



Influence of Information Retrieval Skills on Information Resources Utilisation by Undergraduates of Kwara State University, Malete, Nigeria

¹Basirat Raji, ²Ganiyat Olayinka Bello, ³Saheed Alabi Sulaiman

¹Medical Library, Kwara State University, Malete,

^{2&3}Kwara State University Library, Malete

ABSTRACT

The study examined the influence of information retrieval skills on information resources utilisation by undergraduates of Kwara State university, Malete, Nigeria. Quantitative data were collected using a structured questionnaire. The population of the study consists of one hundred 300 level SIWES undergraduate students that served at Kwara State University, Malete, available as at when the research was conducted. A sample size of 100 of the respondents was drawn from Yount (2006) sample size table, participants were selected using a simple random sampling technique. A total of 74 questionnaires were returned. The findings revealed that the majority of students possess a commendable level of awareness and familiarity with basic and intermediate information retrieval tools. Most respondents demonstrated confidence in locating materials on the library shelf and effectively using search methods such as author, title, subject, and keyword searches. These skills are not only well-known but also frequently applied in their academic activities, as shown by the high rates of daily and weekly usage. However, the findings also indicate a significant gap in the knowledge and usage of more advanced retrieval tools, particularly the use of Online Public Access Catalogue (OPAC) and abstract and index searching. While some students use these tools occasionally, the overall usage remains low, suggesting limited exposure or understanding of their importance. The research recommended that the university library should reinforce and expand existing user education programs by integrating practical sessions that further enhance students' use of keyword, author, title, and subject search techniques. Regular workshops and orientation programs should be institutionalized to maintain and build upon this strong foundation.

ARTICLE INFO

Article History

Received: June, 2025

Received in revised form: September, 2025

Accepted: November, 2025

Published online: December, 2025

KEYWORDS

Information retrieval skills, Information retrieval tools, Information resources utilisation, Undergraduates, Kwara State University

INTRODUCTION

Information retrieval can be described as a process that deals with the organization, representation, storage and access to information materials, both books and non-book, or digital items (print and electronic information items) such as textbooks, files and records, documents, web pages, online catalogs, structured and semi-structured records and multimedia objects. Hambarde and Proença (2021) stated that information retrieval (IR) plays a vital role in

human daily life through its implementation in a range of practical applications, including searching the web, question answering systems, personal assistants, chatbots, and digital libraries among others.

The content, representation and organization of information items should render users with easy accessibility to any information of their interest. The primary objective of information retrieval is to locate and retrieve information that is relevant to a user's query and that one of the

Corresponding author: Basirat Raji

✉ rajibash2015@gmail.com

Medical Library, Kwara State University, Malete.

© 2025. Faculty of Technology Education. ATBU Bauchi. All rights reserved



main goals of IR is to identify and retrieve information that is related to a user's query. Hambarde and Proença (2021) affirm that information retrieval involves searching for and retrieving information from various sources such as databases, search engines and digital libraries. Information retrieval tools is described as the mechanism put in place to facilitate timely retrieval and easier access to information.

Onah, et. al (2020) opined that 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. Information retrieval tools are the bibliographic resources available to enhance the identification as well as easy of access and retrieval of information resource, (Onah et. al., 2020). Echem and Udo-Anyanwu (2018) discussed that information retrieval tools are crucial for retrieving information for positive educational outcomes. To obtain and retrieve timely, effective, reliable and accurate information, certain skills are needed, these skills can be mentioned to be information retrieval skills.

Information retrieval skills are the specialized and technical ability and knowledge required in order to explore and use the information retrieval tools to determine the available and accessible resources and to be able to distinguish them from other resources not required. Onah, et. al. (2020) asserted that information retrieval skills are the abilities to seek relevant information of the subject from different sources. Information retrieval skills are necessary for users in order to improve their ability to attend to important parts of the queries and documents for palatable results. It is important to note that the extent of information retrieval skills needed and used by students enhances the amount and quality of their end results.

Information resources are agents, carriers or transporters of information either or both in print and electronic source. Saba, Babalola and Udoudoh (n.d) as cited by Olubiyo & Olubiyo (2023), define information resources as all library materials found in the library to serve the library users for the purpose of satisfying their information needs. Examples of information

resources are books, journals, theses, and dissertations, newspapers, magazines, indexes/abstracts, databases, encyclopedia and dictionaries etc. They can be in various formats, such as prints, non-prints and electronic format.

Information resources utilisation is the act of exploiting varieties of library resources by the library patrons for timely satisfaction of their information needs. According to *Ekpang, P. O., & Idhalama, O. U. (2024)*, information resources utilization is the actual use of library resources by students/users. Nwachukwu, Abdulsalami and Salami (2014) as cited by *Ekpang, P. O., & Idhalama, O. U. (2024)*, it is the extent to which students and other members of the academic community make use of the resources of a library to meet their information needs.

STATEMENT OF THE PROBLEM

Information retrieval skills can be defined as the ability to discern when information is required, where to find the needed information, how to evaluate the reliability of the information, ways to access the information and the use of such information in an ethical style. Many students do not have the good ability of identifying relevant and accurate information, the period such information is needed, even how to effectively use the information to meet their need at different time, (Abayomi, 2019).

Manasse (2017) observed that a reasonable number of students in tertiary institutions did not know of the existence of different information channels as well as the availability of information retrieval tool in libraries and information centers. Information retrieval skills are therefore one of the basic requirements for students to acquire needful, pertinent and required information retrieval skills for their personal assignments, researches, self-development and lifelong learning. Hence, this study stands to investigate the influence of information retrieval skills on information resources utilisation by undergraduates of Kwara State University, Malete, Nigeria



Research Objectives

The main objective of the study is to understand the influence of information retrieval skills on information resources utilisation by undergraduates of Kwara State University, Malete, Nigeria. The specific objectives of this study are to:

1. Examine the level of awareness and familiarity with the retrieval tools and skills
2. find out how often the students use the skills
3. investigate factors that influences the students' information searching and retrieval skills
4. examine extent at which the skills are useful for information search

Research Questions

To achieve the said objectives, the following questions guide the study:

1. What are your levels of awareness and familiarity with the retrieval tools and skills?
2. How often did you use the skills?
3. What factors influence your information searching and retrieval skills?
4. To what extent are the skills useful for your information search?

LITERATURE REVIEW

Information retrieval is the act and process that deals with the automatic acquisition of required documents that can satisfy the information need of the user thereby minimizing the quantity of irrelevant information. Babayi et al. (2023) opined that retrieving information means extraction of content from different sources of information files, these information sources could be Internet, OPAC, e-books and electronic journals, through the use of appropriate search strategies, including Boolean operators in the search engines. Jansen (2016) discussed that information retrieval is concerned with the production, representation, organization, storage, retrieval or evaluation of information along with the tools and techniques associated with the various processes.

Information retrieval can also be referred to as the process of obtaining relevant documents to satisfy a given users' need and this is usually under the shape of a query. Onah, et. al (2020), also asserted that Information retrieval tools include library catalogue, such as (digital) Online Public Access Catalogue (OPAC), (manual) card catalogue, microform or computerized catalogue, indexes, abstracts, bibliographies, directories, internet search engines, and other in-house created information retrieval tools. Babayi et al. (2023) affirm that information retrieval tools enable information seekers to quickly and efficiently search, find or locate and retrieve the resources that they seek.

Issifu and Wumbie (2022), in their study discussed the various importance of information retrieval for diverse group of people, such as researchers, students, customers, suppliers etc. Information retrieval ensures that only relevant information is retrieved, it also ensures that the users are provided with current and the most accurate information, IR also ensures to save both the librarian and the users' time. For that matter, the need for knowledge in the area of information retrieval cannot be over emphasis and with the information retrieval knowledge and skill, the user will be abreast with what others are doing in his field of work.

Information retrieval skills can be described as the ability and competencies of using the various information retrieval tools to determine, identify, locate, access and retrieve relevant and needed information document in a collection. According to Onah et. al (2020), 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. Abayomi et al. (2019), point out that information retrieval skill has drawn interest from researchers, lecturers, librarians and information specialists, conference organizers and educational institutions, because of the necessity and its impact on their professional advancement and personal development. It is therefore noted that information retrieval skills are needed to define whether a document and/or

search results is a valid answer to a user need or not.

Ekema and Mabawonku (2013) stated that in this era of competitive research and knowledge acquisition, university students need their university libraries to locate and retrieve accurate, timely and up to date information. Also, Babayi et al. (2023), discussed that the traditional methods of information retrieval have been catalogues, bibliographies, printed indexes and abstracts but presently, computerized indexes and databases are now the important and newest in the organization of knowledge and are gradually replacing the traditional methods in almost all ways of applications. However, the digitized strategies and techniques of retrieving information are Boolean operators, such as: phrase searching, proximity search, fuzzy search, stemming, truncation searches, wildcard searches, etc. It is known that a lot of information's are available on the internet, this make information retrieval skills needed in order to be able to gather and retrieve the available and needful information.

METHODOLOGY

The study adopted a descriptive survey design. This design was adopted for the study because it was considered the appropriate method in obtaining reliable information for the study. The total population for this study consists of one hundred 300 level SIWES undergraduate students that served at Kwara State University, Malete. Simple random sampling procedure was adopted to select students for the study based on their availability. Meanwhile all (100%) of the respondents were sampled for the study. This was supported by yount (2006) who said a researcher can sample the entire population when the population is not beyond 100. A self-structured questionnaire tagged Questionnaire on Information Retrieval Skill of Undergraduates of Kwara State University was used for data collection. State how the data was analysed.

RESULTS

Demographic Information

Table 1: Demographic Information

Age	Frequency	Percentage
16 – 20	23	31%
21 – 24	47	64%
25 – 29	4	5%
Gender	Frequency	Percentage
Male	31	42%
Female	43	58%

Table 1 above showed that majority of the respondents fall within the ages 21 – 24 which represents 64%, 31% were between the ages 16 – 20, while just 5% were 25 – 29. The study showed a female-dominated sample, with 43 females representing 58% of the participants,

while 31 males constituted 42% of the respondents.

Research Question 1:

What are your levels of awareness and familiarity with the retrieval tools and skills?

Table 2: level of awareness and familiarity with the retrieval tools and skills

Level of awareness and familiarity	SA	%	A	%	D	%
I know how to locate material need from the library shelf	43	58.1	30	40.5	1	1.4

Corresponding author: Basirat Raji

rajibash2015@gmail.com

Medical Library, Kwara State University, Malete.

© 2025. Faculty of Technology Education. ATBU Bauchi. All rights reserved



Level of awareness and familiarity	SA	%	A	%	D	%
I am aware of how to search other library database using keyword search	32	43.2	33	44.6	9	12.2
I can search online database using search engines	34	45.9	33	44.6	6	8.1
I am familiar with locating library resources using keyword search	28	37.8	37	50.0	9	12.2
I can locate library resources using author search	36	48.6	35	47.3	3	4.1
I can be able to locate library resources using title search						
I know how to locate library resources using subject search	31	41.9	38	51.4	5	6.8
I am aware of using abstract and index to retrieve my information needs	12	16.2	31	41.9	31	41.9

Table 2 revealed a generally positive orientation toward academic activities, with research projects commanding the highest level of strong agreement at 56.8%, followed closely by test and exam preparation at 54.1%. This shows that students recognize the critical importance of information literacy skills in their most demanding academic tasks, where the quality of information directly impacts their performance and learning outcomes. The assignment category shows robust engagement as well, with 51.4% strongly agreeing that it influences their information searching skills, while an additional 44.6% agree. This near-universal positive response (95.9% combined agreement) indicates that routine coursework serves as a primary driver for developing these essential skills.

Similarly, research projects demonstrate even stronger consensus, with 97.3% of students expressing agreement, reinforcing the notion that more complex academic endeavors naturally push students to refine their information retrieval capabilities. Interestingly, the data revealed some variation in how different academic activities influence skill development. Presentations and seminar/report writing show more moderate levels of strong agreement (44.6% and 39.2% respectively), though overall agreement remains high. The seminar/report writing category notably shows the highest disagreement rate at 13.5%, suggesting that some students may not perceive the

Table 3: Use of Skills

connection between writing tasks and information searching skills as clearly as they do for research-intensive activities.

The personal development factor presents a fascinating insight, with 51.4% agreeing and 43.2% strongly agreeing that it influences their information skills. This suggests students understand that information literacy extends beyond academic requirements into their broader personal growth and lifelong learning journey. The entertainment factor shows the most diverse response pattern, with 37.8% strongly agreeing, 44.6% agreeing, but a notable 16.2% disagreeing. This indicates that while many students recognize information searching skills in their leisure activities, a significant minority may compartmentalize these skills as purely academic tools.

The "updatedness" factor demonstrates strong positive response rates, with 93.2% combined agreement, reflecting students' awareness that staying current with information requires active searching and retrieval skills. This high agreement rate shows that students appreciate the dynamic nature of information and understand that their skills in finding current, relevant information directly impact their ability to remain informed and academically competitive.

Research Question 2:

How often did you use the skills?

Information Retrieval Skills	Daily (%)	Once a week (%)	Bi-weekly (%)	Monthly (%)	As and when required (%)
Locate books on shelf	49 (66.2%)	12 (16.2%)	1 (1.4%)	1 (1.4%)	11 (14.9%)
Use of database	33 (44.6%)	18 (24.3%)	11 (14.9%)	1 (1.4%)	11 (14.9%)
Use of OPAC	19 (25.7%)	27 (36.5%)	10 (13.5%)	2 (2.7%)	16 (21.6%)
Searching using authors name	33 (44.6%)	23 (31.1%)	6 (8.1%)	2 (2.7%)	10 (13.5%)
Searching using titles	34 (45.9%)	21 (28.4%)	4 (5.4%)	5 (6.8%)	10 (13.5%)
Keywords search	32 (43.2%)	18 (24.3%)	11 (14.9%)	2 (2.7%)	11 (14.9%)
Searching using subjects	37 (50.0%)	20 (27.0%)	5 (6.8%)	3 (4.1%)	9 (12.2%)
Search using index and abstract	24 (32.4%)	24 (32.4%)	9 (12.2%)	5 (6.8%)	12 (16.2%)

Table 3 revealed the most frequently used skill was locating books on the shelf, with 66.2% of respondents reporting daily usage. This high rate of use aligns with the earlier finding that most respondents are confident in locating materials on the shelf. A further 16.2% used this skill once a week, and 14.9% used it as needed, indicating its essential role in daily academic activity. Search methods using author and title names also showed strong daily application. Specifically, 44.6% reported daily use of author search, and 45.9% used title searches daily. These results are consistent with the previous data that showed high levels of familiarity with both methods. Infrequent use (monthly or bi-weekly) of these search methods was minimal, confirming their importance in regular research activities.

Subject search was also a highly used skill, with half of the respondents (50.0%) using it daily and another 27.0% weekly. This supports the notion that respondents not only understand but actively apply subject searching in their research processes. Similarly, keyword search and

database use was employed daily by 43.2% and 44.6% of respondents respectively, showing that these digital retrieval tools are integral to users' information-seeking behavior. On the other hand, the use of OPAC (Online Public Access Catalogue) was relatively lower, with only 25.7% using it daily. A higher percentage (36.5%) used it weekly, and 21.6% accessed it only as needed. This suggests a possible gap in user awareness or comfort with OPAC as a retrieval tool, despite its central role in library search systems. Finally, searching using indexes and abstracts had the least daily usage (32.4%), with another 32.4% using it weekly. Although this indicates moderate use, the figures suggest that more advanced retrieval tools such as abstracts and indexes are not yet fully integrated into users' daily research habits. This reinforces the earlier observation that this area may require targeted training or promotion.

Research Question 3:

What factors influence your information searching and retrieval skills?

Table 4: information searching and retrieval skills?

Factors	SA (%)	A (%)	D (%)
Assignments	38 (51.4%)	33 (44.6%)	3 (4.1%)
Research projects	42 (56.8%)	30 (40.5%)	2 (2.7%)
Presentations	33 (44.6%)	35 (47.3%)	4 (5.4%)
Seminar/Report writing	29 (39.2%)	35 (47.3%)	10 (13.5%)
Preparation for test and exam	40 (54.1%)	29 (39.2%)	4 (5.4%)
Personal development	32 (43.2%)	38 (51.4%)	4 (5.4%)
Entertainment	28 (37.8%)	33 (44.6%)	12 (16.2%)
Up-datedness	39 (45.9%)	35 (47.3%)	5 (6.8%)

Table 4 revealed factors influencing information searching and retrieval skills, research projects emerge as the strongest influence with 56.8% strong agreement, followed closely by test and exam preparation at 54.1%. This pattern suggests that high-stakes academic activities create the most direct recognition of information retrieval skill development among students. Assignments show solid strong agreement at 51.4%, indicating that routine coursework serves as a consistent driver for skill development, though perhaps less intensely than research-focused activities. The moderate strong agreement for presentations (44.6%) and personal development (43.2%) suggests these factors are recognized as influential but may feel less immediate or pressing to students.

Seminar and report writing presents an interesting anomaly with only 39.2% strong agreement and the highest disagreement rate at 13.5%. This indicates that some students may not

fully recognize the information retrieval demands inherent in academic writing tasks, possibly viewing writing as separate from information searching skills. Entertainment shows the second-highest disagreement rate at 16.2% with moderate strong agreement at 37.8%, revealing divided perspectives on whether recreational activities contribute to information skill development. Meanwhile, staying updated shows balanced recognition with 45.9% strong agreement and low disagreement at 6.8%, suggesting broad but moderate awareness of information currency as a skill driver. The data reveals that students most strongly recognize information retrieval skill development through direct academic challenges, particularly research and assessment activities, while showing less recognition of these skills in writing-intensive work and informal contexts.

Research Question 4:

To what extent are the skills useful for your information search?

Table 5: The useful skills for information search

Purpose of use	SA (%)	A (%)	D (%)
For knowledge acquisition or personal development	40 (54.1%)	31 (41.9%)	2 (2.7%)
To consult reference materials for assignments	35 (47.3%)	38 (51.4%)	1 (1.4%)
To consult journals and e-books for assignments	32 (43.2%)	36 (48.6%)	4 (5.4%)
For current information/ To be up-to-date in knowledge	38 (51.4%)	31 (41.9%)	4 (5.4%)
To prepare for examinations	29 (39.2%)	41 (55.4%)	3 (4.1%)
To consult online resources	24 (32.4%)	44 (59.5%)	5 (6.8%)
To socialize with friends and meet new friends	17 (23.0%)	45 (60.8%)	11 (14.9%)
For communication	31 (41.9%)	37 (50.0%)	5 (6.8%)
Searching for research related materials	30 (40.5%)	40 (54.1%)	4 (5.4%)
For entertainment	18 (24.3%)	39 (52.7%)	14 (18.9%)
Getting relevant information in the areas of specialization	35 (47.3%)	35 (47.3%)	3 (4.1%)
Downloading programs and images/files	28 (37.8%)	38 (51.4%)	7 (9.5%)

Corresponding author: Basirat Raji

✉ rajibash2015@gmail.com

Medical Library, Kwara State University, Malete.

© 2025. Faculty of Technology Education. ATBU Bauchi. All rights reserved



Table 5 revealed extent to which the skills are useful for your information search. Looking at the utility of information search skills across different purposes, personal knowledge acquisition emerges as the highest priority with 54.1% strong agreement, indicating that students most strongly value these skills for self-directed learning and intellectual growth. This is followed by staying current with information at 51.4% strong agreement, suggesting students recognize the importance of maintaining up-to-date knowledge in their fields. Academic applications show varied patterns of recognition. Consulting reference materials for assignments demonstrates solid strong agreement at 47.3%, while specialized area information gathering matches this level exactly. However, examination preparation shows notably lower strong agreement at 39.2% despite having the highest regular agreement at 55.4%, suggesting universal recognition but perhaps less intensity of appreciation. Journal and e-book consultation for assignments shows moderate strong agreement at 43.2%.

Research-related material searching generates 40.5% strong agreement, indicating solid recognition of information skills in scholarly work. Communication purposes show similar levels at 41.9% strong agreement, suggesting students value information retrieval for effective interpersonal and academic communication. Technical applications reveal more moderate enthusiasm, with online resource consultation at 32.4% strong agreement and file downloading at 37.8%. These lower levels might indicate that students view these as basic rather than sophisticated applications of their information skills. Social and entertainment contexts show the weakest strong agreement rates. Socializing and meeting friends generates only 23.0% strong agreement with 14.9% disagreement, while entertainment purposes show 24.3% strong agreement but the highest disagreement rate at 18.9%. This pattern suggests students may not fully recognize the information literacy skills they employ in informal digital spaces, viewing these activities as separate from formal information searching capabilities.

DISCUSSION OF FINDINGS

Findings showed that students are generally familiar with basic retrieval methods such as locating books, using keywords, and searching by author or title. However, fewer students demonstrated awareness of advanced tools like abstracts, indexes, and OPAC. Research projects, exams, and assignments were key factors influencing skill development, while entertainment and seminar writing had less impact. Students found retrieval skills useful for academic tasks, personal development, and staying informed. Despite frequent use of basic tools, limited exposure to advanced techniques suggests a need for targeted training. The results highlight the importance of integrating information literacy into the curriculum to enhance students' academic performance and lifelong learning.

CONCLUSION

The research finding revealed that the majority of students possess a commendable level of awareness and familiarity with basic and intermediate information retrieval tools. Most respondents demonstrated confidence in locating materials on the library shelf and effectively using search methods such as author, title, subject, and keyword searches. These skills are not only well-known but also frequently applied in their academic activities, as shown by the high rates of daily and weekly usage. However, the findings also indicate a significant gap in the knowledge and usage of more advanced retrieval tools, particularly the use of Online Public Access Catalogue (OPAC) and abstract and index searching. While some students use these tools occasionally, the overall usage remains low, suggesting limited exposure or understanding of their importance. Furthermore, the strong academic integration of information retrieval skills, particularly through research projects and assignments; the impressive recognition of these skills for personal development and lifelong learning; the professional awareness students demonstrate regarding specialized information needs; and the more complex attitudes toward social and entertainment applications of these skills.



RECOMMENDATIONS

Based on the research findings, the following two recommendations are made:

1. The university library should reinforce and expand existing user education programs by integrating practical sessions that further enhance students' use of keyword, author, title, and subject search techniques. Regular workshops and orientation programs should be institutionalized to maintain and build upon this strong foundation.
2. The library management should introduce targeted training sessions focused specifically on advanced retrieval tools, such as OPAC and abstract/index systems. These sessions should include live demonstrations, hands-on activities, and follow-up evaluations to ensure students are not only aware of these tools but are also confident in applying them effectively in their research.
3. The university should establish a progressive research skills curriculum that begins with guided research projects in first-year courses and culminates in independent research capstone experiences. Faculty development programs should be implemented to train instructors in designing research-intensive assignments that deliberately scaffold information literacy skills development.
4. The university should implement explicit information literacy instruction within writing-intensive courses, ensuring that faculty clearly articulates how research, evaluation, and synthesis of sources are integral components of academic writing. Writing centers should be equipped with specialized staff trained in information literacy who can provide targeted support for students struggling to connect information retrieval skills with their writing assignments.

REFERENCES

Abayomi Imam, Adesanya Olusegun Oyeleye & Adeyemi Remilekun (2019). Enhancing information retrieval skills through library user education in colleges of

education in Southwest. Nigeria International Journal of Information Processing and Communication (IJIPC). 7(2), 40-49. <https://www.researchgate.net/publication/335993025>

Babangida Umar Babayi, Adaora Chigozie Obuezie & Ozioma Gloria Chisom (2023). Use of information retrieval system for library services by undergraduate students in Professor Aghagbo Nwako Library, Nnamdi Azikiwe University Awka, Anambra State. Jewel Journal of Librarianship. 18(1). <https://www.jeweljournals.com>.

Echem, M. & Udo-Anyanwu, A.J. (2018). Information retrieval tools and library physical environment as correlate of library utilization by students in River State University Libraries, Nigeria. Library philosophy and practice. <https://www.digitalcommons.unlied/libphilprac/1772>.

Ekenna, M. M., & Mabawonku, I. (2013). "Information retrieval skills and use of library electronic resources by university undergraduates in Nigeria. Information and Knowledge Management. 3(9), 6-14.

Ekpang, P. O., & Idhalama, O. U. (2024). Utilization of Information Resources and Students' Academic Performance in Tertiary Institutions in Cross River State, Nigeria. _International Journal on Integrated Education. 9(1), 1-12. doi: <https://journals.researchparks.org/index.php/IJIE>

Hambarde, K. & Proença, H. (2021). Information retrieval: Recent advances and beyond. 1(0). <https://doi.org/>

Issah Issifu & Bawa Abdul Majeed Wumbie (2022). Information retrieval in special libraries and its challenges. International Journal of Innovative Research and Advanced Studies (IJIRAS). 9(1),



- <https://www.researchgate.net/publication/372482527>.
- Jansen, J. (2016). Information processing and management; HBKU, Qatar Computing Research Institute: An online clarivate analytics. International Journal of Elsevier. 1-14.
- Manasseh, T. S., Nongo, C. J. & Onah, E. E. (2017). Information search strategy and retrieval tools in libraries. <https://www.researchgate.net/publication/348995618>.
- Olubiyo, P. O., & Olubiyo, L. M. (2023). Information resources preservation in academic libraries: Challenges and strategies. International Journal of Library and Information Science Studies, 9(3), 24-34. doi: <https://doi.org/10.37745/ijliss.15/vol9n3> 2434
- Onah, J. C., Adayi, I. O., Okonkwo, E. A., & Onyebuchi, G. U. (2020). Information retrieval skills as it correlates to undergraduate use of library information resources at a Nigerian university. Library Philosophy and Practice (e-journal). <https://digitalcommons.unl.edu/libphilprac/4586>.
- Saba, A.M., Babalola, G.A. and Udoudoh, S.J. (). Evaluative study of preservation and use of information Resources in university libraries in Niger state, Nigeria. Available at: <http://staff.futminna.edu.ng/LIT/content/journal/PF0816/2.pdf>.