THE INFLUENCE OF PROGRAMME OF STUDY IN THE USE OF LIBRARY BY UNDERGRADUATE STUDENTS IN NIGERIA

Georgina Uchey Oyedum Federal University of Technology, Minna, Niger State, Nigeria. Email: <u>mrsoyedum@yahoo.com</u>

Abstract

Adequate use of university libraries is essential for students offering different programmes in order to achieve their academic pursuits. This paper, therefore, assessed the extent to which the programme of study influences the undergraduate students' use of Federal University libraries in Nigeria. The study also investigated which of the programmes of study influences the students' use of university libraries most. The survey research method was used for the study and the study population was 1,453 undergraduate students from across Arts, Education, Engineering, Law, Science and Social Science faculties in the selected universities. The main instrument used for the data collection was a questionnaire. Descriptive statistics such as frequency and percentage tabulation were used in analyzing the data. Results revealed that the influence of programme of study on students' use of Federal University libraries in Nigeria is low. The study also revealed that students from the social science related disciplines use the university libraries most in Nigeria. To increase the level of library use by the undergraduate students in Federal Universities in Nigeria, majority of the respondents indicated the need for provision of sufficient library collections. Others indicated provision of library Internet connected computers and provision of sufficient and current library collections that would satisfy the information needs of the users.

Keywords: PROGRAMME OF STUDY, UNDERGRADUATE STUDENTS, NIGERIAN FEDERAL UNIVERSITY LIBRARIES

Introduction

Universities are institutions established to achieve the objectives of teaching, learning and research. They are usually regarded as institutions where students acquire knowledge in various disciplines for self-development which in turn prepares them for future roles in the society. For universities to adequately achieve their objectives, university libraries are established to provide information resources as well as to assist in the academic and research activities of the universities.

Every student in a university environment is identified with a programme of study where he aspires to acquire knowledge and be a professional in that field. To be knowledgeable in their areas of specialization students should not only interact with their lecturers but are expected to use the university libraries to satisfy their information needs. Use of university library could be described as the physical selection of any library resources and the act of reading through the pages, as well as to manipulate the ICT facilities in the library in order to retrieve his/her information needs. The implication of this is that in every academic institution, adequate use of the library should be made by all categories of students so that the learning objectives of the library can be achieved (Oyedum, 2005). Literature has identified some factors such as information literacy, library resources, environmental factors and programme/course of study as some of the variables that affect the students' use of university libraries. Scholars generally have found that there is a relationship between programme of study and library use. Some programmes motivate students to use the library resources more than others. Chu (1994) reported, in his study, that researchers in the sciences use ICT facilities in their information searching more than those in the humanities. To buttress this point further, literature has revealed that, while computerization has affected many library operations, it has had relatively little impact on most humanities work other than to make library collections more accessible within libraries (e.g, the OPAC) and among libraries (interlibrary loan systems) (https:// www. Ideals.illinois.edu) Similarly, Kerins, Madden and Fulton (2004) argued that engineers prefer using the Internet or electronic resources more than library resources in information searching.

On the other hand, Kerins, Madden and Fulton (2004) further reported in their study that law students use the library resources more than the engineering students since their programme centres on items such as reading lists, textbooks and course packs. The study revealed that law students expressed enthusiasm for, but in many cases, a lack of confidence in their ability to use electronic resources effectively. The study also revealed that the law students tended to display poor judgement in their choice of electronic resources when attempting to match information needs.

Such findings reflected concerns expressed in the literature regarding the assumptions that are often made by lecturers and librarians alike, as to law students' ability to use such resources (Hepworth, 2000; Genoni and Partridge, 2000 and Hartmann, 2001). From Kerins, Madden and Fulton's study one can deduce that Arts inclined students make use of library resources more than the Science inclined students. Arts students generally concentrate on theoretical studies and as such they have the tendency to read volumes of library materials more than the scientists that are fact – finding people and are more

involved in empirical studies. However, university libraries are meant for every student and the library staff should encourage all the students through user education courses to use the libraries. The library management should equip the university libraries adequately with information technology facilities in order to attract students to use the libraries.

In summary, it is expected that in most universities the programmes/courses undergraduates offer should be attracting them to effectively make use of the libraries. Unfortunately, this is not the case in Nigerian universities where some students have the wrong notion that the information needs of their programmes are only Internet-based, and so they do not need library services. This notion has to be changed because the university library is meant for every student and as such they should be using it for the good of the undergraduate courses in the universities. After all, literature has indicated that programme of study has a relationship with use of library. Thus, considering the importance of programme of study to students' use of university libraries, the research from which this paper is developed selected some Nigerian university libraries for study in order to investigate the influence of programme of study to undergraduate students' use of university libraries and also ascertain which programmes of study are associated with more university library use.

Literature Review

Several studies have shown that there is relationship between programme of study and students' use of university libraries. Students always strive to seek for more and recent information in their areas of specialization. In most universities for instance, the university libraries always serve as centres where the undergraduate students patronize to acquire knowledge that could enable them understand their areas of specialization better. Milne (2006) pointed out that the library was an important resource for scientists and scholars from humanities and using OPAC effectively would improve their knowledge acquisition. He further emphasized that more scientists than expected visited the library on a daily basis. Similarly, Fidzani (1998) stressed that several studies point to the importance of providing instruction on information access for effective use of the library. He therefore, reported from his study that there is a significant relationship between programme of study and use of some information sources in most libraries of today.

In a similar study, Majid, Eisenschitz and Anwar (1999) reported that their paper explores the methods used by Malaysian agricultural scientists to get information from their libraries, the factors influencing library visits and the occasions for extensive library use. It was found that most scientists visit libraries personally when they need to search the library OPAC, scan periodicals, or use other sources for identifying new information on

their topics. However, they send junior scientists or paraprofessionals to get photocopies of articles, to check out books or to get information from sources already known to them. It was also found that scientists used their library extensively while preparing research proposals and writing reports (<u>www.librijournal.org/pdf/1999</u>).

In another study on use of library collections by scientists, engineers and technicians it was disclosed that the need for user-research and use studies at the individual library level; definition of related terms and concepts like user, use, need, want, demand and requirement; reviewing of some important studies on use of library collections and interaction of scientists, engineers and technicians of libraries with their respective primary libraries were emphasized. The paper further enumerated the relationships found in past studies between characteristics of scientists, engineers and technicians and their use of library collections as well as their interactions with the library. The paper stressed the need for librarians to lay more emphasis in understanding their users in order to know their information needs. "What is more important is intensive librarian education about users than mere education of users of the existing system. Understanding the user is half the battle in providing information services." Finally, lack of sound use studies based on critical incident data in the country was pointed (eprints.rclis.org /10900/). However, literature has shown that libraries played little more than a passive role in the research process of scientists. Adams and Bonk (1995), Lazinger et al (1997) and Adetimirin (2008) supported the view by reporting that students and researchers in the sciences normally use ICT facilities more than those in the humanities in achieving their academic tasks.

Kerins, Madden and Fulton (2004) in a similar study pointed out that the engineering students turn to a variety of library resources when writing their projects but the library was not the first place they looked for information. As revealed by Anderson et al (2001) engineering students are forced to use the library midway through their information seeking process. Engineering students according to Kerins, Madden and Fulton (2004) seem to have a preference for channels that require the least effort or seem to require the least effort, such as the Internet. This finding is similar to the earlier finding of Breton (1981) who reported that professional engineers are known to use channels within arm's reach. Students of engineering according to Breton (1981) viewed the Internet as a speedy, current information source which fed initial information needs quickly. In fact, the majority of engineering students identified the Internet as the first source they check for information for their project, noting that they did so to get an idea of what the topic was all about, as this is usually identified on the Internet.

On the other hand, Milne (2006) revealed that more scholars from the humanities visited the library daily or weekly. This pattern was consistent with the literature, and it appeared that enhanced electronic access to information, particularly that which could be accessed from offices, had not affected the practice. Apart from Milne's findings, another survey of arts and humanities use of library at University of Punjab revealed that most of the respondents reported that they are good in library use skills, as a result of their high frequency of library use, and not to any formal training they had received anywhere. Most of the respondents visit the library to use the reference materials or to search for specific information and they seldom seek help from the library staff. Respondents often face the problem of non-availability of required material due to their heavy dependence on the library resources (www.emeraldinsight.com/journals). Similarly, Kerins, Madden and Fulton (2004) revealed that law students claim to use the resources of the library heavily over the course of their academic programmes.

Kumar, Singh and Yadav (2011) revealed that Social Scientists of Mizoram University depend on many kinds of formal and informal sources of information. Monographs and textbooks are extremely important, as are print journals. More than 80 percent use seminars, workshops, and conferences for seeking information. Electronic databases were a less popular source of information. The results showed a clear preference for print documents. With regard to adequacy of information sources and services, less than 20 percent indicated that information sources were adequate (http://unllib.unl.edu/LPP). This is in line with an earlier report of Ifidon (1977) which states that the humanities and the social sciences have been chosen for his study because researchers in these areas make more use of the library than those in the applied and experimental sciences. In another development, Shokeen and Kushik (2002) studied the information seeking behaviour of social scientists studying and working in the universities located in Haryana. The study reported that most of the social scientists visit the library daily and they use current journals as well as books.

In summary, as expressed above, academics from the humanities displayed a higher rate of borrowing and using library resources. Thus, the reliance of scientists on journal literature would suggest a lower borrowing pattern. This is further summarized in Hamid and Nicholas' (2006) study where they investigated the interdisciplinary differences in information seeking activities of physicists and astronomers. The findings showed the high reliance of research students in physics and astronomy on electronic journals and their low use of libraries.

Previous studies have concentrated on identifying the low level of use of university libraries in Nigeria. However, not much attention has been given to programme of study

as a variable that could be responsible for the low use of the libraries by the students. This study, therefore, investigated the influence of programme of study on undergraduate students' use of libraries.

The study aimed to achieve the following objectives:

- (i) To determine the extent to which programme of study influences the undergraduate students' use of university libraries in Nigeria.
- (ii) To ascertain which programme of study is associated with more university library use by the students.
- (iii) To identify and recommend ways of improving library use by undergraduate students in Nigeria.

Methodology

The descriptive survey research was used to collect data for the study. The stratified and purposive sampling techniques were used to select six universities from the population of Nigerian universities, owned by the Federal Government, that had been stratified by the time period they were established – two each from the 'first generation' universities (established between 1948 and 1969), 'second generation' universities (established between 1970 and 1979) and 'third generation' universities (established between 1980 to date). The universities are: University of Ibadan (UI) and Ahmadu Bello University, Zaria (ABU) -- first generation universities selected from the South-West and North West zones respectively; University of Jos (UNIJOS) and the University of Maiduguri (UNIMAID) -second generation universities selected from North-Central and North-East zones, respectively); and University of Uyo (UNIUYO) and University of Abuja (UNIABUJA) - third generation universities selected from the South-South zone and the Federal Capital Territory, respectively. Thus, the South-East zone is the only one that did not have a representative university in the sample of universities. The choice of the six universities is based on their being conventional / federal universities where diverse subject backgrounds or programmes are available. They were selected in order to represent the various generations of universities in Nigeria as well as to ensure that both the old and young federal universities in Nigeria are integrated in the study.

Furthermore, six academic Faculties and two academic departments in each of the six Faculties were selected from each of the universities. The Faculties are Arts, Education, Engineering/Technology, Law, Science and Social Sciences. In order to ensure a balanced representation of the undergraduate students in the universities, the students selected for the questionnaire survey were proportionately selected from each university based on their faculties, departments and levels of study. The students were selected for the study through random sampling methods (that is, selecting two students randomly as they sat in

a row in the class, starting from the first row to the last one) from the following departments: Physics, Biochemistry, Chemistry, Mathematics, Economics, Mass Communication, Theatre Arts, Music, History, English, Public and International Law, Library, Archival and Information Studies, Vocational and Technical Education, Private and Business Law, Physical and Health Education, Sharia Law, Political Science, Science and Technology Education, Special Education, Religious Studies, Archaeology & Anthropology, Communication Language Arts, Computer Science, Statistics, Teacher Education, Human Kinetics & Health Education, Creative Arts, Chemical Engineering, Electrical Engineering, Mechanical Engineering, Civil Engineering, Food Technology, and Agricultural Engineering were involved in the study. The sub-sample sizes for the six universities were: UI (202 students), ABU (199), UNIJOS (342), UNIMAID (355), UNIUYO (206) and UNIABUJA (149), giving a total sample of 1,453 students.

Questionnaire, interview and observation instruments were used to collect data for the study. Questions elicited information on the influence of programme of study to students' use of their university libraries. The university librarians of the universities selected for the study were interviewed to obtain information on collection sizes and currency, and the physical facilities available in their libraries since adequacy of these could influence the use of libraries by the students irrespective of their programmes of study. Direct observations were also undertaken by the researcher to assess the available physical facilities and the shelving patterns in the university libraries.

Data Analysis and Discussion

To determine the extent to which programme of study influences the undergraduate students to visit the federal university libraries, the respondents were requested to react to some statements that could reveal how programme of study could influence library use in the universities. The result is presented in Table 1.

S/N	Statements	Ν	SA (4)	A (3)	Sum of SA&A	D (2)	SD (1)	Sum of SD&D	\overline{X}	Standard Deviation
1	Programme of study compels you to frequently visit your university library.	1,453	2.5	9.6	12.1	55.7	32.2	87.9	1.82	0.69
2	Programme of study demands mainly formal information sources available in the library	1,453	3.6	28.6	32. 2	48.7	19.1	67.8	2.16	0.77
3	Programme of study demands frequent library use	1,453	3.0	23.7	26.7	38.7	34.6	73.3	1.95	0.83
4	Programme deals mostly with laboratory work and so there is no much need for library use	1,453	273	43.0	70. 3	22. 5	7.2	29.7	2.90	0.88
5	Information obtained from cyber café is sufficient to meet the information needed	1,453	14.0	32.2	46.2	42. 3	11.4	53.7	2.48	0.87
G	Weighted mean								2.26	

 Table 1: Students' perceptions of influence of programme of study to their use of federal university libraries

Source: Field Survey,

From Table 1, the respondents were requested to indicate whether the programmes of study compel them to frequently use the federal university libraries. To this, 12.1% of the students reported that the programme of study compels them to frequently use the university library, while 87.9% of them disagreed with the statement. Other statements

that demanded for the students' responses that could reveal the influence of programme of study to the use of the library are whether their programmes of study demand mainly formal information sources available in the library with 32.2% agreeing that their programmes of study demand mainly formal information sources in the library while 67.8% of the respondents disagreed with the statement. Some 23.7% of the respondents indicated that their programmes of study demand frequent library use while 73.3% of them disagreed. Majority of the respondents, 70.3% disclosed that they do not frequently use the library because they work mostly in the laboratories and 46.2% of the respondents reported that they satisfy their information needs through information obtained from cyber cafés while 53.7% of them disagreed with the statement because information obtained from cyber cafés is never sufficient to satisfy their information needs.

Put differently, the responses in Table 1 revealed that out of the five items listed on the influence of programme of study to students' use of federal university libraries in Nigeria, only one according to students' responses had a high mean score of 2.90 which was above the 2.5 mark on the 4-point Likert scale. This is item 4: not visiting the library because one's programme is a fact-finding course that makes the respondents to work mostly in the laboratories ($\overline{X} = 2.90$; SD=.88). All the other four items produced low mean scores below 2.5. This shows that the influence of programme of study on students' use of federal university libraries in Nigeria is low. These items include item 1: programme of study compelling one to frequently visit university library ($\overline{X} = 1.82$; SD=.69); item 2: visiting the library because programme of study demands mainly formal information sources ($\overline{X} = 2.16$; SD=.77); item 3: using the library frequently because programme of study demands a lot of readings ($\overline{X} = 1.95$; SD=.83) and item 5: not visiting the library because the information obtained from cyber cafés alone satisfy information needs in the area of specialization ($\overline{X} = 2.48$; SD=.87).

On the whole, the weighted mean score of 2.26 is low showing that the influence of programme of study to students' use of the Federal University libraries in Nigeria is low and this negatively affects the students' use of libraries. Furthermore, the second objective of the study sought to ascertain which programmes of study are associated with more university library use and the result is presented in Tables 2 and 3.

Table 2: Use of library by students of social sciences, arts and sciences in Nigerian federal universities

Programme of study	N	Mean	Std.	Std.Error	95% confidence Interval for Mean		
			Deviation		Lower Bound	Upper Bound	
Social sc.	555	53.6811	9.3957	.3988	52.8977	54.4645	
Arts	473	52.1839	9.1342	.4200	51.3586	53.0092	
Science	425	50.9647	11.2837	.5473	49.8889	52.0405	
Total	1,453	52.3992	9.9614	.2613	51.8866	52.9118	

Source: Field Survey

Table 2 shows that students from the social science related disciplines use the university libraries most (\overline{X} =53.68). This is followed by the students offering arts courses (\overline{X} =52.18) and then the students offering science courses (\overline{X} = 50.96). This shows that there are differences in the level of use of library between the students offering social sciences, arts and science related disciplines in Nigerian federal universities.

Source of	Sum of	df	Mean	F	Significant
Variance	Squares		Square		_
Between	1808.459	2	904.230	9.216	.000*
Groups					
Within	142272.02	1450	98.119		
Groups					
Total	144080.48	1452			

Source: Field survey

Table 3 shows that the observed differences in the use of library among undergraduate students offering arts, social sciences and science courses in the universities are significantly different (F (2,1450) = 9.216; p<0.05). This means that there is a significant

Significant at p< 0.05

difference in the use of university libraries across the subject backgrounds of arts, social science and science students.

From the study, the influence of programme of study to undergraduate students' use of Federal University libraries in Nigeria has been provided. The picture that has emerged is that the influence of programme of study to students' use of Federal University libraries in Nigeria is low. This means that programme of study does not actually motivate or influence a student's use of the library. In any university environment, programmes of study are expected to be attracting the students to effectively make use of the libraries. Unfortunately, this is not the case in Nigerian universities where some good numbers of students believe that the information needs of their courses are only Internet-based, and so they do not need library services. However, scholars generally believe that there is a link between the courses offered by the students and the use of library resources. This is why Fidzani (1998) revealed that there is a significant relationship between programme of study and use of some information sources such as encyclopaedias, card catalogues, CD-ROMs and OPACs all available in most university libraries, even though some courses motivate students to use the library resources more than their counterparts offering other courses. Perhaps, the undergraduate students offering different courses or programmes in the universities are influenced to use the university libraries because there is always the need to search for knowledge in their areas of specialization or related courses. This could be achieved through reading some library resources and doing some assignments, writing term papers, seminar papers or even group projects. All these could be successfully achieved through the effective use of libraries.

Be that as it may, in Nigeria, Idiodi and Igbinosa (2003) revealed that library patronage was low because only 20% of the readers used the library the way the library was expected to be used, irrespective of the various courses the students pursue in the university. About 5.36% of the readers did not use the resources of the library at all. These findings corroborate those of Bello (2000) and Amkpa (2000) who found that majority of the students did not use the libraries effectively. Furthermore, Emerole and Ogugua (2007) revealed that there is low patronage of library services as many users have not fully realized the potential of the library in a technology oriented university in this Information Age. The result of the interview of the university librarians revealed that the seating capacity in most of the libraries is inadequate compared to the number of users that visit and use the library resources was about commencing as at the time the study was conducted. They all revealed that they had about 20 to 100 computer terminals in their libraries for users and that majority of the staff are computer literate. Apart from the

interview reports, the observation of the size of the library collections, the physical facilities such as the reading chairs and tables in the selected universities corroborated the finding as it was observed that there were insufficient and few current library resources available in the libraries. Truly, the seating capacities as well as the physical facilities in the libraries were not adequate for studying. Majority of the students were observed standing in-between the book shelves reading their books because of inadequate number of reading chairs for the large population of students available in the universities. Thus, low level of use of the university libraries is bound to exist.

With the advent of the Internet, today's information users such as the undergraduates can no longer depend on conventional information sources to cope with the latest developments in their respective fields. They always strive to have access to the biggest global digital information library, which provides the fastest access to the right kind of information to end – users at any time and at any place in the world (Kumar and Kaur, 2005). No wonder, the findings of this study revealed in Table 2 that students offering social science related disciplines use the university libraries more than the other students offering other courses in the universities, probably because they needed current information to keep them abreast in their areas of specialization.

With the provision of ICT facilities in some of the Nigerian federal university libraries, it is expected that majority of the undergraduate students offering social science courses, arts and sciences in that order would be frequently attracted to visit and use these facilities available in the university libraries for their information searching. Unfortunately, this is not the case in Nigerian federal university libraries as it is revealed in Table 1.

However, the difference in the level of use of the library among the undergraduate students offering social sciences, arts and science related courses in the universities as revealed in Table 3 could be as a result of the availability of other sources of information such as the Internet, making it possible for many students especially those offering sciences to access information and library resources online from their rooms, residence halls, other campus locations and cyber cafes. After all, Chu (1994) reported, in his study, that researchers in the sciences use ICT facilities in their information searching more than those in the humanities. Similarly, Kerins, Madden and Fulton (2004) argued that engineers prefer using the Internet or electronic resources more than library resources in information searching.

Recommendations	Ν	Yes	No	TOTAL
Provision of library Internet connected	1,453	72.7%	27.3%	100%
computers				
Provision of more current library resources	1,453	66.4%	33.6%	100%
Provision of adequate number of physical	1,453	66.0%	34.0%	100%
facilities				
Provision of sufficient library collections	1,453	74.0%	26.0%	100%

 Table 4: Suggested ways of improving undergraduates' use of federal university

 libraries in Nigeria

Source: Field Survey

The last objective of the study aimed to identify and recommend what could be done to improve the undergraduates' use of federal university libraries in Nigeria. Table 4 shows that 72.7% of the respondents indicated provision of library Internet connected computers, some 66.4% suggested provision of more current library resources in the university libraries, while 66% of them suggested provision of adequate number of physical facilities and 74% of them indicated the need for provision of sufficient library collections in the federal university libraries.

From Table 4, it is clear that majority of the respondents indicated the need for sufficient library collections, this is followed by the need for provision of library Internet connected computers and provision of more current library resources as well as provision of adequate number of physical facilities in the federal university libraries. The finding is not surprising because the undergraduates in universities are always searching for any latest information in their fields of study and so they usually rely on current information sources (be it in electronic or hard/print formats) available in the libraries. With adequate information sources and physical facilities in the libraries, the Nigerian undergraduate students irrespective of the course they offer would always want to explore every necessary avenue especially with regards to Internet facilities in order to have access to latest developments in their disciplines and this would at the same time assist them to relate meaningfully with their colleagues worldwide.

Conclusion

From the findings of the study, it could be deduced that all programmes of study do not actually attract students to effectively use the university libraries. The study revealed that students offering social science related disciplines use libraries most in the Nigerian federal universities. This is followed by students offering arts related courses and finally those that offer science courses. It is therefore expected that undergraduates' use of the university libraries (irrespective of the courses they offer) would tremendously improve

if the Nigerian university librarians put more efforts and provide comprehensive ICT services especially Internet services as well as improve the level of information literacy of the users and also provide adequate physical facilities in their libraries. This would, therefore, create a conducive atmosphere that would attract undergraduate students to use the federal university libraries for their academic pursuits in Nigeria.

Recommendations

The following recommendations are provided based on the findings of the study:

- i. The university administration through the university librarians should provide sufficient and current library collections that would satisfy the information needs of the users. With this, students would be attracted to always use the federal university libraries in Nigeria.
- ii. The world is experiencing an information revolution where everybody is talking of global village; therefore, it is recommended that Nigerian undergraduate students should join their counterparts all over the world to catch up with the latest developments in their areas of specialization. Thus, provision of effective Internet services in Nigerian federal university libraries is recommended. Hence, efforts should be made to increase the number of Internet connected computers available in the federal university libraries in Nigeria. Also of importance is the need for information literacy skills to be imparted to students through the effective teaching of user education courses. This would make students know about the resources in the library as well as how to use them.
- iii. There is need to improve the level of physical facilities available in Nigerian federal university libraries in order to attract the students to effectively use the library resources.

REFERENCES

Adams, J. A. and Bonk, S. C. (1995) Electronic information technologies and resources – use by university faculty and faculty preferences for related library services. **College and Research Libraries,** Vol. 56, No. 2, pp. 119 – 131

Adetimirin, A.E. (2008) Factors affecting undergraduates' use of information and communication technology in selected Nigerian universities. (Unpublished Ph.D Thesis), Department of Library, Archival and Information Studies, Faculty of Education, University of Ibadan, Ibadan

Amkpa, S.A. (2000) Students' use of University of Maiduguri libraries: An evaluative study. Gateway Library, Vol. 2, No. 3, pp. 70-80

- Anderson, C. J., Glassman, M., McAfee, R. and Pinelli, T. (2001) An investigation of factors affecting how engineers and scientists seek information. Journal of Engineering and Technology Management, Vol. 18, No. 2, pp.131-155
- Bello, A. A. (2000) Students use of an academic library: University of Abuja experience. Library Bulletin: Journal of the Nigerian Universities Library System. Vol. 5, Nos.1&2, pp.14 -20
- Breton, E.J. (1981) Why engineers don't use databases: indexing techniques fail to fit needs of the profession. Bulletin of the American Society for Information Science, Vol. 7, No. 6, pp. 20-33
- Chu, H. (1994) Email in scientific communication in 15th National Online Meeting Proceedings-New York, May 10-12,1994, Medford, NJ: Learned Information, pp. 77-86
- Emerole, N. and Ogugua, J.C. (2007) Library use pattern in the Federal University of Technology, Owerri: A survey. Borno Library, Archival and Information Science Journal, Vol. 6, No.1, pp.49-57
- Fidzani, B. T. (1998) The impact of user education at the University of Botswana Library. **Information Development** Vol. 14, No. 3, pp.123-126
- Genoni, P. and Partridge, J. (2000) Personal research information management: Information literacy and the research student. *In* C. Bruce and P. Candy. (Eds). **Information Literacy Around the World: Advances in Programs and**

Research. Wagga Wagga NSW: Centre for Information Studies, pp. 223-236

Hamid,R.J. and Nicholas, D. (2006) Interdisciplinary differences in information – seeking activities. Retrieved Sept. 23. 2006. from

http://www.asis.org/conferences/Amo61/papers/.06.html

Hartmann, E. (2001) Understandings of information literacy: The perceptions of first year undergraduate students at the University of Ballarat. Australian Academic and

Research Libraries Vol. 32, No. 2, pp. 110-122. Retrieved March 2, 2003 from http:// alia. Org.au/publishing/aarl/32.2/full.text/Hartmann.html

Hepworth, M. (2000) Approaches to providing information literacy training in higher education: Challenges for librarians. New Review of Academic Librarianship Vol. 6, pp. 21-34

Idiodi, E.A. and Igbinosa, I.O. (2003) Coping with users' frustration in academic libraries in Nigeria: University of Benin experience. Communicate:Journal of Library and Information Science, Vol. 5, No.1, pp.

2-3

- Ifidon, S.E. (1977) **A quantitative assessment of Nigerian University Library collections in the humanities and the social sciences in relation to postgraduate research**. (Unpublished Ph.D Thesis). Department of Library, Archival and Information Studies, Faculty of Education. University of Ibadan, Ibadan
- Kerins, G., Madden,R.and Fulton, C. (2004) Information seeking and students studying for professional careers: The cases of engineering and law students in Ireland. Information Research, Vol.10, No.1.Retrieved Sept.10.2006.from http:// InformationR.net/ir/10-1/paper208.html
- Kumar, A., Singh, S.N. and Yadav, A.K.S. (2011) An investigation of use of information sources by social scientists. Library Philosophy and Practice. Retrieved February 15,2013 from http://unllib.unl.edu/LPP/
- Kumar, R. and Kaur, A. (2005) Internet and its use in the Engineering Colleges of Punjab, India: A case study. Webology, Vol. 2, No. 4, pp.1-22
- Lazinger, S., Bar-Ilan, J. and Peritz, B. (1997) Internet use by faculty members in various disciplines: A comparative case study. Journal of American Society of Information Science, Vol. 48, No. 6, pp.508-518
- Majid, S., Eisenschitz, T.S. and Anwar, M.A. (1999) Library use pattern of Malaysian Agricultural Scientists. Libri. Retrieved February 15, 2013 from www.librijournal.org/pdf/1999
- Milne, P. (2006) Electronic access to information and its impact on scholarly communication. Retrieved July10.2006 from http://www.csu.edu.au/specail/online99/proceedings99/305b.htm
- Muhammad, T., Khalid, M., and Farzana, S. (2009) How humanists use libraries: A survey of arts and humanities faculty at University of Punjab, Lahore. Pakistan.
 Library Review, Vol. 58, No.8, pp.581-592. Retrieved February 15, 2013 from www.emeraldinsight.com/journals
- Oyedum, G.U. (2005) Remedial students' use of an Academic Library: A survey of the Federal University of Technology, Minna Library. African Journal of Education and Information Management, Vol. 7, No. 2, pp. 1 8

- Shokeen, A. and Kushik, S. K. (2002) Information seeking behaviour of social scientists of Haryana Universities. Library Herald, Vol. 40, No.1, pp.8 11
- Sridhar, M.S. (1989) Studies on use of library collections by scientists, engineers and technicians. AGLIS Journal, Vol. 7, No. 4, pp. 9-17. Retrieved February 15, 2013 from eprints.rclis.org/10900/
- Sweetland, J. H. (1992) Humanists, libraries, electronic publishing and the future. Library Trends, Vol. 40, No. 4, pp. 781-803. Retrieved February 14, 2013 from http://www.ideals.illinois.edu