
Relationship Between Information Literacy Skills and Use of Library Resources by Postgraduate Library and Information Science Students in Anambra State, Nigeria

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Abstract

This study determined the relationship between information literacy skills and use of library resources by postgraduate library and information science students in Anambra State, Nigeria. Three research questions and one hypothesis guided the study. Correlational survey design was adopted for the study. The population consisted of all forty-four Masters and Ph.D LIS students of the universities in Anambra State. The entire population was used due to the size. Two instruments, Information Literacy Skills Test (ILST) and Use of Library Resources Questionnaires (ULRQ) were used for data collection. Mean and standard deviation were used to analyze data for research question one, percentage scores were used for research question two while Pearson correlation coefficient was used to analyze data for research question three and test hypothesis at 0.05 level of significance. Kuder-Richardson formula (KR-20) and Cronbach alpha were employed in testing the internal consistency of the instrument and reliability coefficients of 0.88 for ILST and 0.82 for ULRQ were obtained. The findings revealed that the postgraduate students possessed moderate information literacy skills, use all the available library resources; also, there is a positive relationship between information literacy skills possessed by the students and their use of library resources. Based on the findings it was concluded that information literacy skills possessed by LIS postgraduate students help them maximize their use of library resources. It was recommended among others that students should make efforts to improve their information literacy skills through programmes such as seminars, workshops, user education and tutorials organized by library or other research institutes while curriculum planners should entrench information literacy programme in university programmes.

Keywords: Information Literacy, Information Literacy Skills, Library Resources, Postgraduate Students, Library and Information Science Students.

1. Introduction

Universities in Nigeria and the world over are engines of growth and development. They are increasingly recognized to have a broader role in social, economic, technological and manpower development of a nation. In fact, the universities serve as the main source of supply of skilled manpower needed in the various sector of the nation. In order to fulfil this purpose, there is need to provide them with functional libraries (Abdulganiny and Nwalo, 2013). Library has a great role to play in the provision of the right information in the right format to the right user and at the right time (Oyewusi and Oyeboade, 2009). According to Oyewusi and Oyeboade

(2009) Libraries are established in universities in order to provide information resources and services for teaching, learning and research by lecturers and students by acquiring, conserving, organizing for easy access and disseminating relevant information resources to meet the needs of members of the university community.

Library resources are the stock of trade of libraries. They are those materials which enable libraries to carry out their functions effectively. They are the materials which the users come to consult, read or borrow. According to Popoola and Halico (2009) library information resources are those information bearing materials that are in both printed and electronic formats, such as textbooks, journals, indexes, abstracts, newspapers and magazines, reports, Compact Disk-Read Only Memory (CD-ROM) databases, internet disk, videotapes/cassettes, diskettes, computers, microforms among others. These information materials are the raw materials that libraries acquire, catalogue, stock and make available to their patrons, as well as use to provide various other service.

Library resources are for users. The philosophy of librarianship is based on the concept of library services and provision of relevant resources for users. To this end, professional librarians continue to strive to collect, store, organize and disseminate all forms of recorded knowledge in order to satisfy both present and future information needs of users. Library processes revolve around the user. Users must be constantly asked to assess the services and resources provided, as this will help the library to improve upon its services. Among the users of the library resources of the university are the postgraduate students who have already earned a four-year or five-year undergraduate degree, commonly called a bachelor's degree and are admitted to pursue postgraduate education for the masters or doctoral degree. Postgraduate students need various kinds of information resources for research and for self-development. To achieve this, the right information must be available for the right person at the right time in their appropriate formats which are responsibilities of the library. Oguntuase and Falaiye (2004) agreed with this view by observing that the most effective way to mobilize people is through the provision of required information in the most useable form and that such information should be provided for the benefit of a large number of people. No matter how large the stock of the library is, if the resources and services are not fully used, it will end up being a white elephant.

Aguolu and Aguolu (2002) explained that effective use of library resources and other facilities depends on the skilfulness of the users and the level of assistance given to them. Library processes may be complex that the average user may not easily comprehend how to use available resources. As a result of the era of information explosion in which we are, information is expanding at very fast rate and new resources are being introduced into the library (Aina, 2004). The growth of information resources has become a global phenomenon due to technological advancement in information technology (IT). Information in the early 21st century is characterized by information overload, unequal distribution, a strong tendency to triviality and increasing concerns about credibility (Sayer, 2006). This enormous growth of information is also posing numerous challenges in the graduate personal and professional life because overabundance information may lead to confusion in information-seeker's mind while deciding which information is going to be useful or not (Bruce, 2004). As the volumes of information are constantly increasing, search skills are required in order to gain access to the information that is available. The process of identifying and selecting information has become complex. It becomes more difficult for information seekers to carry out a successful quest for

his desired information. It is thus important to explore various information policies and standard concerning information access and use. This realization has led to the term information literacy (IL) which has a very significant implication for today's knowledge-based society (Islam and Rahman, 2014).

Information literacy is also important in higher education as universities prepare people for professional careers and help to enter and adopt of all branches of knowledge. According to Association of College and Research Libraries (2002) Information literacy is a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate and use the needed information. Also International Federation of Library Association (2007) defined information literacy as a self-empowering attitude and commitment by individuals and people, at all levels of society, to seek, access, analyze, translate, transform information and create knowledge to solve problems and achieve personal, social, occupational and learning goals for the improvement of their quality of life. Information literacy is focused on content, communication, analysis, information searching and evaluation. It is a vital ability for the modern cultural development. Ojedokun and Lumade (2005) described information literacy as the ability to locate, evaluate, manage and use information from a range of sources not only for problem solving but also for decision-making and research.

Information literacy is becoming increasingly more important in our world that is rapidly evolving through the growth and proliferation of technological and information resources (American Library Association, 2000). University of Idaho Information Literacy Portal (2011) stated that not all information is created equal; some are authoritative, current, reliable, but some are biased, out of date, misleading, false; the amount of information available is going to keep increasing and the type of technology used to access, manipulate and create information will likewise expand. As a result, information users are faced with countless information choices and must decide which resources to use in the acquisition of information. They also determine the authenticity, validity and usability of the information they discover (American Library Association, 2000). The ability to access, evaluate and use information is a prerequisite for lifelong learning and a basic requirement for the information society.

Roth (1999) aptly described the current information environment and pitfalls facing users of information globally thus:

...explosion of information generated and stored, the unregulated sprawl of the internet, the shift from a print to an image-based culture, the development of sound and video archives of seemingly infinite reproduction of words and pictures through electronic media, the pitfalls have multiplied geometrically. In the midst of the information explosion, ability to access, retrieve and evaluate information has constituted a significant part of today's definition of literacy (p. 42).

Based on this assertion, it is obvious that users of information resources must possess information literacy skills in order to harness information resources at their disposal. To respond effectively to an ever-changing environment, users of information resources need more than just a knowledge base, they also need techniques for exploring it, which will also connect it to other knowledge bases and thus making practical use of it for rational decision-making or problem solving. In other words, the landscape upon which we use to stand has been transformed and users of information resources are being forced to establish a new foundation

called information literacy (Owusu-Ansah, 2004). However, it is important to understand that availability and access to information is not sufficient to guarantee that library user will acquire the skills necessary to comfortably survive in an information world.

Information literacy skills are important in higher education as universities prepare people for professional careers and adopt all branches of knowledge. According to Ranaweera (2008) information literacy skills empower the people with critical skills which will help them become independent lifelong learners. These skills will enable people to apply their knowledge from familiar environment to the unfamiliar. Information literacy skills need to be implemented in a direct way that has an impact on students and reinforces a skill set (Mokhtar and Majid, 2005). In order for graduate students to become involved in the research process, it is important to make the connection between skill set abilities and research interests.

Murray in his study in identifying information literacy programme for graduate students identified ten significant concepts that graduate students need to learn in order to master information literacy and conduct research in information age. These skills are:

1. Focus the topic (narrow the topic/broaden the scope).
2. Work in reverse chronological order, searching the newest information first.
3. Understand the significance of terminology and determine correct subject headings.
4. Vary the sources (use books, periodicals, internet sites etc.).
5. Use Boolean strategies (and, or, not) in computer searches.
6. Multiply sources by three (identify three times as many references as needed for the research).
7. Evaluate critically the materials retrieved; be especially suspicious of sources from the web.
8. Assimilate the information; don't plagiarize.
9. Incorporate your own ideas based on the research topic.
10. Cite all sources.

As a developing country like Nigeria, there is a little awareness about the concept of information literacy skills and its impact. A critical examination of information literacy skill and its numerous benefits shows that it will be of immense value to the postgraduate students in various ways including use of library resources. It will also help them in identifying their information need, understand how the information is organized, identify the best source of information for a given need, locate those resources, evaluate the resources critically and share that information. This work therefore focuses on relationship between information literacy skills and use of library resources by postgraduate library and information science students in Anambra State, Nigeria.

Statement of the Problem

University library have vital roles to play to meet multidimensional demand for information and knowledge of students, lecturers and research scholars. Students need information for a variety of activities and the library has vast resources (print/e-resources) that can meet any of these purposes. The contemporary information world offers abundant information choices, print, electronic, image, spatial, sound, visual and numeric. But changing information environment, application of ICT in library and availability of electronic information sources

both in online and offline have made both library professional and users confused to understand how information or library resources is organized, identify the best sources of information for a given need, locate appropriate information as and when required. This poses a great challenge to students of higher institution, who are supposed to be the regular users of the library resources. Some of these students lack knowledge or skills in identifying, locating and evaluating information which impedes its effective use.

The challenges posed to the users of information include too much of information in various format and all not of equal value. Explosion of information on internet, with billions of websites and pages and millions of print items both are complicating access and retrieval of information by the end users. Postgraduate students are likely to be faced with an increasing range of information sources available through libraries, in online specialist databases and in the internet. All this information raise questions about how to search for and locate what they need as well as issues about the quality, accuracy and reliability of the information they find. A large quantity of information on its own does not make postgraduate students better informed; the onus is on them to be critical and skills users of what information and the sources to which they have access.

Information literacy skills are important because of the rapid growth of information system and information resources. The key skills of information literacy in intended to develop postgraduate critical awareness and competencies in handling information and information system. In spite of the potential benefit of information literacy skills, many students in Nigerian universities lack the requisite skills and knowledge to adequately utilize the vast information fostered by access and research purposes. Some of the postgraduate students were ill-equipped with requisite information literacy skills such as ability to identify, locate, review, select and apply information needed for their studies and had difficulties in using relevant tools to locate information and knowledge. They lack an understanding of what constitute quality scholarly information, they have difficulty evaluating information retrieved and when faced with an array of interfaces and search methods, they favour more intuitive and familiar methods like Google. Inadequate literacy skills among students have led to poor academic performance and research papers caused by frustration of inability to locate information have led to students resorting to mutilating vital library materials. Lack of information literacy skills was partly the cause of underutilization of existing ICTs and information resources.

Without adequate information literacy skills, users of information resources in developing nations like Nigeria may continue to underutilize information resources and technology relate resources that are provided for their use due to low information literacy skills thus resulting in a waste of resources. Based on these, this study seeks to determine the relationship between information literacy skills of library and information science postgraduate students of the universities in Anambra state, Nigeria and their use of library resources

Purpose of the Study

The purpose of this study is to determine the relationship between information literacy skills and use of library resources by library and information science (LIS) postgraduate students of universities in Anambra State. Specifically, this study determined the:

1. Information literacy skills possessed by the LIS postgraduate students of universities in Anambra State.

2. Library resources used by LIS postgraduate students of universities in Anambra State.
3. Relationship between information literacy skills and use of library resources by LIS postgraduate students of universities in Anambra State.

Research Questions

The following research questions guided the study.

1. What are the information literacy skills possessed by the LIS postgraduate students of universities in Anambra State?
2. What are the library resources used by the LIS postgraduate students of universities in Anambra State?
3. What is the relationship between possessed information literacy skills and use of library resources by LIS postgraduate students of universities in Anambra State?

Research Hypotheses

One null hypothesis was tested at the 0.05 level of significance, thus

1. There is no significant relationship between possessed information literacy skills and use of library resources by LIS postgraduate students of universities in Anambra State.

2. Review of Related Literature

With rapid growth in information development, the ability of students to be information literate has become critically important (Ratanya, 2012). Students face a plethora of possible information sources consequently not only must they be able to evaluate these sources for accuracy, reliability and currency. There seems to be a widespread assumption that graduate students are already familiar with university library resources but such an assumption is unjustified. For example, many graduate students do not necessarily resume their schooling immediately after the completion of their undergraduate degrees, and many graduate students change universities and are thus compelled to learn how to use libraries that they had previously never visited (Sadler and Given, 2007). For these reasons the information literacy skills of many graduate students may be outdated or underdeveloped.

According to Chartered Institute of Library and Information Professionals (2004) information literacy skills are skills that are required to be information literate which requires an understanding of:

- i. A need for information
- ii. The resource available
- iii. How to find information
- iv. The need to evaluate result
- v. How to work with or exploit results
- vi. Ethics and responsibility of use
- vii. How to communicate or share your finding

According to Ranaweera (2008) information literacy skills empower the people with critical skills which will help them to become independent lifelong learners.” These skills will enable people to apply their knowledge from familiar environment to the unfamiliar. Andretta (2005) studied information literacy skills and identified higher and lower order thinking associated with information literacy skills. Lower order thinking according to Andretta involved activities

such as the identification of keywords, synonyms and related terms which a research strategy is formulaed. Higher order thinking at the other end of scale involves abstraction to develop a new hypothesis. Islam and Tsuji (2010) in his survey of information literacy skills of graduate students of library and information science in Bangladesh, discovered that students had limited skills in the area of information literacy. In his study of students information literacy skills at the Department of library and information science in the University of Indonesia, Irawti (2009) grouped the information literacy of the students as very good.

Obuh (2009) in his study on the use of electronic resources by postgraduate students of Delta State university of Nigeria revealed that there is a low level of electronic resources experience among respondents. Pandpaziz in assessing information literacy skills of postgraduate students in Kermanshah university indicated that 49.60% of students are proficient in understanding of need of information and 52.14% of students are proficient in research, 37.32% of students are proficient in allocation of information, but only 33% of students are proficient in evaluating the results of process and meeting information need. Totally, the level of information literacy skills of master's students at Kermanshah university of medical science was higher than medium. Hazarati, Gavvani and Ghornanian (2013) in their study on determining the information literacy competency of postgraduate medical students and faculty members in Tabriz University classified information literacy competency in three levels: low, moderate and high. They also found out that postgraduate students of Tabriz university of medical science Iran have higher information literacy skills than faculty members.

Ramakrishma and Valmiki (2004) in their study to assess information literacy skills of postgraduate students in KUVEMPU university revealed that majority of postgraduate students lack awareness regarding the printed reference sources, highest percent of them do not possess the ability to identify the key concepts in the given information environment. About 44 percent of the respondents were unable to use computers and many of them do not possess the knowlegde about software, hardware and storage devices. Significant percent of them are not able to use internet. Majority opined that computer literacy and information literacy programme are "very important to them." Lana (2012) in his survey study of health students revealed that students have very high level of confidence in their own information literacy skills. Ilogho and Nkiko (2014) in their study found out that most students in five selected private universities of Nigeria have low knowlegde of information literacy skills, they showed high deficiency in identifying diverse information sources.

Ivanitskaya, Boyle and Casey (2009) studied the proficiency of the graduate college health information students in finding and evaluating electronic health information, to assess their ability to discriminate between peer-reviewed scholarly resources and to examine the extent to which they are aware of their level of health information literacy skills. They found that even though most students (89%) understood that a one-keyword search is likely to return too many documents, few students were able to narrow a search by using multiple search categories simultaneously or by employing Boolean operators. In addition, nearly half of the respondents had trouble discriminating between primary and secondary sources of information as well 4\as between references to journal articles and other published document. ODPHPS studied the effect of information literacy on use of library, according to ODPHP, 12% of USA adults were health literacy proficient (Medical Library Association, 2014).

Adequate and appropriate information resources provide opportunities for individuals to get access which has depended on the availability of emerging technologies as means for creating, storing, and distributing, retrieving and using information resources. The existing literature, such as (Udoh, 2009 and Popoola, 2008) suggested that library is central to the provision of relevant information resources and services for adequate support of teaching, learning and research in any academic environment. University libraries collect a variety of materials for use by the library patrons. These resources include not only traditional print-on-paper media like books, journals, newspapers and maps, but also audiovisual materials like records, audio cassettes, video cassettes and projectors. Libraries maintain collections that include not only printed materials but also art reproductions, maps, photographs, microfiches, C.D-ROMs, computer software, online databases, internet, electronic books and e-journals and other media. Basically, library resources are materials that users consult in making decisions and also for problem-solving. These sources could be primary or secondary sources.

Ojedokun (2007) noted that primary sources are interpreted, first hand materials such as records and raw data. In other words, library sources are sources that users make use of from time to time in order to meet their information needs. These library resources could also refer to audiovisual materials, such as Audio CD and CD-ROMs for data storage which do not depend solely on reading to get their meanings but they convey relevant information. According to Ubogu (2000) library users are expected to locate the resources they want in a digital form and accessible electronically and are beginning to demand a one-stop shopping in an integrated information environment. This demand by university library users calls for more decisive strides by Nigerian universities to equip their libraries with the necessary information communication technology (ICT) facilities that would enable the university libraries to provide the services expected of electronic libraries of the present times.

Ogunmodede, Adio and Odunola (2011) stated that library resources are those materials which enable libraries to carry out their functions effectively. They are made up of books and other information bearing media. Focusing on the use of library resources by patrons is of importance to libraries. Reitz (2004) described library use as the extent to which the facilities and resources of a library are actually used by its clientele. According to Whitmire (2002) academic library resources are considered a good measure of an institution's excellence and quality. Postgraduate students are those that are building on academic career path after their Higher National Degree or Bachelor Degree. The training and preparation at this level are of vital importance (Oredein, 2013). Research at the graduate level requires the sophisticated use of specialised information sources and involves synthesis of information from various stages of the scholarly communication process that is from primary, secondary and tertiary sources (Hoffmann, Antwi-Nsiah, Feng and Stanley, 2008). Basically, library resources are materials that users consult in making decisions and also for problem-solving. These sources could be primary or secondary sources. Ojedokun (2007) noted that primary sources are interpreted, first hand materials such as records and raw data. In other words, library sources are sources that users make use of from time to time in order to meet their information needs. These library resources could also refer to audiovisual materials, such as Audio CD and CD ROM for data storage which do not depend solely on reading to get their meanings but they convey relevant information.

The use of library resources and services is thus indispensable to the postgraduate students in order to achieve their academic objective. However, resources of a library can influence its use

by postgraduate students. Literature has revealed that information availability does not mean accessibility and utilization. There have been many literatures of utilization of resources and services such as Ogbomo and Adomi (2003), Turtle (2005), Haruna (2004) and Swarna (2004) among others. In a study carried out by Hussain and Kumar (2013) on utilization of information resources and service of the postgraduate students, majority of the users frequently visit the library almost daily and it was further found that books, newspapers and periodicals are the most used by user. In addition, in a study on students and faculty use of academic libraries in Nigeria, Okiy (2000) found that respondents used books more than other materials and that they browsed the shelves to locate these materials.

Research conducted by Omeluzor (2013) on library resources and service utilization by postgraduate students in Nigerian private universities. From the findings, the respondents used more of internet facilities than any other library resources. This represented 65(20%) of the total responses, followed by textbooks and monograph resources while e-journals and e-books were the next most used resources representing 56(17.1%). Sahail and Upadhyay (2012) studied use of library resources by the university students of Kalyani. Authors found that journals, textbooks and lecture notes were the most popular sources of information for the graduate students. Chiemeke (2007) in his study found out that postgraduate students visit the internet more often compared with the academic library facilities to fulfill their research needs. Law (2009) found that students and faculty researchers primarily conducted their research online and indicated that they expect to rely more heavily on library electronic resources.

Researchers like Ogunmodede, Adio and Odunola (2011) in their work revealed that of all the library resources examined, books were the most widely consulted. 89.3% of the sampled population used books, while thesis, dissertation, abstract and indexes recorded very low percentages. Two other studies conducted differently by George, Bright, Hulbert and Linke (2006) showed that both Masters and Doctoral students rely heavily on the internet for their research work, but they also consulted the physical library for their information needs. Amalahu, Oluwasina and Laoye (2009) found out in their study that there was a high use of electronic media, students prefer internet over other library resources. Obuh (2009) studied the use of electronic resources by the postgraduate students of library and information science department revealed that postgraduate student's usage of electronic resources is quite high.

In a study conducted by Raisul and Singh (2010) on the role of academic libraries in facilitating postgraduate students research in Malaysian Universities found out that postgraduate students of Malaysian universities ranked library resources according to their importance. Electronic resources were considered the most important library resources for research activities, computer facilities was ranked the second most valuable library resources. Print resources and thesis were also ranked as important resources for research. The results show that respondents considered newspapers, archives and audio-visual materials important for their research activities. Researchers like Chrzastowski and Joseph (2006) and Jankowska et al (2006) found that have graduate students primarily use journal articles rather than books, they prefer electronic access whenever possible, and desire cross-database searching.

Considering complexity associated with access to certain information coupled with emerging concepts in ICT and the need to effectively utilize information resources in any library, a user requires certain degree of skills and knowledge to access and use information. With rapid growth in information development, the ability of students to be information literate has

become critically important (Ratanya, 2012). There is an imperative need for students to acquire good information literacy skills to be able to retrieve relevant information, critically evaluate it and use it in a legal and ethical manner, both for their assignments and their professional life (Crawford, 2005). Pezeshiki-Rad and Zamani (2005) asserted that the real challenge of our time is not producing information or storing information but getting people to gain and use information resources. Analysing, interpreting and presenting information for use in any environment is an essential skill users of information resources should possess if there to be relevant. Hence, being information literate is fundamental to the use of information resources in the knowledge society (Braaksma, 2004). Information literacy skills brought effective use of library resources to develop “critical thinking skills. In a study by Issa, Amusan and Dauda (2009) the study revealed that university of Illorin library has provisions for students to use e-library resources which most students are aware of but do not use them because they lack the skills. They have not been formally taught the use of e-resources that is information literacy skills.

Kinengyere (2007) in his study on the effect of information literacy skills on the utilization of electronic information resources in academic institutions in Uganda found out that availability of information resources does not necessarily mean actual use. The study also shows that some of the available resources have not been utilised at all. This mean that users are not aware of the availability of such resources, they do not know how to access them, or they do not know what the resources offer. The study also revealed that information literacy skills is very vital in influencing utilization of e-resources. Heid, Detlor, Serenko, Wilson and Lavallo (2010) in their study, students agreed that information literacy instruction leads to a reduction in effort to find information thus convenience is increased, information is easier to find and time is saved. The studies of Chen and Lin (2011) on information literacy in university library user education, it was found that well-designed information literacy programme benefits the library and its staff, faculty and students. Teaching of information literacy skill to students helps them in utilizing information resources in the library.

Omeluzor, Itunu, Onuoha and Alarape (2013) researched on information literacy skills among postgraduate students of Babcock University Nigeria revealed that postgraduate students had their information literacy skills through seminars, user education, orientation and that majority (90%) could identify information in their study area. The researchers concluded that postgraduate students should be mandated to attend information literacy skill programme organized by library such as workshops etc. to enhance students research ability in the emerging information age. Ilogho and Nkiko (2014) according to their study on information literacy search skills of students, revealed that preponderance of students have low knowlegde of information literacy skills, they showed high deficiency in identifying diverse information resources. The study concluded that sound information literacy skills is a desideratum in knowledge acquisition in the twenty-first century.

Anafo and Filson (2014) found that most of the students lack information literacy skills based on this fact, they have problem in using information sources and finally they use the internet without evaluating the authenticity of the website. Islam and Rahman (2014) revealed that information literacy is very important and helpful in academic and research work and that information literacy education should be embedded in curriculum and introduced early to make it more effective for students to use library resources. Olakokumbo (2013) found that user education and information handling skills have impacted greatly on the use of information

resources. Streatified and Markless (2008) in their study discovered that information literacy impacts use of library resources and in the long run higher education performance.

3. Methodology

Correlational survey design was used in this study. The study was carried out in universities that offered postgraduate studies in Library and Information Science (LIS) in Anambra State. Anambra State is one of the states in South-eastern Nigeria. The capital and seat of government is Awka. The population of this study comprises of all 44 (35 and 9) LIS postgraduate students from the Nnamdi Azikiwe University, Awka and Madonna University, Okija respectively. No sampling technique was adopted as entire population was studied. The data required for this study were collected with two instruments Information Literacy Skills Test (ILST) and Use of Library Resources Questionnaire (ULRQ) developed by researcher based on literature reviewed. The instrument for data collection was validated by experts in the field. Kuder-Richardson 20 formula and Cronbach-alpha method were used to analyze the data collected. The reliability coefficient of 0.88 was obtained for ILST using Kuder-Richardson 20 formula (KR-20), while that of questionnaire was established using Cronbach alpha formula to obtain a coefficient value of 0.82. Out of 44 copies of questionnaire distributed to the Nnamdi Azikiwe University, Awka and Madonna University, Okija, the entire copies were completed and returned. This represents 100% response rate. The data obtained from the study were analyzed with descriptive and inferential statistics. In the level of descriptive statistics, mean was used to answer question one while frequency counts and percentage was used to answer question two while inferential statistics, Pearson correlation coefficient was used to analyze data research question three. The information literacy skill test was scored by awarding 1 mark to each correct answer. The null hypothesis was tested using Pearson's correlation coefficient at 0.05 level of significance.

4. Results and Discussion of Findings

Data collected were analysed based on the research questions and hypothesis that guided the study and presented in the tables as shown below:

Research Question 1: What is the information literacy skill Possessed by the LIS postgraduate students of universities in Anambra State?

Table 1: Mean score of Information Literacy Skills possessed by LIS Postgraduate Students of Universities in Anambra State.

Variable	Mean (Percentage Equivalent)	St. Dev.	Remark
Information Literacy skills possessed	12.977 (65%)	3.202	Moderate

Table 1 This reveals that the 22 Information Literacy Skills Test (ILST) carried out on the respondents, their mean score of the information literacy skill possessed by the LIS postgraduate students of universities in Anambra State is 65%.

It was concluded that the mean of the information literacy skills score of the LIS postgraduate students of universities in Anambra State is moderate since the score could be said to be located in-between 40-69% based on decision rule. This implies that LIS postgraduate students

possessed moderate information literacy skills. The LIS postgraduate students possessed moderate information literacy skills for the fact that they have the skills to identify when there is a need for information, locate from the library resources, evaluate and efficiently use that information for the issue or problem at hand. This is in line with the definition of information literacy skills given by Kovalik, Jesen, SchConan and Tipton (2010) which states that information literacy skill refers to an individual's ability of recognize when there is a need for information and how to identify, when and how to locate the information materials, the need to evaluate the information and effectively use that information for the issue at hand. The result of this finding is in agreement with the study carried out by Islam and Tsuji (2010) who found that LIS postgraduate students of university of Dhaka (ISLM) Bangladesh had limited skills in the area of information literacy skills.

Research Question 2: What are the library resources used by LIS postgraduate students of universities in Anambra State?

Table 2: Table showing the percentages scores of the library resources used and not used by LIS postgraduate students of universities in Anambra State

S/N	ITEM	Used	Not used
		Percentage (%)	Percentage (%)
1	Internet	100	0
2	Books (textbooks/monograph)	90.9	9.1
3	E-journals	93.2	6.8
4	E-books	93.2	6.8
5	Thesis/dissertations	84.1	15.9
6	Government publications	93.2	6.8
7	Conference/seminar papers	97.7	2.3
8	Oral information/reference queries	70.5	29.5
9	Periodicals	95.5	4.5
10	Encyclopaedias	93.2	6.8
11	Indexes	86.4	13.6
12	Online Public Access Catalogue	79.5	20.5
13	Audiovisuals	61.4	38.6
14	Dictionaries	95.5	4.5
15	Abstracts	84.1	15.9
16	CD-ROM	65.9	34.1
17	Reports	77.3	22.7
18	Bibliographies	68.2	31.8
19	E-mails	72.7	27.3
20	Blogs discussion	84.1	15.9

The result presented in table 2 shows that the total percentage score for all the listed library resources used is 84.33 which is above 70.00% on the decision rule and thus we conclude that the percentage score of library resources used by LIS postgraduate students is high. This means that the LIS postgraduate students of the universities in Anambra State use all the library resources. The LIS postgraduate students of universities in Anambra State use all the available

library resources in their school and other research centres to source information for their assignments, seminar papers and research work. This finding is in agreement with Ojedokun (2007) assertion which states that library sources are sources that users make use of from time to time in order to meet their information needs. This finding is in line with that of Oyewusi and Oyeboade (2009) that more students indicated using all the library resources available for their research. Hoffmann, Antwi-Nsiah, Feng and Stanley (2008) agreed that research at the graduate level requires the use of sophisticated and specialized information sources and involves synthesis of information from various stages of the scholarly communication process of primary, secondary and tertiary sources.

Research Question 3: What is the relationship between possessed information literacy skills and use of library resources by the LIS postgraduate students of universities in Anambra State?

Table 3: The Coefficient of the Relationship between Information Literacy Skills and Use of Library Resources by the LIS Postgraduate Students of Universities in Anambra State.

Variables	Pearson Correlation coefficient (r)
Information Literacy Skills	0.335
Use of Library Resources	

The result in Table 3 reveals that the Pearson correlation coefficient (r) of the relationship between the information literacy skills and use of library resources by the LIS postgraduate students of universities in Anambra State is 0.335. This means that there is a moderate positive correlation between the information literacy skills and use of library resources by the LIS postgraduate students of universities in Anambra State. . The outcome of this test also shows that the possessed information literacy skill of LIS postgraduate students significantly affects their use of library resources. This was in support of the findings of Issa, Blessing and Daura (2009) that studied the effect of information literacy skills on the use of library and found that there is a positive relationship. Potmann and Rousch (2004) discovered from their study that information literacy skills significantly influenced library resources usage. Streatified and Markless (2008) discovered from their study that information literacy skills impact use of library resources and in the long run higher education performance.

The reason for this result could not be far-fetched when one considers the fact that information literacy skills has to do with the ability to identify, locate, evaluate and utilize effectively the needed information which in turn make one to become independent life-long learner. Also the skills to not only access information but also to ascertain its veracity, reliability, bias, timeliness and context of information in order to participate effectively in the knowledge society. The result suggests that once there was an improvement in possessed information literacy skills, the use of library resources also expected to correspondingly improve.

For LIS postgraduate students of universities in Anambra State to effectively achieve their university education objectives, there is need for possession of high level of information literacy skills. Since information literacy skills are important for adequate information searching, it is not surprising that it has significant effect on use of library resources. Julien (2002) noted that information literacy skills is the ability to make efficient and effective use of information sources and that an information literate person today should possess specific online searching skills which include the ability to select appropriate search terminology, construct a

logical search strategy and evaluate information appropriately. Lack of this skill will definitely impede effective utilization of library resources. The outcome of this study has shown that acquisition of adequate information literacy skills help the postgraduate students to understand critical differences in experiences and suggests library resources use outcomes based on whole experiences and real life practice.

Hypothesis: There is no significant relationship between possessed information literacy skills and use of library resources by the LIS postgraduate students

Table 4: Test of Relationship between Possessed Information Literacy Skills and Use of Library Resources by the LIS Postgraduate Students.

Variables	<i>R</i>	p-value	Remark
Information Literacy Skills Use of Library Resources	0.335	0.026	S

S – Significant correlation at 0.05 level of significance

Table 4 shows that the correlation coefficient between information literacy skills possessed and use of library resources by LIS postgraduate students is moderate positive ($r = 0.335$). Since $p=0.026 < 0.05$, it is implied that there is positive significant correlation between information literacy skills possessed and use of library resources by LIS postgraduate students of universities in Anambra State. Therefore, the null hypothesis is not accepted. This shows that there is significant relationship between the possessed information literacy skills and use of library resources by LIS postgraduate students of universities in Anambra State.

5. Conclusion

From the analysis, interpretation and discussions of result of this study as regards the research questions and hypothesis, the following conclusions are made:

The study has shown that the LIS postgraduate students of universities in Anambra State possessed moderate information literacy skill because they have the skill to recognize their information needs that is knowing when and why they need information, locate information either from the printed or electronic formats, access needed information effectively and efficiently either from the web or physical library materials, evaluate information and its sources critically, incorporate selected knowledge into one's knowledge base, manage and use information effectively to accomplish a specific purpose, understand the information that is provided and make objective judgment as to the validity, timeliness, current and up-to-date information necessary for academic excellence and research work.

The LIS postgraduate students use all the library resources available for their research work, academic excellence and information needs. This shows that adequate use of library resources supported LIS postgraduate students' intellectual, cultural and technical development, because the nature of postgraduate students demands that students must do a lot of independent studies on their own, the use of information resources is thus indispensable to the postgraduate students in order to achieve their academic objective.

The study further showed that relationship exist between possessed information literacy skills of LIS postgraduate students of universities in Anambra State and their use of library resources. There is a relationship because LIS postgraduate students use all the available library resources in other words their library resources use was high while their possessed information literacy skills are moderate.

Implications of the Study

The results of this study have some obvious educational implications. It has provided empirical evidence as regards the information literacy skills possessed by LIS postgraduate students of universities in Anambra State and their use of library resources.

The study revealed that the information literacy skills possessed by the LIS postgraduate students are moderate. This implies that LIS postgraduate students acquire the skills that help them to recognize when information is needed, locate, analyze, integrate, manage and use information, convey information to others efficiently and effectively, the skills to ascertain the veracity, reliability, bias, timeliness and context of information obtained, the skills to evaluate the sources for accuracy, reliability and currency. They also acquire the skills to function effectively in the information rich society and also to become life-long learners.

The study also revealed that the library resources usage of the LIS postgraduate students of the universities in Anambra State is high which means that LIS postgraduate students use all available library resources and also, they are very skilful or competent in the use of all these resources.

The result indicated that there is a significant relationship between the possessed information literacy skills of LIS postgraduate students and their use of library resources. This implies that LIS postgraduate students of universities in Anambra State have acquired information literacy skills and as a result of that use all the available library resources confidently on their own to produce research works without the risk of plagiarism.

Recommendations

The following recommendations have been made based on the findings and conclusions made in this study.

1. LIS postgraduate students should make sure that they attend information literacy programmes such as seminars, user education (library instruction), orientation, one-on-one discussion, tutorial, computer-aided instruction, briefing by librarian, workshop to enhance their information literacy skills.
2. Teaching staff should work in consultation with the library to offer information literacy development as a component of their course and programme and to embed information literacy development within their curricular.
3. There is need for librarians to be actively involved, including building information literacy skills into the teaching material at the design stage. Librarians can contribute actively by providing graduate students with various forms of information literacy instruction for effective use of library and information resources and services and ensure that students are made aware of their critical role and importance to their learning.

4. Academic libraries and other research centers should build strong collection of information resources in physical and digital format to cater for knowledge requirements of postgraduate students. It is therefore necessary to take the needs of the postgraduate students into consideration in policy planning in any university library. It is imperative that academic libraries and its resources be within the reach of the users in order for them to broaden their knowledge and make meaningful and effective contribution to the development of the nation.
5. In order to maximize the use of available resources, the study recommends the establishment and entrenchment of information literacy programme into the regular curriculum of university. Such initiatives would provide strategies for ensuring that the resources in libraries are maximally utilized and justify their existence. Adequate library resources at the appropriate level for degrees offered should be made available to support intellectual, cultural and technical development of students enrolled in Nigerian universities.
6. The university libraries and research centers should make adequate provision of library resources available and accessible to postgraduate students in order to produce qualitative research papers void of plagiarism. University libraries should make sure that library resources should be sufficient in quality, depth, diversity and currency to support the institution curriculum. Government should make more funds available in the university libraries and research centers for the purchase of information resources.

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