Reconnoitering the Correlation between ICT Facilities' Application and Capacity Building of Library Staff in University Libraries in South-South, Nigeria

ABSTRACT

Technology integration in library operations is fundamental to meeting information, literature and research needs of students, researchers and administrative staff of tertiary institutions. This study explored the correlation between ICT facilities application such as social media handles, internet, as well as online public access catalogue (OPAC) and capacity building of library staff in public university libraries in South-South, Nigeria. Correlational research design was used to examine the extent to which ICT facilities' application correlate with capacity building of library staff. Three (3) each of research objectives, questions, and hypotheses were formulated to guide the study. The population was 416 library staff from six public university libraries. The total enumeration sampling technique was used. Two sets of self-structured questionnaire instruments totaling 416 copies were used for data collection, out of which, 306 were retrieved and analyzed which represented 74% response rate. Face and content validity of the instruments were done. A reliability test was conducted which yielded the coefficients of 0.89 and 0.85 respectively. The research questions were analyzed using Pearson Product Moment Correlation Coefficient (PPMC) while the hypotheses were tested at 0.05 level of significance using linear regression statistics. Findings revealed a significant positive correlation between internet, social media handles application and capacity building of library staff, while applications of OPAC showed a feeble correlation with capacity building. Hence, the level to which ICT facilities' application correlate with capacity building of library staff in the university libraries was insignificant, which by implication had negative effects on library staff services delivery. It was therefore recommended, among other measures, the implementation of a comprehensive ICT training programme to address gaps in ICT facilities' application by library staff for effective utilization of all relevant technologies.

Keywords: ICT Facilities' Application, Library Staff, Capacity Building, University Libraries, Internet, Social Media Handles, OPAC.

1. INTRODUCTION

University Libraries play a crucial role in supporting teaching, learning and research activities. They serve as the engine rooms where information and knowledge are generated and disseminated to achieve the university's vision, mission and purpose [1]. Libraries operate as a unit for collection of information resources with the help of library staff for effective propagation of knowledge. This role is pivotal to smooth running of the university libraries [1] [2].

Conventionally, library staff are intermediaries between users and information resources using traditional methods to meet user's goals and objectives [3]. However, rapid advancement of ICT facilities such as social media handles, internet and OPAC as brought into library environment, has transformed the traditional ways information are harnessed to digital information services [2]. These technological advancements lead to a significant shift in the role of library staff from traditional custodians of print resources to provider of digital services [1]. As indispensable assets to university libraries, library staff bear a variety of responsibilities to both their institutions and society at large [4]. They are expected to be highly skilled in various areas, including planning using relevant systems and technologies for capturing, processing, securing, and disseminating information [4][5]. In addition, library staff must be proficient in other ICT facilities such as word processing and spreadsheets, digitization, conducting internet searches, databases, content management systems and design as well as packaging of special programmes [6].

Undoubtedly, this significant shift in role is essential to library staff in appreciating and striving to acquire information for effective, efficient, and reliable use among competitive university libraries [7]. Modified

Model for Technology Adoption (MMTA) further established a focal point between library staff and enhanced library services keeping current technologies as a pivot in social environment [8]. It points out that perceived utility and perceptual ease of use of technologies shall reposition library staff in its environment [8]. Current survey by Odu, [9] described that open-source integration in libraries is directly proportional to enhanced service delivery thus recommended progressive staff development for proper utilization of trending ICT facilities such as the internets, social media handles and OPAC technologies. Nevertheless, modern statistics show that about 74% of 100 university libraries have experienced inefficient libraries operations and services [10]. This could be attributed partially to library staff incapability in handling trending technologies, inadequate open-source technical know-how and dearth of ICT facilities in libraries especially in South-South, Nigeria. In recent times, although South-South has the most populated universities and its library professionals with trending technologically-equipped libraries for strategic planning and information resources; yet, they have high rate of incapable library staff to handle these trending library technologies matching up with the current library operations to meet with user's goals [11]. According to Akwang et al [8], staff deficiency in modern library technologies has marred research productivity and academic output in the university library in the region. It has hindered unlimited access to e-resources and other digital contents, low user patronage, and low research output. This technological gap is a growing concern among professionals and researchers in library profession. The objective of this study is to investigate the correlation between ICT Facilities' application and capacity building of library staff by sampling 416 library staff in six public universities for effective digital service delivery taking cognizance of future generation in the environment.

1.1 Research Questions

1. What relationship exists between social media handles' application and capacity building of library staff in public university libraries in south-south Nigeria?

2. What relationship exists between internet's application and capacity building of library staff in university libraries in south-south Nigeria?

3. What relationship exists between online public access catalogue (OPAC)'s application and capacity building of library staff in public university libraries in south-south Nigeria?

1.2 Hypotheses

The following null hypotheses were formulated and tested at the 0.05 level of significance:

H_{01}: There is no significant relationship between application of social media handles and capacity building of library staff in public university libraries in south-south, Nigeria.

H_{02}: There is no significant relationship between application of internet and capacity building of library staff in public university libraries in south-south, Nigeria.

H_{03}: There is no significant relationship between application of OPAC and capacity building of library staff in public university libraries in south-south, Nigeria.

2. REVIEW OF RELATED LITERATURE

2.1 Concept of University Libraries

University libraries are indispensable in quality implementation of the goals and objectives of the universities. They are the media from which new and emerging information and communication technologies flow and are integrated into the knowledge assets of the universities in order to support social and educational purposes of learning, teaching and research [12]. They serve as research engines of the university community; promoting the ease and convenience of making information resources and services in both print and digital formats such as books, journals, conference proceedings, reference sources and online information sources like databases, e-books, e-journals, etc., available for professors,

and other scholars in various fields of specialization, as well as youths and teenagers undertaking the basic fundamentals of knowledge in diverse fields of learning [13]. Thus, adequately equipped university library is not only the basis of all teaching and effective studies; it is the essential pre-condition for research which enhances the sum of human knowledge [14].

2.2 Concept of ICT Facilities in University Libraries

ICTs are pervasive innovative tools for enhanced services delivery across all types of organizations including university libraries. Oni and Koko [7] define information and communication technology (ICT) facilities as tools used for processing, transmitting or communicating data and information electronically. Oni and Koko [7] asserted that information and communication technology (ICT) refers to a whole range of facilities or technologies involved in information processing and electronic communication to be handled with skills and expertise, for effective achievement and realization of individual and organizational goals and objectives. Elaborating the concept of ICT facilities, Odu,[9] noted that information and communications technology (ICT) facilities include various types of communication devices, tools and machines, such as satellite systems, radio, television, mobile phones, computer and network hardware, Web 2.0 technologies, as well as various services and applications related to them. Information and communication technology facilities pervade every sphere of human endeavour and their impacts are felt prominently in the university libraries. Information and communication technology (ICT) covers all forms of computer and communication equipment and software used to create, acquire, design, process, store, transmit, disseminate, interpret and manipulate information in its various formats. Egharevba [15] identified ICT facilities applied in information services delivery in libraries to include computers, DVDs, CDs, Internet and telephones. deWatteville and Gilbert, as cited in Adeniran *et al* [10] affirmed that ICT facilities help in the provision of effective and efficient information services in libraries. For instance, the use of computers, Internet, digital cameras, Webcam, smart cards, scanners, e-books, printers, e-journals, Web-OPAC, animation, e-mail, CD-ROM, DVD, Artificial Intelligence (AI) and RFID technologies enhance library services in so many ways. This specifically holds that ICT facilities which include new digital machines and electronic devices make for faster, neater, more accurate and reliable inputs and outputs used in promoting information services and activities in the libraries.

2.3 Application of ICT Facilities in University Libraries

ICT application refers to the process of using ICT facilities to perform a given task. It greatly influences university library operations and the responsibilities of information professionals in carrying out daily functions such as selection, ordering, cataloguing and classification, serials control, charging and discharging of information resources, selective dissemination of information, reference services, and preparation of management information for decision making in the university libraries [10] [11]. In other words, application of ICT involves the use of computers, internet, social media handles, RFID and other ICT devices in information generation, processing and transmission to satisfy the information needs of library users. Sokari *et al*. [16] observed that ICT facilities' application helps in easy acquisition, organization, storage, accessibility, retrieval, and dissemination of information. Application of ICT facilities in university libraries has brought about improved utilization of information services by enabling faster and easier access to, and retrieval of information in different formats. It helps in enhancing efficiency in information services delivery and dissemination of information, making it effective and easy while at the same time, eliminating repetitive and routine tasks in the university libraries [16]. However, there are numerous ICT facilities available for application in university libraries as already enumerated above, but this study focuses on social media handles' application, Internet's application and OPAC's application and their relationship with capacity building of library staff in public university libraries in south-south, Nigeria

2.3.1 Social Media Handles

Social media handles are critical products of advancements in information communication technology (ICT) with greater impetus for capacity building of librarians in university libraries. Social media is defined as a collection of Internet-based communities that allow users to interact with each other online, including web forums, wikis, and user-generated content (UGC) websites, websites and computer programmes that allow people to communicate and share information on the internet using a computer or mobile phone

[17]. Its application makes it easy to connect, share and receive information from one end to another end of the world [17]. Joe and Knight [18] noted that social media handles aim at bridging contemporary and social issues for information literacy through service platforms to aid services delivery in academic libraries. These media of communication have succeeded in changing the attitude, thinking and perception of information professionals throughout the globe. Social media handles create an excellent platform for information professionals to learn and apply new ways of reaching out to their potential library customers to fulfill their needs, requirements and demands [19]. Social media has created an effective platform to make people access and share their information with other people from far distance [20]. Social media helps the library staff to make things easy for themselves and their readers to increase their capacity to build good relationships among library staff and library users. Social media helps the library staff to create an account in order to promote their library sources and services. These enhance dissemination and communication of information and provide ways of accessing the learned society and creating awareness on access to library sources and services from users' home. Moreover, application of social media handles requires social media skills, which are necessary abilities that are capable of helping librarians in the acquisition, creation, processing, storage, dissemination, sharing or publishing of information [8] [21]. Additionally, there is a variety of social networks sites which facilitate seamless access to information without boundaries. These include: Facebook, Twitter, WhatsApp, YouTube, WeChat, Instagram, QZone, Weibo, Twitter, Tumblr, Telegram, BaiduTieba, LinkedIn, LINE, Snapchat, Pinterest, Viber, etc. [17] [8] [20].

2.3.2 Internet's Application

Internet is an integral part of the modern society and plays prominent role in capacity building of information professionals in university libraries. Singh and Sharma [22] defined internet as a worldwide network of computers communicating via an agreed upon protocol (rules for exchange of information). It is an umbrella under which different networks, small and big, freely exchange information across the globe. It provides access to the most diversified source of information hosted by individuals and various organizations worldwide on a vast network of servers. Internet gives on to the world web, the interconnections to thousands of servers created by various organizations, commercial establishments, industrial units, academic establishments, various groups and individuals. The web pages loaded on various servers provide a variety of information in the form of text, graphics, animation, multimedia, etc. either free of cost or for a modest fee [22]. Application of internet enables librarians to connect or access information irrespective of time and space factor, engage in point-to-point communication, access to large number of databases, use hyperlinking facility from one server to another, have instant and interactive community creation on a global base, as well as access bibliographic databases, table of contents, full text of journals, preprints, technical reports, patents, courseware, etc. [19]. Application of internet also facilitates online search by browsing the World Wide Web (www) via the Uniform resource locator (URL) to access online services and databases provided electronically. This gain of internet application skills enables easy and rapid access of librarians to accurate and reliable information, and for various information management processes such as analysis, evaluation and decision-making [23]. For instance, internet application skills enhance the manipulation of multiple search systems, exploration of popular search engines, and use of basic search function, construction of multiple search queries, multi-tasking reformulation, parallel reformulation and recurrent reformulation.

2.3.3 Online Public Access Catalogue (OPAC)

OPAC is another vital ICT facility driven by advancement in information and communication technology. To be able to apply OPAC effectively in university libraries, information professionals should be trained through capacity building programmes. Eserada and Okolo [24] defined online public access catalogue (OPAC) as a database of bibliographic records describing the holdings of a library. OPAC may be local or Web-based; locally hosted OPAC is usually accessible to library users within a university's network via institutional Intranet, while a Web-based OPAC is accessible to everyone connected to the Internet and is usually accessible through a Universal Resources Locator (URL) [25]. Rouse [26] also conceived OPAC as an online bibliography of a library collection that is available to the public. It allows users to search a document by authors, titles, subject and keywords from a terminal and also allows printing, downloading or exporting of records via different electronic means [27]. OPAC has revolutionized the traditional access

to resources of libraries in general and academic libraries in particular. It is an interface of information retrieval system which assists information searchers to access resources of libraries using several access points [28]. Eserada and Okolo [24], further asserted that the introduction of online public access catalogue (OPAC) facilities to university libraries has brought about an advanced way in the techniques of accessing and retrieving information resources that a library acquired to serve its users. Thus, OPAC application in university libraries has changed the ways of providing services to users' community. That underscores the reason why Swaminathan [29] opined that OPAC is a device of change in today's libraries, which helps users search for library resources and to find out the availability of such documents in the library at a given point in time. OPAC system is one of the technologies that provide access to any of the information contained in the records of the library. With OPAC application, university libraries are now moving from the manual retrieval system in terms of traditional card catalogue to the use of OPAC as an information retrieval system characterized by short bibliographic records, mainly of books, journals, and audio-visual materials available in a particular library [30].

2.4 Capacity Building

Capacity building is a phenomenal process of developing an entire setting of an organization for optimal results and performance. Oguche *et al* [31] defined capacity building as method often used by organizations including libraries to manipulate and increase the ability and performance of staff. It is interrelated with training and development and most often referred to as staff training, human resource development, personnel or manpower development. Capacity building is an essential strategy in university libraries to enhance the use of evolving ICT tools for information services delivery. This is even as Imam et al. [32] and Oguche *et al*. [31] pointed out that, capacity building is used in university libraries across the globe to explore viable means of developing staff capacity for enhanced competitiveness and efficiency. Bhattacharjee and Bhattacharjee [33] opined that capacity building in university libraries is broadly geared towards developing LIS profession, library development, as well as developing institutional and legal framework. It aims at developing librarians' abilities, skills, understandings, attitudes, values, confidence, relationships, behaviours, motivations, resources and conditions that enable individuals and organizations perform more effectively and efficiently toward the realization of set goals. This implies that capacity building helps librarians in acquiring necessary skills, competence and confidence for ICT facilities' application in university libraries.

2.5 Effect of Capacity Building on Library Staff and it Users

Library staff are those individuals who work in a library to manage, maintain, and provide access to the library's resources, services and facilities. Etebu *et al* [3] described library staff as anyone who collects, records, organizes, stores, preserves, retrieves, and disseminates printed or digital information. Ibegwam *et al*. [14] asserted that library staff is bibliographic officer of the university libraries as well those in leadership and supervisory positions in the university libraries. Similarly, Akidi and Umebali [34] defined library staff as individuals in the university libraries with higher and sound academic background, professional knowledge, skills, competencies and service attitude suitable for the provision of library information services to users. Library staff plays a crucial role in supporting academic research and information needs of library users within and even beyond the host environment. They are responsible for information generation, organization, and dissemination in the information-controlled world. Library staff work together to provide a range of services, including collection development and management, information literacy instruction, reference and research assistance, circulation and borrowing services, programme planning and outreach, library maintenance and operations, etc. Library staff members are classified according to qualifications as professionals, paraprofessionals and non-professionals.

2.5.1 Professionals

Professional staff members often referred to as librarians; possess higher academic qualifications, with at least a first degree or its equivalent in Library and Information Science. They are trained personnel with requisite qualifications in librarianship, at the level of bachelor degree, postgraduate diploma, Masters and Doctor of Philosophy (PhD). They do the more complex and intellectually rigorous jobs entailing sophisticated judgement calls, supervision and complex operations. They play leadership roles such as

providing direction and guidance on how the services and activities of the various departments and units of the university libraries are to be performed [1]. They are persons in charge of or who work professionally in libraries for its management and services. They are essential assets of the university libraries because they intermediate between users of the university libraries and information resources for the purpose of meeting the goals and objectives of the universities and information needs of the users.

2.5.2 Paraprofessionals

Paraprofessionals are support staff including library assistants, library technicians who possess at least diploma certificates in librarianship. Paraprofessionals work in all types of libraries including public libraries, academic libraries etc. They assist professional librarians to acquire, prepare and organize materials. They run day- to- day library operations essential to effective functioning of the library and perform supportive customer services under the direction of a supervisor. In addition, they carry out such other tasks as are assigned by their supervisors [35].

2.5.3 Nonprofessional

Nonprofessionals/Supporting staff are library attendants who possess at least high school education. This category of library staff also includes clerical and office staff for administrative services. The nonprofessionals comprise library attendants who attend to all patrons and willingly give assistance when needed. Their duties include cleaning and shelving books, routine reading of the shelves and such other duties as may be assigned by the librarian. The nonprofessionals group also includes clerical and office staff for administrative services [6]

2.6 Review of Empirical Studies

Adeniran *et al*. [10] investigated application of ICT in selected libraries in Kwara State. The study revealed that most academic libraries in Kwara State are in developed stage in terms of provision of ICT facilities. Despite this fact, the study revealed that majority of the surveyed academic libraries were lacking computerized security door and smart board, while the availability of all other ICT facilities was rated high especially computer systems, CD/DVD, internet connectivity, slide projector etc. The study concluded that provision of adequate ICT facilities in academic libraries revolutionized information service delivery and that, the advancement in the use of ICT in day-to-day operations in academic libraries enhances information provision to the library users. The study recommended that library authorities should provide proper support to library professionals in the application of ICT as well as provide opportunities for staff development on the use of ICT through attendance in seminars, workshops and shot courses in order to enhance their technical skills for proper implementation and provision of effective and efficient services to the library users.

Akintola [35] conducted a study on capacity building, ICT skills, use and service delivery of library personnel in universities in Southwestern Nigeria. The study revealed that ICT skills were acquired via assistance from friends, self-instruction, and workshops/seminars. The study showed that the three mostly delivered services in the libraries were internet services, information provision on library website, and user education.

In a related study, Eserada and Okolo [24] examined the use of online public access catalogue (OPAC) in selected university libraries in South- South Nigeria. The study revealed that students' use of OPAC in university libraries in South-South Nigeria is low and the main purpose for using OPAC by the students are to locate documents, know about a document without physically visiting the library, find out if a document is available in the library, as well as search and retrieve information. It identified poor/irregular power supply, lack of OPAC knowledge and unfamiliarity with the OPAC system, etc., as the main challenges encountered by students in the use of OPAC. Based on the study, it was recommended that efforts should be geared towards inculcating on students the knowledge and skills required to use OPAC, while universities should be equipped with the enabling infrastructure such as adequate power supply, and effective Internet connectivity in order to encourage the use of OPAC in university libraries. However, in all the literature available within the reach of the researcher, no study was conducted on exploring the

relationship between ICT facilities' application and capacity building of library staff in public University libraries in south-south, Nigeria. Therefore, this study was conducted to fill the gap in knowledge.

3. METHODOLOGY

3.1 Study Area

The study covered six public university libraries of two selected states (Akwa Ibom and Rivers State) in the south-south geo-political zone of Nigeria.

3.2 Experimental Details of the Study

Correlational research design was used to examine the extent to which ICT facilities applications correlate with capacity building of library staff. Three (3) each of research objectives, questions, and hypotheses were formulated to guide the study. The population was 416 library staff from six public university libraries. A total enumeration sampling technique was used. This comprised 91 library staff from the University of Port-Harcourt, 81 from the University of Uyo, 30 from the Federal University of Technology, Ikot Abasi, 71 from Ignatius Ajuru University of Education, Rumuolumeni, 79 from River State University, and 64 from Akwa Ibom State University. Two sets of self-structured questionnaire instruments entitled 'Information and Communication Technology Facilities Application' (ICTFA) and 'Capacity Building Programmes for Information Professionals in University Libraries' (CBPIPUL) totaling 416 copies were used for data collection out of which, 306 were retrieved and analyzed which represent 74% response rate. Face and content validity of the instruments were done. A reliability test was conducted which yielded the coefficients of 0.89 and 0.85 respectively. The research questions were answered using Pearson Product Moment Correlation Coefficient (PPMC) while the hypotheses were tested at 0.05 level of significance using linear regression statistics.

3.3 Decision Rule and Interpretation

The decision rule held is that the null hypotheses (H_0) were rejected if the *P*-value is 0.05, otherwise it was accepted. This implied that when the p-value is 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. The interpretation of "r" was presented to guide the decision as follows: 0.80 and above = Very High; 0.60 - 0.80 = High; 0.40 – 0.60 = Medium; 0.20 – 0.40 = Low; and 0.00 – 0.20 = Very Low.

4. RESULTS AND DISCUSSION OF FINDINGS

The results have strong implications for all stakeholders in the university library systems especially library staff. The analyzed data for each research question and its corresponding hypothesis are presented in tables.

Research Question 1: What relationship exists between social media handles' application and capacity building of library staff in public university libraries in South-South Nigeria?

Table 1: PPMC Coefficient between Social Media Handles' Application and Capacity Building of Library Staff in University Libraries in South-South Nigeria

Correlations			
		Social Media Handles Application	Capacity Building
Social Media Handles Application	Pearson Correlation	1	-.094
	Sig. (2-tailed)		.100
	N	306	306
Capacity Building	Pearson Correlation	-.094	1
	Sig. (2-tailed)	.100	
	N	306	306

*Correlation variables for capacity training of library staff

N = number of observed sample

Table 2: Regression Coefficients Table for Social Media Handles and Capacity Building

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	57.234	4.221		13.559	.000
	Social Media Handles Application (Hms)	-.145	.088	-.094	-1.650	.100

*Coefficients values for regressions

a. Dependent Variable: Capacity Building From the regression coefficients table:
Capacity Building = 57.234 + (-0.145Hms)

The positive relationship between social media handles application and capacity building of library staff in university libraries (table 1) indicate the correlation coefficient (r = 0.094) which is positive and within the coefficient limit of ± 0.00 – 0.20 [1]. The coefficient of determination (r^2 = 0.000) indicates that 0.0% of the variance (table 2) observed in capacity building in university libraries is accounted for by social media handles' application by library staff (figure 1). The implication is that the university libraries and library staff can better leverage on the gains of the social media handles for better collaboration as well as reach wider users' audience for better services provision in the changing information age that is highly influenced by the ICT-social media platforms [3].

Hypothesis 1: There is no significant relationship between social media handles' application and capacity building of library staff in university libraries in South South Nigeria.

The P-value was 0.100 compared to Alpha value of 0.05 of the null hypothesis. It is indicative of positive relationship (table 2) which states that, there is no significant relationship between social media handles' application and capacity building of library staff in university libraries was rejected. This implies that there was a significant relationship between social media handles application and capacity building of library staff in university libraries.

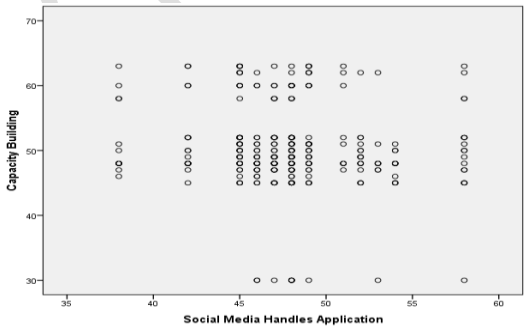

Figure 1: A scattered graph representing the relationship between Social Media Handles and Capacity Building

Research Question 2: What relationship exists between Internet's application and capacity building of library staff in public university libraries in South South, Nigeria?

Table 3: Pearson Product Moment Correlation Coefficient between Internet's Application and Capacity Building of Library staff in Public University Libraries in South South Nigeria

Correlations

		Internet Application	Capacity Building
Internet Application	Pearson Correlation	1	.059
	Sig. (2-tailed)		.307
	N	306	306
Capacity Building	Pearson Correlation	-.059	1
	Sig. (2-tailed)	.307	
	N	306	306

*Correlation variables for internet application & capacity building

Table 4: Regression Coefficients Table for Internet's Application and Capacity Building

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	38.230	1.298		29.459	.000
	Internet Application (Ai)	-.036	.035	-.059	-1.023	.307

*Regression coefficients of internet application

Dependent Variable: Capacity Building From the regression coefficients table
Capacity Building = 38.230+ (-0.036Ai).

The correlation between internet's application and capacity building of library staff in public university libraries was puny but positive (table 3) as was indicated by the correlation coefficient (r = 0.059) which is positive and within the coefficient limit of ± 0.00 – 0.20. The coefficient of determination (r^2 = 0.003) (figure 3) indicates that 0.3% of the variance observed in capacity building of public university libraries is accounted for by Internet's application by library staff**.** This implies that absent of constant Internet connection may be seriously truncating Internet's application and hampering the capacity building of the library staff [5]. This may negatively affect the provision of real-time of Internet-based library services to the teaming users who obviously have more preference for online library services [8]. It may also negatively affect the responsibilities of the university libraries in supporting their parent institution's tripartite functions of teaching, learning and research [1].

Hypothesis 2: There is no significant relationship between internet's application and capacity building of library staff in public university libraries in South South Nigeria

The P-value 0.000 is below the Alpha value of 0.05 (table 3) and the null hypothesis which states that, there is no significant relationship between internet's application and capacity building of library staff in public university libraries was rejected. This implies that there was a significant relationship between internet's application and capacity building of library staff in public university libraries in South South Nigeria.

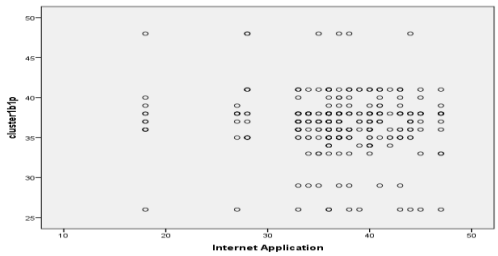

Figure 2: A scattered graph representing the relationship between Internet's Application and Capacity Building

Research Question 3: What relationship exists between online public access catalogue (OPAC)'s application and capacity building of library staff in public university libraries in South South Nigeria?

Table 5: Pearson Product Moment Correlation Coefficient between Online Public Access Catalogue (OPAC)'s Application and Capacity Building of library staff in Public University Libraries in South South Nigeria

Correlations			
		OPAC	Capacity Building
OPAC	Pearson Correlation	1	.013
	Sig. (2-tailed)		.820
	N	306	306
Capacity Building	Pearson Correlation	.013	1
	Sig. (2-tailed)	.820	
	N	306	306

*Correlation variables for OPAC & capacity building

Table 6: Regression Coefficients Table for OPAC and Capacity Building

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.091	.794		20.275	.000
	OPAC	.011	.047	.013	.228	.820

a. Dependent Variable: Capacity Building From the regression coefficients table**:**
Capacity Building = 16.091 + (0.011)(OPAC).

There was a very feeble positive relationship between OPAC's application and capacity building of library staff in public university libraries (table 5 & 6) as indicated by the correlation coefficient (r = 0.13) which is positive (figure 3) and within the coefficient limit of ± 0.00 – 0.20. The coefficient of determination (r^2 = 0.007) indicated that 0.7% of the variance observed in capacity building in public university libraries is accounted for by OPAC's application by library staff (figure 3). Majority of the university libraries had no functional OPAC and most of the library staff obviously received little capacity building or training in the application of OPAC [24] [28]. The implication of this reality is that university libraries in South South Nigeria may be typically lacking behind in the provision of effective library services which are clearly ICT-OPAC's reliance.

Hypothesis 3: There is no significant relationship between OPAC's application and capacity building of librarians in public university libraries in South South Nigeria.

The *P*-value of 0.820 is higher than Alpha value of 0.05. It is indicative of significant relationship between OPAC's application and capacity building of library staff in public university libraries, hence, the hypothesis was accepted [23]. This implies that there was no significant relationship between OPAC's application and capacity building of library staff in public university libraries in South South Nigeria.

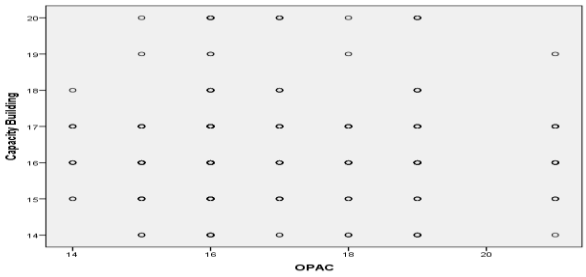

Figure 3: A scattered graph representing the relationship between OPAC's Application and Capacity Building

5. CONCLUSION

The study highlights the significance of ICT facilities' application in enhancing library services, revealing a positive relationship among library staff in utilizing social media platforms and internet services. This correlation significantly contributes to their capacity building and improves the effectiveness of services delivery. The effective application of these digital tools underscores the positive impact of targeted training in these areas. On the contrary, the application of Information and Communication Technology (ICT) with respects to online public access had a feeble correlation with capacity building of library staff in university libraries in the region. Paucity training in this critical area indicates a substantial gap that needs to be addressed. Addressing these training gaps through comprehensive ICT training programmes will be crucial for equipping library staff with the skills necessary to fully utilize these technologies. Such improvements will ensure that library staff are better prepared to meet the diverse needs of their users and to support the evolving demands of the digital information landscape.

6. RECOMMENDATIONS

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

1. University library management in collaboration with management of universities should provide adequate ICT facilities such as constant Internet services, OPAC systems, etc., and provide funding to sponsor and/or support staff capacity building programmes in order to ensure that library staff are adequately trained in emerging areas of needs in the university libraries.

2. University libraries should take advantage of the gains and potentials of institutional-based social media handles such as library blog, library staff-users WhatsApp platform, library Facebook account, library YouTube, X handle, etc., in order to reach wider users' audience through various services. This should be done with the intention of generating funds from subscription for online services to augment some financial needs of the university libraries.

3. Above all, Library staff should proactively engage in emerging ICT related training programmes relevant to library and information professions such as artificial intelligence (AI), drone, OPAC, database management, websites development, etc., to stay up-to-date vis-à-vis emerging challenges.

Disclaimer (Artificial intelligence)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

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