University of Nebraska - Lincoln Digital Commons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

December 2018

Impact of Quality Information Resources on Students' Academic Performance in Tertiary Institutions in Niger State, Nigeria

Aliyu Babadoko Mohammed Federal University of Technology, Minna, babadoko.mohammed@futminna.edu.ng

Jibril Attahiru Alhassan Fedearal University of Technology, Minna, j.alhassan@futminna.edu.ng

Georgina Uchey Oyedum Federal University of Technology, Minna, georgina@futminna.edu.ng

Follow this and additional works at: http://digitalcommons.unl.edu/libphilprac



Part of the Library and Information Science Commons

Mohammed, Aliyu Babadoko; Alhassan, Jibril Attahiru; and Oyedum, Georgina Uchey, "Impact of Quality Information Resources on Students' Academic Performance in Tertiary Institutions in Niger State, Nigeria" (2018). Library Philosophy and Practice (e-journal).

http://digitalcommons.unl.edu/libphilprac/1978

IMPACT OF QUALITY INFORMATION RESUOURCES ON STUDENTS ACADEMIC PERFORMANCE IN TERTIARY INSTITUTIONS IN NIGER STATE, NIGERIA

By

Aliyu Muhammad Babadoko

And

Jibril Attahiru Alhassan, PhD

And

Georgina Uchey Oyedum, PhD

Department of Library and Information Technology Federal University of Technology, Minna, Nigeria

ABSTRACT

The study was carried out to investigate the quality information resources and its impact on academic performance of students in tertiary institutions in Niger State. The objectives of the study were to ascertain the availability of information resources, find out the impact of the quality of information resources on students' academic performance among others. Three research questions were formulated, and one null hypothesis was tested at 0.05 level of significance. The study adopted survey research design. The population of the study comprised of undergraduate students of the tertiary institutions in Niger State which as at 2014/2015 academic session was 69,061. Multistage sampling technique was used to sample 373 respondents. Questionnaire was used for data collection. A total 373 copies of the questionnaire were administered out of which 326 copies were dully filled and returned correctly representing 87% response rate. Mean (x) was used to analyze data in respect of the three research questions formulated. The findings from the study revealed that most of the information resources were not available in the academic libraries. Other findings revealed that quality of information resources and its utilization has positive impact on the academic performance of undergraduate students. The hypotheses tested showed significant relationship between quality of information resources, and students' academic performance in tertiary institutions in Niger State. Drawn from the findings, it was recommended that libraries in tertiary institutions in Niger State should be adequately equipped with quality information resources among others.

Keywords: Quality Information Resources, Tertiary Institutions, Students' Academic

Performance, Niger State, Nigeria

INTRODUCTION

One of the most essential elements that all forms of life need is undoubtedly information. Information is a term difficult to describe because it has several dimensions. For example, Bitagi (2013) disclosed that information are news that come to the receiver for the first time which enables the receiver to take action according to expectation. Hence, it also helps to achieve religious and political stability, socio-economic development, scientific development, industrial, and technological advancement as well as cultural change and well-being of a nation. Information is obtainable from various resources which are referred to as information resources that comprise of range of materials acquired by library to meet the users' quest for information. There are various types of information resources such as print and non print resources. Specifically, Okonkwo as cited by Akor (2014) categorized library resources into books and nonbook materials. The non-book materials include staff, finance, building, and equipment, while book materials include newspapers, magazines, pamphlets, pictures, tapes, films and many other audio-visual resources. These resources contained in the library tend to accomplish the teaching, learning and research activities in tertiary institutions when the students familiarize themselves with the use of library. In fact, in academic communities, libraries are vital and the engine rooms of learning and research. Their significant capacity is to procure information materials and services that support the attainment of instruction, learning and research activities of their parent institutions and ensure that students perform well in academics.

Academic performance, according to Sivathaan and Velnnampy (2013) is the extent of the outcome students achieve in their educational work. Considering the level of academic performance of students, it is evident to find out about the quality of information resources at the institutions disposal. In the libraries, quality is frequently regarded as the quality of service because they are service organizations. However, information resources are proficient if they can offer accurate, significant and use full information that can help users take care of their issues (Nwagu and Osiname, 2009). Therefore, quality should comply with the user's needs. Certainly, this is evident from the fact that availability of quality materials is vital for achieving superior academic skills in tertiary institutions. Students in tertiary institutions with standard libraries and full time librarians performed at high levels than those with minimal or without library resources.

Hence, a good library that is adequately equipped with quality resources and good staff could lead to higher students' performance.

Statement of the Problem

For an individual to progress in the process of education there has to be quality and available information resources in different formats. Academic libraries are established to satisfy the information needs of the users. Unfortunately, the library users from observation are not adequately utilizing the library because of their perceived low quality resources. In the case where information resource are in abundance, perhaps, this may be attributed to the wrong students' perception that library lack materials that meets their needs. It is against this backdrop that the study investigates how the quality of information resources can impact on student's academic performance in academic institutions in Niger State.

Objectives of the Study

The main objective of the study is to determine the extent to which quality information resources impact on academic performance of students in tertiary institutions in Niger State. The specific objectives are to:

- 1. Ascertain the availability of information resources in tertiary institutions in Niger State.
- 2. Assess the quality of information resources available in tertiary institutions in Niger State
- 3. Find out the impact of the quality of information resources on students academic performance in tertiary institutions in Niger State.

Research Questions

This study provides answers to the accompanying research questions:

- 1. What are the available information resources in tertiary institutions in Niger State?
- 2. What is the quality of information resources in tertiary institutions in Niger State?
- 3. What are the impacts of the quality of information resources on student's academic performance in tertiary institutions in Niger State?

Literature Review

Availability of information resources entails carefully selecting, acquiring and also providing means by which users could get necessary information resources needed. Oriogu (2015) buttresses this point by noting that 'information resources availability is their presence in the libraries. Adeleke (2005) contended that if libraries are to add to the headway of information, they should procure resources and guarantee viable use of such resources by its clients. Without availability of information resources, accessibility will be difficult and its utilization impaired. As Chima and Nwokocha (2013) explained that ability to identify and retrieve specific information needed for a particular situation requires an awareness of the source (availability) and the skill to retrieve it within a short time and at low cost (accessibility). The technique for assessing the viability of library services is through user satisfaction.

Therefore, the various factors which lead to the satisfaction of library users are summed up by Thakuria (2007) to include: availability of current library resources brings about satisfaction in the users, organization of the library facilities should be clear to the users, the resources and services should be accessible easily, staff must be proactive and friendly with library users, the outlook of the library, facilities, staff, and services should be appealing and encouraging. Bitagi and Udoudoh (2013) opined that the availability of all types and forms of information resources in academic libraries is profoundly basic if these libraries are to maintain use needs in their respective institutions. Thus, a library tries to ensure that every user gets document, which could satisfy his/her quest for information.

Furthermore, users go to the library to get various information materials for different purposes. Specifically, information materials are in form of text books, newspapers, projects, index and abstracts, magazines, encyclopedias, CD-ROM databases, e-resources, video cassettes and microfilms among others (Adeoye and Popoola, 2011; Popoola and Haliso, 2009). Information resources availability facilitates the ability of tertiary institution libraries to give adequate service to their users. This is probably why Popoola (2008) asserted that the services and information resources in the institutional libraries must be capable for supporting research exercises among staff and students. Any library that procures the required resource will hold its users and as such has better view of its services by them (Hlison and Aina 2012). To this end, the inception of service quality strategy started as an instrument to gauge service quality.

The procurement of standard resources is one of the essential human privileges of each library client. In the library's view, Rasul and Shau (2011) acknowledged that quality might be perceived by the library users when there is smooth conveyance and absence of mistake in service. The Association of College and Research Library (2011) maintained that quality materials constitute one of the instruments required for the improvement of educational standard. In particular, the association distinguished that in academic libraries, measures were designed to guide library managers on the most effective method to progress and manage their parts as partners in instructing clientele, accomplishing their aims and sit their libraries right in the consistent improvement of their services.

The idea of satisfying clients has developed to incorporate a more extensive spotlight on the clients' point of view of the library. According to Filiz (2007) 'satisfaction is an essential element of quality service in a library'. Its evaluation gives a vital input to libraries for survey and enhances their services to clients. Filiz (2007 p.9) further stated that:

The standard of a library relies on the advantages users get from it. The presence of a library will be questioned when users start searching for different options for information resources. One approach to show value is by giving services of high standard. Hence, it is essential for libraries to know about changing users desires and to persistently endeavor to give standard support to them (Filiz, 2007 p.9).

In a study, Rehman, Shafique and Mahmood (2011) affirmed that in spite of the handling and spread of library holdings, a major challenge of academic library is the service based around communication amongst clients and the library staff. Libraries should as a matter of fact ensure that their services show legitimate levels of consideration to clients, the resources provided to them should be valuable (Loughborough University Library 2005).

Quality could be defined as diminishing the gap between clients' desire for good services and their view of services received (Kachoka and Hoskins, 2009). In other words, quality must be in conformity with the users' necessities. Library's resources are said to be of high quality when the gathering of the library are up to date and applicable in fulfilling the different needs of users (Hlison and Aina 2012). Additionally, academic libraries are center of convergence for educating, learning and research activities that are relied upon to give quality resources and are built up in accordance with the objectives and targets of their foundations (Anunobi and Okoye,

2008). Therefore, they are charged with the responsibilities to acquire the needful. Probably, this is why, Opoku (2011 p.189) stated that:

Academic libraries have to procure quality resources and advance their services to address the issues of the institution and encourage users to utilize the information resources more. The library regularly needs to advance the relationship of the considerable number of parts that make up the services to guarantee that changing library target are attained (Opoku, 2011 p.189).

Hence, the standard of library resources is a key for the attainment of the institutions objectives. Thus, there is the need to understand library users so as to provide the resources they may need. Khan and Shafique (2011) expressed that understanding the library patrons is half way struggle by the library in providing information resources and services. Therefore, the more students learn, the more profound they gain knowledge and the better they can impart what they have realized. Hence, they know the significance of resources, in the sense that a greater part of them look for information to enhance their academic performance (Owolabi, Jimoh and Opeh, 2010). Put differently, standard information resources should be built up, kept up and investigated to boost the achievement of students' learning out comes. In this regard, the available resources and services in institutional libraries must support the research exercises among the students and faculty staff (Popoola, 2008). Thus, sufficient procurement of quality information resources for the library users should be made available.

Library services and information resources constitute to the instruments needed for the improvement of educational standard. To buttress this assertion, Adeoye and Popoola (2011) agreed that for the institutions to ensure some levels of performance, there are facilities other than classrooms in every institution that can contribute to classroom instructions and learning process which is the library. In other words, students' academic performances depend on the information resources in their parent institutions. Hence, quality information resources improve the viability of tertiary institutions as they are essential things that can bring great academic performance in students.

Research Methodology

The study adopted survey research. The population of the study comprised of 69,061 undergraduate students for 2014/2015 academic session in the thirteen government owned

tertiary institutions in Niger State. The data on population of the students were gathered through the internal records of these institutions as at October 2015. The sample size for the study consisted of 373 respondents. Multi stage sampling technique was used to arrive at the required sample size. Stratified sampling technique was used to group the tertiary institutions into four strata: Polytechnics, Colleges of Education, Universities, and Monotechnics. The instrument used for data collection was a structured questionnaire. Data collected were analyzed using descriptive statistics to answer the research questions and inferential statistics (Pearson Product Moment Correlation or Correlation Coefficient) to test the hypothesis.

Results

Response Rate

A total of three hundred and seventy three (373) copies of the questionnaire were distributed out of which three hundred and twenty six (326) were duly filled and returned representing (87%) response rates. Fati Lami Institute of Legal and Administrative Studies returned 12 (4%) copies of the questionnaire, School of Health Technology, Minna returned 11(3%), Federal College of Education, Kontagora returned 15(5%), Federal University of Technology, Minna returned 88(27%), Niger State Polytechnic, Zungeru returned 34(10%), Federal Polytechnic, Bida returned 49(15%), Niger State College of Education, Minna returned 55(17%) and Ibrahim Badamasi Babangiga University, Lapai returned 62(19%) copies of the questionnaire, while 47(13%) copies of the questionnaire were not returned.

Research question One: What are the available information resources in tertiary institutions in Niger State.

Table 1: Responses on the kinds of information resources available

S/N	Statements	4	3	2	1	\overline{X}	STD	REMARK
		SA	A	D	SD	MEAN		
1	Text books	206	89	11	20	3.50	0.76	Agreed
2	Newspapers	135	118	27	46	3.11	0.96	Agreed
3	Dictionaries	124	123	26	53	3.06	0.93	Agreed
4	Journals	100	141	14	71	3.00	0.84	Agreed
5	Project, thesis and dissertation	102	126	27	71	2.93	0.93	Agreed
6	Directories	10	143	92	81	2.22	0.89	Disagreed

7	Almanacs	51	101	74	100	2.40	1.00	Disagreed
8	Gazettes	53	89	57	127	2.42	0.96	Disagreed
9	Index and abstract	69	89	92	76	2.41	1.11	Disagreed
10	Encyclopedias	52	93	97	84	2.31	0.97	Disagreed
11	Electronic resources	67	83	96	80	2.37	1.11	Disagreed

Key: Strongly Agreed (**SA**), Agreed (**A**), Disagreed (**D**) and Strongly Disagreed (**SD**) Standard deviation (**STD**)

Table 1 is a reflection of the extent of agreement or disagreement with information resources available in the tertiary institutions in Niger State. The majority of the respondents agreed that information resources such as text books with (\bar{X} =3.50, \bar{U} =0.76), newspapers with (\bar{X} =3.11, \bar{U} = 0.96), dictionaries with (\bar{X} =3.06, \bar{U} =0.93), journals with (\bar{X} =3.00, \bar{U} =0.84), projects, thesis and dissertations with (\bar{X} =2.93, \bar{U} =0.93) were available in most tertiary institutions in Niger State with the mean scores of between 2.93-3.50 indicating agreement since they were above 2.5. On the other hand, majority of the respondents also indicated that information resources such as directories with (\bar{X} =2.22 \bar{U} =0.89), almanacs with (\bar{X} =2.40, \bar{U} =1.00), gazettes with (\bar{X} =2.24, \bar{U} =0.96), indexes, abstracts with (mean=2.41, \bar{U} =2.41), encyclopedias with (\bar{X} =2.31, \bar{U} =0.97) and electronic information resources with (\bar{X} =2.37, \bar{U} =1.11) were partially available since the mean scores were below 2.5 criteria set for the acceptance of mean.

Research Question Two: What are the quality of information resources in tertiary institutions in Niger State?

Table 2: Responses on the quality of information resources available in their libraries

S/N	Statements	4	3	2	1	\bar{X}	STD	REMARK
		SA	A	D	SD	MEAN		
1	Adequacy - the information resources in our	61	85	50	130	2.48	0.97	Disagreed
	library are sufficient in quantity to meet							
	your needs							
2	Currency/Recency/ - information resources	43	105	65	113	2.39	0.95	Disagreed
	in the library are up-to-date							
3	Relevance – information resources in the	85	34	128	79	2.23	1.22	Disagreed
	library are relevant to course of study							
4	Reliability - information resources in the	76	117	50	83	2.67	1.00	Agreed
	library are always available for use							

5	Conformance - information resources meet	85	46	110	85	2.33	1.19	Disagreed
	the agreed standards (well catalogued and							
	classified)							
6	Durability - information resources in the	90	47	119	70	2.33	1.23	Disagreed
	library are in good format to withstand							
	prolong use							
7	Service provision – the library personnel are	85	125	52	64	2.75	1.02	Agreed
	always willing to help and provide users							
	with prompt services							
8	The information communication	71	52	129	74	2.33	1.18	Disagreed
	technology facilities in our library are							
	effective and efficient							
9	Accuracy – the information resources are	75	117	55	79	2.65	1.01	Agreed
	sufficiently accurate							
10	The information resources are adequate in	71	102	70	81	2.54	1.06	Agreed
	number which allow many users to study at							
	a time							

Key: Strongly Agreed (**SA**), Agreed (**A**), Disagreed (**D**) and Strongly Disagreed (**SD**) Standard deviation (**STD**)

Table 2 shows that respondents agreed that four out of the ten items identified as parameter for the quality of information resources were available. Responses indicated that the resources have reliability with (\bar{X} =2.67, \bar{U} =1.00), service provision with (\bar{X} =2.75, \bar{U} =1.02), accuracy of information resources with (\bar{X} =2.65, \bar{U} =1.01) and that the information resources were adequate in numbers which allow many users to study at a time with a (\bar{X} =2.54, \bar{U} =1.06). Table 2 also indicates that greater part of the respondents showed that six statements were not available in the library. These were adequacy of information resources in terms of quality with (\bar{X} =2.48, \bar{U} =0.97), currency/recency of the resources with (\bar{X} =2.39, \bar{U} =0.95), relevance to course of study with (\bar{X} =2.23, \bar{U} =1.22), conformance with standard with (\bar{X} =2.35, \bar{U} =1.19), durability in terms of format to allow prolong use with a mean of (\bar{X} =2.33, \bar{U} =1.23). This implies that the quality of the information resources in the libraries were below average.

Research Question Three: What are the impacts of the quality of information resources on student's academic performance in tertiary institutions in Niger State?

Table 3: Responses on the impacts of the quality of information resources on student's academic performance.

S/N	Statements	4	3	2	1	\overline{X}	STD	REMARK
		SA	A	D	SD	MEAN		
1	Availability of information resources ensure systematic	189	88	24	25	3.36	0.91	Agreed
	preparation for tests and examinations							
2	Clarity of information resources assist in carrying out	180	117	10	19	3.43	0.74	Agreed
	assignments with accuracy							
3	Currency of information resources ensures up datedness	154	128	22	22	3.27	0.86	Agreed
	on knowledge and skills acquisition							
4	The durability of information resources allows frequent	161	118	19	28	3.29	0.85	Agreed
	use of the resources for writings and presentations							
5	The accuracy of information resources develops	159	105	26	36	3.22	0.93	Agreed
	confidence on research activities							
6	It explore augmentative ability and express feelings	188	110	325	27	1.93	1.12	Disagreed
7	Adequacy of the information resources generally	165	105	21	34	3.27	0.89	Agreed
	enhances my academic performance							
8	Relevance of information resources helps to achieve	165	116	21	24	3.30	0.86	Agreed
	progress in academic activities							
9	Conformance of information resources ensures	164	118	22	22	3.30	0.87	Agreed
	accessibility and satisfaction							

Key: Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD) Standard deviation (STD)

Table 3 reveals the responses from the respondents on the impact of the quality of information resources on student's academic performance in tertiary institutions in Niger State. Table 3 indicated that majority of the respondents agreed with eight of the statements listed. These statements include; availability of information resources ensure systematic preparation for tests and examination with (\bar{X} =3.36, \bar{U} =0.91), clarity of information resources assist in carrying out assignments with accuracy with a (\bar{X} =3.43, \bar{U} =0.74), currency of information resources ensures up datedness on knowledge and skills acquisition with (\bar{X} =3.27, \bar{U} =0.86). Table 3 also shows that the durability of information resources allows frequent use of the resources for writings and presentations with (\bar{X} =3.29, \bar{U} =0.85), the accuracy of information resources develops confidence on research activities with (\bar{X} =3.22, \bar{U} -0.93), adequacy of the information resources generally enhances their academic performance with (\bar{X} =3.27, \bar{U} =0.89), relevance of information resources

helps to achieve progress in academic activities and conformance of information resources ensures accessibility and satisfaction each with (\bar{X} =3.30, \bar{U} =0.87, 0.86) respectively. Hence, all the mean scores are accepted because they are greater than 2.50 criteria set for acceptance of mean. However, Table 3 equally revealed that majority of the respondents disagreed with one out of the ten statements listed. The statement is; information resources explore augmentative ability and express feelings with (\bar{X} =1.93, \bar{U} =1.12) that is less than 2.50 set standard.

Discussion of the findings

The discoveries uncovered that some information resources such as directory, almanac, gazettes indexes, abstract, encyclopedias and electronic resources were not available in the libraries in the tertiary institutions in Niger State (Table 1). The non availability of these resources for students could be due to the poor economic situation in the country which is negatively affecting every sector of the society. Under this condition, the academic institutions in Nigeria such as the universities find it difficult to adequately equip their libraries to support instruction, learning, and research activities. It is completely vital for an academic library to have the resources that would empower it to meet its objectives. This is probably why Bitagi and Udoudoh (2013) opined that the availability of all types and forms of information resources in academic libraries is profoundly basic if these libraries are to meet with the information needs of users in their respective institutions. So also, Ugwuanyi, Okwor and Ezeji (2011) stated that abundance of information resources provided by libraries makes them potential learning environment.

The study further revealed that the reliability, accuracy and adequacy of information resources are the existing components that made up the quality of information resources available in libraries studied, while adequacy, currency, relevance, conformance and durability are some of the components of quality that are lacking in information resources in the tertiary institution in Niger State (Table 2). This could be because parent or sponsoring organizations or institutions do not allocate much fund to their libraries to purchase quality information resources for their users. This further portrays the poor economic condition of the country. Information resources in the library should be accurate, timely, relevant, complete and concise. This finding is similar to that of Hlison and Aina (2012) which stated that libraries that procure adequate resources will retain their users and have good view of their services by users. In addition, the findings equally agreed

with the opinion of Oyewusi and Oyeboade (2009) that information resources and services should be adequate in standard, depth, differences, and up to date to accomplish the institutions' programmes.

The study revealed that majority of the respondents agreed that quality information resources make impact on the students' academic performance (Table 3). They agreed with the statements such as availability of information resources ensure systematic preparation for tests and examination, clarity of information resources assist in carrying out assignments with accuracy, currency of information resources ensures up-datedness on knowledge and skills acquisition among others (Table 3). This finding could be because the more students learn, the deeper they gain knowledge and the better they can communicate what they learnt. The information resources in the library remain the core and most vital equipment of any recognized educational institution. This is similar to Nwagwu and Osiname (2009) who observed that information resources are efficient especially when they provide pertinent, valuable, and precise information that can help clients take care of their issues. Similarly, the findings also agreed with the opinion of Owolabi, Jimoh and Opeh (2010) that a greater part of students look for information to enhance their academic performances.

Conclusion

In view of the findings of the study, one would along this line conclude that information resources availability in relation to their type, format, sources and quality are significant for adequate use of libraries in the tertiary institutions by the undergraduate students in the tertiary institutions in Niger State. Therefore, there is need for improved level of information resources utilization among the undergraduate students, provision of accurate, relevant, current, durable, reliable and adequate information resources, timely training of students on the technical aspects of the library usage and proficiency of information framework use should be encouraged. Once these factors are carefully taken care of in academic libraries the level of academic performances of undergraduate students is expected to improve.

Recommendations

The followings are recommended based on the findings of the study:

- i. Information resources of all types should be available and should be accurate, current, adequate, reliable, relevant, and durable. The resources should be accurate to satisfy the expectation of the undergraduate students and should be relevant to their fields of study.
- ii. Libraries in tertiary institutions should be adequately equipped with information resources.
- **iii.** Faculty members should always encourage the undergraduate students to use the library by giving them references and assignments that would take them to the library. This is necessary to improve their academic performance.

REFERENCES

- Adeleke, A.A. (2005). Use of library resources by academic staff of the Nigerian Polytechnics, *Journal of Library Science* 12 (2), 15-24.
- Adeoye, M. O., Popoola, S. O. (2011). Teaching effectiveness, availability, accessibility and use of library and information resources among teaching staff of schools of nursing in Osun and Oyo State, Nigeria. *Library Philosophy and Practices*. Retrieved from http://www.webpages.uidaho.edu/~mbolin/ adeoye-popoola.htm
- Akor, P.U (2014). Assessment of resources and services of the two university libraries in Markudi, Benue State. *Journal of information, education, science and technology* 1 (1), 215-216.
- Anunobi, C. V., & Okoye, I. B., (2008). The role of Academic libraries in Universal access to print and electronic resources in the developing countries, *Library Philosophy and Practice* 5 (20), 1-5.
- Bitagi, A.M. (2013). Information resource utilization for research by scientists agricultural research institute in Nigeria. Seminar presented at the Faculty of Education. University of Nigeria, Nsuckka on 25th May.
- Yusuf, F. & Iwu, J. (2010). Use of academic library: a case study of Covenant University, Nigeria. Chinese Librarianship: *An International Electronic Journal* 1&2, 30.
- Sivathaan, N. & Velnamply, T. (2013). Use of electronic information resources and academic performance of university teachers: A case study. *European Journal of Business Management*. 5 (1), 46-53.
- Thakuria, P.K. (2007). Concepts of quality in library services: an overview. *5th Convention Planner-2007*. Gauhati University, Guwahati, December 7 (8), 412-420.
- Nwagwu, E. E., & Osiname, R. (2009). Information needs and seeking behaviour of nurses at the University College Hospital, Ibadan, Nigeria. *African Journal of Library, Archive and Information Science* 19 (1), 25-38.
- Chimah, J. T. & Nwokocha, U. (2013). Information resources, retrieval and utilization for effective research in tertiary and research institutions. *Asian Journal of Humanities and Social Sciences (AJHSS)*, 1 (3), 20-21.
- Bitagi, A. M. & Udoudoh (2013). Library and Information resources for effective scientific research in Nigeria Universities. *In conference proceedings of the 1st International conference of the School of Technology Education (STE), Federal University of Technology, Minna held in Minna* between 6th-9th October: 171-175.
- 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. and Haliso, Y. (2009). Use of information resources and services as predictor of teaching effectiveness of social scientists in Nigerian universities. *African Journal of Library, Archival and Information Science* 19 (1), 65-77.
- Haliso, Y. & Aina, R. F. (2012). Quality collection of library resources in meeting users' needs in academic institutions: competitive intelligence approach: *Global Journal of Human Social Science Linguistics & Education*. 12, (12), 2-5.
- Rasul, G. & Shau, A. K. (2011). Use of IT and Its impact on service quality in an academic library: *Library Philosophy and Practices*. 57-66
- Association of College & Research Libraries (2011). Standards for libraries in Higher Education, Chicago, Illinois 1-22.
- Adebayo, E. A. (2009). Quality Assurance and the implication for the management of University libraries in Nigeria: *Library Philosophy and Practices* 1-3.
- Filiz, Z. (2007). Service quality of University Library: a survey amongst students at Osmangazi University and Anadolu University. *Ekonometri ve İstatistik Say* 1 (1), 1-19.
- Rehman, S. U., Shakfique, F. & Mahmood, K. (2011). A survey of user perception and satisfaction with reference services in university libraries of Punjab: *Library Philosophy and Practices*. 4-6
- Loughborough University Library. (2005). Survey of Loughborough University library users' perceptions of levels of quality and customer care from circulation desk, support services desk and levels 1, 2 and 3 enquiry desks 4-22.
- Kachoka, N. & Hoskins, R. (2009). Measuring the quality of service: a case of Chancellor College library, University of Malawi. *South African Journal of Library and Information Science* 75 (2), 171-181.
- Opoku, D. (2011). Improving service quality in academic library: A managerial approach. *International Journal of Research in Education* 8 (2), 198 209.
- Khan, S. A. & Shafique, F. (2011). Information needs and information-seeking behaviour: A survey of college faculty at Bahawalpur. *Library Philosophy and Practice* 16.
- Owolabi, K. A., Jimoh M. A. & Opeh, S. C. (2010). Information seeking behaviour of Polytechnic students: the Case of Akanu Ibiam Federal polytechnic Unwana Nigeria. *Library Philosophy and Practices*.