

# LIBRARIANS' ICT AWARENESS AS CORRELATES OF UTILIZATION OF ICT BASED LIBRARY CONSORTIUM IN UNIVERSITY LIBRARIES IN NORTH CENTRAL NIGERIA

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#### Abstract

**Purpose:** the study was designed to determine the relationship between librarians' ICT awareness, library policy and the utilization of ICT based library consortium in University Libraries in North Central Nigeria.

**Design/Methodology:** The study adopted correlation research design, the population of the study consisted of 210 academic librarians in universities in North Central Geo Political Zone of Nigeria and the zone is made up of six States with twelve public universities. The study was carried out with two research purposes and research questions and two null hypotheses. The research used five point Likert scale Questionnaire, which was validated by three experts, two in Faculty of Education, NnamdiAzikiwe University, Awka, and one in the Faculty of Education, University of Nigeria, Nsukka. The reliability of the instrument was established through internal consistency method of reliability. The reliability test conducted on 10 librarians at the NnamdiAzikiwe University, Awka showed an overall co-efficient of internal consistency of r=0.96.

**Findings:**The findings of the study showed that there is significant relationship between librarians' ICT awareness, library policy and the utilization of ICT based Library consortium in the university libraries in North Central, Nigeria. The relationship between librarians' ICT awareness and the utilization of ICT based library consortium is a very strong positive relationship (r=0.61). The relationship between library policy and librarians' ICT awareness towards the utilization of library consortium is also a very strong positive relation of library consortium is also a very strong positive relation (r=0.68). The hypothesis tested were rejected.

**Implications:** Librarians' ICT awareness correlates with the utilization of ICT based library consortium which means the variables tend to increase together. The implication is that greater ICT awareness among librarians is associated with greater utilization of ICT based library consortium.

**Originality/Value:** The University Library Management should create department or unit in the University library to handle issues that will promote and sustain librarians' ICT' awareness and their utilization of ICT based library consortium.

**Keywords:**Library Consortium; ICT Tools; Policy Framework; librarian's ICT awareness; University library; Librarians

Paper type: Empirical research

## Introduction to the study

The application of ICT in library and information service creates numerous opportunities for library and librarians to leverage on, to address the challenges facing the library. Besides creating opportunities, the application of ICT in library also poses a lot of challenges to the library and librarians. Among the challenges confronting libraries and librarians in their attempt to use ICT for library services are; librarians' ICT awareness of the potential of ICT in library. The level of consciousness of librarians toward the application of ICT to large extend determine the rate and success of utilizing ICT for library services. The policy environment in the library is another signpost that may encourage or discourage the innovative use of ICT in library services. No innovation can strive in a situation where the existing policy in the library is not ICT friendly. The librarian must take cognizance and

same in the use of ICT to discharge related library consortia services.

The application of ICT in library services has enabled the establishment of many library consortium across the globe, Fresnido and Yap (2014) argued that the concept of academic library consortium emerged in the Philippines as evidenced by the successive establishment of three consortia namely, the Academic Libraries Book Acquisition Services Association (ALBASA), the Inter-Institutional Consortium (IIC) (now South Manila Inter-Institutional Consortium) in, and the Mendiola Consortium (MC). The study was based on assumption that level of ICT awareness determine the level of utilization of ICT in library operation, as a result the study discuses the relationship between librarians' ICT awareness and utilization of ICT based library consortium. The study as designed has investigated and determined the relationship that exists between librarians' ICT awareness, library policy and the utilization of ICT based Library Consortium in Nigerian University Libraries in North Central Nigeria.

The utilization of ICT tools facilitated the emergence of new form of electronic environment in library. The awareness and acceptance of the paradigm is so overwhelming among library and information science professionals to the extent that Librarians and their respective library are effectively utilizing ICT tools to share library routine functions like subscription and acquisition, collection development with other libraries. Meanwhile, Kumar (2013), in line with finding of the study, attested to the fact that Libraries through their librarian are utilizing ICT tools as an aid to jointly and cooperatively access or make acquisition of license key to electronic or online information resources (E-Books or Database).

Khan (2016) affirmed that computing technology, communication technology, and mass storage technology are some areas of continuous development that reshape the way libraries access, retrieve, store, manipulate, and disseminate information to users.ICT has impacted on every sphere of academic library

activity especially in the form of the library collection development strategies, library building and consortia. ICT presents an opportunity to provide value-added information services and access to a wide variety of digital based information resources to their clients. Furthermore, academic libraries are also using modern ICTs to automate their core functions, implement efficient and effective library cooperation and resource sharing networks, implement management information systems, develop institutional repositories of digital local contents, and digital libraries: and initiate ICT based capacity building programs for library users.

Idhalama&Ifidon (2019) in a study revealed that ICT has positive and negative effects on Nigerian academic libraries, ICTs are introduced for various routines in academic libraries, some librarians in academic libraries engage in activities against the ethics of libraries with regards to ICT, despite questionable ways of using ICT by some librarians, ICT remains a repositioning force in academic libraries in Nigeria amongst others.

However, as rapid development in ICT lead to the emergence of networked information services, different types of library consortia have come into existence around the world. It is against this background that, guite recently libraries in Africa facing similar financial challenges have also moved to cooperate more extensively in sharing their resources for the benefit of their users, although the pace of development has been relatively slow. The notion of cooperation, described as a "universal language spoken in different dialects," emerged as libraries explored each other's common strengths and limitations. Librarians have realized that, together, things can be done better and greater information resources could be made available with the aid of ICT. Therefore, investigation into state of relationship between librarians' ICT awareness, library policy and the utilization of ICT based library consortium will help the librarians and their respective libraries.

## **Objectivesof the Study**

The purpose of the study was to determine the state of relationship between librarians' ICT awareness, library policy and the utilization of ICT based library consortium in University Libraries in North Central Nigeria. Specifically, the study conducted investigation to find out:

- 1) If librarians' ICT awareness correlates with their utilization ICT based library consortium in University Libraries in North Central Nigeria.
- The relationship that exists between Lib rary policy and librarians' ICT awareness on ICT based library consortium in University Libraries in North Central Nigeria.

## **Research Questions**

- 1) What relationship exists between librarians' ICT awareness and their utilization of ICT based library consortium in University Libraries in North Central Nigeria?
- 2) What relationship exists between Library policy and Librarians' ICT awareness on ICT based library consortium in University Libraries in North Central Nigeria?

# Hypothesis

The following null hypotheses were tested at 0.05 level significance.

 $H_o$ 1: There is no significant relationship between librarians' ICT awareness and their utilization of ICT based Library Consortium.

H<sub>o</sub>2: There is no significant relationship between Library policy and Librarians' ICT

awareness on ICT based library consortium in University Libraries in North Central Nigeria.

# Literature review

ICT based library consortium is a phrase put together by the researcher to strengthen this work by conceptualizing the phrase, to conceptualize the phrase, the researcher has to first conceptualise library service and ICT based library services. According to Omosor (2014) one can use ICTs to develop new computerized information services and conceptualize it.

Library consortium, according to Muthu (2013) is an agreement, formal or informal, among a group of libraries to share collections, data, facilities, personnel, etc., for the benefit of their users and to reduce the expense of collection development. The use of ICT in library has really broken the walls of the library, web 2.0/Library 2.0 made library consortium so flexible that librarians seem not to be aware when library engaged in library consortium activities because it is no longer a requirement for library to send their representatives to a meeting to discuss and sign the terms of agreement and memorandum of understanding, before library consortium can take place, ICT has made it so convenient for librarians to sign and participate library consortium building with just 'a click on a web link' and the library already a member of library consortium. All these happen with the aid of ICT tools in the library.

Meanwhile, Chatterjee (2010) and Ossai (2010) observed that libraries can be linked together with the support of information and co mmunication technology, particularly, through networking, whereby libraries will come togethe r to acquire traditional and e-resources under th e umbrella of library consortium, Chatterjee (2010) and Ossai (2010) agreed that library consortium is the application of ICT infrastructure to run all form of Library collaboration.

Ajaegbu, Ehioghae, and Oreoluwa (2014) said that the factors considered for the level of awareness of ICT based library services are: Internet Services, OPAC, electronic data, Ejournal, fax machine, document delivery, scanner, printing facilities, CD ROM, desktop and laptops availability and use. It was found that the level of internet service awareness as ICT based library service is the highest followed by the use of desktop and laptops and then printing facilities while the level of unawareness of fax machine services is highest followed by document delivery and OPAC. They found that there is a need for tertiary institutions to adopt the use of ICT in their library services and also to employ some awareness programs for their

Post Graduate students at the every point of enrolment. The awareness program will not only be useful to the students but also to the library staff towards effective deployment and use of the technology.

Librarians quickly developed ICT awareness because it is very clear that library computerization will among other benefits lead to increase productivity, improved quality of tasks/services and resource sharing in libraries. (Nkanu&Okon 2010, Rajawat 2016, Madu, Vandi and Chagwa 2018).

It is well recognized that librarians' ICT awareness made libraries all over the World to agitate for the application of ICT in library services. Thus, libraries are deploying ICT tools in various sector of the library to pursue the old mission of Library cooperation with a new tool and style call library consortium, (Francis &Kabir, 2008; Khan, 2016; Mahesh & Mittal, 2008).

In addition, the University libraries needed to also, put in place policy framework that will encourage and motivate librarians to key into ICT based library consortium activities. Library as an organization should look inwardly to phase out all library policy, rule, and guidelines that tend to discourage the librarians from developing interest in the acquisition of ICT skills and replaced with library policy, rule, and guidelines that encourage librarians to get skilled in ICT and use the ICT for consortia activities.

Librarians have shown some level of awareness and understanding over time that ICT represent any technology and/or device that is used in producing, organizing and distributing information resources. It is common knowledge in library that one of the channels through which University libraries can enhance library user's access to information is to get involved in the utilization of ICT based library consortium. It will enable library to provide enhanced access to information resources through a number of initiatives like library resources sharing, collaborative acquisition, cooperative subscription to database(s), consortia licensing and other mechanism that facilitate wider, prompt, and cheaper access to information resource for the teaming library users, researchers, and academics who patronize the University Library.

Investigating the direction and strength of relationship between librarians' ICT awareness, library policy and utilization of ICT based library consortium in an era University libraries are stocked with varying degree of ICT tools, yet underutilized. The study was based on the assumption that there is an underutilization of ICT based library consortia activities bv academic librarians in the University libraries.

## **Research Method**

The study adopted correlation research design. The population of the study comprised all the 210 professional librarians in the study area. No sample and sampling technique were required because the population is not enough to warrant sampling. The instrument for data collection was questionnaire which was validation by experts and the reliability of the instrument was also established.

The method of data analysis adopted Pearson Product Moment Correlation, computed through Statistical Package for Social Sciences (SSPS,V20). Including the test of hypothesis at 0.05 level of significance. SPSS general rules and Cohen's conventions were adopted to interpret the correlational strength and to determine the direction of relationship and association of the variables.

The presentation and analysis is divided into four parts. The first part reported the response rate of the questionnaire. The second part reported on the answers to research questions. The third part reported on testing of hypotheses while the fourth part concerned the discussion of findings.

## **Response Rate**

A total of 210 copies of the questionnaire were distributed and 149 i.e., 71% were returned. The response rate of (71%) is considered adequate for the study because the standard and acceptable response rate for most studies is 52.7%, according to Baruch, Y &Holtom, B. C. (2008).

#### **Research Question 1**

What relationship exists between librarians' ICT awareness and their utilization of library consortium in University libraries in North Central Nigeria?

The answer to research question one ispresentedinTable1.

Table 1: Pearson correlation between Librarian's ICT awareness and their utilization of ICT based consortium in University Libraries in North Central Nigeria.

		Library Consortium Utilization	Librarians' ICT Awareness	Remarks
Library Consortium	Pearson Correlation	1	0.61**	Very strong positive and statistically significant relation
Utilization	Ν	149	149	

\*\*. Correlation is significant at the 0.05 level (1-tailed).

The data computed in Table 2 show that the direction of the relationship between librarians' ICT awareness and the utilization of library consortium is positive (r=0.61). The variables are positively correlated, the variables tend to increase together (i.e., the greater awareness is associated with greater utilization). The magnitude or strength of the association is very strong and the variables have a statistically significant relation.

#### **Research Question 2**

What relationship exists between library policy and librarians' ICT awareness towards ICT based library consortium in University libraries in North Central Nigeria?

The answer to research question two is presented in Table 2

Table 2: Pearson correlation between Library policy and Librarians' awareness towards ICT based library
consortium in University Libraries in North Central Nigeria.

		Library Consortium Utilization	Library Policy & Librarians' ICT Awareness	Remarks
Library Consortium Utilization	Pearson Correlation	1	0.68**	Very strong positive and statistically significant relation
	Ν	149	149	

\*\*. Correlation is significant at the 0.05 level (1-tailed).

The data presented in Table 5 show that the direction of the relationship between library policy and librarians' ICT awareness towards the utilization of library consortium is positive (r=0.68). The variables are positively correlated, the variables tend to increase together (i.e., change in library policy is associated with

changein utilization). The magnitude or strength of the association is very strong and the variables have a statistically significant relation.

#### Test of Hypothesis

The formulated null hypotheses for the study were tested at 0.05 level of significance.

#### Hypothesis 1

There is no significant relationship between librarians' ICT awareness and their utilization of ICT based Library Consortium in University library in North Central Nigeria.

Test of hypothesis 1 is presented in Table 3.

Table 3: Significance of relationship between Librarian's awareness and the	ir utilization of ICT based
consortium in University Libraries in North Central Nigeria.	

		Library Consortium	Librarians' ICT	Remarks
			Awareness	
Library Consortium Utilization	Pearson correlation	1	0.61	Very strong positive relation
	P-Value		0.00	Significant
				H <sub>o</sub> Rejected
	N	149	149	

\*\*. Correlation is significant at the 0.05 level (1-tailed).

Hypothesis 1 was analysed with the data computed in Table 3. It shows that a statistically significant relation (*P-Value* = 0.00) exists between librarian's ICT awareness and the utilization of ICT based library consortium in University libraries in North Central Nigeria. Since  $\alpha$  = 0.05 and *P-Value* = 0.00, *P-Value* < 0.05, *P-Value is less than*  $\alpha$  level, therefore, the null hypothesis was rejected.

#### Hypothesis 2

There is no significant relationship between library policy and librarians' ICT awareness on ICT based library consortium in University libraries in North Central Nigeria.

Test of hypothesis 2 is presented in Table 4.

Table 4: Significant relationship between library policy and librarians' ICT awareness on ICT based library consortium in University libraries in North Central Nigeria.

		Library consortium	Library Policy &	Remarks
			Librarians' ICT	
			Competency	
Library Consortium	Pearson	1	0.68**	Very strong positive
Utilization	Correlation			relation
	P-value		0.00	Significant
				H <sub>o</sub> Rejected
	N	149	149	

\*\*. Correlation is significant at the 0.05 level (1-tailed).

Hypothesis 4 was analysed with the data presented in Table 4 and it shows that a statistically significant relation (*P-value* = 0.00) exists between library policy and librarians' ICT awareness on the utilization of ICT based library consortium in University library in North Central Nigeria. Since  $\alpha$  = 0.05 and *P-value* = 0.00, *P-value* < 0.05, the null hypothesis was rejected.

## **Discussion of findings**

There is significant relationship between librarians ICT awareness and their utilization of ICT based Library consortium in the university libraries in North Central Nigeria. The  $H_o$ 1 which stated that there is no significant relationship between librarians' ICT awareness and their utilization of ICT based Library Consortium in University library in North Central Nigeria was rejected. Positive relationship exists between library policy and librarians' ICT awareness on the utilization of ICT based library consortium in University libraries in North Central Nigeria. The  $H_02$  which stated that there is no significant relationship between library policy and librarians' ICT awareness on the utilization of ICT based library consortium in University library in North Central Nigeria was rejected.

There is significant relationship between librarians ICT awareness and their utilization of ICT based Library consortium in the university libraries in North Central Nigeria. The  $H_o$ 1 which stated that there is no significant relationship between librarians' ICT awareness and their utilization of ICT based Library Consortium in University library in North Central Nigeria was rejected. The utilization of ICT tools facilitated the emergence of new form of electronic environment in library. The awareness and acceptance of the paradigm is so overwhelming among library and information science professionals to the extent that Librarians and their respective library are effectively utilizing ICT tools to share library routine functions like acquisition, subscription and collection development with other libraries. Meanwhile, Kumar (2013), in line with finding of the study, attested to the fact that Libraries through their librarian are utilizing ICT tools as an aid to jointly and cooperatively access or make acquisition of license key to electronic or online information resources (E-Books or Database).

Similarly, the study findings agreed with Khan (2016) when he affirmed that computing technology, communication technology, and mass storage technology are some areas of continuous development that reshape the way libraries access, retrieve, store, manipulate, and disseminate information to users. ICT has impacted on every sphere of academic library activity especially in the form of the library collection development strategies, library building and consortia.

Information and Communication Technology (ICT) brought unprecedented changes and transformation to academic library and information services, where conventional library and information services such as OPAC, user services, reference service, bibliographic services, current awareness services, document delivery, interlibrary loan, audio visual services, and customer relations can be provided more efficiently and effectively using ICT.

The findings of this study are contrary to Zachary (2015) who in a study identified lack of awareness, sensitization, education and training as obstacles to effective library resource sharing (Library Consortium). But in affinity with the findings of Samea (2015) who concluded that shareholders in education in Arab Countries are aware of the key role academic library consortium and their impact on higher education as library staffs are well trained and provided with state of the art ICT infrastructure. Positive relationship exists between library policy and librarians' ICT awareness on the utilization of ICT based library consortium in University libraries in North Central Nigeria. The  $H_o2$  which stated that there is no significant relationship between library policy and librarians' ICT awareness on the utilization of ICT based library consortium in University library in North Central Nigeria was rejected.

Though findings of the study indicated a relationship between library policy and librarians' ICT awareness on the utilization of ICT based library consortium but the existence of library policy on ICT is an issue. Whereas, UBD (2018) and UTAMU (2012), said that the purpose of ICT policy in the library is to set out procedure that should be followed to ensure a consistent and effective utilization of ICT tools in library. Policy framework is needed in the library to enumerate the rules necessary to ensure the existence of the highest levels of consistency, control and harmonious interaction with ICT technologies. The librarians aver to the fact that sponsorship to attend professional and workshop will stimulate and revolutionaries ICT application in the library.

# **Implications of Findings**

Librarians' ICT awareness correlates with the utilization of ICT based library consortium which means the variables tend to increase together. The implication is that greater ICT awareness among librarians is associated with greater utilization of ICT based library consortium.

The variables are positively correlated, the variables tend to increase together, and change in library policy is associated with change in librarians' ICT awareness on the utilization of ICT based library consortium.

The variables are positively correlated, the variables tend to increase together i.e., change in library policy is associated with change in librarians' ICT awareness towards the utilization of ICT based library consortium.

The variables are positively correlated, the variables tend to increase together, i.e., change in library policy is associated with change in librarians' ICT competence for the utilization of ICT based library consortium.

The implication of the study on the academic librarians is that all the variables correlated with each other, meaning that an increase in one is direct increase in the other; they should brace up increase in their level of professionalism.

### Conclusion

Librarians in the study area have awareness on existence of ICT based library consortium in the university libraries and it was statistically proved that there is significant and very strong positive relationship between librarians' ICT awareness and the utilization of ICT based library consortium in university libraries in North Central Nigeria.Finally, the relationship between library policy and librarians' ICT awareness on the utilization of ICT based library consortium was positive and statistically significant.

#### Recommendations

The following recommendations arose from the findings of the study:

 The University Library Management should create department or unit in the University library to handle issues that will promote and sustain librarians' ICT' awareness and their utilization of ICT based library consortium.

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