
INFORMATION RETRIEVAL TOOLS AND UTILIZATION OF LIBRARY RESOURCES BY UNDERGRADUATE STUDENTS IN FEDERAL UNIVERSITIES IN SOUTH-SOUTH ZONE, NIGERIA

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ABSTRACT: *The study investigated the influence of information retrieval tools on the utilization of library resources by undergraduate students in Federal Universities in South-South Zone, Nigeria. The population of the study comprised 952 registered library users from 3 selected universities in the zone during 2017/2018 academic session. Survey research design method was employed using a structured questionnaire to collect data. Data collected was analysis using mean and standard deviation. The hypothesis was tested using simple linear regression and multiple regression analysis respectively. The regression model produced a regression coefficient of $R=.489$ which revealed that there is a strong positive relationship between knowledge of information retrieval tools and utilization of library resource. The study equally revealed that knowledge of information retrieval tools is relatively low in the institutions studied. It was recommended that more attention should be paid to the teaching of the use of information retrieval tools in all library user education studies of the instructions.*

KEYWORDS: retrieval tools, library resources, utilization, undergraduates, south-south zone, Nigeria

INTRODUCTION

Information utilization presupposes three basic things. There are: (i) That information is available in some format and/or in some defined system (ii) That infrastructure to access or retrieve information is available and (iii) That personnel to manage the information is also available. Information required or sought by users appear in a variety of formats called information carriers. These may be print media such as books and serials, manuscripts written by hand or type-set such as letters and minutes of meetings, graphic media, cartographic materials, microforms and most currently digital media/electronic formats in computer files, CD-ROMS and databases.

Yusuf and Iwu (2010) and Edem, Ntui and Edem-Agbor (2011) underscore the importance of academic libraries as not only hubs around which teaching, learning and scholarship revolve in academic institutions but also emphasis that these libraries have the responsibility to provide appropriate information resources to meet the objectives and mission of their institutions. Today, due to developments in ICT, several thousands of published information resources both in print and electronic forms are being churned out. It has become difficult, if not impossible to keep track with available published resources. Consequently, retrieving information from the myriads of information devices and carriers has become a matter of grave concern to libraries and information scientists.

Information retrieval is concerned with the process of selecting information from storage devices or carriers. This process is dependent in physical mechanism in library collections and or computers/technologies information system designs. The information environment today requires basic knowledge and understanding of retrieval tools to facilitate access to information. It has become compelling to equip users with knowledge about access tools available to them in order to assist them explore opportunities provided in a new information environment.

Statement of the problem

Success in information seeking and utilization requires some basic skills. Breen and Fallon (2005) and Uzuegbu (2004) avow that to be information literate, a person must be able to recognize when information is needed and have ability to locate, evaluate and use effectively the needed information.

Anato and Filson (2014) succinctly observe that because of the growing complexity of new information environment, individuals are faced with diverse abundant information choices in their personal and academic lives. The implications here is that individuals today are as earlier stressed should have knowledge to be able to carry out a couple or all of the following tasks necessary to source and utilize information resources in a digital age. Some of the critical skills required include: (i) knowledge of sources of information (ii) Knowledge of search strategies and must fundamentally (iii) Knowledge of retrieval tools to access information.

The problem of underutilization of library resources by undergraduates in University libraries have been of great concern to librarians. Cochrane (1985) and Okon (2007) observed poor use of libraries by students while Ajiboye, Ovedipe and Alewiye (2013) lamented that library-based tools for accessing information were rarely used by students. More so, methods of accessing and using information resources have changed and are still evolving. What is apparently not clear is whether inadequate knowledge of information retrieval tools or otherwise is affecting the utilization of library resources. This work is therefore undertaken to investigate the influence of information retrieval tools on the utilization of library resources by undergraduates in Federal universities in South-South Zone, Nigeria.

Purpose of the study

The purpose of the study is to investigate the influence of information literacy competence on utilization of library resources by undergraduates in Federal universities in South-South zone, Nigeria. Specifically, the study is designed to determine undergraduate. Knowledge of information retrieval tools and utilization of library resources in the zone.

Research question: This question was raised to guide the study:

To what extent does undergraduates' knowledge of information retrieval tools influence utilization of library resource in Federal Universities in south and south zone, Nigeria.

Research hypothesis: This hypothesis was formulated to guide the study:

Knowledge of information retrieval tools has no significant influence on the utilization of library resources by undergraduates in Federal universities in south-south zone Nigeria.

LITERATURE REVIEW

The need to equip prospective library users with knowledge of information retrieval tools cannot be overemphasized. It can be very time wasting and frustrating if users have spend fruitless and laborious efforts in searching and looking for information materials needed in vain.

Echem and Udo-anyanwu (2018) stressed that the effectiveness of a library as an instrument of learning is determined by the success with which it is able to provide the users with the necessary tools capable of accessing and retrieving the information they seek. Retrieval tools enable information seekers to quickly and efficiently search, find/or locate and retrieve the resources that they seek.

Nwosu and Ottong (2014) define information access or retrieval tools as systems created to facilitate access or retrieval of information in an organized information centre. They see them as basic building blocks for systems that organize recorded information that are collected by libraries, archives and museums. According to Ojedokun (2007) information access or retrieval tools also sometime called finding aids are produced for the sole purpose of leading users to particular types of information sources. Some of the traditional tools in libraries include catalogues, Indexes, abstracts and bibliographies. In recent times due to developments in ICTs, computerized access tools have begun to offer full-text access to digital documents in addition to bibliographic records.

Okafor (2006) investigated abstracts and indexes as guides to information retrieval. The study revealed a significant importance and usefulness of abstracts and indexes in libraries as access facilitators to library resources. Inyokwe (2011) carried out a study on the relationship between retrieval devices and utilization of information resources in University libraries in South-South Zone, Nigeria. The survey used a sample size of 1523 registered-library undergraduate users. The data collected was analysed using Pearson Product Moment Correlation (PPMC0 and Multiple Regression Analyses. The result also showed positive relationship between information retrieval devices such as abstracts, bibliographies, author/title catalogues, indexes, internet and library classification and students utilization of information resources in the universities surveyed. In a related work by Dike and Edem (2015) which examined the extent of use of library catalogues as retrieval tools by students of Federal University of Technology, Owerri library, Nigeria, it was revealed that low awareness of catalogue use as a retrieval tool was a factor in the under-utilization of its library resources.

Also, Ajiboye, Oyedipe and Alawiye (2013) surveyed the use of information retrieval tools by post graduate students of selected universities in South Western Nigeria. They used frequency counts and percentages to elicit responses from a randomly selected sample of 1923 respondents from different faculties in the universities studied. The study showed that respondents used information retrieval tools for various purposes and that their university library user education and information literacy programmes accounted for their main sources of their knowledge about information retrieval tools.

Onyenania and Oni (2001) assessed Internet Search Engines (ISE) usage by undergraduate students in selected universities in the Niger Delta region of Nigeria. The purpose of the study was to find out the types of ISEs used, their ability to use ISEs and method of acquiring ISE search skills. A sample size of 300 students was interviewed using a structured questionnaire.

Frequency counts and percentages were used to answer the questions while Z-test statistical tool was used to test the hypotheses. The study revealed that students used ISEs mainly for the purpose of retrieving information resources to meet their academic information needs. Earlier in a related work, Odini (1994) compared the performance of two manual indexes and three related online databases as information retrieval devices. The methods used for data collection were interview with the users, observing guides to the databases and noting the file numbers of the three databases to be searched. His finding showed that the most common sources to search for topics was found to be the online database. This was essentially because these provided faster, more thorough and efficient means of carrying out literature search than the card method.

In recent times, a good number of academic libraries in Nigerian universities have automated their house keeping operations and most of these libraries are providing Online Public Access Catalogue (OPAC) as public interface to users to search and retrieve documents from their library holdings. A couple of studies and reviews have been carried out by scholars and researchers to determine the strength, weaknesses and usability of OPAC as information access tools and to determine the efficiency of the search capabilities of the tool. Oduwole (2002) studied use of OPAC by 256 user in Nigeria universities while Adedibu (2008) surveyed the use of OPAC by science students at the University of Ilorin, Nigeria. Results from these two studies reveal a significant use of OPAC as a retrieval tool in libraries that have their information in databases. Similarly, Shorunke, Eluwole and Gbenu (2004) evaluated users' satisfaction with OPAC of Landmark University, Nigeria using descriptive survey design. A target population of 200 students were purposively selected to participate in the study using a structured questionnaires as the main instrument for data collection. The study revealed that users of OPAC at the university were highly satisfied with the performance and functions of the OPAC. It further revealed that the use of library study skills and information communication technology courses created necessary awareness on the use of OPAC.

Ademodi and Akintowide (2012) focused their attention on awareness and use of OPAC at Adekunle Ajasin University library, Nigeria. Three hundred (300) undergraduates were interviewed to find out their awareness of OPAC, its use, library services and key constraints encountered in the use of the library OPAC. The findings showed that awareness and use of OPAC facility in the library by these undergraduates at various levels was low. Contrary to the above finding, Campbell and Fast (2004) in an earlier exploratory study of university students' perceptions of searching OPAC and web search engines found that students expressed distinct preferences for search engines over library catalogue, finding catalogues baffling and difficult to use effectively. The students equally expressed a low opinion of their ability to search the catalogue. It is not surprising that students express preference to OPAC over traditional library catalogue. It is noteworthy that OPAC public interface and searching capabilities together a function as finding aid. Essentially, library users use bibliographic information to identify, select and obtain available library resources which OPAC readily does for them.

METHODOLOGY

The research design adopted was ex-post facto design because essentially, the researcher does not have direct control of the independent variables because their manifestations have already occurred and cannot be inherently manipulated. The research area was south-south geopolitical

zone, Nigeria. The population of the study comprised 14860 registered undergraduate library users from five universities selected for the study in 2017/2018 academic session. Stratified and simple random sampling techniques were used to select 10% of registered users from 3 universities relative to their population, totaling 952. The selection was 346 from 3456 users from the University of Uyo, 304 from 3035 from university of Port-Harcourt and 302 from 3016 from University of Calabar

The instrument used was a 4 point Likert-type scale Users Evaluation Questionnaire divided into sections A and B. Section A sought demographic information while section B assessed the information retrieval tools variable. The instrument was validated using Cronbach Alpha reliability test. The reliability coefficient obtained for the 8 items in the studied variable was .74 which showed that the instrument was reliable enough to be used. Data collected was analysed using mean (X) and standard deviation (SD). The hypothesis was tested using simple regression analysis and multiple regression analysis.

PRESENTATION OF DATA, RESULTS AND DISCUSSION

There are two main variables in this study:- information retrieval tools (independent variable) and utilization of library resources (dependent variable) by undergraduates in Federal Universities in South-South zone of Nigeria. The descriptive analysis of the mean and standard deviation of the variable is presented in Table I. The interpretation of the descriptive analysis of the mean and standard deviation can be inferred by comparing the calculated means with the population mean of the instrument. The knowledge of information retrieval tools in using library information resources has a mean of 14.79 and 14.92 respectively. If the value is compared with the expected mean of 15, the mean of the variables are relatively lower than the expected mean. It can thus be inferred from this result that the undergraduates' knowledge of information retrieval tools is relatively low.

The Hypothesis: Knowledge of information access tools has no significant influence on utilization of library resources by undergraduates in Federal Universities in South-South Zone, Nigeria. This variable expressed in a null hypothesis was tested using data from 952 respondents. Simple regression analysis was used in the data analysis and the results are given in Table 2. The regression model produced a regression coefficient of $R=.489$ which indicates that there is a strong positive relationship between knowledge of information retrieval tools and utilization of library resources. This implies that the more knowledge of information retrieval tools a student has, the more the student is likely to use library resources. An R^2 value of .239 indicates the knowledge of information retrieval tools may account for 23.9% of the variable on utilization of library resources in the study area. This finding is a critical indication that knowledge of information access tools has high tendency to influence the utilization of library resources by students in the study area.

The F-value of the analysis of variance (ANOVA) obtained from the regression table was $F = 297.62$ to 2 decimal places and there significant value of .000 (or $P < .05$) at the degree of freedom (df) 1 and 949. The implication of the result is that the null hypothesis is rejected. It can be inferred or concluded that knowledge of information retrieval has significant influence on utilization of library resources by undergraduates in Federal Universities in South-South Zone, Nigeria.

Table 1: Descriptive analysis of means and standard deviation of the variable

S/N	Variable	Mean	Std Deviation	N
1.	Knowledge of information retrieval tools	14.79	3.38	950

Table 2: Simple regression analysis of the influence of information retrieval tools on utilization of library Resources by undergraduates in Federal Universities in South-South Zone, Nigeria

R	R-Square	Adjusted R-Square	R-Std Error of the Estimate		
.489 ^a	.239	.238	9.156		
	Sum of square	DF	Mean square	F	Sig
Regression	24951.966	1	24951.966	297619	.000 ^b
Residual	79478.902	948	87.839		
Total	104430.868				

a. Dependent variable: Utilization of library resources

b. Predictor: (instant): Knowledge of information retrieval tools.

The findings in this study are in agreement with the works of Odusanya (2001) and Adedibu (2007) whose studies revealed that a high number of students use library catalogues and other retrieval tools to access library materials. An R² value of 23.9 indicating that information retrieval tools account for students 23.9% of utilization of library resources has grave concern for attention to be paid by librarians to inculcating information tools literacy skills in their libraries. The results are also in consonance with Ajiboye, Oyedipo and Alawoye (2013) whose study revealed that users rely significantly on information retrieval tools to access library materials.

From the study, when we compare the knowledge of information retrieval tools in using library resources which has a mean of 14.9 relatively lower than the expected mean of 15. It can be inferred that undergraduate's knowledge of information retrieval tools is relatively low in institutions studied in South-south zone, Nigeria. The study is in infirmity with the works of Ajiboye, Oyedipo and Alawoye (2013) who decried that library based retrieval tools for accessing library resources were rarely used by undergraduate students.

On the other hand, though contestable, it can be inferred that libraries and librarians are not doing much or enough in instructing and teaching programmes necessary to keep students informed of information retrieval tools and as well as information literacy skills necessary in

accessing library resources. The study has underscored the importance of information retrieval tools in facilitating the utilization of library resources by undergraduate students in the study area. The implication of the study is that more attention should be given to not only making students aware of these tools but attention should also be given to adequately instruct and equip students with skills on how to use these tools.

CONCLUSION

In addition to the traditional print and non-print materials in library collection, development in information and communication technologies have broadened the nature and types of information resources available to users. Information resource today constitute a range of materials, equipment and technologies such as computers, telecommunication systems, internet, online database and system gathered by libraries in order to meet information needs of both intended and anticipated users. Success in accessing library information resources is becoming increasingly dependent on the availability tools provided to guide users to library content.

It can be concluded that information retrieval tools can be used to significantly predict undergraduates' utilization of library resources in Federal Universities in South-South Zone, Nigeria. It can also be concluded that poor knowledge of information access tools by undergraduates is a significant factor in the underutilization of library resources in the universities investigated. Libraries can achieve better utilization of their resources if their intended users are adequately informed about available library retrieval tools and know how to use them to access library resources.

Recommendations

Based on the findings and subsequent conclusion the following recommendations are proffered:-

1. Use of library programmes and other library information skills studies offered for undergraduates should pay more attention to information retrieval tools modules.
2. User education programme offered in universities should be renewed and broadened taking into cognizance of materials in electronic/digital content.
3. Principally, electronic/digital content resources are offered via computers and computer networks and the internet. Consequently, programmes in information literacy should emphasize basic computer and technology skills to equip user with skills to do both off-line and computer/online searches in their quest for information.

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