

INFORMATION RETRIEVAL SKILLS AND RESEARCH EFFECTIVENESS AMONG LAW SCHOOL STUDENTS IN NIGERIA

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Abstract

This study investigates the influence of information retrieval skills on research effectiveness among Law School Students in Nigeria. Two research questions and one null hypothesis guided this study. A descriptive survey design was adopted, and the population of the study comprised all 3722 students across the Abuja, Lagos, and Kano campuses of the Nigerian Law School. A sample size of 348 students was selected to participate in the study. Data was collected using a structured questionnaire, administered online through Google Forms, and an 84.78% response rate was achieved. The collected data were analysed using frequency counts, percentages, mean, and standard deviation, while Pearson's Product-Moment Correlation (PPMC) was used to test the relationship between the variables. The findings of this study revealed that Nigerian Law School students possess a moderately high level of information retrieval skills and a high level of research effectiveness. The test of hypothesis showed that information retrieval skills had no significant influence on students' research effectiveness. The study concluded that information retrieval skills alone do not significantly influence research effectiveness among Law School students in Nigeria. Based on this, the study therefore recommends that the Nigerian Law School adopt

more hands-on, practice-based training, including structured workshops and real-life problem-solving tasks.

Keywords: Information Retrieval Skills, Research Effectiveness, Nigerian Law School

Introduction

A fundamental component of research effectiveness is information retrieval skills. Julien, Latham & Gross (2020) compellingly highlighted that research effectiveness relies heavily on Information Literacy Skills. Information Literacy Skills (ILS) are the overarching cognitive framework which includes the ability to recognise information needs, formulate search strategies, navigate complex electronic databases and resources, use appropriate search tools, apply keywords and Boolean operators, manage search results and evaluate the credibility of sources. However, it is the information retrieval skills that represent the specific, technical competencies required for locating the necessary information. These skills are particularly salient and include: formulating precise search strategies and navigating complex electronic databases and proprietary resources such as Law Pavillion, LexisNexis, Nigerian Weekly Law Reports (NWLR) online, Westlaw, etc. It also includes applying advanced search operators like Boolean search, as well as truncation logic and wildcards.

Information retrieval skills refer to the ability and techniques required to effectively and efficiently identify, locate, evaluate, and utilise relevant information from diverse sources. According to Bankole, Sulaiman, and Mahammuod (2024), information retrieval is the process of finding and accessing relevant information in both print and computerised formats, which can be used to support research activities. Sanni and

Tunmibi (2024) opined that the phrase ‘information retrieval skill’ is a product of the digital age as it is closely attached to the use of technology. In the digital age, access to vast pools of information does not automatically translate to effective retrieval. Law students and legal practitioners alike rely on the ability to search, locate, evaluate, and apply authoritative sources, such as statutes, case law, and scholarly opinions, to construct persuasive legal arguments and address complex legal issues. In other words, the ability to effectively gather relevant information from different sources, both print and online, to make informed legal decisions is the basis of the legal profession. In the digital era, access to a vast array of information does not translate to effective retrieval and the invention of various technologies worldwide has changed the way legal research is conducted, with information resources that were previously in print now appearing in electronic format in databases such as NWLR online, Law Pavilion, Westlaw, LexisNexis, and several others.

All these electronic databases have been created to provide vast resources to legal practitioners and law students, but they must be skilfully queried to retrieve relevant and accurate information effectively. Despite the availability of diverse print and digital information resources, law school students still struggle to acquire relevant information required to produce effective and evidence-based legal research. It is on this basis that this study investigated the influence of information retrieval skills on research effectiveness among Law School students in Nigeria.

Research Questions:

1. What are the information retrieval skills possessed by Law School Students in Nigeria?
2. What is the level of research effectiveness among Law School Students in Nigeria?

Hypothesis

Ho₁: There is no significant influence of information retrieval skills on research effectiveness among Law School Students in Nigeria.

Literature Review

The Concept of Information Retrieval Skills

Information retrieval skills are the competencies that allow an information seeker to find relevant and useful information from a large collection of information resources. According to Yemi-Peters, Gwarzo, & Oladokun (2024), Information Retrieval Skills include the ability to formulate search strategies, select appropriate databases, assess authority and relevance, and integrate information ethically into legal writing. Within the field of library and information science, these skills describe the abilities required to recognise an information need, locate relevant information efficiently, evaluate retrieved materials, and use them appropriately to solve a problem or complete a task.

In the context of legal education, information retrieval skills take on a specialised character. Legal information is organised according to strict rules of hierarchy, jurisdiction, and authority. Statutes, case law, law reports, and secondary materials serve different functions, and failure to retrieve the appropriate type of source can undermine the quality of legal research. For students of the Nigerian Law School, effective information retrieval requires not only familiarity with general academic resources but also competence in navigating legal databases and identifying binding and persuasive authorities. Zhang and Yang (2022) emphasise that successful retrieval is achieved when users are able to translate legal problems into precise search queries and refine those queries as new information emerges.

The level of information retrieval skills possessed by students has been examined in several empirical studies. Overall, the literature suggests that students generally operate at a moderate level of competence. Bamigboye, Nweke, Akintola and Oyagbinrin (2022) reported that postgraduate students were able to identify information needs and locate relevant materials but experienced challenges in structuring effective searches and managing retrieved information systematically. These findings indicate that while students may retrieve information successfully, the efficiency and quality of the retrieval process remain limited.

The Concept of Research Effectiveness

Research effectiveness has also been linked to students' ability to evaluate and use information critically. Gestel, Byland and Lienhard (2018) emphasise that effective

research is not defined by the quantity of sources consulted but by the quality of reasoning and the appropriateness of sources selected. In legal research, the use of outdated cases, overruled decisions, or non-authoritative materials can significantly reduce research effectiveness. This highlights the importance of critical evaluation skills in determining research quality.

Instructional practices play a significant role in shaping research effectiveness. Singh and Kumar (2019) report that students who receive structured guidance on research planning and evaluation tend to produce more coherent and analytically sound work. In legal education, structured instruction in legal research methods, combined with practical exercises and feedback, has been shown to improve students' ability to organise arguments and integrate sources effectively (Dunn & Whiteman, 2022). Where such instruction is lacking, students are more likely to rely on memorisation or descriptive summaries of legal materials. Among law students, research effectiveness is also influenced by assessment methods and institutional expectations. When assessments emphasise citation quantity rather than analytical quality, students may prioritise source accumulation over critical engagement. For Nigerian Law School students, whose assessments often require the application of legal principles to practical problems, limited research effectiveness can have serious implications for academic performance and professional readiness.

The level of research effectiveness among students is therefore best described as variable. While some students demonstrate strong analytical skills and effective

integration of sources, many operate at a moderate level characterised by basic organisation and limited critical depth. Muhammed, Ali, and Mohammed (2020) noted that improvements in research effectiveness are often associated with exposure to guided research activities and consistent feedback. This suggests that research effectiveness is a skill that can be developed through targeted intervention rather than an innate ability. Enhancing research effectiveness requires attention to the foundational skills that support quality research output. Information retrieval skills and legal research competency provide the basis for effective research, but they must be complemented by instruction in analysis, synthesis, and argumentation. Without this integration, students may continue to retrieve relevant information without producing research that meets professional and academic standards.

There are indications that research effectiveness among law students is closely tied to their ability to plan research, evaluate sources critically, and apply legal authorities coherently. While Nigerian Law School students demonstrate basic research capability, there remains a need to strengthen higher-order research skills in order to improve the overall quality of legal research outputs. Addressing these challenges is essential for enhancing academic performance and preparing students for the demands of legal practice.

Methodology

The study adopted a descriptive survey research design. The descriptive survey design is considered appropriate for this study due to the large and geographically

dispersed sample of the Nigerian Law School students across the selected campuses. Also, it was deemed appropriate because it allows for crucial correlational analysis to statistically determine the relationship between the variables under study. The population for this study consists of 3,722 students enrolled in the Nigerian Law School Abuja Campus (1550), Lagos Campus (1250) and Kano Campus (922) during the 2025 academic session. The sample size for this study is 348 students. This was determined using the Cochran formula modified for a finite population at a 95% confidence level ($Z = 1.96$) and a 5% margin of error. A structured questionnaire was used to gather data and the collected data were analysed using descriptive and inferential statistics.

Results and Discussion

Research Question One: What Are the Information Retrieval Skills Possessed by Law School Students in Nigeria?

Table 1: Mean Responses on the Information Retrieval Skills Possessed by Law School Students in Nigeria.

S/ N	Item	SA F (%)	A F (%)	D F (%)	SD F (%)	Mea n	ST. D
1	I can identify and select the most appropriate legal sources, whether primary (e.g., statutes, case law) or secondary (e.g., textbooks, journal articles, commentaries)	100 (33.90)	161 (54.58)	14 (4.75)	20 (6.78)	3.16	0.80
2	I am confident in using library catalogues to locate print and electronic legal resources	57 (19.32)	148 (50.17)	71 (24.07)	19 (6.44)	2.82	0.81

3	I can effectively search and navigate online legal databases such as LexisNexis, Law pavilion and NWLRonline	75 (25.42	149 (50.51	54 (18.31	17 (5.76)	2.96	0.82
4	I know how to apply advanced filters (e.g., jurisdiction, date range, court level) when searching databases	52 (17.63	142 (48.14	76 (25.76	25 (8.47)	2.75	0.84
5	I can use Boolean search operators (AND, OR, NOT) to refine my legal research	30 (10.17	95 (32.20	123 (41.69	47 (15.93	2.37	0.87
6	I am comfortable applying truncation and wildcards (e.g., *, \$, ?) to broaden or narrow my searches	30 (10.17	90 (30.51	128 (43.39	47 (15.93	2.35	0.87
7	I can assess the currency and relevance of legal information before using it in research	61 (20.68	140 (47.46	69 (23.39	25 (8.47)	2.80	0.86
8	I can synthesise retrieved materials into coherent legal arguments that address the research question	65 (22.03	153 (51.86	60 (20.34	17 (5.76)	2.90	0.80
IRS Index						2.76	0.63

Source: Field Survey, 2025

Table 1 shows that Law School students in Nigeria are characterized by a moderately high level of information retrieval skills as the total average of the overall mean is equal to 2.76 (ST. D = 0.63). The students expressed a higher level of skill in the areas of identification of appropriate legal sources (Mean = 3.16), searching online legal databases (Mean = 2.96), and synthesising retrieved information into legal arguments (Mean = 2.90). Nevertheless, lower mean scores were obtained in the case of advanced search techniques, especially the usage of Boolean operators (Mean = 2.37) and truncation and wildcards (Mean = 2.35). These findings imply that students are quite

able in the area of retrieval of legal information, but areas such as the use of Boolean search operators for refining legal research, and the application of truncation and wildcards in broadening and narrowing searches need enhancement.

The finding shows that the students exhibited a moderately high level of information retrieval skills such as the ability to identify appropriate legal sources, search online databases and synthesise retrieved information into legal arguments. However, they displayed deficiency in the use of Boolean operators, truncation, and wildcard techniques to narrow database search. This study aligns with the study of Sanni & Tunmibi (2024), who similarly found that while legal practitioners exhibited a moderate level of information retrieval skills there were deficiencies of skills in particular areas like information chaining and information organization.

Research Question Two: What Are the Information Retrieval Skills Possessed by Law School Students in Nigeria?

Table 2: Mean Responses on the Level of Research Effectiveness Among n Law School Students in Nigeria.

S/ N	Item	Correct n (%)	Wrong n (%)	Mea n	SD
1	A client approaches you, claiming her employer terminated her employment without giving notice. She wants to know whether she has a valid legal claim under Nigerian labour law. What is the primary legal issue to investigate in this scenario?	256 (87.07)	38 (12.93)	0.87	0.34
2	You are asked to advise on whether a contract signed electronically (via email) is enforceable in Nigeria. Which of the following	277 (93.90)	18 (6.10)	0.94	0.24

	is the most appropriate step in your legal research?				
3	You are preparing a legal opinion on <i>cybercrime liability</i> under Nigerian law. You need to determine how <i>Nigerian courts</i> have interpreted the <i>Cybercrimes (Prohibition, Prevention, etc.) Act 2015</i> . Which of the following search strategies would be most effective for retrieving <i>relevant case law</i> from an online legal database (e.g., Law Pavilion, Westlaw, or LexisNexis)?	234 (79.32)	61 (20.68)	0.79	0.4 1
4	While researching a contractual dispute, you want to find judicial interpretations of certain clauses. Which resource would be most effective?	222 (75.25)	73 (24.75)	0.75	0.4 3
5	You are preparing a legal opinion on <i>intellectual property rights in digital media</i> . You decide to use an AI-powered research assistant to speed up your work. The AI tool generates a detailed legal argument, including case law references. When you check the citations, you notice that some of the cases do not actually exist in the Nigerian Law Reports. What is the most appropriate action to take in this situation?	258 (87.46)	37 (12.54)	0.87	0.3 3
6	You find two conflicting judgments on the same legal issue. How should you proceed?	257 (87.12)	38 (12.88)	0.87	0.3 4
7	You are writing a legal research paper on <i>the doctrine of precedent in Nigerian jurisprudence</i> . You referred to a case decided by the Supreme Court in 2018 titled <i>A.G. Lagos State v. A.G. Federation</i> . You want to cite it correctly in your reference list and in-text. Which of the following represents the most appropriate legal citation format for this Nigerian case according to standard legal referencing conventions (e.g., <i>Nigerian Weekly Law Reports – NWLR</i>)?	244 (82.71)	51 (17.29)	0.83	0.3 8
8	After completing your research on corporate governance reforms, you are required to present your findings to your supervising partner. Which of the following best demonstrates effective communication of findings?	268 (90.85)	27 (9.15)	0.91	0.2 9

RE Score	6.83	1.66
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Source: Field Survey, 2025

Table 2 indicates that Law School students in Nigeria have a high level of research effectiveness, as the percentage of correct responses across all items ranged from 75.25% to 93.90%. The highest score (93.90%) was recorded on the item concerning the enforceability of electronically signed contracts in Nigeria, while 90.85% correctly identified the most effective way to communicate research findings to a supervising partner. High performance was also observed in identifying legal issues, handling conflicting judgments, verifying AI-generated citations and applying appropriate research strategies. Although there was a slight decrease in performance in selecting useful resources for judicial interpretations and retrieved case law, the correct response rates in these areas were in excess of 75 percent, indication a satisfactory performance. The overall mean score for Research Effectiveness = 6.83 (SD = 1.66) proves that students of the Nigerian Law School have a high level of research effectiveness, which allows them to perform appropriate, ethical, and practical legal research.

Research effectiveness among the students of Nigerian Law School is of high level as reflected in their strong performance on the objective research effectiveness items. This indicates that students are generally able to apply legal research knowledge accurately in structured, practice-oriented scenarios. This finding is supported by evidence from Project Information Literacy (Head, 2020), which reported that students

in professional and postgraduate programmes often perform well on structured, scenario-based research tasks when expectations are clearly defined and aligned with assessment formats. Head explains that such effectiveness is often reinforced by repeated exposure to applied problem-solving tasks and guided instruction, rather than independent exploration alone. This aligns with the Nigerian Law School context, where students undergo intensive, professionally oriented training designed to prepare them for practical legal work.

Hypothesis One: Information Retrieval Skills Have No Significant Influence on Research Effectiveness Among Law School Students in Nigerian.

Table 3: Influence of Information Retrieval Skills on Research Effectiveness Among Law School Students in Nigeria.

	Estimate	Std. Error	P-value
Intercept	6.5166	0.4361	0.000
Information retrieval skills	0.1148	0.1539	0.456

Source: Field Survey, 2025

Table 3 indicates that information retrieval skills have a very weak positive relationship with research effectiveness among students of the Nigerian Law School. This is shown by the Pearson correlation coefficient ($r = 0.044$), which implies information retrieval skills has a very little influence on research effectiveness. Additionally, the R^2 value of 0.002 indicates that information retrieval skills explain 0.2% of the variation in research effectiveness of Nigerian Law School students. It

suggests that other factors beyond information retrieval skills may play a more substantial role in determining students' research effectiveness.

From the results of the research, it was found that the association between information retrieval skills and research effectiveness among Law School students in Nigeria is very low. The regression analysis reveals that retrieval skills of research did not significantly predict research effectiveness, as the beta coefficient is low and the p-value is greater than the significance level. The lack of meaningful association in this study implies that information retrieval skill in itself is not sufficient in ensuring effective legal research results, especially in a professional legal training setting like the Nigerian Law School.

Recommendation

1. Greater attention should be given to advanced database search techniques such as Boolean operators, truncation, and refined search strategies, as students showed weaker competence in these areas.
2. Law libraries, in collaboration with legal educators, should provide regular training and support on the effective use of legal databases and emerging research tools.
3. Practical-based research assessments should be employed to further reinforce and monitor the high level of Nigerian Law School students' overall research effectiveness.

4. Law curriculum planners and instructors should strengthen instructional strategies such as mentorship programmes, time management guidance, and access to research support services to address non-skill related factors that may strongly influence students' research effectiveness

Conclusion

The study concludes that information retrieval skills alone do not significantly influence research effectiveness among Law School students in Nigeria. While students may possess basic abilities in locating and accessing information resources, these skills do not necessarily translate into improved research performance, particularly when research effectiveness is assessed through objective measures.

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