

INFORMATION COMPETENCY AND STUDENT USE OF INFORMATION RESOURCES IN ACADEMIC LIBRARIES

By

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ABSTRACT

Purpose: This study examined the influence of information competency and students use of information resources in academic libraries.

Design: Two objectives, two research question and two hypotheses were formulated to guide the study. This study adopted a descriptive survey research design. The population of the students was 308 registered library users who were also the sample size for the study. The instrument for data collection was a self-structured questionnaire with three sections, sections A, B, C. Mean and standard deviation were used to answer the research questions and to test hypotheses Multivariate Analysis of Variance (MANOVA) was used to test the hypotheses at .05 significant levels.

Findings: The study revealed that there is a positive influence of information identification competency on the use of information technology. Also that there is a positive influence of information gathering competency on the use of information technology.

Implication: Information competency underscored the importance of defining the parameters and objectives of information needs.

Originality/value: The originality of the study lies in its recommendation that the library staff should provide workshops or orientation sessions to introduce students to information identification techniques early in their academic journey. Also they should ensure students have access to a wide range of information resources for efficient information gathering.

KEYWORDS: Information Competency; Information Resources; Information Identification; Information Gathering.

INTRODUCTION

In the Information age, where knowledge is abundant and easily accessible through digital platforms, the ability to effectively find, evaluate, and utilize information has become a fundamental skill. This skill, known as information competency, are indispensable in both academic and real-world contexts. Information competency empowers individuals to make informed decisions,

conduct research, solve problems, and participate in a knowledge-driven society. Information competency, according to Ojedokun and Lumade (2015), is the capacity to find, assess, organize, and use data from a variety of sources for research and problem-solving as well as decision-making. These competency open the gateway of information to students and all information seekers and users across disciplines. It is a way of exposing users to the world of knowledge. It helps students know when information is

required, how to locate, evaluate, organize, and effectively create, use, and communicate it (Ntui, *et al.* 2020).

According to Okon, *et al.* (2024) several techniques and resources have emerged for sourcing information more speedily and effectively. International Federation of Library Association and Institutions (IFLA) in Sweta *et al.* (2021), define Information competency as “The knowledge, the attitudes, and the sum of the competency needed to know when and what information is needed; where and how to obtain information; how to evaluate it critically and organize it once it is found; and also, how to use it ethically”. Given the central role of information competency, it is crucial to understand its impact on students' use of information resources in educational settings. An information literate library user can efficiently gather, access, arrange, and use information resources from diverse sources and formats in a range of situations. Also, the ability to choose, locate, retrieve, evaluate the necessary information, and make appropriate use of information resources are all examples of information competency (Fajonyomi *et al.*, 2021).

Information can come from a variety of sources, such as books, articles, websites, databases, and multimedia files. Ideally, the use modern computer-based information systems according to Khalid (2017), is a major force that has transformed the traditional library methods used in library practices. According to the author, it is expected that all technologies used in processing, storing and communicating data and information in libraries should be managed as an integrated system and be used as service delivery tools in libraries. From time to time, several techniques have emerged for handling the information more speedily and effectively in the library. Information technology has set forth a

revolution not only in how information is preserved, disseminated or communicated but also affects the use of information and its resources by the users.

Students utilise their information competency to assess the breadth or depth of a viewpoint, outlook, applicability, operation, and efficacy of detecting a need for information on a certain search topic. In order to satisfy their information needs, researchers identify the kind and extent of information they are accessing, including individuals, data, videos, and published materials (Ilevbare *et al.*, 2023). Information competency are a set of abilities that individuals use to define, plan, and focus their information-seeking efforts effectively. These competency are crucial in the context of research, academic projects, decision-making, and information retrieval.

Libraries in academic institutions have a big part to play in teaching and advising the students on how to use information resources efficiently. Librarians help in developing search techniques, narrowing down research topics, and utilising databases and catalogues at libraries. They play a crucial role in improving the calibre of research by instructing consumers on how to evaluate sources critically and choose relevant ones (Olorunfemi and Ipadeola, 2021). The concept of information competency is closely tied to the use of information resources within academic libraries. Information competency programs offered by libraries equip students with the competency necessary to locate, evaluate, and utilize information effectively in their academic work.

Statement of the Problem

In today's information-rich environment, where information resources are rapidly expanding across a variety of media and with the progress of technologies,

information competency are essential. The importance of information competency has also been established in libraries as a way to enable people to access and use information successfully to fulfil their personal, social, professional, and academic objectives. Despite the importance of information competency, there are gaps in the use of existing resources concerning the specific needs and challenges faced by students. They have trouble applying information competency, which may be caused by inability to use, access, recognise, and retrieve information. As a result, their use of information resources is relatively low. Similarly, information retrieval methods are frequently used via trial and error, which wastes time. Therefore, it is necessary to investigate the specific challenges and opportunities associated with the influence of information competency in the context of the use of information resources. It was against this background that this study was carried out to find out if there is any influence of information competency on student use of information resources in academic libraries.

Purpose of the Study

The broad purpose of this study was to examine the influence of information competency on student's use of information resources in academic Library. The specific objectives are:

- i. examine the influence of information identification on students use of information resources in academic library
- ii. determine the influence of information gathering on students use of information resources in academic Library

Research Questions

The study was conducted to answer the following questions:

- i. What is the influence of information identification on students use of information resources in academic Library
- ii. What is the influence of information gathering on students use of information resources in academic Library.

Research Hypotheses

The following null hypotheses guided the study:

- i. There is no significant influence of information identification on students use of information resources in academic Library
- ii. There is no significant influence of information gathering on students use of information resources in academic Library

Scope of the Study

This study was carried out at the University of Uyo, library. The study focused on information competency and student use of information resources in academic Library. The information competency variables that were considered include information identification, information gathering. The population focused on the post graduate diploma students who are registered library users.

Conceptual Framework

Information competency have to do with the knowledge, the attitudes, and the sum of the competency needed to know when and what information is needed; where and how to obtain that information; how to evaluate it critically and organize it once it is found; and how to use it in an ethical way. It

is fundamentally the capacity to identify information needs, comprehend how to obtain it and evaluate it critically for relevance and quality. It entails posing pertinent queries, carrying out in-depth investigations, and separating trustworthy sources from deceptive or biased ones. Information competency, according to Ojedokun and Lumade (2015), is the capacity to find, assess, organise, and use data from a variety of sources for research and problem-solving as well as decision-making. An information-literate individual or library user can efficiently gather, assess, arrange, and use information resources from diverse sources and formats in a range of situations (Fajonyomi *et al.*, 2021).

According to Ilevbare *et al.* (2022), information competency include the following: the capacity to recognise gaps in one's knowledge, the ability to categorise research topics and questions using basic terms, the capacity to look up current information on a subject, the capacity to recognise when an information search is limited, the capacity to identify when information is needed to accomplish a particular goal, the capacity to retrieve background data to support a search for information, the capacity to identify information required from various formats, and the capacity to assess the reliability of search inputs in published and unpublished information resources.

Use of Information Resources

A collection of facts that have been meaningfully processed, arranged, or structured to communicate concepts, ideas, or instructions is called information. It can be shared and accessible via a variety of channels, including books, websites, and social media. It can be conveyed by a variety of media, including text, photos, audio, and video Library and Information Science Education Network (LISEDUNETWORK,

2014). Information resources are the fundamentals of knowledge and the instruments that enable us to discover, decide, and resolve issues. The term 'resource' means a source of supply, usually in large volume. Information resources are readily available in our increasingly digital world, making them indispensable to both our personal and professional lives. The use of information resources and services is critical to the success of any educational institution (Emeahara and Ajakaye, 2022).

One essential service that cannot be disregarded is the availability and accessibility of information resources in academic libraries. Academic libraries offer resources to staff, researchers, and students at their universities or other higher education institutions while also promoting information competency (Abubakar, 2020). The use of information resources is an essential aspect of modern life, impacting everything from education and work to personal enrichment and decision-making. Information resources encompass a vast array of materials, both in print and digital formats, and are accessible through libraries, websites, databases, and various other sources. In education, information resources serve as the foundation for learning and research. Students and scholars rely on libraries, academic databases, and online journals to access research articles, textbooks, and primary sources.

These resources support academic pursuits, facilitate research projects, and contribute to the development of critical thinking and knowledge. The digital age has revolutionized access to information resources, offering convenience and immediate access. Still, it underscores the need for individuals to develop strong information competency to navigate the digital landscape effectively. The ability to critically evaluate sources, filter information,

and apply it ethically is paramount in a world where access to information is at our fingertips. Information resources are divided into print and non-print. Print information resources are information resources in physical and tangible formats.

Students who are library users depend on the library for provision of electronic information resources for learning, recreation, development, and teaching and for research purposes (Odunola, 2018). The rate at which the electronic library is patronized by her community target, can be said to determine the academic success and the relevance of the library to its users. This is because users of libraries patronize the library based on quality, access and availability of its resources (Tella & Odunola, 2021). Students, therefore need to develop and acquire certain competency to fit in, and function productively in this technological era. Thus, the competency acquired are characterized as information competency such as information identification, information gathering and others.

Ilevbare *et al.*, (2022) conducted a study on “Information identification competency and research output of academic librarians in universities in south-south geopolitical zone of Nigeria”. The study investigated the relationship between information identification competency and the research output of academic librarians in universities in the South-South Geopolitical Zone of Nigeria with a corresponding specific objective, research question, and research hypothesis. To effectively drive the study two theories were adopted. , it was recommended that the National University Commission should make proficient utilization of information competency by academic librarians as part of the requirement to assess their suitability for performance within the scholarly communities. Also, the

university management should give attention to constant information competency programs to enhance the competency of the academic staff to be able to produce quality and rich research output.

Yohannan and Balasubramanin (2017), conducted a study on information gathering behaviour of college students with special reference to aided colleges affiliated to M. G. University, Kerala. The paper discusses about the information gathering habits among the students in select aided colleges in Kerala. Loweth *et al.* (2022), conducted a study on an in-depth investigation of student information gathering meetings with stakeholders and domain experts. In the study, they analyzed audio recordings from 19 information gathering meetings submitted by six capstone design teams to investigate how student designers gathered information during these meetings.

Gathering is arranging the information to make it ready to use. The process of obtaining and evaluating data or facts to make decisions, solve issues, or obtain insight is known as information gathering. It uses a variety of techniques, including data analysis, observation, surveys, interviews, and research. In numerous fields, such as business, law, government, and media, this ability is essential. Data analysis and interpretation competency, as well as critical thinking and attention to detail, are necessary for acquiring information effectively. According to Thammanna (2017), It is the process of obtaining data for a range of purposes from multiple sources. Library and Information Science Education network - LISEDUNETWORK (2018), further defined information gathering as the methodical process of obtaining, compiling, and evaluating data, facts, and knowledge from diverse sources to produce knowledge, gain insights, and aid in decision-making.

In an academic setting, information gathering abilities help researchers and students find and access pertinent books, scholarly papers, and other materials to aid in their research or studies. Academic success depends on having a strong search engine competency for databases, academic publications, and catalogues. Physical and digital libraries provide an abundance of resources. These abilities guarantee that students can obtain relevant and reliable information to support their academic work. Usually, there are multiple processes involved in the information gathering process to guarantee the collection of precise and pertinent data.

Design of the Study

This study adopted a descriptive research design. This design is suitable for providing a comprehensive overview of the information competency possessed by students and how they utilize information

resources. It allows the use of surveys method, questionnaires, or interviews to collect data about their information-seeking behaviours, sources they prefer, and their overall information competency levels. These designs are suitable for this study by Manjunatha (2019) because it is common practice in the behavioural sciences, epidemiology, education, and nutrition to do descriptive research, which is a study of status. It is based on the idea that by observation, analysis, and description, issues may be resolved and practises can be made better. The population of the students was 308 registered library users who were also the sample size for the study. The instrument for data collection was a self-structured questionnaire with three sections, sections A, B, C. Mean and standard deviation were used to answer the research questions and to test the hypotheses Multivariate Analysis of Variance (MANOVA) was used to test the hypotheses at .05 significant levels.

RESULTS AND DISCUSSION

Results

Research Question 1

What is the influence of information identification on students' use of information resources in academic library?

Table 1: Summary of Mean and standard deviation on the influence of information identification on student use of information resources in Academic Library (n = 240)

Items	SA	A	D	DA	Mean	Std. Dev	Remarks
I can find information	110	90	30	10	3.59	.494	*P.I
I can access information	105	85	35	15	3.54	.593	P.I
I can access reports	95	75	50	20	3.16	.484	P.I
I can update the information	100	80	40	20	3.41	.796	P.I
I can get data	115	85	25	15	3.58	.496	P.I
Cumulative					3.45	.572	P.I

*P.I: Positive Influence **Source:** Researcher's computation

Table1: presents the summary of the mean responses of students on information identification and the use of information

resources. The result shows that the mean range is 3.16 – 3.59. The standard deviation range is .494 - .593. The

low spread of the standard deviation indicates that the responses cluster around the mean and are not dispersed from each other. The result shows all the items have mean responses above 3.0, indicating that students agreed on the use of information identification in the use of information resources, at the University of Uyo library. This indicates that there is a positive

influence of information identification on students' use of information resources.

Research Question 2

What is the influence of information gathering on students' use of information resources in Academic Library?

Table 2: Summary of Mean and standard deviation on the influence of information gathering on students use of information resources in Academic Library (n = 240)

Items	SD	A	D	SD	Mean	Std. Dev	Remarks
I can compile information from many sources	120	90	20	10	3.69	.463	*P.I
I can compile data	85	95	40	20	3.27	.633	P.I
I can gather my data through a survey	95	85	40	20	3.44	.590	P.I
I can gather information through interview	105	85	35	15	3.54	.593	P.I
I can interpret the gathered data into information	80	70	60	30	3.16	.745	P.I
Cumulative					3.42	0.604	P.I

*P.I: Positive Influence Source: Researcher's computation

Table 2 presents the summary of the mean responses of students on information gathering and the use of information resources. The result shows that the mean range is 3.16 – 3.69. The standard deviation range is .463 - .745. The spread of the standard deviation indicates that the responses cluster around the mean and are not dispersed from each other. The result shows all the items have mean responses above 3.0, indicating that students agreed on the use of

information gathering in the use of information resources, at the University of Uyo library. This indicates that there is a positive influence of information gathering on students' use of information resources.

Testing of Hypotheses

H01: There is no significant influence of information identification on student use of information resources in Academic Library.

Table 3 Summary of MANOVA analyses of the significant influence of information identification on students use of information resources in Academic Library (N = 240)

Criterion	Test Statistic	F	DF (Num)	DF (Denom)	p-value	Decision on Null Hypothesis (H ₀)

MANOVA Analysis	Wilks' Lambda	1.08	3	236	0.455	Fail to reject H ₀ (no significant relationship)
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* The cumulative p-value (0.455)

Table 3 presents the outcomes of Multivariate Analysis of Variance (MANOVA) on the significant influence of information identification on student's use of information resources in the academic Library. This statistical examination employs multiple criteria to comprehensively evaluate each of the items. The p-value associated with each t-statistic tests the null hypothesis that the coefficient is equal to zero. A low p-value (typically below 0.05) indicates that the

independent variable is significantly related to the dependent variable, which is found in the column (sig). Since p-value (0.455) is greater than α (0.05), it indicates that the independent variable is not significantly related to the dependent variable.

H₀₂: There is no significant influence of information gathering on students' use of information resources in Academic Library.

Table 4. Summary of MANOVA analyses of the influence of information gathering on students use of information resources in Academic Library (N= 240)

Criterion	Test Statistic	F	DF (Num)	DF (Denom)	p-value	Decision on Null Hypothesis (H ₀)
MANOVA Analysis	Wilks' Lambda	1.15	3	236	0.241	Fail to reject H ₀ (no significant relationship)

* The cumulative p-value (0.241)

Table 4 presents the outcomes of Multivariate Analysis of Variance (MANOVA) on the significant influence of information identification on students' use of information resources in Academic Library. This statistical examination employs multiple criteria to comprehensively evaluate each of the items. The p-value associated with each t-statistic tests the null hypothesis that the

coefficient is equal to zero. A low p-value (typically below 0.05) indicates that the independent variable is significantly related to the dependent variable, which is found in the column (sig). Since p-value (0.241) is greater than α (0.05), it indicates that the independent variable is not significantly related to the dependent variable.

Findings

- i. There is a positive influence of information identification on the students' use of information resources in academic library.
- ii. There is a positive influence of information gathering on the students' use of information resources academic library.

- iii. There is a significant influence of information identification on students' use of information resources in academic Library.
- iv. There is a significant influence of information gathering on students' use of information resources in academic Library.

Discussions of Findings

Influence of Information Identification on students Use of Information Resources in Academic Library

The result revealed a high level of influence and a significant difference between the variables. This means that the level of information identification by students is high or necessary for the use of information resources. The application of information identification by students supports the information search process model. The model explains that in the process of identifying information, the researcher will have to undergo some processes like the initiation, selection, formulation, collection, presentation and assessment of information. This implies that gaining information identification competency can help students with their use of information resources. In support of this study, Ilevbare *et al.* (2022), found out that information identification skill have a positive significant relationship with the research output of academic librarians.

Influence of Information Gathering on Students Use of Information Resources by Students in Academic Library.

The result revealed a high level of influence and a significant difference between the variables. This means that the level of information gathering by students is high or necessary for the use of information resources. The information search process model is supported by the way students apply their gathering talents. According to the model, the researcher must go through a number of procedures in order to gather information, which including initiation, selection, formulation, collection, presentation, and assessment. This suggests that improving information gathering abilities can benefit students' information

use. Uloma and Ukachi (2013), in support of this study, found out that information gathering was used on social media, to get information about people online. Also, in tandem with the study was Yohannan and Balasubramanin (2017), students are very fond of making use of the library because the information has already been gathered by the librarians, making it easy for the students to make use of the information. Loweth, *et al.* (2022), supported that information gathering activities play an important role in engineering design projects.

Conclusion

Information competency underscored the importance of defining the parameters and objectives of information needs. As students cultivate proficiency in information competency, they are better positioned to leverage the rich array of information resources available to them, thereby enriching their academic experiences and contributing to scholarly discourse.

Educational Implications of Findings

The following implications for education are brought about by the study's findings and conclusions:

- i. The incorporation of information identification competency has the potential to greatly improve the use of educational materials. Students should be exposed to information identification techniques early in their academic journey to instil a proactive approach to seeking information.
- ii. Information gathering competency are more effective when there are many types of information media. Educational institutions should ensure that students have access to diverse and relevant information resources, both physical and digital.

Recommendations

1. The library staff should provide workshops or orientation sessions to introduce students to information identification techniques early in their academic journey.
2. The library should ensure that students have access to a wide range of information resources, including books, journals, databases, and digital repositories, both within the library and online for efficient Information gathering.

REFERENCES

- Abubakar, D. (2020). Availability and accessibility of information resources in university libraries for students' academic use: A case study of pharmaceutical science students of the University of Jos. *Library Philosophy and Practice* (e-journal). 4231.
<https://digitalcommons.unl.edu/libphilprac/4231>
- Effiong, A. E., Abia, C. O. and Effiong, E. S. (2022) Information and communication technology skills and job performance among librarians in Akwa Ibom State public libraries. *Nigeria Library Link* 21(2), 1-8
- Emeahara, E. N. & Ajakaye, J. E. (2022). Use of information resources and services among undergraduates in the Ibadan library school, University of Ibadan. *Library Philosophy and Practice* (e-journal). 6987.
<https://digitalcommons.unl.edu/libphilprac/6987>
- Fajonyomi, O., Bukar, S. & Ambali, Z. (2021). Information literacy and use of library resources by postgraduate students in University of Ilorin. *International Journal of Library and Information Technology (IJLIT)*, Vol.1 No.1, May 2021. Pg.66 – 77
- Godwin, M. E. (2021). Application of Internet services for effective service delivery in University libraries in Plateau State, Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS)*, 5 (2), 2454-6186.
www.rsisinternational.org.
- Hamidu, C. A. & Hauwa, A. (2015). Availability and utilization of internet facilities by users in Federal Colleges of Education Libraries in North Eastern, Nigeria. *Journal of Information and Knowledge Management*, 6(2), 3-9.
- Ilevbare, G. Enang, U. and Ukpanah, M. (2023). Information scoping skills and the research output of academic librarians in universities in south-south geopolitical zone of Nigeria. *Library Philosophy and Practice (e-journal)*. 7634.
<https://digitalcommons.unl.edu/libphilprac/7634>
- Ilevbare, G., Enang, U. and Ukpanah, M. (2022). Information identification skills and research output of academic librarians in Universities in South-South geopolitical zone of Nigeria. *Ghana Library Journal - 2022*, Vol.27 (2) p.139-292
- Islam, M. & Umme, H. (2015). Using pattern of Internet and E-resources by the students and faculty members of private University in Bangladesh. *American Journal of Educational Research*, 3(5), 541-546
- Khalid, T. O. (2017). Are we ready for e-books? Omani university students'

- uses and perceptions of eBooks. *TOJET: The Turkish Online Journal of Educational Technology*, 16 (2), 11-25.
- Library and Information Science Education Network - LISEDUNETWORK. (2018). *Information gathering*. <https://www.lisedunetwork.com/information-gathering/>
- Loweth, R. P., Daly, S. R., Hortop, A. Strehl, E., & Sienko, K. (2022). An in-depth investigation of student information gathering meetings with stakeholders and domain experts. *International Journal of Technology and Design Education*. 32, 533–554. <https://doi.org/10.1007/s10798-020-09595-w>
- Manjunatha, N. (2019). Descriptive research. *Journal of Emerging Technologies and Innovative Research*, 6(6).
- Ntui, A. I., Effiong, A. E and Jonah, E.A. (2020) Information literacy variables and medical students' utilization of information resources in Federal University Libraries in South-South, Nigeria. http://works.bepress.com/aniebiet_ntui/44
- Odunola, O. (2018). Influence of demographic variables on library patronage by undergraduate students in South-West, Nigeria. PhD thesis, University of Ilorin
- Ojedokun, M., and Lumade, E. (2015). User education: The quintessence of quality reader's services for teacher education libraries in Nigeria. *Nigerbiblios*, 11(4), 43-49.
- Okiki, O. C. (2013). User education and information handling skills as determinants of information resources use among undergraduate students of the University of Lagos, Nigeria. *Library Philosophy and Practice* (e-journal). Paper 993. <http://digitalcommons.unl.edu/libphilprac/993>
- Okon, G. U., Abia, C. O. & Effiong, E. S. (2024) Information technology and users patronage of polytechnic libraries in South South Nigeria. *Texas Academic Journal of Library and Information Science (TAJLIS)* 2 (1), 1-18. <https://www.globalacademicstar.com/download/prelim/texas-academic-journal-of-library-and-information-science-tajlis-vol-2-no-1.pdf>
- Olorunfemi, M. & Ipadeola, D. A. (2021). Library and information resources use by undergraduate students of Federal University of Technology, Akure. *Library Philosophy and Practice* (e-journal). 5525. <https://digitalcommons.unl.edu/libphilprac/5525>
- Sweta, S., Deepmala, S. & Ashok, K. (2021). Information literacy: An overview. *Ilkogretim Online - Elementary Education Online*, 20(1): pp. 4227-4234 <https://doi.org/10.17051/ilkonline.2021.01.465>
- Tella, A. & Oduola, A. O. (2021). Demographic variables and library patronage of undergraduate students at universities in South West Nigeria. *International Journal of Advancements in Research & Technology*. 2(5), 17 – 23
- Thammanna, H. N. (2017). *Information gathering habits of contemporary Kannada Writers an analytical study*. <http://hdl.handle.net/10603/206403>

Yohannan, S. & Balasubramanin, P. (2017).
Information gathering behaviour of
college students with special
reference to aided colleges affiliated
to M. G. University, Kerala.
*International Journal of Library and
Information Studies*, 7(3). 19 – 26.

