can be added to a user's board, referred to as repining. One can use a heart icon to like a pin or add comments below the description. The site is becoming more popular for business and educational use; libraries are rapidly using this new tool to help endorse, display and promote new books and collections, share "good reads," and promote library events (Dudenhoffer & Cynthia, 2012).

Content sharing Competence and use of digital library

In this era of the digital divide, the rapid development of information technology and the emergence of networked information services have necessitated a complete overhaul of library services for resource-sharing approaches. Sharing resources can be called library collaboration. It includes efforts to share faculties and expand and improve services without proportionally increasing the cost of processing facilities, which include books. Out-of-the-box digital libraries make resource sharing possible and easy. Magara (2012) opened that a digital library is an automated or electronic library known as an information centre without a physical location for the end users. The digital library method of resource sharing is becoming a common demand among academic and research institutions library responds to this request by attempting to create text of name of materials available to a broader virtual and audience Akintunde (2013). Recognizing the opportunities presented by the development of ICT-enabled information dissemination and sharing, some Nigerian libraries are undertaking efforts to digitize the collections and to achieve their availability to world knowledge (Felix, 2019).

People share personal content on social media platforms such as Facebook, Pinterest, Twitter, Google+, or Instagram and on more traditional file-sharing platforms Pettigrew et al. (2018). These services allow sharing with friends, followers or, on platforms such as Facebook or Google+, explicitly defined groups or individuals. Users can sort social-network-site friends into a variety of pre-defined groups for sharing. Some users create groups using features such as

Google+ Circles or Facebook Friend Lists. For example, Facebook users used Friend Lists to target specific audiences to recreate some of their contexts or to target relevant people in their networks (Nardi & O' Day, 2017). Users can also share content publicly on these platforms with friends or followers, often with intended audiences. However, these "imagined" audiences may not match the contents actual reach Bates (2019). Personal content sharing can be rooted in activities or applications used for two frequently related tasks: "personal organization," such as managing personal information or synchronizing between files, devices and group information management, handing files in a collaborative setting such as a repository system (e.g., Drop box, Google Drive) (Ackerman, 2018).

Methodology

The study adopted the Correlational research design. The population comprised of 1800 2019/2020 postgraduates only. Simple random sampling technique was used to randomly select 210 postgraduate users. Structured Questionnaire titled 'ICT competence and Use of Digital Library Questionnaire' (ICTCQ), was used as primary instrument for data collection. The instrument was divided into three sections A, B, C (A: Demographic data and instruction. B: ICT competencies, C: Use of the digital library). The instrument was validated by two experts and a reliability coefficient of 0.82 using Cronbach Alpha. Simple Linear Regression was used to analyse the research questions and test the null hypotheses at 0.05 level of significance.

Analysis and Discussion of finding

Research Question 1: What is the relationship between Internet Browsing Competence and the Use of Digital Library?

Table 1: The Summary of result of the relationship between Internet browsing Competence and the Use of Digital Library

Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate
Internet browsing Competence and the Use of Digital Library	.841 ^a	.649	.647	.54478

a. Predictors: (Constant), Internet browsing competence

b. Dependent Variable: Use of Digital Library

The result in Table 1 reveals the relationship between Internet browsing competence and the use of Digital Library in Ignatius Ajuru University of Education, Rumuolumeni Port Harcourt Rivers State Nigeria. With the coefficient of determination ($R^2 = 649$) revealing that about 64.9% of the total variance in the use of Digital Library in Ignatius Ajuru University of Education, Port Harcourt, Rivers State is attributed to Internet browsing competence with a corresponding correlation coefficient of 0.84. This implies that Internet browsing competence has a strong relationship with the use of Digital Library.

Research Question 2: What is the relationship between Electronic Databases competence and the use of Digital libraries?

Table 2: The Summary of result of the relationship between Electronic Database Competence and the Use of Digital Library

Variable	R	R Square	Adjusted Square	R Std. Error of the Estimate
Electronic Databases Competence and the use of Digital libraries	.713	.476	.474	.87289

a. Predictors: (Constant), Electronic Database Competence

b. Dependent Variable: Use of Digital Library

The result in Table 2 reveals the relationship between Electronic Database competence and the use of Digital Library, With the coefficient of determination ($R^2 = .476$) indicating that about 47.6% of the total variance in use of Digital Library in Ignatius Ajuru University of Education, Port Harcourt, Rivers State with a corresponding correlation coefficient of 0.71. This implies that Electronic Database competence has a very strong relationship with the use of Digital Library.

Research Question 3: What is the relationship between Social Media (LinkedIn & Pinterest) competence and the use of Digital Library?

Table 3: The Summary of result of the relationship between Social Media (LinkedIn & Pinterest) Competence and the Use of Digital Library

Variable	R	R Square	Adjusted Square	R Std. Error of the Estimate
Social Media Competence and the Use of Digital Library	.890	.724	.723	.72813

a. Predictors: (Constant), Social Media (LinkedIn & Pinterest) Competence

b. Dependent Variable: Use of Digital Library

The result in Table 3 reveals the relationship between Social Media (LinkedIn & Pinterest) competence and the use of Digital Library. With the coefficient of determination ($R^2 = .724$) indicating that about 72.4% of the total variance in use of Digital Library in Ignatius Ajuru University of Education, Port Harcourt, Rivers State with a corresponding correlation coefficient of 0.89. This implies that Social Media (LinkedIn & Pinterest) has a very strong relationship with use of Digital Library.

Research Question 4: What is the extent of the relationship between Content Sharing competence and the use of Digital Library?

Table 4: The Summary of the relationship between Content Sharing Competence and the Use of Digital Library

Variable	R	R Square	Adjusted Square	R Std. Error of the Estimate
Content sharing competence and the Use of Digital Library	.820	.784	.782	.85255

a. Predictors: (Constant), Content Sharing Competence

b. Dependent Variable: Use of Digital Library

The result in Table 4 reveals the relationship between Content Sharing competence and the use of Digital Library. With the coefficient of determination ($R^2 = .784$) indicating that about 78.4% of the total variance in Content sharing competence in Ignatius Ajuru University of Education is attributed to content sharing competence with a corresponding correlation coefficient of 0.82. This implies that content sharing competence has a very strong relationship with the use of Digital Library.

H₀₁: There is no significant relationship between Internet browsing competence and the use of Digital Library.

Table 5: The Result of Linear Regression on relationship between Internet Browsing Competence and the Use of Digital Library

Source of Variance	Sum of Squares	DF	Mean Square	F	P-value
Regression	365.363	1	365.363	771.093	.002
Residual	202.661	209	.205		
Total	468.024	210			

a. Dependent Variable: Use of Digital Library

b. Predictors: (Constant), Internet Browsing Competence

The result in Table 5 shows the relationship between Internet browsing competence and the use of Digital Library in Ignatius Ajuru University of Education. The table also reveals the F-value as 771.093 and the p-value as .002. However, since the p-value is less than 0.05 ($P < 0.05$), the null hypothesis which states that there is no significance relationship between Internet browsing competence and the use of Digital Library is not accepted while the alternative hypothesis which states that there is a relationship between internet browsing competence and the use of Digital library is accepted. Therefore, it can be concluded that there is a significant relationship between Internet browsing competence and the use of Digital Library in Ignatius Ajuru University of Education Rivers State.

H₀₂: There is no significant relationship between Electronic Database competence and the use of Digital Library.

Table 4.6: The Result of Linear Regression on relationship between Electronic Database Competence and the Use of Digital Library

Source of Variance	Sum of Squares	DF	Mean Square	F	P-value
Regression	270.253	1	270.253	509.511	.001
Residual	240.107	209	.316		

Total 210.360 210

- a. Dependent Variable: Use of Digital Library
 b. Predictors: (Constant), Electronic Database Competence

The result in Table 6 shows the relationship between Electronic Database competence and use of Digital Library in Ignatius Ajuru University of Education, Rivers State, Nigeria. The table also reveals the F- value as 409.511 and the p-value as .001. However, since the p-value is less than 0.05 ($P < 0.05$), the null hypothesis which states that there is no significant relationship between Electronic Database competence and use of Digital Library in Ignatius Ajuru University of Education is rejected while the alternative hypothesis which states that there is a relationship between Electronic database competence and use of digital library is retained. Therefore, it can be concluded that there is a significant relationship between Electronic Database competence and use of Digital Library in Ignatius Ajuru University of Education Rivers State.

H₀₃: There is no significant relationship between Social Media (LinkedIn & Pinterest) competence and the use of Digital Library.

Table 7: The Result of Linear Regression on the relationship between Social Media Competence and the Use of Digital Library

Source of Variance	Sum of Squares	Df	Mean Square	F	p- Value
Regression	145.821	1	145.821	378.780	.002
Residual	276.274	209	.523		
Total	222.094	210			

- a. Dependent Variable: Use of Digital Library
 b. Predictors: (Constant), Social Media Competence

The result in Table 7 shows the relationship between Social Media (LinkedIn & Pinterest) competence and the use of Digital Library. The table also reveals the F- value as 378.780 and the p-value as .002. However, since the p-value is less than 0.05 ($P < 0.05$), the null hypothesis which states that there is no significant relationship between Social Media (LinkedIn & Pinterest) competence and the use of Digital Library is not accepted while the alternative hypothesis which states that there is a relationship between Social media (LinkedIn and Pinterest) competence and use of digital library is retained. Therefore, it can be concluded that there is a significant relationship between Social Media competence and use of Digital Library in Ignatius Ajuru University of Education Rivers State.

H₀₄: There is no significant relationship between Content sharing competence and the use of Digital Library.

Table 8: The Result of Linear Regression on the relationship between Content Sharing Competence and the Use of Digital Library

Source of Variance	Sum of Squares	DF	Mean Square	F	P-value
Regression	218.993	1	218.993	310.113	.002

Residual	290.853	209	.466
Total	409.847	210	

a. Dependent Variable: Use of Digital Library

b. Predictors: (Constant), Content Sharing Competence

The result in Table 8 shows the relationship between Content sharing competence and the use of Digital Library. The table reveals the F- value as 310.113 and the p-value as .002. However, since the p-value is less than 0.05 ($p < 0.05$), the null hypothesis which states that there is no significant relationship between content sharing competence and the use of Digital Library is not accepted while the alternative hypothesis which states that there is a relationship between content sharing competence and the use of digital library is retained. Therefore, it can be concluded that there is a significant relationship between content sharing competence and the use of Digital Library in Ignatius Ajuru University of Education Rivers State, Nigeria.

Findings

Based on the result of the analysis of the data obtained, the following were the findings that:

- i. Internet browsing competence has a very strong relationship with the use of digital library.
- ii. Electronic Database competence has a very strong relationship with the use of digital library.
- iii. Social Media (LinkedIn & Pinterest) competence has a very strong relationship with the use of digital library.
- v. There is a significant relationship between content sharing competence and the use of digital library in Ignatius Ajuru University of Education Rivers State, Nigeria.

Conclusion

The importance of ICT competence cannot be over emphasized, especially when it comes to enhancing the use of digital library among postgraduates. It is a known fact that postgraduates' use of digital library is improved by being ICT competence. The findings of the study revealed that there is a significant relationship between internet browsing competence, Electronic database competence, Social media competence (LinkedIn and Pinterest) content sharing competence and the use of digital library in Ignatius Ajuru University of Education Rivers State, Nigeria. From these findings it can be easily inferred that ICT competence matters a lot and should be a concern of both the government and University administrators.

Recommendations

Based on the conclusion of the study the following recommendations were postulated:

- i. Postgraduates should browse useful information on the internet, instead of irrelevant sites that are not beneficial to them.
- ii. Effective step should be taken to encourage the postgraduate students and researchers in general to utilize the electronic databases so that the huge sum invested in subscribing for these databases will not be a waste. To this end, library management should organise a

- workshop or training on the importance of electronic databases, its uses and how to filter search by keywords
- iii. IAUE Digital library should lecture postgraduates on the importance of information sharing, through the use of Pinterest, LinkedIn and content sharing. Pinterest and LinkedIn and content sharing are the heavy hitter of information promulgation which is available to postgraduate students regardless of time and location.
 - iv. Library administrators should create awareness among library users, of the resources available by using brochures, newsletters and posters on the website. University management should provide more update resources and services to improve the facilities for accessing digital resources.
 - v. Library administrators should state clearly to the University management the importance of digital library for improving studies and research in order to ensure sustainability. All user requirements should be taken into consideration by University management in planning digital library strategies.

References

- Abirag, K. D., Vilgo, J., & Schroeder, M. (2018). *ICT competence practice: Digital-based teaching and learning with Teachers and Students*. Springer Publishing Company.
- Ackerman, M. (2018). Augmenting Organizational Memory: A Field Study of Answer Garden. *ACM Transactions on Information Systems (TOIS)*, 16(3), 203-224.
- Adeoye, A.A. (2017). Electronic Database Resources and Digital Literacy Skills as Determinants of Nigerian Undergraduates Library Use, *Journal of Capital Development in Behavioural Sciences*. 5(1), 140.
- Akande, S. O. & Bamise, O. F. (2017). The role of school library in academic motivation of secondary school students in Osun State, Nigeria. *International Journal of Library Science*, 6(1), 18-27.
- Akinola, A.O., Shorunke, O. A., Ajayi, S.A., Odefadehan, O. O., & Ibikunle, F.L. (2018). Awareness and use of electronic databases by postgraduates in the University of Ibadan. *Library Philosophy and Practice (e-journal)*, 2065. <http://digitalcommons.unl.edu/libphilprac/2065>
- Akintunde, S.A. (2013). New and emerging tools for library practice in the new millennium. *Journal Library Information Science*, (1)1, 07–72.
- Alakpodia. O. N. (2010). The use of internet skills among library and information students: The experience of Delta State University, Abraka. *Information Impact: Journal of Information and Knowledge Management*, 1(2), 55-50.
- Albrecht, W. D. (2011). LinkedIn for accounting and business students. *American Journal of Business Education*, 4(10), 39-41.
- Asemi, A. (2005). Information searching habits of Internet users: A case study on the Medical Sciences University of Isfahan, Iran. *Webology*, 2(1), 1-10.

- Ani, O. E., & Ahiauzu, B., (2018). Towards effective development of electronic information resources in Nigerian University libraries. *Library Management*, 29(6), 504-514.
- Ashcroft, L., & Watts, C. (2015). ICT skills for information professionals in developing countries: Perspectives from a study of the electronic information environment in Nigeria. *IFLA Journal*, 31(1), 6-12.
- Bajpai, V. K. & Margam, M. (2019) ICT Skills and Competencies of Library and Information Science Professionals working in College Libraries, University of Delhi: A study. *Library Philosophy and Practice (e-journal)*. 2275. <https://digitalcommons.unl.edu/libphilprac/2275>
- Bates, M., (2019). The Design of Browsing and Berrypicking Techniques for the Online Search Interface. *Online Review*, 13(5), 407-424.
- Bawden, D. (2018). Digital Literacy. http://www.scitopics.com/Digital_Literacy.html
- Bell, T. & Shank, J. (2018) Digital Literacy, Definition and Resources: What is Digital Literacy? http://cleach.wordpress.com/what-is-digital-literacy/Accessed_10/03/12
- Boaduo, N. A., & Babitseng, S. M., (2017).The need for teachers to be researchers, The African Symposium. *An Online Journal of African Education Network*, 7(1), 183-191.
- Boucaud, A.A. (2017). A Correlational Study Examining the Relationship Between Restorative Practices and School Climate in Selected Elementary Schools in a Large Mid-Atlantic Urban School District. [Dessertation]. <https://commons.cu-portland.edu/edudissertations/75>
- Bruce, C. (2017). The relational approach: A new model for information literacy. *The New Review of Information and Library Research* 3,1–22.
- Buckingham, K. (2016). Defining digital library: what people need to know about digital media *Digital Kompetanse*, 4(1), 263 -276.
- Cahill, K. (2009). *User-Generated Content and Its Impact on Web-based Library Services*. Chandos Publishing.
- Caluza, L.J.B., Verecio, R. L., Funcion, D.G.D., Quisumbing, L.A. (2017). An Assessment of ICT Competencies of Public School Teachers: Basis for Community Extension Program. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 22(3), 1-13. DOI: 10.9790/0837-2203040113
- Dadzie, P.S. (2015). Electronic Resources: access and usage at Ashesi University College. *Campus-wide Information Systems*, 22(5), 32-34.
- Davis, I. (4th July 2015). Talis, Web 2.0 and All That", Internet Alchemy blog, 2005 <http://internetalchemy.org/2005/07/talis-web-20-andall-that>
- Dudenhoffer L. and Cynthia M. (2012). Pin It! Pinterest as a Library Marketing and Information Literacy Tool. *College & Research Libraries News*, 73(2), 328-332.
- Ellore, S. B., Niranjana, S. & Brown, U. J. (2014). The Influence of Internet Usage on Academic Performance and Face-to-Face Communication. *Journal of Psychology and Behavioural Science*, 2(2), 163-186.
- Felix, N.U. (2009). Trends in digital library services in academic libraries in South Africa: library portals and ETD systems. [Paper presentation]. Nigerian Library Association, 44th annual national conference, and AGM proceedings, Abuja.

- Islam, S., & Islam, N. (2017). Use of ICT in Libraries: An Empirical study of selected Libraries in Bangladesh. *Library Philosophy and Practice*. <http://tinyurl.com/opca4kp> on 08/1/2021
- Kakkar, N. (2014). Influence of Internet Addiction on the Academic Performance and Mental Health of College Students: An international peer review and referred. *Scholarly research journal for interdisciplinary studies*, 3(21), 23-56.
- Kamba, M.A. (2019). The changing role of researchers in Nigeria: The Internet as an alternative future to modernity. *Library Philosophy and Practice*. 987
<http://www.iclc.us/cliej/cl31BQM.pdf>
- Komal, B. (2019). Reddit and Use of the Internet in the Libraries of Lahore, Pakistan. *Chinese Librarianship: An International Electronic Journal*, 31, 76-87.
- Konlan, B. (2019). LinkedIn Competence for Research Output in Ghanaian Academic Libraries with a focus on the University for Development Studies (UDS) Library systems. [unpublished thesis]. Master Of Philosophy in Information Studies, Unversity Of Ghana.
- Magara, E. (2012). Applications of digital libraries and electronic technologies in developing countries: practical experiences in Uganda. *Library Rev.*, 51(5), 241–255.
- Mathur, P. (2017). *Technological Forms and Ecological Communication: A Theoretical Heuristic*. Lanham.
- Musa, H.U., Ahmad A., Yunusa M. B. etal (2015), Use of Electronic Databases by the Academics of Faculty of Sciences Umaru Musa Yaradua University, Katsina Nigeria. *IOSR Journal of Humanities and Social Science* 20 (5), 51-56 DOI: 10.9790/0837-20545156
www.iosrjournals.org
- Nardi, B. & O' Day, V.L. (2017). Intelligent Agents: What We Learned at the Library. *Libri*, 46(2), 59-88.
- Nkamnebe, et al (2019). Extent of Information and Communication Technology Skills Possessed by Librarians in University Libraries in Anambra State, Nigeria. *Information and Knowledge Management*, 5(9), 32-45.
- Newman, O. (2019). Social media giraffe. [GIRAFFESOCIAL].
<https://www.giraffesocialmedia.co.uk/social-media/>
- Nwokedi, V. (2017). Impact of Internet use on teaching and research activities of the academic staff of Faculty of Medical Sciences, University of Jos: A Case study. *Gateway Library Journal*, 10(I), 13-22.
- O'Reilly, T. (2015). What is Web 2.0: design patterns and business models for the next generation of software. [OREILLY].<http://www.oreilly.com/pub/a/oreilly/tim/news/2005/09/30/what-isweb-20.html>
- Ogedebe, P. M. (2012). Internet Usage and Students' Academic Performance in Nigeria Tertiary Institutions: A Case Study of University Of Maiduguri. *Academic Research International*. 2(3), 334-343.
- Okoro, E. (2012). Integrating social media technologies in higher education: Costs-benefits analysis. *Journal of International Education Research*, 8(3), 255.
- Olatokun, W. M. (2018). Internet access and usage by secondary school students in a Nigerian Municipality. *SAJnl Libs & Info Sci.*, 23, 138-148.

- Omehia, A., Okwu, E., & Nsirim, O. (2021). Librarians' ICT Competencies and Utilization of Emerging Technologies in Academic Libraries in Rivers State, Nigeria. *Library Philosophy and Practice (e-journal)*. 5410. <https://digitalcommons.unl.edu/libphilprac/5410>
- Perdana, I.A., & Prasojo, L. D.(2019). *Digital Library Practice in University: Advantages, Challenges and Its Position: Advances in Social Science, Education and Humanities Research*. Atlantis Press SARL.
- Pettigrew, K.E., Fidel, R., & Bruce, H. (2018). Conceptual frameworks in information behavior. *Annual Review of Information Science and Technology (ARIST)*, 35, 43-78.
- Siraj, H.H., Salam, A., Hasan, N. A., Jin, T. H., Roslan, R. B. & Othman, M. N. B. (2015). Undergraduates in Nigerian Universities- A case study approaches. *Journal of technology* 38(117), 34-44.
- Smeaton, K. & Davis, K. (2014). Using Social Media to Create a Participatory Library Service: An Australian Study. *Library and Information Research*, 38(117), 54-76.
- Smith, C. (2014). By the Numbers: 120 Amazing LinkedIn Statistics. [DRAMABLING]. <http://expandedramblings.com/index.php/by-the-numbers-a-few-important-linkedin-stats/3/>
- Srinivasan, C., & Padmini, R. (2019). Digital Library project in the United States. *DESIDOC bulletin of IT*, 17(6), 23-33.
- Stubblings, B., & McNab, K. S. (2018). Application of ICT in Two Major Academic Institution Libraries in Arunachal Pradesh: A Survey. [INFLIBNET]. <http://www.INFLIBNET/ahmedabad/>
- Ternenge, T. S. & Kashimana, F. (2019). Availability, Accessibility, and Use of Electronic Information Resources for Research by Students in Francis Sulemanu Idachaba Library University of Agriculture, Makurdi". *Library Philosophy and Practice (e-journal)*. 2352.
- Tofi, S. T. et al., (2020). Utilization of Digital Reference Resources and Services by Postgraduate Students in University Libraries in Benue State, Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS)*, 4(6), 32-54.
- Webber, S. & Johnston, B. (2016). Information literacy in higher education: a review and case study, *Studies in higher education*, 28(3), 335-352.
- Wigmore, I. (2021) Social Media/WhatIs.com. [TECHTARGET]. <https://whatis.techtarget.com/definition/social-media>
- Wikipedia (n.d). Information and communication technology. http://en.wikipedia.org/wiki/Information_and_communications_technology
- Wittmer, F. (2011). A New Politics. In F. Webster (Ed.), *Culture and Politics in theInformation Age*. Rout-ledge.