

*Full Length Research Paper*

# Information needs, library resources and services available to post graduate students in the Institute of African Studies, University of Ibadan, Nigeria

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The study evaluated information needs and library resources available to post graduate students in the Institute of African Studies, University of Ibadan, Nigeria. One hundred and fifty-five copies of questionnaire were administered to postgraduate students in Peace and Conflict Studies (PCS), African Studies (AFS) and Peace Building (BD) units. The study identified Kenneth Dike, WORDOC and IFRA as libraries normally used by postgraduate students of the Institute of African Studies. The study shows that the library resources/materials in the Institute of African Studies library were readily available and accessible; and that 79.4% of postgraduate students were satisfied with the available library materials. Theses and dissertation and journal articles were the most frequently referenced library materials. The study further revealed that journal articles and textbooks/monographs were the main library materials required by research students. Result of One-Way Analysis of Variance indicated that the postgraduate level of satisfaction with library materials do not vary significantly ( $F = 0.895$ ,  $p > 0.05$ ). The study recommended that the Institute of African Studies library should be updated in terms of acquiring current books, journals and audio-visual materials to make it the most referenced library in order to meet the needs of Institute of African Studies researchers.

**Key words:** Information need, Institute of African Studies, library resources and services, postgraduate students.

## INTRODUCTION

The Institute of African Studies University of Ibadan was established by an Act of the Senate, in July 1962. It was conceived as an interdisciplinary research institute. It was a beneficiary of the Rockefeller and Ford Foundations. In September 1969, the National Universities Commission recommended that the Federal Military Government take over the financial responsibility for the institute as an

integral arm of the university. African Studies is a multi-disciplinary program where the research tools of various disciplines are brought to bear on the study of African Culture. These studies cover African Traditional Religion, African Law, Visual Arts, Music, Dance Studies-African Dance to Performance Studies, Peace and Conflict Resolution, History, Linguistics, Religious Belief and

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Thought System. The study of Traditional Culture is necessarily a multi-dimensional task since the music, poetry; dance, sculpture and painting form an integral system which is directly woven into the economy, the political, social structure and the religions of African societies. The institute's aim in undertaking such research and initiating similar projects is three fold. The first is to set a high standard of scholarship in African Studies generally, the second is the encouragement of a consciously imaginative development of new cultural forms and of new adaptations to modern life and the third is to enlist the attention and co-operation of pioneers and workers in such fields, as well as provide storage for the resulting specialized materials. The long-term task of the Institute of African Studies is to co-operate with the many departments of the university in developing the African aspect of their various disciplines, with primary relevance to the postgraduate program of the university. In October 1980, following the directives of the University Senate, the institute initiated a postgraduate teaching program. However, being a unique institute and the direction of research which is basically of the African perspective, getting access to information on a wide variety of issues could be perturbing and sometimes frustrating to students.

The postgraduate students need access to different types and formats of information, including textbooks, journals and serials amongst others. It is often acknowledged that information is power. Information is needed for a variety of purposes and its use depends on its availability. Chambers Encyclopedia (1970) defined information as that, which reduces doubt or uncertainty about a particular problem situation or circumstance. Libraries in Nigeria are not well funded as books are insufficient and many of the available books are out-of-date. This contributes to compound the information needs of students which could deny them access to current information on concepts, methods and theories in different fields of human endeavors. With the advent of Information and Communication Technology (ICT), mostly the internet, the information need of students is resolved as students now have access to the latest information and materials. The internet as well as the publishing of articles online using the open access option has come in to ease the problem of accessibility of information materials (Echezona et al., 2011). These recent technologies in the academic environment enable students to come to terms with research frontiers from other countries, thereby making research less difficult. But the use of the internet is depended on socio-economic background of students; and not all students can access the internet daily due to power (electricity) failure. This therefore means that the library still serves as a place of seeking information. Thus understanding the information needs and sources of information used by postgraduate students will help the library to acquire regular and current journals and other information sources

that are constantly required by postgraduate students during the course of their programs. The information will help make research into African Culture, Religion, Peace and Conflict resolution more interesting as well as help expand the theories and application of models in understanding African Traditional Culture. The availability of up-to-date and readily available information is largely depended on its acquisition. Thus, the acquisition of information for the Institute of African Studies Library will help students to conduct effective research for the overall growth of the African culture. Several studies have been carried out to understand the information needs of students. Others looked at the information needs of respective departments, but the information needs and library resources available to postgraduate students of the Institute of African Studies have been little investigated. It is on this basis that the study evaluates the information needs, library resources and services available to post graduate students in the Institute of African Studies, University of Ibadan, Nigeria.

The library is one of the research facilities in the Institute of African Studies. It maintains sizeable reference materials of six thousand titles at present. These collections reflect selective coverage of subjects. These include African history, Sociology, Political Science, Linguistics, Archaeology, Anthropology, Music and Visual Arts. There is also a collection of reprint papers, conferences, seminar papers and cultural films. The open shelves contain six thousand titles of books, reserved titles, one thousand five hundred, three hundred and sixty journal titles mostly unsubscribed, ninety six theses, five dissertations, eight hundred and eleven Masters Projects. Other materials are: seventy two boxes of reprints, one box of seminar papers and magazines. The Institute subscribes to Tell and Newswatch magazines, conference papers, brochures in seventy boxes, a backlog of newspapers for seven years for binding. The list of recorded sounds available in the Senior Library Officer's office is as follows; one thousand eight hundred and twenty eight, Reel to Reel long recorded sound tapes, sixty one Reel to Reel short recorded tapes, four Audio recorded cassettes, ninety eight phonograph records, fifty Reel to Reel films. Peace and Conflict Resolution programme is about thirteen years in the Institute of African Studies and has a very rich collection of books. The Resource Center is named after the donor Dr Abolurin (Commandant Civil Defense). The books are mainly on Peace Building and Conflict Resolutions. The resource holding is over four thousand titles of books. In addition to the Institute of African Studies Library and Abolurin Resource Center, the Institute has three documentation centers namely; Center for Arabic Documentation, Documentation Center for Traditional Medicine and the French Institute for Research in Africa. The documentation centers mentioned also assist the research students in their studies in their various disciplines of interest. The Institute's museum has a very

interesting collection of over two thousand ethnographic materials and traditional arts objects. Most of the objects are from Nigeria and other African countries as well as Brazil which has historical connections with Nigeria. The Institute of African Studies houses major part of the University of Ibadan ethnographic and fine art collection which reflects research interest of the Institute of African Studies. It contains examples of material culture, carved masks, cloth costumes of cult group masquerades, religious political insignia, carvers and porters' tools, divination apparatus, fishing and farming implements, house hold furnishings and utensils, paintings, prints, drawing and sculptures. At present there are over one thousand objects from Nigeria, Mali, Ivory Coast, Dahomey, Togo and the Cameroon as well as Brazil with which Africa has historical connections. These objects are acquired through direct purchase on location. Some of these items are gifts, such as the Benin antique of 1897. The Institute is also a patron of modern art in Nigeria and has a growing collection of unique paintings, sculpture, cloth and metal work. The Institute's Library and Resource Center open Monday – Friday at 8am – 4pm. The staff renders reference, readers and reprographic services to the students. The library is closed for a week each month during examination to enable the Senior Library Officer participate in the 24 h library services of the Main Library (Kenneth Dike Library). Within that period, the library is always locked for security. The Senior Library Officer and a Library Assistant were the members of staff in the library. At present, the Senior Library Officer is the only staff managing the library because the university generally is short staffed.

### Scope of the study

The study was limited to postgraduate students of the Institute of African Studies, University of Ibadan. It covered research students in three units of Peace and Conflict Studies, African Studies and Peace Building. The survey was carried out in the 2011/2012 academic session.

### Objectives of this study

The specific objectives of the study were:

1. Determine the information needs of the postgraduate students.
2. Examine library resources available to postgraduate students

### LITERATURE REVIEW

There are different sources of information. Information

needs of Postgraduate Students are important for the Institute's library in improving their collections and services with the available library resources. Information needs according to Case (2002), is a recognition that your knowledge is inadequate to satisfy a goal that you have. The type of information a user needs depends entirely on the user of the information. Researches have been carried out by a number of scholars about information needs and they found out that 'information needs' is complex and as such the need for specific information must be determined by the user/user group (Adelani, 2002). Studies by Sohail et al. (2012), in the use of library resources and services, found out that, the students needed to be guided by reference librarians to meet their information needs. Library Orientation programs are organized in Kenneth Dike Library which is the Main Library of the University of Ibadan for new students and postgraduate students for effective use of the library resources. Needs differ according to the user group. Ehikhamenor (1990) observed that information needs of academic scientists are not quite the same as those of the scientist in industries. Certainly information needs of an Arts researcher can never be the same as a technician. Information needs (Akinola, 2009) are an individual or groups or companies desire to locate and obtain information to satisfy needs. Ranganadham and Babu (2012) studied the awareness and use of library resources and services at Osmania University, Hyderabad. They studied the adequacy of library resources and satisfaction in sources of information. Research studies have been carried out which examine the information needs and library resources available to user groups such as academics, non-academic, researchers, scientists, technologists while other studies distinguish between these groups depending on their various faculties (Brown, 1999; Msuya, 2002; Callinan, 2005). The information resources can be divided into two, library and non-library resources (Uhegbu, 2001). Library resources include text books, journals, newspapers, magazines, E-classroom, ICT unit and others. Non-library resources include the television, radio, posters and handbills but the resource of interest is the library resources made available and accessible to postgraduate students of the Institute of African Studies. According to Uhegbu (2001), for any collection to be called a library or a resource center it must satisfy the following basic prerequisites:

1. be a reservoir of recorded knowledge, either in print or non-print;
2. prepared for use and arranged in a systematic way; offer services which are in consonance within and outside its area of location and literal to the extent of its objectives, philosophy and policy.

Information is an essential resource which individuals in every society should have access to (Kantumoya, 1992).

According to Opeke (2002), information can be

**Table 1.** Library mostly used by respondents.

Library used	Frequency	%
Institute of African Studies	12	7.7
Kenneth Dike Library	67	43.2
WORDOC Library	32	20.6
IFRA Library	20	12.9
Social Science Library	8	5.2
Abolurin Resource Library	16	10.3
Total	155	100

conceptualized as the gateway to other resources, be it social, economic, technological or educational. Information need, in information science, according to Kahthau (1993), evolves from a vague awareness of something missing and culminating in locating information that contributes to understanding and meaning of what is needed. Wilson (1997) points out that, there must be an accompanying motive when a person experiences an information need. Thompson (2004) saw information needs as what one must look for to support his/her profession. Needs are matters of priority, what we need is an overriding reason. Haruna and Mabawonku (2001) suggested that needs arise when the state of possessed knowledge is less than what is needed to deal with some issues and that information needs are diverse, constantly changing and not amendable to generalization. Students are always determined to seek information to enhance their research. Bii and Otiike (2003) studied the provision and accessibility of health information. The study pointed to the fact that health information sources made available and accessible were non-library resources. Okey (1999), on the information needs of the rural dweller, found out that utilization of information sources may not necessary be determined by age but depends also on the accessibility and awareness of such sources.

## METHOD

The descriptive survey design was adopted for this study. The population of the study comprised all postgraduate students of the Institute of African Studies, University of Ibadan, Nigeria. The participants cut across the three units under the Institute of African Studies; the units were Peace and Conflict Studies (PCS), African Studies (AFS) and Peace Building (PB). Participants were approached at their respective lecture halls and after consent was granted, the instrument was administered to the students. Stratified sampling technique was employed, since the Institute had three units as mentioned above. In all, one hundred and fifty-five copies of structured questionnaire were administered; PCS had 85 copies, AFS had 25 copies and PB had 45 copies.

A self-constructed structured questionnaire was used for the study. The questionnaire was divided into four sections: A, B, C and D. Section A measured students' demographic characteristics; Section B measured respondents' information needs; Section C measured availability of library materials, while Section D measured respondents' level of satisfaction with available library resources as well as accessibility to library materials. Data obtained from the

administered questionnaire were analyzed using simple percentages and Pearson Product Moment Correlation through the use of Statistical Package for Social Science (SPSS) version 20.0 software for Windows and were depicted in tables and charts.

## RESULTS

The result of the study revealed that, the library most used by respondents is Kenneth Dike (Table 1). WORDOC and IFRA were identified as the libraries normally used for gathering and searching for information in relation to African literature and Women Research and Documentation. Nevertheless, Kenneth Dike Library was the most used library by postgraduate students for related information because KDL is the Main Library of the University of Ibadan. The library has most of the library resources needed by the postgraduate students namely – OPAC service, E-Resource Retrieval facility, Text books, Current Journals and Project/Thesis which are not available in the Institute of African Studies Library. However, the three commonly used libraries serve as places to enhance research in different fields of African related studies such as Peace and Conflict Studies, African Studies, Peace Building and Women Research Documentation Centre among others.

### Level of accessibility to library

Accessibility to information remains paramount in postgraduate research discourse. In order to ascertain the level of accessibility to library materials, respondents were asked to ascertain the level of accessibility to library resources; the outcome of the enquiry showed that materials in the library were readily accessible with 78.7% of the overall responses (Figure 1). In addition, 7.7% of the respondents were of the opinion that materials in the libraries are slightly accessible; to this group of persons, they do not have complete access to all required information, while 13.5% asserted that materials in the library are inaccessible. The result obtained here however reveals that information is generally accessible to respondents in the Institute of African Studies Library and other libraries in the University of Ibadan.

### Frequently referenced library materials

The information in Table 2 shows that theses, dissertation and journal articles were the most frequently referenced materials by respondents. This is obvious as the study focused on postgraduate students. This was closely followed by textbooks/monographs. These frequently used library materials enable research gaps to be identified for further investigation as well as provide theoretical and methodological clarification in African studies research. They also help in shaping present study

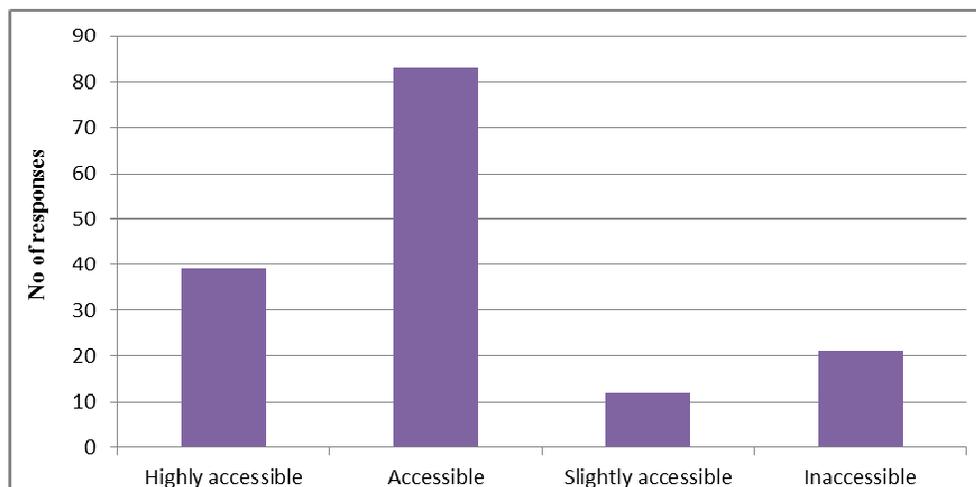


Figure 1. Accessibility to information in the library.

Table 2. Frequently used library materials.

Material	Frequency	Percentage
Textbooks/Monographs	18	11.6
Journal articles	31	20
Reference materials	15	9.7
Conference proceedings	6	3.9
Theses and dissertation	46	29.7
Reprographic services	9	5.8
Abstract/Indexes	10	6.5
Bibliographic services	20	12.9
Total	155	100

Source: Field data.

and make discussion easier as well as serve as guide to prospective studies. Above all, theses, dissertation and journals provide basis for literature search. Other frequently used library materials for postgraduate research included abstract/indexes and reference materials. These library materials remain essentials in achieving cutting-edge research.

### Availability of library materials

Table 3 gives vital information on library materials that are readily available to respondents. It indicates that theses, dissertation, journals and newspapers/magazines were library resources readily available to respondents for onward reference. This is obvious as they constitute materials often used for postgraduate research. Newspaper/magazines are used by the respondents to find information on diverse facet of the economy such as vacancies, sport, national and internal news as well as literature for academic purpose. Journals and theses on the other hand serve as guide for academic discourse.

Table 3. Library resources/materials readily available to respondents.

Resources	Frequency	Percentage
Books	7	4.5
Journals	36	23.2
Theses and dissertation	77	49.7
Newspapers/Magazines	30	19.4
Conference proceedings	5	3.2
Total	155	100

Source: Field data.

Other library resources readily available but seldom used included conference proceedings and textbooks.

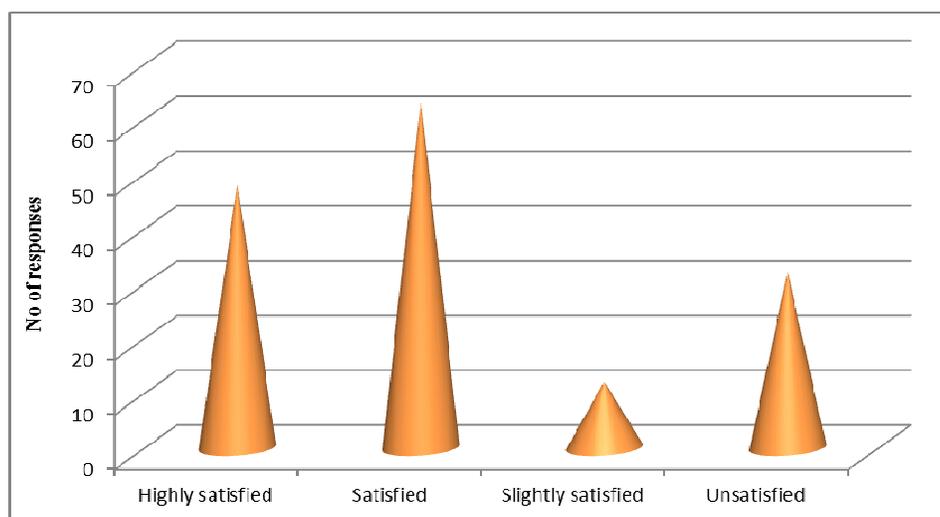
### Library materials and utilization

The information in Table 4 shows that among the various library resources, thesis and dissertation were used daily, followed by newspapers/magazines. As noted earlier, these materials provide respondents with required information on daily basis. For the respondents, thesis and dissertation provide the basis for postgraduate research, mostly African studies which have a unique method of investigation. For materials used once in a week, newspaper/magazines as well as theses and dissertation were on the lead. This is apparent as they are often used by respondents' week in week out. It further reveals that conference proceedings and books constituted library resources occasionally used by respondents. This therefore implies that thesis/dissertation, newspapers/magazines and journals constitute library materials frequently in use. Conference proceeding are occasionally used and serves as last resort for literature search, as the respondents basically concentrate on theses/dissertations and journals.

**Table 4.** Library resource and frequency of use.

Resources	Frequency				
	Daily	Once a week	Twice a week	Fourth nightly	Occasionally
Books	0	15	43	61	37
Journals	9	18	60	29	20
Thesis and dissertations	105	24	8	7	0
Newspapers/Magazines	31	76	13	40	19
Conference proceedings	10	22	31	18	79

Source: Field data.

**Figure 2.** Respondents' satisfaction with library materials.

### Level of satisfaction

Figure 2 assesses respondents' level of satisfaction with available library materials. The results in the figure reveal that 71.6% of respondents were satisfied with the availability of library materials, while 20.6% were unsatisfied. To this group of displeased persons, the university should re-print and update materials in the library, as some of the library materials are obsolete and many have depreciated. For instance, some of the respondents noted that theses catalogues need to be replaced as most of the titles have been torn, which make it difficult to search for these titles in the library. The theses titles really need to be properly typed out and bound. The titles also have to be entered in the Institute of African Studies library data-base for easy retrieval of reference resources. In general, the result indicates that respondents that make use of the library materials are satisfied and pleased with the available resources.

### Category of information sourced by respondents

In Table 5, the results show that academic information

**Table 5.** Type of information usually sourced by respondents.

Type of information	Frequency	%
Academic information	85	54.8
Employment information	31	20
Information for personal development	19	12.3
Health information	8	5.7
Political/global information	12	7.7
Total	155	100

Source: Field data.

was the main information required by respondents, which perhaps was the motive for visiting the libraries. This was followed by employment information which is usually contained in newspapers. Since not all the respondents can afford newspapers and with the availability of photocopy machines which enable required information to be handy, respondents visit the library for such information. This service may not be readily available outside the library. Other required information by the respondents but which may not be as vital as academic information was information for personal development,

**Table 6.** Information materials required by postgraduate students.

Materials	Frequency	%
Textbooks/Monographs	30	19.4
Journal articles	89	57.4
Reference materials	22	14.2
Audio-Visual materials	14	9
Total	155	100

Source: Field data.

health information and political/global information. The result therefore identifies academic information as the predominant type of information normally sourced by respondents in the library.

### Required library materials

The library materials required by respondents in their day-to-day academic pursuits are presented in Table 6. It shows that journal articles and textbooks/monographs were the main library materials normally required by respondents. This is apparent as these materials provide research students with recent theories and methodologies in diverse areas of African Studies, Peace and Conflict Resolution as well as in Peace Building. The materials also serve as a guide to theses and articles writing for publication in local and international journals. Indeed, a well written article or thesis cannot be achieved without the availability of these library materials. Through journals and monographs, methods for investigation can be replicated and redefined to suit local perspective; as well as show the direction of research and the areas of needs for further studies.

### Analysis of the variation in level of satisfaction with library materials

Since the study examines postgraduate students' information needs and library resources availability, the research sought to find out if the level of satisfaction with available library materials varies among respondents across the three units under the Institute of African Studies. To determine this, One-Way Analysis of variance Test was employed. The response scale of highly satisfied (4 points), satisfied (3 points), slightly satisfied (2 points) and unsatisfied (1 point) was inputted into SPSS 20.0 software. The result obtained is shown in Table 7. The result obtained showed that the level of satisfaction with library materials does not vary across the three units of African Studies. This implies that the respondents hold similar opinion concerning the availability of materials in the studied libraries. Since the Institute carries out research on African related studies, the methods and theories used could be the same, due to

their affinity. Hence, there is high level of triangulation (borrowing/use of theories and methods) and synergy for a successful subject of investigation.

### DISCUSSION

The study on the use of libraries by postgraduate studies of the Institute of African Studies for gathering and research information in relation to African Studies is depicted in Table 1 and Figure 1. The study revealed that Kenneth Dike Library (KDL) was the most used library because as the main library of the university, it has almost all the library resources and services needed by the postgraduate students. Others are faculty/departmental libraries. The study revealed that only available library resources available in these departmental libraries are made accessible to postgraduate students. The study shows that library resources/materials in the university libraries are accessible to postgraduate students. It may be postulated that students actually find it easier to locate materials in the library than searching online, a task which may seem less laborious; as majority of the theses/dissertations carried out in the Institute are not found online, and are only accessible in the library. The Institute of African Studies is yet to be automated. This calls for the need to upload theses online using the university's website for easy reference to future researchers. This finding agrees with those of Fidzani (1998) that researchers rely heavily on library resources. The study shows that theses, dissertations and journal articles are the most frequently referenced materials by research students, as they provide essential information for achieving cutting-edge research. This result confirms the finding of earlier and related studies, like those of Gooden (2001) and Echezona et al. (2011) that students make more reference to journal articles than other information sources because they are major sources of information for academics to carry out meaningful research.

The study revealed that theses, dissertations, journal articles, bibliographic services and textbooks/monographs are the main library resources readily available and accessible to postgraduate students for academic discourse. The study revealed that library resources are accessible and postgraduate students are satisfied with materials available. Positive as this response may sound, it may not hold for a majority of tertiary institutions in Nigeria, as many of the universities in the country do not have up-to-date materials for postgraduate programs mostly in the aspect of African Studies. As reported by Ajiboye and Tella (2007) that most of the universities in Nigeria lack resource materials for research. Academic information is recognized as the main information required by postgraduate students, which perhaps is the motive of their visit to the library. This is so as students are usually loaded with many assignments and seminar presentations which require no

**Table 7.** ANOVA result of the variation in level of satisfaction.

Source of variation	Sum of squares	Df	Mean square	F	Sig.
Between Groups	3.004	3	1.001	.895*	.445
Within Groups	168.905	151	1.119		
Total	171.910	154			

\*Insignificant at 5% alpha level. Source: SPSS output.

any other place, other than the library. The library is therefore seen as the only environment to handle such a rigorous and herculean discourse.

The study gave important information on library materials that are readily available to students. It indicated that theses, dissertations, journals and newspapers/magazines were readily available for consultation by the students.

The study revealed that, among other library resources, theses and dissertations were used daily because they enable research gaps to be identified for further studies. This study found out that, academic information was the main information required by the students.

The study revealed that, journals, textbooks/monographs were the main library materials required by the postgraduate students and also serve as a guide to theses and article writing for publication in local and international journals. Certainly these materials provide research students with recent theories and methodologies in diverse areas of African Studies, Conflict Resolution and Peace Building. The analysis reveals that journal articles and textbooks/monographs are the main library materials required by research students. There is therefore the need to make these library materials readily available and accessible to postgraduate students to ease their research. This finding lends support to those of Okafor and Ukwoma (2007) that journals are more frequently used than other resources. In another study, Omekwu and Popoola (1991) and Nkiko and Adetoro (2007) found that monographs are cited more than journals in research discourse. This entails the importance of journal articles and textbooks/monographs in academic discourse, as their relevance varies with departments. The analysis also holds that postgraduate level of satisfaction with library materials do not vary across the three units of African Studies; as students happen to have similar feelings and opinion concerning the availability of materials in the studied libraries. This is apparent as a result of the synergy in the conduct of research in the Institute.

## Conclusion

Though majority of the respondents gave positive responses on the examined variables, the negative responses call for concern and interventions in order to

improve on the library materials for cutting-edge research in the present era of information and communication technology.

## RECOMMENDATION

Renovation of the library building is necessary so that it will accommodate more seats for postgraduate students and other students who wish to use the library. The resources need to be of very high standard especially as more courses like Peace, Conflict Resolution and Peace Building are been added to other courses in the Institute. The Institute of African Studies Library needs to be automated to make retrieval of library materials easier for the students. The library is under staffed and that problem needs to be urgently addressed to enable the postgraduate students use the resources effectively. The library needs to be connected to the Internet to facilitate their research. A photocopying machine should be provided with a staff to attend to the students in the library at an affordable rate to discourage mutilation of materials by indigent students. Staffing the library is very important because without the Library Assistants, the students cannot use the library effectively. There is need for Library Assistants to be employed to assist the Senior Library Officer (SLO) in opening the Institute's library throughout the month especially when the SLO partakes in the twenty-four hours duty in Kenneth Dike Library which is mandatory for Librarians and Library Officers.

Acquisition of current journals, textbooks/monographs, reference materials and audio-visual materials which will enable the students project Audio Recorded Reel-Reel tapes available in the Senior Librarian Office for their research. The Institute's library should be updated to make it the most referenced library to meet the needs of African studies researchers.

## Conflict of Interests

The author has not declared any conflict of interests.

## REFERENCES

- Adelani RO (2002). Information needs and Information seeking behavior of science Lecturers in Federal College of Education. Abeokuta: a case study. *Gateway Libr. J.* 5 (1/2):61-68.

- Ajiboye JO, Tella A (2007). University undergraduate students' information seeking behavior: implications for quality in higher education in Africa. *Turkish Online J. Educ. Technol.* 6(1):40-52.
- Akinola SF (2009). Information seeking behavior of lecturers of Faculties of Education In Obafemi Awolowo University, Ile Ife and University of Ibadan. *Samara J. Inform. Stud.* 9(2):23-32.
- Bii HK, Otiike J (2003). Provision and accessibility of health information to the rural communities in Kenya: A case study of Bomet district. *Afri. J. Libr. Arch. Inform. Sci.* 13(2).
- Brown CM (1999). Information seeking behavior of scientists in the electronic information age: astronomers, chemists, mathematicians and physicists. *J. Am. Soc. Inform. Sci.* 50(10):929-43.
- Callinan JE (2005). Information – seeking behavior of undergraduate biology students: A comparative analysis of first year student at the University of Dublin. *Libr. Rev.* 54(2):86-99.
- Case DO (2002). *Looking for Information: A Survey of Research on Information Seeking, Needs, and Behavior.* San Diego, CA: Academic Press, 350p.
- Echezona RI, Okafor VN, Ukwoma SC (2011). Information sources used by postgraduate students in library and information science: a citation analysis of dissertation. *Library Philosophy and Practice (e-journal)*, Paper 559
- Ehikhamenor EA (1990). The use of formal information sources in physical science research in Nigerian Universities. *Int. Libr. Rev.* 22(3):149-159.
- Fidzani BT (1998). Information needs and information-seeking behavior of graduate students at the University of Botswana. *Libr. Rev.* 47(7):329-340.
- Gooden AM (2001). Citation analysis of chemistry dissertations: An Ohio State University case study. <http://www.ist.org/o1-fall/index.html>.
- Haruna I, Mabawonku I (2001). Information Needs and Seeking Behavior of Legal Practitioners and Challenges of Law Libraries in Lagos, Nigeria. *Int. Inform. Libr. Rev.* 33:66-87.
- Kahthau C (1993). *Seeking meaning. A process approach to library and Information services.* N.J: Abler. Norwood.
- Kantumoya A (1992). Public libraries and community information services in Africa. *Afri. J. Libr., Arch. Inform. Sci.* 2(1):33-38.
- Msuya J (2002). Information seeking behavior of library users in a changing library environment: the case of faculty of law staff members. *University of Dar es Salam Libr. J.* 4(1&2).
- Nkiko C, Adetoro N (2007). Pioneer bachelor degree: Citation analysis of Covenant University Students' Research projects. *Library philosophy and Practice.*
- Okey HO (1999). Funding in the Local Government System as a Strategy for Sustainable Rural Development in Nigeria. [http://www.academicexcellencesociety.com/funding\\_in\\_the\\_local\\_government\\_system.html](http://www.academicexcellencesociety.com/funding_in_the_local_government_system.html).
- Okafor VN, Ukwoma SC (2007). Availability and use of information resources by academics in science and engineering faculties in Southern Nigerian Universities. *Inform. Technol.* 4(2):175-187.
- Omekwu CO, Popoola S (1998). Improving citation behavior of University students in developing countries: A critical review of thesis literature at the University of Ibadan. *Library Bulletin* 2(1&2):44-51.
- Opeke R (2002). Information as an empowerment tool for the poor in Nigeria: a research and policy agenda. *Afr. J. Educ. Plann. Pol. Stud.* 2:43-56.
- Ranganadham S, Babu KS (2012). Awareness and use of library information resources and services in Osmania University, Hyderabad. *Int. J. Lib. Inform. Stud.* 2(3):42-54.
- Sohail MD, Pandye A, Upadhyay AK (2012). Use of library resources in university libraries by students: a survey with special references the University of Kalia IASIC *Bulletin* 57(2):122-128.
- Thompson C (2004). *Needs.* London Rutledge.
- Uhegbu AN (2001). *The Information User Issues and Themes.* John Jacob's Classics, Enugu.
- Wilson TD (1997). Information behavior. An inter-disciplinary perspective. *Inform. Proc. Manage.* 33(4):551-572.