AWARENESS AND USE OF INFORMATION SOURCES AND SERVICES AND THEIR EFFECTS ON THE PRODUCTIVITY OF FACULTY MEMBERS IN A NIGERIAN SPECIALIZED UNIVERSITY

By

NGOZI OJEABULU

Federal University of Petroleum Resources, Effurun ngoziojeabulu@Qmai.Lcom

IJIEKHUAMHEN OSAZE PATRICK

Federal University of Petroleum Resources, Effurun sazepatrickiSgmaii.com

& STELLA UWAZURIKE

National Horticultural Research Institute, Okigwe stellauwazurike@qrnail.com

Abstract

The paper discussed faculty awareness and use of information sources and services in Federal University of Petroleum Resources, Effurun (FUPRE). The total population of the study was 179 faculty members from two colleges, namely College of Science and College of Technology. Total enumeration method called CENSUS was adopted to include all teaching staff of the university. The research instrument used for the study was a structured questionnaire to elicit data from the respondents. The study showed that faculties in FUPRE are strongly aware of journals, books, online sources/CD ROMs, colleagues, conference papers and encyclopedia while the respondents are unaware of statistical publications and government documents. The study also revealed that the respondents are strongly aware of current awareness services, referral services, internet/ email, photocopying services and the respondents are unaware of selective dissemination of information, database searching and statistical data analysis. The study showed that the respondents use information sources mainly to meet their teaching needs and research and publications needs. All the respondents in this study (100%) indicated that information sources utilization improved their academic productivity to a very great extent User training programmes coupled with constant internet access were recommended to improve faculty awareness, access and use of information sources/ services.

Introduction

Universities in Nigeria and all over the world have a core mandate to produce highly skilled graduates in different fields of life with the right attitude and character to fit into society independently. This mandate may not be achievable without putting adequate information to play at the right time. Information can be regarded as already processed data useful for quality decision making because it serves as a guide to mankind in this world full of mystery. Information is useful to all humans irrespective of their professions; as doctors require information to carry out proper treatment of patients; lawyers require information to handle cases; the elderly persons require information to make health decisions; teachers require information to prepare lesson notes and impact the requisite knowledge to the students; etc.

Information can come from virtually anywhere — media, blogs, personal experiences, books, journals and magazine articles, expert opinions, encyclopedias, web pages and other digital resources (Virginia Polytechnic Institute and State University, 2017). These aforementioned sources of information are quite useful to faculties in their teaching, research, mentoring and community services. According to Popoola (2008), the quality of teaching, research, and community service of lecturers in any university system depends on information sources and services. Information availability, accessibility, and use are essential to the teaching, research, and service activities of lecturers in the Nigerian university system. Faculties contribute to the attainment of the broad objectives of the university: teaching, research, and community service, etc. Faculties provide academic guidance to students and extend the frontiers of knowledge through research and publication. This makes faculty members' need for information inevitable.

Information sources and services that should be made available in a university information system (library, archives, records offices, documentation centres, and data centres) should be able to support the teaching, research, mentoring, and community service needs of faculty members in the institution. Agba, Kigongo-Bukenya, and Nyumba (2004) stated that the shift from print to electronic information means that both academic staff and students in a university system must use these resources for better quality, efficient, and effective research more than ever, Edwards and Bruce (2002) observed that sources of information and other opportunities available via the Internet are

increasing exponentially. This is reflected in the steady increase in the use of computers and the Internet in teaching and learning. Other researches concentrated on the information seeking behaviour of faculty members with only a few studies on the awareness and use of information sources/ services by faculty members. This is the first study on the awareness and use of information sources/ services by faculty members conducted in a University in Delta State, Nigeria. This study also reflects how the use of information sources affects the productivity of faculty members.

Objectives of the Study

The general objective of this study is to find out the level awareness and use of information sources/services and their effects on the productivity of faculty members in Federal University of Petroleum Resources, Effurun. The specific objectives of this study are to:

- ✓ Find out faculty members awareness of information sources/ services in the Federal University of Petroleum Resources, Effurun.
- ✓ Investigate the frequency of the use of information sources by faculty members.
- ✓ Identify the use to which faculty members put the information they get.
- ✓ Investigate the effects of information utilization on the academic productivity of faculty members.

Research Questions

In order to guide the researchers in this study, the following questions were designed in line with the objectives of the study.

- ✓ What are the information sources/ services faculty members are familiar
 with in the Federal University of Petroleum Resources, Effurun?
- ✓ How frequent do faculty members use Information Sources?
- ✓ To what use do faculty members put the information they get?
- ✓ What are the effects of information utilization on the academic productivity of faculty members?

Literature Review

The use of information is a phenomenon which appears everywhere in the contexts of everyday life (Savolainen, 2009). According to IGI Global (2017) information use from the user or cognitive perspective is the modification of the user's knowledge structure. Both information and knowledge are representations of reality, but information is located outside one's mind (e.g., text in a" book), and knowledge is located inside one's mind (e.g., a memory of the aforementioned text). In other words, knowledge is what a person

knows, whereas information can be either raw material for knowledge, or externalized knowledge (Kari, 2010).

Farlnx (2017) opined that information sources are distinguished by the form of representation: textual (books, journals, manuscripts), graphic (graphs, diagrams, plans, charts), and audiovisual (sound recordings, motion pictures, slides). Different information sources have arisen at various times, but they have all undergone significant evolution in the 20th century. Information source as defined by Farlex (2017) is any system producing information or containing information intended for transmission; in information science, the conventional designation for scholarly documents or publications, which serve not only as important sources but also as the means of transmission of information in space and time.

Popoola (2008) carried out a study on the use of information sources and services and its effect on the research output of social scientists in Nigerian universities. The study showed that social scientists in Nigeria are more aware of journals as their preferred information sources. The major information services used by the respondents in support of their research activities are current awareness, statistical data analysis, selective dissemination of information (SDI), document delivery/loan, and word processing. Popoola (2000) on a similar study found that academic social scientists in universities utilized the following library information services: current awareness photocopying, referencing, statistical data analysis, email, selective dissemination of information, and online database searching in support of their research output.

Aforo and Lamptey (2012) conducted a study on the information needs and the information seeking behaviour of Law Lecturers in Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. The study revealed that the information sources faculty member were aware of law journals, textbooks, law reports, conference proceedings, law databases and newspapers, with law journals topping the chart on awareness scale of information sources.

There are various reasons why lecturers need information (Haliso & Toyosi, 2013). One of the most frequently cited reasons why faculty members seek information relates to search projects. Popoola (2008) found that getting literature for their research needs is the most important reason why lecturers in higher institutions seek information. Kemoni (2002) studied the utilization of archival information by researchers in the University of Nairobi, Kenya and

found that they utilized maps and atlases, gazettes, theses and dissertations, newspapers, statistical abstracts, video films, political record books, journals and conference papers, Popoola and Haliso (2009) reported from their study that the use of information sources could help lecturers to carry out innovative studies, which in turn make them (lecturers) support their communities through research and development.

Ojo-Ade and Jagboro (2005) found that academic staff in Obafemi Awolowo University, Ile-Ife, Nigeria, used subject catalogues to locate and retrieve the needed information materials. The use of relevant and timely information is likely to enhance academic output of lecturers. The study of Haliso and Toyosi (2013) on the influence of information use on Academic Productivity of Lecturers in Babcock University, Nigeria revealed that Utilization of Information had influenced positively the Productivity of the Lecturers in the study.

Research Methodology

A descriptive survey research method was adopted for the study. The study adopted a total enumeration method called census to include all teaching staff of the university. The research instrument used for the study was a structured questionnaire. Before the administration of the questionnaire, face validation was carried out to test the validity of the questions. The questionnaire was given to the Automation Librarian, Federal University of Petroleum Resources, Effurun who validated the content of the instrument alongside with the research questions. The reliability of the instrument was done using 30 faculty members from Ambrose Alli University, Ekpoma which is outside the scope of the study. The result of the reliability test was done using Pearson Product Moment Correlation Coefficient r. This result yielded a reliability coefficient index of 0.75. This means that the instrument is good and reliable since the test result is above the acceptance point of 0.5. The Target population of the study comprises faculty members from the Federal University of Petroleum Resources, Effurun, Nigeria. The total population of the study was 179 faculty members from the two colleges which are College of Science and College of Technology, Federal University of Petroleum Resources, Effurun. The researchers decided to study the entire population because the scope was not too wide to cover. One hundred and seventy-nine (179) copies of the questionnaire were distributed to the respondents and a total of 172 was duly filled and found usable for the study, hence there was a 96% return rate. The data collected -for-this study were analyzed using simple percentages and frequency counts.

Discussion of Findings

SECTION A: Analysis of the Demographic Distribution of Respondents Table 1: Demographic Characteristic of the Respondents

S/N	Category	Frequency	Percentage
0 1	Female	74	43%
Gender	Male	98	57%
	TOTAL	172	100%
	25-34	27	16%
Age (in	35-44	56	32%
years)	45-54	60	35%
	55 and Above	29	17%
	TOTAL	172	100%
Academic Qualificatio n	Post-Doctoral	7	4%
	PhD	21	12%
	Master Degree	97	57%
	Bachelor Degree	47	27%
	TOTAL	172	100%
Rank	Professor	7	4%
	Reader	5	3%
	Senior Lecturer	27	16%
	Lecturer I	44	25%
	Lecturer II	39	23%
	Assistant Lecturer	18	10%
	Graduate Assistants	32	19%
	TOTAL	172	100%

Table 1 shows that out of the 172 respondents, 43 percent of them are female faculty members while 57 percent of them are male. Four (4) percent of respondents hold a postdoctoral degree, 12 percent of them hold a PhD degree, 57 percent of them hold a master degree and 27 percent hold a bachelor degree. Four percent (4%) of them are Professors, 3 percent of them are readers, 16 percent of them are senior lecturers, 25 percent of them are lecturer I, 23 percent of them are Lecturer II, 10 percent of them are assistant lecturers and 19 percent are graduate assistants.

SECTION B: Awareness and Use of Information Sources and Services and Their Effects on the Productivity of Faculty Members

Table 2: Awareness Level of Information Sources by Faculty Members

Level of Awareness	Strongly	Aware	Unaware	Strongly	Total
	Aware/	%	%	Unaware	%
	%			%	
Journals	159 (92%)	13 (8%)			172
					(100%)
Books	147 (85%)	25(15%)			172
					(100%)
Online Sources/ CD	143 (83%)	29 (17%)			172
ROMS					(100%)
Colleagues	139 (81%)	33 (19%)			172
					(100%)
Conference Papers	112 (65%)	40 (23%)	20 (12%)		172
·					(100%)
Encyclopedia	107(62%)	39 (23%)	21 (12%)	5 (3%)	172
					(100%)
Statistical	71 (41%)	45 (26%)	50 (29%)	6(4%)	172
Publications					(100%)
Government	27 (15%)	51(30%)	79 (46%)	15 (9%)	172
Documents					(100%)
Theses and	19 (11%)	79 (46%)	67 (39%)	7 (4%)	172
Dissertations					(100%)
Radio/ Television	15 (9%)	101	49 (28%)	7 (4%)	172
		(59%)			(100%)
Directories/	11 (6%)	107	51 (30%)	3 (2%)	172
Handbooks	,	(62%)			(100%)
			L	<u> </u>	

Table 2 presents the responses depicting the level of Awareness of Information Sources by respondents. For journals, 159 (92%) respondents are strongly aware and 13 (8%) are aware of it. For book, 147 respondents (85%) are strongly aware and 25 (15%) are aware of it. With respect to online sources/CD-ROMs, 143 (83%) are strongly aware of it, while 29 (17%) are aware of it. For Colleagues 139 (81%) are strongly aware of it and 33 (19%) are aware of it. Conference paper 112 (65%) are strongly aware, 40 (23%) are aware and 20 (12%) are unaware of it Encyclopedia 107 (62%) are strongly aware, 39 (23%) are aware, 21 (12%) are unaware and 5 (3%) are strongly unaware of it. Statistical publications 71 (41%) are strongly aware, 45 (26%) are aware, 50 (29%) are unaware and 6 (4%) are strongly unaware of it. Government documents 27 (15%) are strongly aware, 51 (30%) are aware, 79 (46%) are unaware and 15 (9%) are strongly unaware of it. Theses and dissertations recorded 19 respondents (11%) who were strongly aware, 79 (46%) are aware, 67 (39%) are unaware and 7 (4%) are strongly unaware of it. Radio/ Television 15 (9%) are strongly aware, 101 (59%) are aware, 49 (28%) are unaware and 7 (4%) are strongly unaware of it. For directories/ handbooks 11 (6%) are strongly aware, 107 (62%) are aware, 51 (305) are unaware and 3 (2%) are strongly unaware of it.

Table 3: Awareness Level of Information Services by Faculty Members

Level of Awareness	Strongly	Aware	Unaware	Strongly	Total
	Aware	%	%	Unaware	%
	%			%	
Current Awareness	154	18 (10%)	-	-	172
Services	(90%)				(100%)
Referral Services	142	30 (17%)		-	172
	(83%)				(100%)
Internet/ Email	139	15 (9%)			154
	(81%)				(90%)
Photocopying	127	19 (11%)			146
	(74%)				(85%)
Document Delivery/ Loan	23 (13%)	107	5 (3%)		135
		(62%)			(78%)
Selective dissemination of	23 (13%)	9 (5%)	89 (52%)		121
Information					(70%)
Database Searching	21 (12%)	7 (4%)	73 (42%)		101
					(58%)
Statistical Data Analysis	2 (1%)	4 (2%)	91 (53%)		97
					(56%)

From **Table 3** above, for current awareness services 154 (90%) are strongly aware, 18 (10%) are aware of it. Referral Services 142 (83%) are strongly aware and 30 (17%) are aware of it. For Internet/ Email service 139 (81%) are strongly aware and 15 (9%) are aware of it. Photocopying 127 (74%) are strongly aware, 19 (11%) are aware of it. Document Delivery Service 23 (13%) are strongly aware, 107 (62%) are aware and 5 (3%) are unaware of it. Selective Dissemination of Information 23 (13%) are strong aware, 9 (5%) are aware, 89 (52%) are unaware of it. Database searching 21 (12%) are strongly aware, 7 (4%) are aware and 73 (42%) are unaware of it. Statistical Data Analysis 2 (1%) are strongly aware, 4 (2%) are aware, 91 (53%) are unaware of it.

Table 4: Frequency of the Use of Information Sources by Faculty Members

Frequency	Frequency	Percentage
Daily	139	81%
Weekly	25	14%
Monthly	8	5
Quarterly		
Bi-annually		
Annually		
Total	172	100%

From **Table** 4 above, 139 (81%) of the respondents use information sources on a daily basis; 25 (14%) use it weekly; and only 8 (5%) of them indicated that they use it monthly while no one of them uses information sources quarterly, bi-annually or annually. The means that a vast majority of faculty members uses information sources on a daily basis.

Table 5: Use to which Faculty Members put the information they get

Use of Information Sources	Frequency	Percentage
To meet Teaching needs	172	100%
To meet Research/ Publications needs	172	100%
To get funding information/ Grants	148	86%
To know current trends about my Field	127	74%
For current Information/ News	98	57%
To get health related information	67	39%

From Table 5 above, it is glaring that 172 (100%) of the respondents use Information sources to meet their teaching needs, 172 (100%) to meet their

research/ publication needs, 148 (86%) to get funding information/ grants, 127 (74%) to know current trends about their field, 98 (57%) current information/ news and 67 (39%) to get health related information.

Table 6: Effects of Information Utilization on the Academic Productivity of Faculty Members

Academic Productivity Rating	Frequency	Percentage
Information utilization has improved my academic productivity to a Very Great Extent	172	100%
Information utilization has improved my academic productivity to a Great Extent	157	91%
Information utilization has improved my academic productivity to some extent	97	56%
Information utilization has improved my academic productivity to a little extent	-	-

Table 6 shows the effect of the use of information sources on the academic productivity of Faculty members. All the 172 (100%) of the respondents indicated that the use of information sources has improved their academic performance to a very great extent, 157 (91%) indicated that the use of information sources has improved their academic performance to a great extent and only 97 (56%) indicated that the use of information sources has improved their academic performance to some extent.

Summary of Key Findings of the Study

Based on the data collected and analyzed for this study, the following are the major findings:

1. It is obvious from the study that 43% of the respondents in the study were female while 57% were male. There are more male respondents in the study than female. The highest number of respondents in this study

- is between the age brackets of 45-54 years of age while majority of the respondents had the Master degree.
- 2. The study showed that the respondents in this study are strongly aware of journals, books, online sources/CD ROMs, colleagues, conference papers and encyclopedia while the respondents are unaware of statistical publications, government documents, etc. as their information sources. This finding is in agreement with the study of Popoola (2008) which shows that social scientist faculty members in Nigeria are more aware of journals as their preferred information sources. This finding also concurs with the study of Aforo and Lamptey (2012) which shows that the information sources faculty members were aware of are law journals, textbooks, etc.
- 3. The respondents are strongly aware of current awareness services, referral services, Internet/ email, photocopying services and the respondents are unaware of selective dissemination of information, database searching and statistical data analysis. This finding corroborates with the study of Popoola (2001) which shows that that academic social scientists in the Nigerian universities studied utilized the following library information services: current awareness, photocopying, referencing statistical data analysis, email, selective dissemination of information and online database searching in support of their research output.
- 4. From the study, 81% of the respondents indicated they use information sources on a daily basis.
- 5. The study revealed that the respondents use information sources mainly to meet their teaching needs and research and publication's needs. This finding corroborates the finding of Popoola and Haliso (2009) which shows that information sources help lecturers to carryout innovative studies, which in turn make them (lecturers) support their communities through research and development.

6. All the respondents in this study (100%) indicated that information sources utilization has improved their academic productivity to a very great extent. This finding is in line with the study of Haliso and Toyosi (2013) which revealed that utilization of information sources had influenced positively the productivity of the lecturers in the study.

Conclusion and Recommendations

From this study, it is clear that information sources are very useful for the academic productivity of faculty members in Nigeria and all over the world. Faculty members in the Federal University of Petroleum Resources, Effurun are strongly aware of journal and books as their preferred information sources and they make use of them to meet their teaching, research/ publication needs. The information services that the faculty members are aware of are current awareness services, referral services and internet/ email services.

Information sources use has translated in the academic productivity of faculty members in Nigeria. Faculty members who have access to information and use it wisely can survive in the Nigerian university system as they will be able to impact the requisite knowledge to their students and publish highly impactful journal paper. This study establishes that the use of information sources and services have main and interaction effects on the academic productivity of the faculty members in a Nigerian specialized university.

In view of the foregoing, the following recommendations are made:

- ✓ Faculty members in Nigerian universities should continue to use
 information sources in all formats in support of their teaching and
 research activities.
- ✓ Academic libraries should acquire current information-bearing materials to meet the information needs of faculty members.

- ✓ Library management should regularly organize training programmes for faculty members to improve their awareness and utilization of information sources.
- ✓ Faculty members should feel free to utilize the information services available to them in their libraries as they will go a long way to ease their access to information.
- ✓ University management should ensure Internet access should be made available to faculty members both in the library and their offices to aid uninterrupted access to information available on the web.
- ✓ Faculty members should strive to continue to share knowledge among themselves to boost their access to information about their fields.

References

- Aforo, A.A., & Lamptey, R.B. (2012). Information needs and the information seeking behaviour of law lecturers in Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. *International Research Journal of Arts and Social Sciences*, 7(4), 75-80. Retrieved from http://archive.knust.eciu.gh/downloads/19/197228.pdf
- Agba, D.M., Kigongo-Bukenya, I.M.N., & Nyumba, J.B. (2004) Utilization of electronic information resources by academic staff at Makerere University. *University of Dar es Salaam Library Journal*, 6(1), 18-29.
- Edwards, S.L., & Bruce, C.S. (2002). Reflective Internet searching: An action research model. *The Learning Organization: An International Journal* 9(4), 180-188.
- Fatlex.(2017). *Information Source.* Retrieved from http://encyclopedia2.thefreedirtionary.com/information+source
- Farlex. (2017). What is information use. global.com/dictionary/information-use/14578 Retrieved from http://www.igi-
- Haliso, Y., & Toyosi, L. (2013). Influence of Informatk use on academic productivity of lecturers in Babcock University, Nigeria. *Jour of Information Engineering and Applications*, 3(11), 70-76.
- IGI Global. (2017). What is information use. Retrieved from http://www.igi-global.com/dictionary/information-use/14578.
- Kemoni, H.N. (2002) The utilization of archival information by researchers in Kenya: A case study of the University of Nairobi. *African Journal of Library, Archives and information Science, 12(21),* 69-80.

- Ojo-Ade, C.O., & Jagboro, K.O. (2005). Subject catalogue use at the Hezekiah Oluwasanmi Library, Obafemi Awolowo University, Ile-Ife, Nigeria. *African Journal of Library, Archives and Information Sciences*, 10(2), 177-186.
- Popoola, S.O. (2000). The use of information products and services in social science research in Nigerian universities. *African Journal for VIP Psychological study of Social Issues*, 5(2), 296-308.
- Popoola, S.O. (2008). The use of information sources and services and its effect on the research output of social scientists in Nigerian universities. *Library Philosophy and Practice*. Retrieved from http://www.webpages.uidaho.edu/~mbolin/popoola,htm.
- Popoola, S.O., & Haliso, Y. (2009). Use of library information resources and services as predator of teaching effectiveness of social scientists in Nigeria universities, *African Journal of Library, Archives and Information Sciences*, 19(1), 65-77.
- Savolainen, R. (2009). Epistemic work and knowing in practice as conceptualizations of information use. *Information Research*, **14(1)**, paper 392. Retrieved from http://informationr.net/ir/14-1/paper392.html
- Virginia Polytechnic Institute and State University.(2017). *Types of information sources*. Retrieved from http://www.lib.vt.edu/help/research/info-sources.html