RELATIONSHIP AMONG POSTGRADUATE STUDENTS' INFORMATION LITERACY, INFORMATION TECHNOLOGY SKILLS AND LIBRARY USE IN SELECTED UNIVERSITIES IN NORTH EAST ZONE, NIGERIA

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Abstract
The study investigated the relationship among postgraduate students' information literacy, information technology skills and library use in selected universities in North East Zone, Nigeria. The three selected libraries are; Ramat Library, University of Maiduguri, Borno State, Abubakar Tafawa Balewa University Library, Bauchi State and Ibrahim Babangida Library, Modibbo Adama University of Technology, Yola, Adamawa State respectively. The study is guided by one null hypothesis. Correlation survey research design was adopted in conducting the research. The population of the study was 183 registered postgraduate students' library users of the selected university in the zone for 2018/2019 academic session and a total of 183 (100%) questionnaires were retrieved and found valid for analysis. Data collected was analyzed using multiple regression at 0.05 level of significance to test the formulated hypothesis. The statistical package for social sciences (SPSS) software version 23 was used for coding of the data collected. Based on the findings of this study, for information literacy to locate recorded a coefficient of determination which is the adjusted R^2 value of 0.231 implies that the variables included in the model explain 23.1% variation on the information literacy were explained by the independent variables included in the model which include information skills and information technology skills. The remaining 76.9% can be attributed to error in specification and the exclusion of other factors from the model. Therefore, the study recommended that the services provision of the librarians should be extended to assisting postgraduate students in retrieving their needed information.
Keywords: Information literacy skill; Information technology Skill; Word processing; Postgraduate students and Library use

Introduction
Information technology literacy is the ability to publish research and ideas using the latest technology. The emerging technology literacy refers to the continual ability to adapt to understand, evaluate and make use of the ever increasing and changing technological innovations. The critical thinking literacy which is also very important to research is having the critical ability to evaluate information and its sources. Therefore, it can be said that a researcher who possesses these abilities is ready for lifelong learning and research. The Pasifika-Slanza report (2013) opines that for libraries to be effectively make use of, the student needs to be information literate to know the available e-resources in a library and information technology skills to access data bases such as Online Public Access Catalogue (OPAC) And other e-resources. This point is well supported by Shapiro and Hughes who believe information technology skills and critical thinking have to be merged together by a researcher to be able to achieve his desired result.

Abdulwahab (2009) noted that information technology has received the face of librarianship and has also created limitless opportunities for open access in information. According to Okello-Obura and Magara (2008), the major reasons for the adoption of resources by libraries and students alike are to facilitate access to international information resources via the internet as well as the timely dissemination of both

local and international research output. Storey (2005) indcate the use of IT in libraries has immeasurably increased and enhanced users satisfaction, cost effectiveness, faster and simple programs, rapid communicative interaction and easier operational procedures. Okello-obara and Ikoja-Odongo (2010) also add the fact that users such as students cannot access e-resources without adequate computer skills hence; information technology provides the tools and the means for the collection, capture, process, storage, transmission and dissemination of information Ebijuwa (2005). To make use of the growing age of electronic resources, students must therefore, acquire and practice the skills necessary to exploit them (Okello-Obura & Magara, 2008).

Okello-Obura and Ikoja Odongo (2010) suggested that accessing the maximum potential of electronic resources requires a much greater skills than those required for searching printed sources. These skills they added 'include knowledge of the database structure and the instruction which must be input into the computer by the searcher, as well as an understanding of the ways in which the instructions are linked to one another. Fortunately, these skills are not only useful for academic research but also for the life-long learning. Abdulwahab (2009) observed that information technology is still in its embryonic stage in Nigerian libraries, however, Marcum and George (2003) revealed in aggregate that electronic information use was substantial and growing in the nation's major Universities and liberal arts colleges in USA. The situation in Nigeria as observed by Nwezeh (2012) noted that university administration at many Nigerian universities now see information technology as necessary in the process of learning and teaching.

Hiller (2001), stated that the user needs, satisfaction and library performance at the University of Washington Libraries, confirms that respondents placed increased importance on electronic resources. If that is the case, then Venkataramana (1998) submission indicates that the effective use of IT in academic libraries would 'increase efficiency in operations, eliminates repetitive nature of works, improves the quality and range of services, facilitates easy and wider access to all kinds of information sources , facilitates faster information communication, increase moral and motivation of library staff, facilitates cooperation and resources sharing, save time, space, improves productivity and image of library. These submissions point towards the fact that the postgraduate students need information technology skills for quicker and better research output.

Hypothesis
Ho: There is no significant joint relationship among information literacy skills to locate and information technology skill to word processing and postgraduate students' library use in selected University libraries in the North East Zone Nigeria.

Methodology
The study was a survey research design, Akuezuilo and Agu (2003) affirmed that survey is one in which group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group. According to Sambo (2008), survey research is often used to assess opinion, thoughts and feelings. It is a design in which data are gathered by asking relatively large number of cases at a particular time. The population of this stud comprises of all the registered postgraduate library users for 2018/2019 academic session of the three University libraries under study numbering 183. The libraries are Ramat Library University of Maiduguri, ATBU Library Bauchi and IBL MAUTECH Yola, Adamawa State. The respondents for this study therefore included all the registered postgraduate students' library users in these three (3) university libraries. A purposive sampling technique was used to select three University libraries in the selected zone. Population of postgraduate student's registration record provided in the Reader's Services Section for 2016/2017 academic session of the three (3) sampled libraries are 183 in number. The researcher used purposive sampling because the population is manageable.

The research instrument that was used in this study is Postgraduate students' information literacy, technology skills and library use in University libraries (POSINLITSQ) was used to collect data. The questionnaire has four different sections. The instrument was used because it addressed questions that best sample people's opinion on the study. This is in agreement with Dlakwa (2005) that a questionnaire is a research instrument that consists of a set of questions on a specific subject under investigation to which the participants in a study are expected to respond. To ensure validity of the instrument, the instrument were validated for both face and content validated by the researcher's supervisor, faculty members and an expert in the area of research and statistics in University of Maiduguri who was requested to critically examine the items in relation to relevance, appropriateness of statements, the clarity of words, and length of statements in relation to the objective of study and the research questions. They were also requested to make other necessary comment(s) towards ensuring that the instrument is adequate and relevant to the study. Their corrections and suggestions were incorporated to arrive at the final copy of the instrument. The instrument was subjected to pilot testing using ten (10) postgraduate students registered library users from University of Nigeria, Nsukka which is outside the area of study, but shares the same characteristics with the study population. And the reliability coefficient was 0.82.

The researcher obtained an introductory letter from the Head of Department of Library and Information Science, University of Maiduguri. A covering letter written by the researcher was attached to each copy of the questionnaire, the content of the covering letter entails the purpose of the research; soliciting for cooperation from the respondents to complete the questionnaire, with the assurance of anonymity and confidentiality of all information provided. Copies of questionnaire were administered on the respondents by the researcher and research assistants in the university libraries under study. The research assistants were given one day training on how to administer, retrieve, and return the completed questionnaire to the researcher. The administration and collection of the questionnaire lasted for two weeks. Descriptive statistics were used in analyzing the data to answer the research questions, results were presented in tables and charts where necessary. Inferential statistics of multiple regressions was used to test the null hypotheses at 0.05 level of significance using Statistical Package for Social Science (SPSS).

Results
Table 1: Joint Relationship among Information Literacy Skill to Locate, Information Technology Skill to Word-processing and Postgraduate Students' Library use in selected University libraries in the North East Zone Nigeria

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	33.146	3.858		8.592	.000
INFORMATION LITERACY SKILL TO LOCATE	-.570	.190	-.200	-3.000	.003
INFORMATION TECHNOLOGY SKILL TO WORD-PROCESSING	1.008	.141	.478	7.172	.000
R=0. 481, R^2 ADJUSTED=0.231, F – VALUE=27.692					

The result of regression analysis for information literacy to locate recorded a coefficient of determination which is the adjusted R^2 value of 0.231 implies that the variables included in the model explain 23.1% variation on the information literacy were explained by the independent variables included in the model which include information skills and information technology skills. The remaining 76.9% can be attributed to error in specification and the exclusion of other factors from the model. The two variables information literacy skill to locate and information technology skill to word-processing were statistically significant determinants of postgraduate students' library use. The regression was analyzed at 0.05 level of significance. Conclusively, this means that all the two (2) variables taken together accounted for 23.1%

of the variance in postgraduate students' library use. The F-Statistic is 27.692; this is very high and statistically significant at 0.05 which confirms that postgraduate students' library use is statistically related to the independent variables of information literacy and information technology skills. The information literacy skills show a significant relationship with p-value of 0.003 which is less than 0.05 while information technology skills shows a significant relationship with p-value <0.001 which is also less than 0.05. Conclusively, the study found that information literacy skills with a Beta value of 200 and information technology skills with a Beta value of 478 respectively influence the postgraduate students' library use in selected University libraries in the North East Zone Nigeria. Therefore, information technology skills such as Computer, Word processing, Database, Browse, Electronic mail system, and Mobile device, etc enables the postgraduate students to have more access to information resources which also influence their library use.

Discussions
This study found that information literacy skills and information technology skills influence the postgraduate students' library use in selected University libraries in the North East Zone Nigeria. This is in line with Hignette, Margavio, & Margavio, 2009; Tsai & Tsai, 2003) who reported that students information search skills are often inadequate and many students have difficulties in finding and using information effectively. The result of this study is also similar with the study of Chu and Law (2008), among Medicine and Engineering research students at M.Phil and PhD levels who explained that they encountered hardship in locating effective information sources and conducting search terms that yield relevant results. This is also similar to study of Doyle (2012) who asserted that students need some level of these skills to make decisions about academic matters and other aspects of their daily lives. It is also in line with the study of Shapiro and Hughes (2006) who explained that information literacy gives library users the practical skills needed in the effective use of information technology, print or electronic information resources. The study of Pauline and Uloma (2018) who study the Influence of Information Literacy Skills on Postgraduate Students in Private University Libraries in South-West, Nigeria is in support of this study. This in line with the study of Mugyabuso, 2016 whose findings showed that although information literacy exists among students, a good number of students demonstrated significant deficiency in their information literacy knowledge and skills in key aspects including searching for information from electronic sources, application of various information search techniques such as Boolean operators, use of truncation, synonyms and concept maps.

Conclusion
The contributing factors to the problem of not many Nigeria postgraduate students adequately equipped with the necessary information literacy and information technology skills needed to carryout academic research work is seen as under-utilization of library resources which led to this research had similarly been identified as the study revealed that majority of the postgraduate students have low information literacy skills, inability to locate and evaluate information obtained from different sources, apply, communicate and acknowledge when the needed information is meet, despite their information technology skills abilities.

Recommendations
Based on the findings of this study, the following recommendations were made:
1. The services provision of the librarians should be extended to assisting postgraduate students in retrieving their needed information. This will go a longway in enhancing their continued use of the library services.
2. Information and Communication Technology (ICT) course be part of the curriculum of every postgraduate programme, with emphasis on e-information literacy.
3. E-learning and E-liberary with adequate facilities and equipment should be provided and made easily accessible for postgraduate students.

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