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CONTENTS

3

Information Literacy Search Skills among Post-Graduate Students at the Federal University of Agriculture, Abeokuta, Nigeria

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Abstract

This study assessed the information literacy skills possessed by post-graduate students of the Federal University of Agriculture, Abeokuta (FUNAAB), and the extent to which they used these information literacy skills in their academic works. Descriptive survey approach was adopted for this study. A structured questionnaire that discussed the information needs, information sources, the level of information literacy skills and benefits of instructional programme was the instrument for data collection and was randomly administered on the postgraduate students of nine colleges during the last semester of 2016/17 academic year. 150 copies of questionnaire were distributed and 135 were returned giving a response rate of 90%. The data collected were analyzed using simple percentages and means. The study revealed that most of the students were aware of the information sources which were available in the library. The students mostly relied on the internet/search engines, textbooks, periodical/ journals, professionals and colleagues for information. They rarely used electronic resources such as AGORA, TEEAL and HINARI. This could be due to a lack of awareness and skills necessary to search databases. Some suggestions were made by the respondents according to their need to improve their information literacy skill such as access to online sources, organizing instructional programmes at the faculty libraries, creating more awareness on instructional programmes, avoiding copyright issues in research and how to use academic databases. The study recommends a great deal of communication and collaboration among librarians and faculty members. They need to work closely to integrate information literacy skills with existing curricular goals.

Keywords: Information, literacy, search, skills, library, instruction, sources, Postgraduates.

Introduction

The search for information is increasingly becoming important, particularly for academic and research purposes. At the same time, the ability to sift through the gamut of information available on the web and other information sources to find reliable and accurate data is becoming more important every day, among users especially post-graduates who are often expected to find information for course exercises or written reports, but the skills necessary to do so are not taught consistently in the curriculum. To gain access to use these vast resources effectively is critical to academic success and personal self-directed learning. Even though students of today are very versed with computers and electronic media, yet

they need to develop the skills to locate authoritative information (Lombardo and Miree, 2003; Emmons and Martin, 2002; Maughan, 2001) and to effectively analyze the quality, quantity, and source of the information they retrieve (Majka, (2001). The change in formats and organization of information shows that users of information resources need guidance and education in order to achieve realistic expectations. Owusu-Ansah, 2004 says, users of information resources must possess information literacy skills in other 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. Most universities in Africa practise mainly user education and library orientation, most of which lack the capacity to produce information users who exhibit adequate information literacy attributes and quite a large number of postgraduate students in developing nations as reported in literature have poor e-information literacy competency. Their low literacy skills correlate with their inability to exploit the benefits of electronic resources in their academic work. (Dulle, 2004; Adeleke and Emeahara 2016). Information literacy has received increasing attention in research and professional practice with the emergence of electronic resources and growing recognition that information literacy is necessary to participate in the information age, so acquisition of information literacy skills is an important issue, because, the consequences for reaching adulthood with limited information literacy skills are becoming increasingly severe. Individuals who are unprepared to participate in this information-rich society are at an increasing disadvantage. Blummer and Kenton (2015) says "In the new millennium, students require information literacy as well as digital literacy skills to succeed in academia and beyond". This means that it is crucial to integrate information literacy skills education into higher education effectively if we wish students to be full participants in tomorrow's workforce. Students need to achieve a level of information literacy that will allow them to find, assess, and use information in order to succeed in school, the workplace, and their personal lives.

The role of the library is to support students' information needs by providing relevant resources and services effectively. At some point of their university education, students will find it necessary to use the library to access and retrieve information for either research or learning needs. This is a problem for some students who feel that they do not have the skills and experience in using and finding their own way around the resources and services that a library provides (Grimes and Charters 2000). In Nigeria, Baro and Fyneman, 2009, corroborated the assertion of lack of information skills amongst students, "Most students in Nigerian universities have been found to lack the sophisticated skills that are needed to exploit the university libraries information resources both print and online". Despite what has been written on the concept of information literacy, recommendations and standards for information literacy that have been developed and updated nationally by a variety of professional organizations, little is known about the extent to which students, most importantly, post-graduates meet these standards.

In the early 1980s, definitions of information literacy frequently aligned with library user education/bibliographic instruction, and identified specific skills, knowledge and attitudes required to meet information needs; Pinto *et al.*, 2010). With

time, discussion increasingly focused on the value of research strategy and evaluation in an information society. Columbia University and the University of Colorado sponsored the National Symposium on Libraries and the Search for Academic Excellence in 1987 (Breivik & Gee, 2006) and from this conference, a definition of information literacy appeared that informed the American Library Association's (1989) Presidential Committee's final report. The definition from that report has been widely adopted and built upon, and includes these elements:

- knowing when information is needed;
- identifying information needed to address the problem;
- finding, evaluating and organizing the needed information; and
- using the information effectively.

The Problem Posed

Library-based instructional services for graduate students have received limited attention to date. Faculty advisors assume that either their graduate students arrive at graduate school competent in research skills, or that these students should discover how to carry out research through a process of self-discovery. As a result, few library instruction services are targeted toward graduate students. Graduate students, like undergraduates, come from a wide variety of educational backgrounds, and frequently have knowledge gaps about finding and using information that can impede their success as researchers. Although many graduate students are technology savvy, they often do not have the experience or the information literacy skills to effectively access or use web-based scholarly databases and critically analyze the results of their searches.

The Academic College and Research Library (ACRL) standards for information literacy skills have been widely adopted by many colleges and universities. However, not all colleges and universities require that students receive information literacy instruction, even those who do, often relegate instruction to no more than a one-hour workshop. Students are given an introductory library tour in their first year. This orientation tour is presented by library staff members which consisted of a physical tour of the library, an introduction to the arrangement of material, and a brief demonstration of how to search the library catalogue. The so-called one-shot instructional session has been falling out of favor for some time. A preliminary investigation by Dorlvo (2016) revealed that at the University of Ghana, there is no organized training in information literacy for students both at undergraduate and post graduate levels. Apart from the one-week orientation given to students when they arrive as fresh men and sometimes lecturers arranging for a session with librarians to teach students how to search for information, there is no provision for information literacy education as a major course to be studied in the university. The fact remains that students who are unaware of a deficit in their information literacy skills are unlikely to seek skill remediation on their own or to engage with instruction when forced to take it. Postgraduate students at FUNAAB do not receive library use instructions according to the Library Bulletin. It is for this reason that this study seeks to assess the information literacy levels of post graduate students of The Federal University of Agriculture Abeokuta.

Objectives

The main objective of this research is to investigate the information literacy search skills levels among post graduate students of The Federal University of Agriculture, Abeokuta (FUNAAB).

To do so, the following objectives were set to:

- examine the information needs of the post-graduate students in the FUNAAB?
- examine how graduate students locate information Von needed?
- examine students' knowledge of information literacy skills?

- examine if graduate students evaluate the retrieved information?
- find out how graduate students use information legally and ethically?
- find out students' expectations for improvement in literacy skills and library instruction programme?

Literature Review

A review of existing literature reveals numerous articles, which discuss the relevance of information literacy skills in higher education. Many articles, as suggested by Lloyd (2003), indicate an increasing interest in information literacy within the academic library context. Much of the literature is concerned with the development of information literacy skills and attributes; the most effective methods of assessing students' information literacy; and the connection between information literacy and lifelong learning (Weiner, 2011). The characteristics of the information literate person have been described in standards set out by the Australian and New Zealand Institute for Information Literacy (Bundy, 2004); the American Library Association (2000); the United Nations Educational, Scientific, and Cultural Organisation (UNESCO) international framework (Catts and Lau, 2008). Rasaki (2008), who studied information literacy skills in three African universities, stated that "Information literacy skills is a way of nurturing and sustaining lifelong learning", while Ojedokun (2007) asserts that whatever the format that holds the information, be it Internet or the World Wide Web, online databases, books, journals, government departments, films, conversations, posters, pictures or other images or any number of other possible sources, the skill to understand and critically evaluate the information is inherent in the notion of information literacy. Blasco and Zolner (2009) have also defined information literacy, by characterising the information literate person: one who has the analytical and critical skills to formulate research

questions and evaluate results and the skills to search for and access a variety of information types in order to meet his or her information needs. Summarily, most definitions, in fact, circle around these stages of need recognition, search formulation, source selection and interrogation, information evaluation and information synthesis and use (Webber and Johnson 2000).

The ultimate goal of a comprehensive information literacy programme is to inculcate in the individual the ability to recognize when information is required and to teach them to understand how the information is organized, and how to access it. Several studies have shown that lack of information literacy is partly the cause of under-utilisation of existing information and communication technologies (ICTs) and information resources. Mutula et al. (2004) established in their study that students are "ill-equipped with requisite information literacy skills such as the 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". Julien, 2002; Tilvawala, Myers and Andrade (2009), reported one barrier to the efficient utilization of information (re)sources especially digital resources in developing countries as the relatively low level of information literacy skill. Assessing the Information literacy skills of Post-Graduate in Ghana, Darlvo (2016) reported "Though some of them know about the existence of the databases in the Balme library and can access them at the graduate school, they do not use them because they simply do not have the skills to search for information in the databases. Library and information anxiety among students has been identify also as a result of low level literacy skills acquisition. Candy (2002) addressed information anxiety among students which Bruce (2002) associates with poor information literacy competences, as learners cannot find the information they need thereby rely on

others for its retrieval while obtaining information literacy instruction has also been indicated to help reduce library anxiety according to Jiao and Onwuegbuzie (2001), Battle (2004). This is especially true among international students, who came from culturally different backgrounds, have different needs, values and language (Patton, 2002; Mu, 2007). Patton's study of international students at the University of Canterbury found that a well-planned library orientation programme and research skills instructions could help reduce the academic stress amongst international students. Curry and Copeman (2005) proposed that early library orientation programmes must be followed up with instructions on catalogue and database searching sessions later so as not to inundate new international students with too much information and hence help reduce anxiety.

Another factor that enhances or diminishes information literacy in university community is the perceptions of students and their handlers, particularly the faculty members. Bruce's in his paper investigates the perceptions held by university educators 'with some interest in information literacy'. Bruce suggests that an understanding of the underpinning perceptions about information literacy would enhance our ability to communicate effectively to both students and academic staff when delivering information literacy programs. Perceptions of students concerning levels of information skills, required in a tertiary setting, are also investigated by Secker (2011) who highlights the transition in universities 'from a stress on teaching to an emphasis on learning and with this change, has come a concern with information literacy.

Whilst Information Literacy and Digital Literacy skills are recognised as important for lifelong learning and development by librarians, academics, and even some students, disjointed perceptions and lack of clear ownership of the provision of Digital Literacy and Information Literacy has meant that these skills are often not fully integrated into curricula and institutional strategies (Beetham, McGill, & Littlejohn, 2009).

Peacock (2004) argues that the role of librarians is changing as they seek to devise, develop and implement strategies and systems which embed information literacy in the curriculum because academic librarians are uniquely positioned to foster the development of information literacy, according to Burhanna (2007), this is purported to be especially successful when librarians develop partnerships with faculty and, as partners, incorporate information literacy programs into the academic curriculum. Bendriss, Saliba, and Birch (2015) says Librarians equally have a very vital, and evolving, role in collaborating with faculty to implement the changes necessary for an effective information literacy curriculum. Collaborations between academic librarians and faculty members have been highlighted, by studies, as a tool for effective information literacy skills programmes. Clark and Catts (2007) recognized the collaboration between faculty/librarian as an effective means of teaching information literacy, also, Weisskirch and Silveria (2005) cite a growing trend in faculty/librarian collaboration in teaching students' information literacy skills, while Ritchie et al. (2010) suggest that as well as providing traditional reference services, they are managing electronic information systems, and engaging with other specialists through liaison initiatives. Clark and Catts (2007) suggest this is an effective way to ensure that information literacy instruction is integrated into the course curriculum rather than being taught as a stand-alone educational session.

The opinions of faculty regarding information literacy and their levels of involvement in the teaching of it have interested librarians for many years. Studies have been published across the world outlining research on faculty perceptions of information literacy within specific institutions and disciplines. Much of this research has confirmed what librarians

have suspected all along: Faculty generally agrees on the importance of information literacy but need more of a push to truly embrace it within the curriculum (Dacosta, 2010).

Fung, Townsend, and Parr (2004) asserts that teachers must be ready to teach students to become critical thinkers, intellectual curious observers, creators and users of information. This is to equip and prepare students for an independent lifelong learning while utilizing the skills acquired to seek needed information. Also, Educators and researchers must grapple with defining the standards and competencies associated with information literacy; develop effective new ways to engage learners and measure the outcome and impact of such learning. Efforts along these lines are already being conducted (Ilogho, & Nkiko 2014).

Methodology

Results Analysis and Discussion

A descriptive survey approach was adopted for this study. The study covers postgraduate students in the Federal University of Agriculture Abeokuta. While a structured questionnaire was constructed to elicit response from students on their information needs, searching tools, library instructional programme, that is, whether they have attended classes on library use, level of information literacy skill and need of information literacy skill. 10 per cent of the total (1,568) registered students for the 2016/17 academic year was sampled for the study. Using a random sampling technique, the questionnaires were distributed to the students by their group coordinator for effective results yield. Out of the 150 questionnaires distributed, 135 (90%) were found usable for the study. Data were analyzed with the use of descriptive statistics, and the results are presented in figures, percentages and mean.

Table 1: Distribution of respondents by college

College of respondents	Frequency	Percentage (%)
College of Agricultural and Management and Rural Development (COLAMRUD)	26	19.2
College of Animal Sciences and Livestock Production (COLANIM)	9	6.7
College of Veterinary Medicine (COLVET)	3	2.2
College of Physical Sciences (COLPHYS)	9	6.7
College of Biosciences (COLBIOS)	21	15.6
College of Engineering (COLENG)	4	3
College of Environmental Resources Management (COLERM)	32	23.7
College of Food Sciences and Human Ecology (COLFHEC)	12	8.8
College of Plant Sciences and Crop Production (COLPLANT)	19	14.1
Total	**135**	**100.0**

The distribution of the respondents by college shows that majority of respondent were from COLERM, 32(23.7%), 26(19.2%) in COLAMRUD, 21(15.6%) in COLBIOS, COLPLANT 19(14.1%), COLFHEC followed with 12(8, 8%), while both COLANIM and COLPHYS returned 9(6.7%) respectively.

Table 2: Distribution of respondents by level of study

Level of study	Frequency	Percentage (%)
Masters	116	85.9
Ph.D	19	14.1
Total	**135**	**100.0**

The analysis in table 2 indicates that Masters Students are the major respondents with 116(85.9%).

Table 3: Distribution of respondents by gender

Gender	Frequency	Percentage (%)
Male	71	52.6
Female	64	47.4
Total	**135**	**100.0**

The distribution of the respondents by gender shows that male respondents were 71(52.6%) while their female counterparts were 64(47.4%). The indication of this is that there were more male students in the 9 Colleges than the female counterpart which reflects fair and balanced gender sensitivity.

Table 4: Age distribution of respondents

Age range	Frequency	Percentage (%)
21-25 years	23	17.0
26-30 years	50	37.0
31-35 years	38	28.1
36-40 years	16	11.9
41 years and above	8	5.9
Total	**135**	**100.0**

The age range bar displayed above shows that majority 50(37.0%) falls within 26-30 age range followed by 38(28.1%) respondents, who were within 31-35 years, 23(17.0%) of the respondents were within age 21-25 and 16(11.9%) were within 36-40 years while 8(5.9%) respondents were 41 years and above. From the above table, it could be deduced that majority of the respondents were within 26-35 years who are matured adult.

Table 5: Instructional Programme

Have you attended any instructional programme in the library	Frequency	Percentage (%)
YES	51	37.8
NO	84	62.2
Total	**135**	**100.0**

Table 5: indicates the response to the question on whether the students have participated in any instructional programme in the library, majority 84(62.2%) of the respondents indicated "NO" that they have never attend any instructional programme in the library while 51(37.8%) indicated "YES". This implies that most respondents are lacking in knowledge to assist their information gathering.

Table 6: Need for library instruction programme

S/N	Library instruction programme	SA	A	D	SD	Mean	S.D
a.	It provides students with good ideas about library services and how to benefit from it	61(45.2%)	72(53.3%)	1(0.7%)	1(0.7%)	3.43	.554
b.	Helps students to know the value of information on their academic achievement	43(31.9%)	86(63.7%)	4(3.0%)	2(1.5%)	3.26	.585
c.	Helps to know more about the electronic resources available in the library	42(31.1%)	86(63.7%)	6(4.4%)	1(0.7%)	3.25	.569
d.	Helps students to know more about the print resources in the library	44(32.6%)	80(59.3%)	9(6.7%)	2(1.5%)	3.23	.634
e.	Creates awareness about library resources and services	57(42.2%)	74(54.8%)	4(3.0%)	-	3.39	.548
f.	Teaches students how to develop search skills	50(37.0%)	73(54.1%)	11(8.1%)	1(0.7%)	3.27	.640
g.	Helps students to know how to find and locate information sources	55(40.7%)	75(55.6%)	5(3.7%)	-	3.37	.556
H	Helps to know the usefulness of library catalogue	53(39.3%)	77(57.0%)	5(3.7%)	-	3.36	.553
I	Teaches students research strategies in databases	35(25.9%)	89(65.9%)	10(7.4%)	1(0.7%)	3.17	.580
J	Teaches students how to evaluate information obtained from different sources	37(27.4%)	82(60.7%)	15(11.1%)	1(0.7%)	3.15	.629

Table 6 reveals the respondents view on need for library instruction programme. 133(98.5%) of the respondents agreed that it provides students with good ideas about library services and how to benefit from it with (Mean=3.43), while 131(97.0%) respondents that agreed creates awareness about library resources and services with (Mean=3.39), followed by 130(96.3%) respondents that agreed helps students to know how to find and locate information sources and helps to know the usefulness of library catalogue with (Mean=3.37 and 3.36) respectively, 129(95.6%) respondents agreed it helps students to know the value of information on their academic achievement with (Mean=3.26), followed by 128(94.8%) that agreed that it helps to know more about the electronic resources available in the library with (Mean=3.25), followed by 124(91.9%) that agreed that it helps students to know more about the print resources in the library and teaches students research strategies in databases with (Mean=3.23 and 3.17) respectively, followed by 123(91.1%) that agreed that teaches students how to develop search skills with (Mean=3.27) and 119(88.1%) respondents that agreed teaches students how to evaluate information obtained from different sources with (Mean=3.15). The above responses

demonstrate how beneficial library instructional programme to students learning process is.

Table 7: Information needs

S/N	Information needs	SA	A	D	SD	Mean	S.D
a.	Academic and course-related information	55(40.7%)	76(56.3%)	3(2.2%)	1(0.7%)	3.37	.570
b.	Information on my research area	47(34.8%)	80(59.3%)	6(4.4%)	2(1.5%)	3.27	.616
c.	Career or job-related area	21(15.6%)	89(65.9%)	21(15.6%)	4(3.0%)	2.94	.655
d.	Health-related information	23(17.0%)	89(65.9%)	19(14.1%)	4(3.0%)	2.97	.657
e.	Information for personal development	33(24.4%)	85(63.0%)	12(8.9%)	5(3.7%)	3.08	.692
f.	General information and current affairs	26(19.3%)	85(63.0%)	20(14.8%)	4(3.0%)	2.99	.680
g.	Entertainment	15(11.1%)	70(51.9%)	43(31.9%)	7(5.2%)	2.69	.738

From table 7 the need for academic and course-related information and research information takes priority among respondents scoring 131(97.0%) with (Mean=3.37) and 127(94.1%) with (Mean=3.27) respectively, these are followed by information for personal development 118(87.4%) with (Mean=3.08), health-related information 112(83.0%) with (Mean=2.97) and general information and current affairs 111(82.2%) with (Mean=2.99).

Table 8: Information sources consult for information and how often

S/N	Information sources	Always	Seldom	Rarely	Never	Mean	S.D.
a.	Textbooks	72(53.3%)	43(31.9%)	18(13.3%)	2(1.5%)	3.37	.770
b.	Reference sources (Encyclopaedia, Bibliographies, etc)	51(37.8%)	49(36.3%)	31(23.0%)	4(3.0%)	3.09	.851
c.	Periodicals (Journals, Magazines, Newspapers)	85(63.0%)	32(23.7%)	17(12.6%)	1(0.7%)	3.49	.742
d.	Electronic databases (JSTOR, AGORA, HINARI, TEEAL)	44(32.6%)	33(24.4%)	35(25.9%)	23(17.0%)	2.73	1.096
e.	University library	39(28.9%)	41(30.4%)	42(31.1%)	13(9.6%)	2.79	.973
f.	Internet/search engines (Google, Google Scholar, etc)	117(86.7%)	14(10.4%)	4(3.0%)	-	3.84	.444
G	Professional (Lecturers, Librarians, Colleagues)	68(50.4%)	43(31.9%)	21(15.6%)	3(2.2%)	3.30	.813

Table 8 answers the question; what sources respondents consult frequently whenever information is needed for their programme? Internet/search engines (Google, Google Scholar, etc) is the first choice of 117(86.7%) respondents with (Mean=3.48), Periodicals (Journals, Magazines, Newspapers) ranked next by 85(63.0%)respondents with (Mean=3.49), Textbooks 72(53.3%) with (Mean=3.37), Professional (Lecturers, Librarians, Colleagues) 68(50.4%) with (Mean=3.30), Reference sources (Encyclopaedia, Bibliographies, etc) 51(37.8%) with (Mean=3.09), Electronic databases (JSTOR, AGORA, HINARI, TEEAL) 44(32.6%) which are subject specific in the respondents study field is the least considered as a source of information. In order to navigate and maximally get relevant and accurate information from these preferred sources, respondents need instructional training.

Table 9: Level of information literacy

S/N	Level of information literacy	SA	A	D	SD	Mean	S.D.
a.	I can identify the main concepts in any information	56(41.5%)	75(55.6%)	4(3.0%)	-	3.39	.546
b.	I can identify and prioritize the types of information sources I need	42(31.1%)	90(66.7%)	3(2.2%)	-	3.29	.502
c.	I can create a search strategy using the main concepts to find information on a topic	48(35.6%)	78(57.8%)	9(6.7%)	-	3.29	.584
d.	I can use texts and databases to retrieve information on a specific topic	43(31.9%)	83(61.5%)	9(6.7%)	-	3.25	.569
e.	I can evaluate the relevance of information I have collected for my topic	48(35.6%)	84(62.2%)	3(2.2%)	-	3.33	.518
f.	I understand issues related to plagiarism, copyright fair dealing and security of information	48(35.6%)	85(63.0%)	2(1.5%)	-	3.34	.506
G	I understand the referencing requirements for the information sources I use	51(37.8%)	78(57.8%)	6(4.4%)	-	3.33	.560
H	I know where to go in the library when selecting information sources	38(28.1%)	76(56.3%)	18(13.3%)	3(2.2%)	3.10	.705
I	I can use reference sources effectively	43(31.9%)	83(61.5%)	9(6.7%)	-	3.25	.569
J	I ask a librarian when I do not know how to search for needed information	23(17.0%)	65(48.1%)	35(25.9%)	12(8.9%)	2.73	.848
K	I ask a librarian when I need specific information about a topic	16(11.9%)	63(46.7%)	43(31.9%)	13(9.6%)	2.61	.820
L	I ask a librarian when I need help to choose the most suitable reference sources	20(14.8%)	54(40.0%)	48(35.6%)	13(9.6%)	2.60	.857
M	I use different types of sources to obtain quality information for my topic	65(48.1%)	61(45.2%)	6(4.4%)	3(2.2%)	3.39	.681

The responses as provided in table 9 shows that 133(98.5%) with (Mean=3.34) of respondents understand issues related to plagiarism, copyright fair dealing and security of information. Respondents that agreed that they can identify and prioritize the types of information sources needed and also to evaluate the relevance of information collected for their topic is 132(97.8%) with (Mean=3.29 and 3.33) respectively. 131(97.0%) responses show I can identify the main concepts in any information with (Mean=3.39). Respondents also agreed to exhibits literacy skills in referencing requirements for the information sources at 129(95.5%), create a search strategy using the main concepts to find information on a topic at (126(93.3%) and can use texts and databases to retrieve information on a specific topic.

Table 10: What area of information literacy skills do you request training? And to be included in the library instruction programme

S/N	Suggestions	SA	A	D	SD	Mean	S.D
a.	Basic search strategies in electronic databases	63(46.7%)	69(51.1%)	3(2.2%)	-	3.44	.542
b.	Accessing online sources of information	66(48.9%)	69(51.1%)	-	-	3.49	.502
c.	How to use the academic databases	62(45.9%)	72(53.3%)	1(0.7%)	-	3.45	.514
d.	How to conduct literature search	59(43.7%)	73(54.1%)	3(2.2%)	-	3.41	.538
e.	Referencing styles and citation	61(45.2%)	72(53.3%)	2(1.5%)	-	3.44	.527
f.	Avoiding copyright issue in research	63(46.7%)	69(51.1%)	3(2.2%)	-	3.44	.542
G	Creating more awareness on instructional programmes	63(46.7%)	69(51.1%)	2(1.5%)	1(0.7%)	3.44	.568
H	Organizing instructional programmes at faculty libraries	61(45.2%)	73(54.1%)	1(0.7%)	-	3.44	.513

There are some suggestions which are made by the respondents according to their need to improve their information literacy skills as shown in table 10. All respondents

135(100.0%) indicate accessing online sources of information while 134(99.3%) respondents want organizing instructional programmes at faculty libraries and how to use the academic databases with a mean of 3.45 and 3.44 respectively. Referencing styles and citation, Basic search strategies in electronic databases, how to conduct literature search, avoiding copyright issue in research and Creating more awareness on instructional programmes were some of the suggestions offered.

Discussion

The findings established that respondents are motivated to search for information for their academic and research needs such as: finding information for coursework or to complete assignments, writing their projects and keeping up-to-date in their field of study. This finding confirms the earlier studies by Eskola (2005) that real information needs, such as finding information for a thesis, trigger developments in information literacy and Dorvlo (2016), that introducing information literacy as part of the curriculum at the post graduate level of education is important because of the need for the right information to be gathered for assignments, term papers, presentations and theses writing.

The finding also portrays that students are aware of the information sources which are available for consultation. They use sources such as internet, periodicals, textbooks and professionals/colleagues. Others sources rarely or never consulted are databases such as AGORA TEEAL and HINARI which are specific to their area of study and readily available to them. For example, 32.6% respondents that "ALWAYS" consult the agricultural based Electronics Resources are lower than 67.4% who do occasionally or not. The inability to use electronic sources could be as a result of lack of the necessary skills to use them or lack of awareness. Majority of the respondents have never attended any information literacy class. Anecdotal observation by this author found that the turnouts of undergraduate for library orientation programmes are better than the postgraduate group. Furthermore, practical hands-on Information literacy programmes are not constant thus slowing down dexterity and mastery. Information sources are efficient if they provide relevant, useful, specific and accurate information that could help students solve their problems.

Students' response revealed the need for library instructional programme among students especially at the graduate level of education. This programme, majority of respondents agreed showcase library resources and services and how to utilize them effectively so that students will be able to choose the right information for the different purposes for which the information is needed. There is need for an enhanced and continuous library user education geared towards empowering students to be sufficiently familiar with diverse information sources, format and peculiar characteristics.

From this study, the postgraduate students demonstrate some component skills of information literacy by considering highly, the ethical and legal issues concerning the use of the information and know how to evaluate the information they have found. Locating, evaluating, and using information marked the awareness of information literacy by students in this study.

Through this study, postgraduate students at FUNAAB suggested ways to improve information literacy skills: All respondents suggest access to online sources, organizing instructional programmes at the faculty libraries, creating more awareness on instructional programmes, avoiding copyright issues in research and how to use academic, referencing style and citation and basic search strategies in electronic databases.

Conclusion

Graduate students are required to carry out exhaustive research within their fields, therefore, these students require competencies that will increase abilities in

accessing and locating information. There is a need to develop and sustain the information literacy level of the postgraduate students in an information age with its multifaceted learning opportunities and challenges. These skills provide the students with a scope to make a great use of existing information sources whenever they want. Grassian and Kaplowitz, (2001) are of the view that there is enough explanation about the usefulness of information literacy "Gaining skills in information literacy multiplies the opportunities for students' self-directed learning, as they become engaged in using a wide variety of information sources to expand their knowledge, ask informed questions, and sharpen their critical thinking for further self-directed learning". Information literacy programmes no doubt will equip students with the skills to find, evaluate and manage the information they need for their academic work and know the ethical and legal issues concerning the use of the information. Conclusively, educating students in information literacy is not only a worthwhile goal but an essential component in the development of students as lifelong learners (Cooney and Hiris, 2002).

Recommendations

Information literacy initiatives are being led by librarians, though the learning has not been integrated into credit-bearing classes. This study is adding its voice to the various past calls for the establishment of information literacy committee in Nigerian Universities that will include faculty, students and the librarians. The terms of reference would be policy formulation, monitoring, evaluating and facilitating the development of information literacy skills in the university. This may be why Barnard, … [et al.] (2005) stated that the implementation of an integrated curriculum promises advanced information skills, access, and use of available evidence to support clinical decision-making and a formation for lifetime learning. They

argued that for information literacy to be enhanced, collaboration between teaching faculty and librarians must be fostered in meaningful ways. The implementation should transcend a mere theoretical delivery to a robust practical hands-on. Students can benefit from a targeted information literacy exercise when implemented at the beginning of a postgraduate study to lay the foundations for effective evidence-based research skills; Librarians and faculty members should continue to periodically assess students learning to evaluate the effectiveness of information literacy skills instruction for post-graduate study.

The areas of information retrieval and analysis as well as plagiarism and referencing continued to trouble students. It is recommended that more focus be placed on these areas through more opportunities for practical application within the course curriculum.

Re-assessment of information literacy towards the end of a post-graduate study would provide further evidence of acquisition of skills.

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