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Abstract

The study examined the correlation between information retrieval skills possessed by undergraduates and the use of library information resources in a Nigerian University of Education. A Correlational survey research design was adopted. The population of the study consists of the entire cohort of undergraduate students in Tai Solarin University of Education, Ijagun, Ogun State. The first University of Education in Nigeria was used for the study. A sample size of 800 undergraduates was drawn using a stratified sampling technique across the five colleges of the university. A total of 765 questionnaires were returned. A frequency distribution table, mean, standard deviation and percentage were used to analyze the data. To test the hypothesis, the Pearson Correlation Coefficient at the significance level of 0.05 was used, and it was performed in SPSS program version 22. The findings revealed among other things that the undergraduates possess extremely poor skills in the use of internet search engines for information retrieval. However, they possess average skills in the use of abstracts and the library catalogue. Also, the students possess poor skills in the use of Indexes but they possess good skills in the use of bibliographies. The study shows that there is a significant relationship between the information retrieval skills possessed and the frequency of use of library information resources by undergraduates. The study recommended that the university library should subscribe to electronic information resources for the students to use. Internet search engine skills and search strategies should be included in the course contents of "Use of Library" so that undergraduates will acquire such skills of using advanced search strategies, alert services, Boolean operators, and Truncation among others.

Keywords: Information Retrieval skills, Information Retrieval tools, Library information resources, Undergraduates, University of Education.

Introduction

The university Libraries is an important academic unit in higher education because it provides information in various formats to support the teaching, learning and research objectives of the university. Omeluzor, Dolapo, Agbawe, Onasote and Abayomi (2017) indicated that the University Library is an established and organized arm of a university with a clear mandate to provide relevant and up to date information resources that meet the information needs of its users. The main aim of university libraries is to acquire information resources in different formats, in various fields of human knowledge and to process, organize, disseminate and provide access to them.

Library information resources include the print and electronic information resources that are acquired, processed, organized and disseminated to the entire users community to support their academic activities. Library resources are books, dictionaries, encyclopedias, journals, magazines, newspapers, maps, directories, bibliographies, biographies, e-books, e-newspapers, e-journals, and literature materials among others (Aina, 2004). These resources provide necessary information for teaching, learning and research. University library resources are usually large in quantity due to the fact that they are developed to cover a wide range of disciples or field studied at the university.

Without adequate use of these resources the library resources becomes useless. Mwatela (2013) asserted that the use of library information resources and services has been a concern from the time libraries changed from being cultural monuments to knowledge acquisition and information communication centres. According to Ekema and Mabawonku (2013) in this era of competitive research and knowledge acquisition, university students their university libraries to locate and retrieve accurate, timely and up to date information. In this era of information overload, it is difficult for library users to locate or retrieve library resources of their choice without proper organization of such resources. The mechanism put in place in the libraries to facilitate information retrieval and access is referred to as Information retrieval tools.

Information retrieval tools are the bibliographic resources available to enhance the identification as well as easy of access and retrieval of information resources. These information retrieval tools include; Library catalogue, Indexes, Abstracst, Search engines, Bibliographies, Directories etc. Information retrieval tools can also be defined as bibliographic control mechanisms aimed at facilitating access, location, retrieval and use. Echem and Udo-Anyanwu (2018) asserted that information retrieval tools are crucial for retrieving information for positive educational outcomes. For effective, accurate and timely information retrieval, certain skills are needed. These skills are referred to as information retrieval skills.

Information retrieval skills are those technical skills and knowledge needed to explore and use information retrieval tools to identify available resources and distinguish them from other resources not needed. Information retrieval skills are the skills to seek relevant information of the subject from different sources. There is also variety of information available on the web, not all of them may not be relevant, therefore student should have knowledge about relevancy (Ferdows, 2014). Comprehensive, effective and up to date information retrieval skills will add to the overall quality of students' academic performance and output. Emphasizing the importance of information retrieval skills, Prasad (2014) stated that information retrieval skills are the stepping stones of all academic process. For better academic performance, it is very vital that all students most especially undergraduate acquire and possess high information retrieval skills for exploiting information retrieval tools. Atanda and Ugwulebo (2017) stated that students' skills in

using information retrieval tools can be acquired through user education, library tours, library orientations, seminars, lectures, workshops, library staff, library handbooks among others. The extent of skills for using the various information retrieval tools possessed by an undergraduate student has an implication on the use of library resources by such students, because adequate information retrieval skills enhance the amount and quality of information retrieved by the end user after an information or literature search. Consequently, it is important to study the correlation between information retrieval skills and undergraduates use of library information resources.

STATEMENT OF THE PROBLEM

Information retrieval tools are the bibliographic resources and available mechanisms put in place to enhance the identification as well as easy access and retrieval of information resources. Regardless of the type of library, some of its most relevant function is the extent to which the collections are organized and the efficiency of the available information retrieval tools in assisting users to locate and access available information resources. Without information retrieval tools, the entire library will be likened to a big city without map or directions, hence going through such big city is either impossible or very difficult. Library information retrieval tools offers numerous advantages ranging from easy and quick identification, access, retrieval as well as the possibility of preserving library items from unnecessary wear and tear due to inadequate handling on the shelves by users that do not consult in advance the appropriate information retrieval tools.

Several studies have been conducted on information retrieval tools utilization in the library especially about the library catalogue and bibliographies. For instance Ajiboye, Oyedipe and Alawiye (2013) observed that information retrieval tools are occasionally used by undergraduates to retrieve resources. This underutilization could be as a result of lack of skills in using information retrieval tools or other factors like the lack of adequate retrieval tools, or improper arrangement and filing systems. Little effort has been given to assessing the skills of utilizing such tools by the users, most especially the undergraduates. Most importantly, some of the studies conducted on information retrieval skills used the inadequate technique of asking the undergraduate students if they have a particular information retrieval skill or not. Instead, students should be asked to answer questions about specific information retrieval tools in order to assess their information skills. Also, there is evidence that students sometimes indicate possessing skills they don't have. Therefore, in this study we tend to pose a question and then the respondent is required to accept or reject the statement; rejecting a correct statement or accepting a wrong statement reveals lack of such skills. It is this inadequacy in the technique used for assessing the information retrieval skills of undergraduates that motivated this study.

OBJECTIVE OF THE STUDY

The general objective of the study is to examine the information retrieval skills as a statistical correlation to undergraduates use of library information resources in a Nigerian University of Education. The specific objectives of the study are to:
1. Identify the library information resources available in a Nigerian University of Education
2. Examine the frequency of use of library information resources by undergraduates
3. Ascertain the information retrieval tools available
4. Assess the information retrieval tools skills use possessed by undergraduates

5. Ascertain the relationship between information retrieval tools skills possessed by undergraduates and the frequency of use of library information resources
6. Identify the factors affecting the information retrieval tools skills acquisition of undergraduates
7. Present strategies to enhance the information retrieval tools skills acquired by undergraduates

RESEARCH QUESTIONS

The following research questions were formulated to guide the study:

1. What are the library information resources available?
2. What is the frequency of use of library information resources by undergraduates?
3. What are the information retrieval tools available?
4. What are the information retrieval tools skills possessed by undergraduates?
5. What are the factors affecting the information retrieval tools skills acquisition of undergraduates?
6. What are the strategies to enhance the information retrieval tools skills acquisition of undergraduates?

HYPOTHESIS

The following null hypothesis was formulated to guide the study and it will be tested at (P>0.05) significance level.
Ho₁ There is no significant relationship between the information retrieval skills possessed and the frequency of use of library resources by undergraduates at a Nigerian University of Education

LITERATURE REVIEW

Library and information resources are the print and non-print information resources consulted by library users to meet their information needs. According to Echem and Odo-Anyanwu (2018) the major objective of university libraries is to develop and maintain collections of information resources in all formats such as print and non-print and the provision of such resources to meet the information needs of users. Library and Information resources available in the university libraries include books, reference resources, serial resources, e-resources etc. Library and information resources could be either in print or electronic resources.

Print information resources are the conventional information resources like books, dictionaries, directories, journals, handbooks, manuals, encyclopedias, newspapers, magazines, bulletins, etc. The introduction of Information and Communication Technology (ICT) brought about electronic information resources. Electronic information resources are those digital resources that cannot be read without a technological device, these include electronic journals, electronic books, electronic reference resources, CD-ROMs, e-magazines, e-newspapers etc.

Information retrieval tools are the information organization systems developed for the organization and bibliographic control of information resources. It includes those tools that help a library user easily identify and retrieve an information resource of interest. Information retrieval tools also enable the librarians or information professionals to easily take inventory of the holdings of a particular library or information center (Aina, 2004). Information retrieval tools include library catalogue neither Online Public Access Catalogue (OPAC), card catalogue,

microform or computerized catalogue, indexes, abstracts, bibliographies, directories, internet search engines, and other in-house created information retrieval tools Edom (2012) identified bibliographies, indexes, title indexes, directories, OPAC, online database, internet search engines etc. as the major information retrieval tools available at the university libraries. similarly, Nnadozie (2007) listed reading lists, indexes, abstracts, library catalogue, search engines, OPAC, bibliographies, shelf guides, web-based information retrieval systems as some of the information retrieval tools.

Studies have revealed that library catalogue and internet search engines are the most utilized information retrieval tools (Echem and Odo-Anyanwu , 2018; Aina, 2004; Ekere and Mole, 2014). Islam (2010) defined the library catalogue as a record or list of books, periodicals, journals, pamphlets, monographs, audio-visual aids and other information resources of a particular library or a group of libraries. Nkechi (2015) asserted that the library catalogue informs the users on what a library has in the traditional library or virtual library. Emphasizing the indispensability of the library catalogue as an information retrieval tools, Arshad and Shafique (2014) argued that "Even a well established library with trained staff, competitive head and large collection cannot function well in the absence of an up to date, well constructed and accurate library catalogue of any form." Apart from library catalogue, the other most utilized information retrieval tool is the internet search engines.

An internet search engine is a website that acts like a massive catalogue of the pages available on the internet (Poulet, Hiom and Mcmenemy, 2005). Search engines use software called a robot, a spider or a crawler to index pages from the web into its searchable databases. There are thousands of search engines available; the most currently used are google, Bing and Yahoo (Bothma, Cosijn, Fourie and Penzhorn, 2014). The availability of these information retrieval tools are ineffective if adequate skills and competences of using them are not acquired by library users, most especially by undergraduate students who are at their early stage of academic career

Information retrieval skills are the ability and competence of using the various information retrieval tools to identify locate and retrieve information resources from a collection. Ferdows (2014) indicated that information retrieval skills are the skills to seek relevant information of the subject from different sources. Okuonghae and Ogiamien (2016) identified that undergraduates in Nigeria have little skills in the use of the library catalogue and indexes, knowledge of using various information retrieval tools and the effective use of internet search engines. The Information retrieval tools skills most needed in this century are internet search skills and strategies, and the library catalogue search skills among others.

To search the internet effectively the student must possess such skills and competence as in the use of Boolean operators, strategic use of search engines, keywords search skills, advance search skills, and truncation among others. While emphasizing on the information retrieval skills of students, Aina (2004) suggested that students can use a single term or a combination of terms but further advised that the combination of terms may be more appropriate to retrieving more relevant results. Ekenna and Mabawonku (2013) argued that some search strategies like use of Boolean logic, truncation, wildcat and proximity features are useful for retrieval of information. To effectively use the library catalogue, the students must possess the basic filing system skills (Aina, 2004). The students most understand the basic filing arrangement, the type of catalogue and other principles and standards in the library catalogue. The essence of acquiring information retrieval tools skills is to enhance in the identification and utilization of library information

resources among users of the library no matter the types, purpose of establishment and user community.

Undergraduates make use of the library information resources for different purposes, depending on their information needs. In the study of students' use of library information resources, Oluwatobi, Ehioghae, Aluko-Arowolo and Ayoola (2014) discovered that student use library resources to a high extent. Similarly, in a study conducted by Echem and Udo-Anyanwu (2018) the findings revealed that students make use of library information resources very well, the most used information resources according to their finding are books, reference materials journals, and internet resources. On the contrary, Ferdows (2014) conducted a study on the factors influencing utilization of Library services and resources in University of Nairaobi, Mombasa Campus Library, the study revealed among other things that Online Public Access Catalogue, e-books and e-journals, are highly underutilized.

The major challenges of acquiring skills for using information retrieval tools are lack of adequate user education programmes in our university libraries, students neglect, inadequate resources and infrastructural facilities like ICT equipment). Arshad and Shafique (2014) in a study, identified a lack of proper user education, improper filing of the catalogue, and lack of awareness among others as the challenges inhibiting the use of library retrieval tools. Similarly, Islam (2010) identified that most of the students are not aware of the existence of the library catalogue for various reasons.

A study conducted by Obat (2019) focused on Maseno University students' self-reported retrieval skills and competencies when utilizing the electronic information resources. The population of the study comprised of 1001 undergraduate students across all the schools at the e-Campus of Maseno University. The findings revealed that a majority of students indicated to have good information retrieval skills. Also, Most of the students indicated to be using the electronic information resources either daily or weekly. This shows the correlation between the information retrieval skills and the use of the Electronic Information Resources. Additionally, a number of students, however also indicated that they have poor skills in various aspects of information retrieval presented in the study, most especially Boolean operators (OR, AND, NOT), and Truncation techniques (such as $, *, +). The study recommended regular practice, training, self-learning and self-efficacy and positive attitude as ways of improving the retrieval skills and search experiences among undergraduate students.

In an empirical investigation of information retrieval skills among undergraduate students in Dhaka university, Ferdows (2014) found out that undergraduates have basic computer skills and use both print and electronic resources in the library studied. In regards to internet search skills of the undergraduates, the study revealed that a majority of the undergraduates don't have enough searching skills to retrieve the needed information from the web. Most importantly, the undergraduates have poor knowledge about Boolean operators and truncations. Lack of appropriate training on how to use information resources and search skills, gaps in knowledge about different search techniques etc. were identified as the challenges affecting undergraduates search skills in Dhaka University. The study recommended proper training of undergraduates as the way forward.

METHODOLOGY

A correlational survey was adopted for the study. A correlational survey is the type of survey research design that seeks to establish what relationship exists between two or more variables (Nworgu, 2015). Usually, such studies indicate the direction and magnitude of the

relationship between the variables. This method was considered appropriate for the study because the study seeks to establish a relationship between the information retrieval skills possessed by undergraduates and the extent of the use of Library information resources. The population of the study consists of the entire final year of undergraduate students at three colleges of Tai Solarin University of Education, Ijebu-Ode. A sample size of 800 undergraduates was drawn using a stratified sampling technique across the five colleges at the university. The Questionnaire was divided into two parts. Part A focused on the demographic information of the respondents, while Part B, focused on answering the research questions that guided the study. One unique part of the Questionnaire is the part that assessed the information retrieval tools skills of the undergraduates, instead of the conventional way of asking the respondents about the skills and competence of retrieving information they possess. This research used direct questions which the respondents were required to accept or reject the statements. The researcher would then score the respondents based on their answers to the statements to determine their skill level. Answering any question correctly scores (2.5) marks while incorrect answer is (-2.5) in all there were 40 questions. Hence, scores between 0-39 (Extremely poor skills) are rated 1, 40-49 (poor skills) are rated 2, 50-59(average skills) are rated 3, 60-69 (good skills) are rated 4 , 70-80 (very good skills) are rated 5, while 80-100(excellent skills) are rated 6. The data collected was analyzed using frequency distribution table, mean, standard deviation and pie chart so as to aid the maximum understanding. The null hypotheses were tested at 0.05 level of significance using Pearson Correlation Coefficient with the help of SPSS (version 22). In collecting and presenting the data, real limit of number rule was employed.

Results

A total of 800 copies of questionnaires was distributed to the sampled respondents and 765 were completely filled and returned, making a response rate of (95.6%) which is valid for the study. The data collected was presented in line with the research questions that guided the study .

Table 1: Gender Distribution of Respondents

S/N	Gender	Frequency	Percentage (%)
1	Male	325	42.5
2	Female	440	57.5
	Total	765	100.0

Table one above shows the gender distribution of respondents. Based on the table out of 765 respondents, 325(42.5%) were male, while 440(57.5%) were female.

Table 2: Library Information Resources Available

S/N	Library Information Resources	Frequency	Percentage (%)
	PRINT INFORMATION RESOURCES		
1	Textbooks	765	100
2	Journals	737	96.3
3	Magazines	580	75.8
4	Newspapers	436	57

5	Dictionaries	609	79.6
6	Encyclopedia	729	95.3
7	Student research projects	629	82.2
8	Literature book (novel, poems etc)	733	95.8
	ELECTRONIC INFORMATION RESOUCES		
10	e-books	468	61.2
11	e-journals	633	82.7
12	e-newspapers	578	75.6
13	Internet	492	64.4
14	CD-ROMs	508	66.4
15	Electronic student projects and Thesis	64	8.4
16	OPAC(Online Catalogue)	56	7.3
17	e-abstract	179	23.4

Results of table 2 show that of the eight printed information resources listed only newspapers (57%) has a percentage lower than 75.8 percent. In general, the electronic information resources have lower percentage (82.7% to 61.2%) as compared to print resources and the three-last listed: Electronic student projects and Thesis, OPAC (Online Public Access Catalogue), and e-abstracts shows the lower percentage. Therefore, this shows that the library has more print information resources than electronic information resources.

Table 3: Information Retrieval Tools Available

S/N	Information Retrieval Tools	HA	MA	FA	NA	Mean	St. D	Decision	Rank
1	Card catalogue	341	303	121	0	3.29	0.72	MA	1st
2	Internet search engine	184	336	122	123	2.76	0.99	MA	2nd
3	Directories	93	277	273	122	2.45	0.90	FA	3rd
4	Indexes	124	154	243	244	2.21	1.06	FA	4th
5	Online Public Access Catalogue	61	216	244	244	2.12	0.95	FA	5th
6	Bibliographies	92	154	182	337	2.00	1.06	FA	6th
7	Abstract	92	61	278	334	1.88	0.99	FA	7th
	Grand Score	-	-	-	-	**2.08**	**0.95**	**FA**	

Keys: HA=Highly Available; **MA**=Moderately Available; **FA**= Fairly Available; **NA**= Not Available

Table three above shows the responses on the information retrieval tools available in Gbenga Daniel Library, From the table card catalogue and Internet search engine with 3.29 and 2.76 mean respectively are the major information retrieval tools available in the library. On the low end, Directories with 2.45 mean was rejected as not available by the respondents. Same with Indexes with 2.21 mean. Library Online Public Access Catalogue, with 2.12 mean. Bibliography with 2.00 mean and the least available tool is abstract with 1.88 mean score. The grand mean score of 2.08 and 0.95 standard deviation means that information retrieval tools are fairly available in Gbenga Daniel Library.

Table 4: Library Catalogue use skills possessed by undergraduates

S/N	ITEMS	CORRECT	INCORRECT
	LIBRARY CATALOGUE (Card and OPAC)		
1	Card catalogue are arranged by the size of the information resources the card represent.	69 (9%)	696 (91%)
2	Library card catalogue are arranged alphabetically by author, title and subject.	765 (100%)	0 (0%)
3	Searching through the author's name, subject catalogue is used.	70 (9.2%)	695 (90.8%)
4	When the user knows the title of the information resource, he/she is supposed to search using the subject catalogue/entry.	69 (9%)	696 (91%)
5	When the author and title of the information resource needed by the user is not known he/she is supposed to search title catalogue.	208 (27.2%)	557 (72.8%)
6	To use the library OPAC, the user must be connected to the internet.	626 (81.8%)	139 (18.2%)
7	OPAC has more access point then card catalogue because you can use ISBN, publisher to search for material in addition to title, author& subject.	626 (81.8%)	139 (18.2%)
8	Library OPAC can be accessed without internet.	625 (81.7%)	140 (18.3%)
9	Library OPAC can be accessed at home via internet and necessary device (smart phone laptop, etc).	557 (72.8%)	209 (27.3%)
10	Library OPAC has password and cannot be accessed without the password.	278 (36.3%)	487 (63.7%)
11	User is supposed to copy the classification number of a material from the card or OPAC and use it to locate the material on the shelve.	556 (72.7%)	209 (27.3%)
	Grand score	**405(52.9%)**	**360(47.1%)**

Table four shows the use of the Library Catalogue skills possessed by undergraduates. Six out of the eleven statement posed to assess the skills of students were answered correctly by most of the students. All the students have knowledge of the arrangement of the catalogue card. Most of the students 626 (81.8%) have skills of library OPAC. On the other hand, most of the students 696(91%) were incorrect that "Card catalogue are arranged by the size of the information resources the card represent". Similarly, most of the students have no skills of searching the library catalogue using subject entry.

Table 5: Index use skills possessed by undergraduates in Tai Solarin University of Education, Ogun State.

S/N	ITEMS	CORRECT	INCORRECT
1	Indexes contain classification number of the information resources.	69 (9%)	696(91%)
2	Indexes contain keywords and page number where such words can be found.	418(54.6%)	347(45.4%)
3	To use back of the book index, the user most connect to the internet.	278(36.3%)	487(63.7%)
4	Newspaper indexes contain the subject headings of the newspaper articles.	696 (91%)	69 (9%)
5	Indexes are always arranged by classification number of the scheme used in a particular library.	278 (36.3%)	487 (63.7%)
	Grand Score	**348(45.4%)**	**417(54.6%)**

Table five shows the responses on the Index use skills possessed by undergraduates. From the result, most of the students have no knowledge of the contents of an index as about 696 (91%) thought that Index contains classification number. Also, Most of the students have the knowledge that index contains keywords and page number to locate the words. However, only few of the students have the knowledge of how words are arranged in an index.

Table 6: Abstract use skills possessed by undergraduates

S/N	ITEMS	CORRECT	INCORRECT
1	Abstract are summary of the original work in a short and précised format.	557(72.8%)	208(27.2%)
2	Abstract always contains the bibliographic details of the information resources for easy identification .	696(91%)	69(9%)
3	Abstract contains classification number of the information resources.	70(9.2%)	695(90%)
4	Abstract helps user to decide whether to use the original information resources or not.	486(63.5%)	279(36.5%)
5	Abstract is not relevant in information retrieval	418 (54.6%)	347 (45.4%)
	Grand Score	**445(58.2%)**	**320(41.8%)**

Table six shows the responses on the use of abstract skills possessed by undergraduates. From the result, most of the Students 557(72.8%) has knowledge of what abstract is. Also, most of the students 696(91%) has skills of the contents of an abstract. The students understands the relevance of abstract. However, only few 70 (9.2%) has knowledge that abstract does not contain classification number.

Table 7: Bibliography use skills possessed by undergraduates

S/N	ITEMS	CORRECT	INCORRECT
1	Bibliographies are list of information resources on a particular subject.	626 (81.8%)	139 (18.2%)
2	Through bibliographies users will identify other similar information resources in their desired subject.	486 (63.5%)	279 (36.5%)
3	Bibliographies contains accession number and classification of the information resources.	765 (100%)	0 (0%)
4	Bibliographies are arranged alphabetically, or chronologically.	556 (72.7%)	209 (36.3%)
5	In Bibliography "(2010)" is the page number.	487 (63.7%)	278 (36.3%)
6	In Bibliography "Ekere, F. C. " is the name of the publisher.	140 (18.3%)	625 (81.7%)
	Grand Score	**510(66.7%)**	**255(33.3%)**

Table seven shows the responses on the use of Bibliography skills possessed by undergraduates. the result shows that most of the students 626(81.8%) possess skills of what bibliography is. Also, about 486(63.5%) understands the potentials of bibliographies as information retrieval tool. All the students have knowledge of the contents of a bibliography. The students also possess skills of the arrangement of bibliographies.

Table 8: Internet Search Engine use skills possessed by undergraduates

S/N	ITEMS	CORRECT	INCORRECT
1	Internet search engines like Google, Bing or Yahoo can be used without internet connectivity	349 (45.6%)	416 (54.4%)
2	Internet search engine are used to index pages from other website.	418 (54.6%)	347 (45.4%)
3	Adding "AND" between two words instruct the search to index document with both words.	70 (9.2%)	695 (90.8%)
4	Google is the only search engine available.	696 (91%)	69 (9%)
5	Adding ´OR between two words instruct the search engine to retrieve web pages containing either of the words	70 (9.2%)	695 (90.8%)
6	Adding NOT between two words instruct the search engine to retrieve pages with the first word not the later.	209 (27.3%)	556 (72.7%)
7	Google scholar retrieve the same document like Google search	277 (36.2%)	488 (63.8%)
8	The first document in a search result is always the most relevant document	347 (45.4%)	418(54.6%)
9	To search the internet, it's better to type in all the question u want to answer	209 (27.3%)	556 (72.7%)
10	Every information retrieve online is authentic and relevant	0 (0%)	765(100%)
11	Information from blog is more reliable than information from online journal page	558 (72.9%)	207 (27.1%)
12	Bing.com accept more Boolean operators than google.com	347 (45.4%)	418 (54.6%)
13	Putting a search keywords in a bracket instructs the search engine to bring the history	208 (27.2%)	557 (54.6%)
	Grand Score	**289(37.8%)**	**476(62.2%)**

Table eight presents the use of Internet Search Engine skills possessed by undergraduates. From the result most of the students possess little skill of using internet search engines to retrieve information from the web. However most of the students understand what internet search engines is. However, most of the students have little skills of Boolean operators, advance search strategies and truncations. Only 70(9.2%) possess the skill of using 'OR' and 'AND' between words while searching online. while only 209(27.3%) possess skills of using 'NOT' in searching for online resources. Also, all the students have no skills of evaluating online information resources.

Table 9: Information Retrieval Skill Level of undergraduates

S/N	Information Retrieval Skill Level	Frequency	Percentage
1	Extremely Poor Skills (0-39)	38	5.0
2	Poor Skills (40-49)	182	23.8
3	Average Skill (50-59)	296	38.7
4	Good Skill (60-69)	183	23.9
5	Very Good Skills (70-80)	35	4.6
6	Excellent Skills (81-100)	31	4.1
	Total	**765**	**100.0**

Table nine above shows the Information Retrieval Skill Level of undergraduates. From the table it is evident that majority of the undergraduate students, 296(38.8%) possess average skills of information retrieval having scored between 50-59. Only 31(4.1%) of the entire respondents possess Excellent Skills having obtained between 81-100 score. more also, 38(5%) of the students have extremely poor skills in information retrieval, having obtained between 0-39 score. 182(23.8%) has poor skills in information retrieval.

Table 10: Frequency of Use of Library Information Resources among Undergraduate Students

S/N	Library information resources	Daily	Weekly	Monthly	For assignment	Read for test	Examination	MEAN	ST.D	RANK
	PRINT INFORMATION RESOURCES									
1	Textbooks	124	0	91	185	243	122	2.97	1.59	1st
2	Newspapers	153	31	61	154	335	122	2.77	1.46	2nd
3	Journals	62	62	30	184	274	153	2.69	1.47	3rd
4	Magazines	62	31	61	154	335	122	2.65	1.39	4th
5	Dictionaries	62	30	62	214	213	184	2.64	1.44	5th
6	Encyclopedia	62	0	123	123	274	183	2.57	1.42	6th
7	Literature book (novel, poems etc)	31	0	0	153	306	275	2.20	1.02	7th
8	Student research projects	0	0	62	93	334	276	2.16	1.19	8th
	ELECTRONIC RESOURCES									
10	e-books	0	0	123	122	306	214	2.12	1.18	1st
11	e-journals	31	0	31	213	215	275	2.00	1.10	2nd
12	e-newspapers	0	31	61	214	123	336	2.00	1.10	3rd
13	CD-ROMs	0	31	31	182	185	336	1.92	0.90	4th
14	Internet	31	0	0	123	276	335	1.89	1.11	5th
15	e-abstract	0	0	0	154	334	277	1.84	0.73	6th
16	OPAC(Online Catalogue)	30	0	0	122	246	367	1.84	1.11	7th
17	Electronic student projects and Thesis	0	0	0	122	306	337	1.72	0.72	8th

Table ten shows the frequency of use of library information resources among Undergraduate Students of Tai Solarin University of Education, Ogun State. From the table majority of the undergraduate students uses textbooks frequently with 2.97 mean score. followed by newspapers with 2.77 mean score. journals with 2.69 mean score, ranked 3rd. followed magazines with 2.65 mean score. the only library information with less frequency of usage is Literature   book   (novel, poems etc), with 2.20 mean score and ranked least among the print information resources. On the other hand, the frequency of use of electronic information resources shows that all the electronic resources were rejected. E-books with 2.12 mean score, ranked 1st among the electronic resources. Followed by e-journals with 2.00 mean score together with e-newspapers. The least frequently used electronic resources is electronic thesis and dissertation   with   1.72   mean   score   and   ranked   last.

Table 11: Responses on the factors affecting the information retrieval skills acquisition of undergraduates

S/N	CHALLENGES	SA	A	D	SD	Mean	St. D	Rank
1	Inadequate of information retrieval tool like OPAC, Index, abstract	433	281	26	25	3.47	0.72	1st
2	Improper filing of catalogue cards	380	311	74	0	3.40	0.66	2nd
3	Inadequate internet access in the library	359	330	76	0	3.37	0.66	3rd
4	Lack of awareness of information retrieval tools by students	327	361	52	25	3.29	0.74	4th
5	Inadequate IT infrastructure like computers, telecommunication facilities etc	279	410	76	0	3.27	0.63	5th
6	Inadequate user education	275	382	101	25	3.14	0.76	6th

SA: Strongly Agree; **A:** Agree; **D:** Disagree; **SD**: Strongly Disagree

Table eleven shows the responses on the factors affecting the information retrieval skills acquisition of undergraduates in Tai Solarin University of Education, Ogun State. From the table, Lack of information retrieval tool like OPAC, Index, abstract with 3.47 mean score is the major factor affecting. Followed by Improper filing catalogue cards, with 3.40 mean score, ranked 2nd. Lack of internet access, with 3.37 mean score is also a major factor affecting students. The table also shows that Lack of awareness of information retrieval tools by students is also one of the factors with 3.29 mean score. the least factors affecting affecting the information retrieval skills acquisition of undergraduates in Tai Solarin University of Education, Ogun State as shown by the table are Lack of IT infrastructure like computers, telecommunication facilities etc with 3.27 mean score and Inadequate user education, with 3.14 mean score.

Table 12: Responses on the Strategies to enhance the information retrieval skills acquisition of undergraduates

S/N	STRATEGIES	SA	A	D	SD	Mean	St. D	Rank
1	Adequate provision of Internet access by the library	433	282	50	0	3.50	0.62	1st
2	Proper filing catalogue cards	355	333	77	0	3.36	0.66	2nd
3	Availability of information retrieval tools like OPAC, index, abstract	309	383	73	0	3.31	0.64	3rd
4	Provision of adequate IT infrastructure like computers, telecommunication facilities etc by the library	303	358	104	0	3.26	0.68	4th
5	Provision of adequate user education to students by the librarians	332	281	152	0	3.24	0.76	5th
6	Creating Adequate awareness of	202	489	74	0	3.17	0.58	6th

| | information retrieval tools among students by the library through library orientation, library tour, seminar etc | | | | | | | |

SA: Strongly Agree; **A:** Agree; **D:** Disagree; **SD**: Strongly Disagree

Table twelve shows undergraduate students' responses on the Strategies to enhance the information retrieval skills acquisition of undergraduates in Tai Solarin University of Education, Ogun State. From the table Adequate Internet access with 3.50 mean score, ranked 1st. followed by Proper filing catalogue cards, with 3.36 mean score. other strategies are Availability of information retrieval tools like OPAC, index, abstract, with 3.31 mean score. Provision of adequate IT infrastructure like computers, telecommunication facilities etc, with 3.26 mean score. Provision of adequate user education to students with 3.24 mean score. the least strategies is Adequate awareness of information retrieval tools by students with 3.17 mean score

Table 13: Relationship Between Information Retrieval Skills and Frequency of use of Library Information Resources

Variable	N	Mean	Std. Dev	R	Df	Sig	Remark
Information retrieval skills	765	3.12	1.07				
Textbooks	765	2.97	1.59	143	764	0.000*	Significant
Newspapers	765	2.77	1.46	272	764	0.000*	Significant
Journals	765	2.69	1.47	160	764	0.000*	Significant
Magazines	765	2.65	1.39	140	764	0.000*	Significant
Dictionaries	765	2.64	1.44	262	764	0.000*	Significant
Encyclopedia	765	2.57	1.42	205	764	0.000*	Significant
Literature books (novel, poems etc)	765	2.20	1.02	070	764	0.053	Not Significant
Student research projects	765	2.16	1.19	159	764	0.000*	Significant
e-books	765	2.12	1.18	208	764	0.000*	Significant
e-journals	765	2.00	1.10	081	764	0.025*	Significant
e-newspapers	765	2.00	1.10	234	764	0.000*	Significant
CD-ROMs	765	1.92	0.90	307	764	0.000*	Significant
Internet	765	1.89	1.11	192	764	0.000*	Significant
e-abstract	765	1.84	0.73	435	764	0.000*	Significant
OPAC(Online Catalogue)	765	1.84	1.11	524	764	0.000*	Significant
Electronic student projects and Thesis	765	1.72	0.72	483	764	0.000*	Significant

*Significant at P< 0.05

Table thirteen presents the correlational results between Information Retrieval Skills and Frequency of use of Library Information Resources. As evident from the table, information retrieval skills have a strongly significant relationship with the Frequency of use of Library

Information Resources by undergraduates (P>0.05). except Literature books (novel, poems etc). The frequency of use of other library information resources have a strongly significant relationship with the information retrieval skills possessed by undergraduate students (P>0.05). This reveals that the more information retrieval skills possessed, the greater the frequency of use of library information resources.

Discussion of Findings

Library information resources available

The findings revealed that Otunba Gbenga Daniel Library at Tai Solarin University of Education, Ijagun, Ogun State has both print and electronic information resources for meeting the information needs of the students. Based on the findings the major information resources available are books, journals, newspapers, magazines, dictionaries, encyclopedia, literature materials (novel, poems etc), e-books, e-journals, e-newspapers and Internet search engines. These findings support the assertion of Aina (2004) who stated that in most university libraries, print and non-print information resources such as books, journals, magazines, dictionaries, encyclopedia, e-books, e-journals, and the Internet among others are available for students' consultation.

Frequency of use of library information resources by undergraduates

The findings revealed that the undergraduate students use print information resources like textbooks, newspapers, journals, magazines, dictionaries, encyclopedia, and literature books (novel, poems, etc), more than electronic information resources, like e-books, e-journals, e-newspapers and Internet search engines. This might be due to our limited availability of electronic resources. The findings are in line with that of Ekema and Mabawonku (2013) who observed that library e-resources such as e-books, e-journals, e-magazines, Online Public Access Catalogue (OPAC), etc. were not used as frequently as they should be used by undergraduates. The findings also support of the findings of Ferdows (2014) who conducted a study on the factors influencing utilization of Library services and resources at the University of Nairaobi, Mombasa Campus Library, this study revealed that Online Public Access Catalogue, e-books and e-journals, are highly underutilized. This rate of underutilization of electronic information resources might be the result of the undergraduates' poor skills in using Internet search engines.

Information retrieval tools available

The findings revealed that the major information retrieval tools available are the Library catalogue card, and the Internet search engines. Other retrieval tools like directories, indexes, abstracts, the Online Public Access catalogue (OPAC), and bibliographies are fairly available in the library. The above findings are in line with that of Edom (2012) who identified bibliographies, indexes, title indexes, directories, OPAC, online databases, internet search engines etc as the major information retrieval tools available in the university libraries. Similarly, Nnadozie (2007) who earlier identified reading lists, indexes, abstract, library catalogues, search engines, OPAC, bibliographies, shelf guides, and web-based information retrieval systems as some of the information retrieval tools available for utilization at the university libraries.

Information retrieval tools skills possessed by undergraduates

The study revealed based on the grand score of the respondents, that the undergraduate students possessed extremely poor skills in using Internet search engines for information retrieval. However, in regards to the use of the library catalogue and abstracts, the students possess average skills in using both. It is worthy of note, that the students possessed poor skills in using indexes but have good skills in using bibliographies as information retrieval tools. The findings support that of Okuonghae and Ogiamien (2016) who identified that undergraduates in Nigeria have little skills in the use of library catalogue and indexes, knowledge of using various information retrieval tools and use of internet search engine. The findings also support those of Obat (2019) who in a self-assessment study of the information retrieval skills of undergraduates identified a number of students that have poor skills in various aspects of information retrieval, most especially Boolean operators (OR, AND, NOT), and Truncation techniques (such as $, *, +). Additionally, Ferdows (2014) identified that, most of the undergraduates don't have enough searching skills to retrieve the needed information from the web. Most importantly, the undergraduates have little understanding about Boolean operators and truncations.

Relationship between information retrieval tools use skills possess by undergraduates and the frequency of use of library information resources

The findings revealed that there is a strongly significant relationship between the information retrieval skills possessed by undergraduates and the frequency of the use of library information resources. Hence, undergraduates who have excellent skills in the use of various information retrieval tools will make use of library information resources more than an undergraduate with extremely poor skills at using information retrieval tools. The finding is in agreement with that of Obat (2019) who in a self-assessment study, observed strong and positive correlations between the information retrieval skills and the use of the electronic Information resources among undergraduates in Maseno University, Kenya.

Factors affecting the acquisition of information retrieval skills by undergraduates

The study revealed that inadequate provision of user education to students, Lack of awareness of information retrieval tools by students, inadequate internet access in the library, inadequate information retrieval tools like OPAC, Indexes, abstracts, improper filing of catalogue cards, inadequate IT infrastructure like computers, telecommunication facilities etc. are the major factors affecting the information retrieval tools skills acquisition of undergraduates in a Nigerian University of Education. The findings above are in line with those of Arshad and Shafique (2014) who identified lack of proper user education, improper filing of the catalogue, lack of awareness as the challenges inhibiting the use of the library retrieval tools among undergraduates. Similarly, Islam (2010) in a study on the use of the library catalogue identified that most of the students are not aware of the existence of the library catalogue for various reasons. This lack of awareness inhibits the acquisition of skills for using such tools.

Strategies to enhance the acquisition of information retrieval skills by undergraduates

The study revealed the need to provide adequate Internet access by the library, Provision of adequate user education to students by the librarians and the availability of information retrieval tools like OPAC, indexes, and abstracts in the library. The development of an awareness

program of information retrieval tools by the library through library orientation, library tour, seminar etc. The proper filing of catalogue cards, and adequate IT infrastructure like computers, telecommunication facilities etc. are the major strategies to enhance the information retrieval skills of undergraduates in this university. These findings correlate with those of Atanda and Ugwulebo (2017) who stated that student's skills in using information retrieval tools can be acquired through user education, library tours, library orientations, seminars, lectures, workshops, library staff, and handbooks.

Conclusion

It was concluded that undergraduates of the university in this study have inadequate skills in the use of various information retrieval tools for retrieving library information resources in the library. Most importantly, the students lack adequate skills in Internet searching through various search strategies. The implication of this is that their information searches are limited to the use of basic keywords in an information search. However, the use of such keys as Boolean operators, Truncations, advance search strategies and alert services increases the rate of information retrieval from the web.

Recommendations

Based on the findings, the following recommendations are concluded:

1. The university library should subscribe to electronic information resources for the students to use
2. Adequate awareness of the availability of electronic information resources should be created by the library through workshop, seminar, library tour, brochures etc.
3. Most importantly, Internet search engine skills and search strategies should be included in the course contents of "Use of Library" so that undergraduates will acquire such skills of using advance search strategies, alert services, Boolean operators, Truncations among others.
4. A promotion campaign should be organized by the library to colleges of the university to encourage the students to use the library frequently.
5. The university library should make available such information retrieval tools like OPAC, Indexes, Abstracts etc. and educate the students on the various skills of using these tools for information retrieval.

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