Assessment of Knowledge of Evaluation of Information Sources and Utilisation of Information Resources by Undergraduate Students in Federal Universities in South-South, Nigeria

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Abstract
The study assessed knowledge of evaluation of information source and utilization of information sources by undergraduate students in federal universities in South-South, Nigeria. The population of the study comprised 9507 registered library users from three selected universities in the study area in the 2018/2019 academic session. 952 users were randomly sampled with the research instrument. The research design adopted for the study was ex-post facto design. A questionnaire was used for data collection. Data collected was analysed using mean, standard deviation, while simple regression analysis was used to test the hypothesis. The regression model produced a Regression Coefficient of R = 423, which indicated a strong positive relationship between knowledge of evaluation of information sources and exploitation of information resources. The findings further revealed that knowledge of evaluation of information sources is relatively low among the undergraduate students. The study recommended that management of universities should put in place appropriate policy measures and strategies to ensure greater involvement of professionals librarians in the teaching of literacy skills in their institutions, as well ensuring greater collaboration between the faculty and the librarians for the purpose of effective teaching of literacy skills in the Nigerian universities.
Keywords: Assessment, Knowledge evaluation, Information sources, Information utilization

1.1 Introduction

Academic libraries acquire and stock all forms of materials in print and electronic formats required for study, learning and research. They also have the responsibility of offering information literacy programmes to provide access to the resources in their collection, and also equip the users with relevant knowledge and skills to evaluate information sources consulted and use them in an ethical manner in order to promote scholarship and learning.

Nna-Etuk, Echu and Umoh (2021) stressed that there were changes in the quality and variety of information resources available to users, as well as great changes in technology and ways information is stored and accessed. As a result of rapid developments in Information and Communication Technologies (ICTs), several thousands of published information, both in print and digital forms, are available in the environment for human consumption. It has become increasingly difficult to keep track of available

published works and to access them. Thus, the knowledge of evaluation of information sources is an essential pre-requisite skills for every users, particularly students in higher institutions.

Apparently, information literacy skills are increasingly becoming important in the contemporary environment of rapid technological evolution due to the proliferation of information resources. Anto and Filson (2014) stated that individuals face diverse and abundant information changes in their personal and academic lives. Uzoegbu (2014) observed that emerging information users face new challenges and new tasks among which are:

i. ability to determine information and ways to access them;

ii. understand the several media for knowledge sharing; and

iii. have knowledge of information evaluation, as well as utilize them in an ethical manner.

Ojedokun (2007) explained that, the ability to access, evaluate and use information is a pre-requisite skill for lifelong learning, noting that, it is a holistic and interactive learning process. The concept of information literacy presupposes that an individual recognises the need for information and knows how to find, evaluate, use and, subsequently, communicate information effectively to solve a particular problem or to make a decision. However, whether information comes from the internet or the world wide web (www), online, databases, books, government departments, films, conversations, posters, pictures or any other possible sources. Inherent in the concept of information is the ability to understand and critically evaluate the source of information utilised.

Therefore, knowledge of evaluation of sources of information is critical. Besides, educational activities and academic research are fast becoming knowledge-based, and information resources are widely available both in print and non-print formats. There is

need for undergraduate students to critically evaluate the sources of information before use. Some of the criteria for evaluation of information sources, whether print or non-print include: authority, which involves the verification of the knowledge and expertise of authors, physical features of the sources, publishers and sponsoring agency, among others. The question that may arise is: do undergraduate students in Nigeria universities have adequate knowledge and skills to evaluate the sources of information use and to properly acknowledge and cite works consulted? Are the students conversant with the process and the implications of not verifying their sources of information? This has provided the basis for this study in order to assess undergraduate students' knowledge of evaluation and utilisation of information resources in federal universities in South-South, Nigeria.

1.2 Statement of the Problem

Libraries, especially those in academic institutions, play a central role in furthering the objectives of their parent institutions, viz; teaching, learning, research and community service. They not only acquire, but also organise both print and non-print resources for easy retrieval and optimal utilisation. However, in spite of effort by these academic libraries, student users still lack basic information skills such as knowledge of sources of information, as well as ability to evaluate sources of information and using them in an ethical manner.

Students at undergraduate level are expected to possess basic knowledge of available sources of information. Other critical skills required include: knowledge of search strategies and knowledge of retrieval tools to access information both in print and non-print format. Based on the foregoing, this work was carried out to assess undergraduate students' knowledge of evaluation of information sources and utilisation of information resources in federal universities in South-South, Nigeria.

1.3 The Purpose of the Study

The purpose of the study was to assess undergraduate students' knowledge of evaluation of information sources and utilisation of information resources in federal universities in South-South, Nigeria. Specifically, the study aimed at determining the following: the students' knowledge of evaluation of information and effective utilisation of information resources.

1.4 Research Question

The following research question was formulated to guide the study:

i. To what extent do undergraduate students' knowledge of evaluation of information sources influence their proper utilisation of information resources in federal universities in South-South Nigeria?

1.5 Research Hypothesis

Research hypothesis was also formulated for the study:

H_o: Knowledge of evaluation of information sources has no significant influence on exploitation of information resources by undergraduate students in federal universities in South-South, Nigeria.

2.1 Literature Review

Knowledge of evaluation of information is critical to LIS. Educational activities and academic research are fast becoming knowledge-based. Hence, there is a need for students to critically evaluate sources of information before accessing them. Igwe and Uwa (2015) stressed that the proliferation of information sources and new technologies has brought about decisive changes in human communication process and behaviour. They further noted that information literacy aims to empower citizens by providing them with knowledge, skills and attitude necessarily to engage in traditional library settings as well as global environment.

Evaluating information content for reliability and credibility of the source is vital in today's global environment. Haase (2010) emphasised that, acquisition of critical skills is an intellectual process of using information in a process of observation, experience, reflection, or reasoning using strategies such as conceptualising information, synthesising information, analysing information, and above all, evaluating information objectively.

Similarly, Ugwuogu and Okile (2014) stressed that, there is need to critically evaluate online resources before utilisation. They explained that students should be taught key concepts for proper evaluation of web-based resources, as well as being familiar with them, as this will make them to be information literate persons who will not only be able to access information effectively and efficiently, but also evaluate information critically and competently, as well as use information accurately and objectively.

Ugwuogu and Okile (2014) highlighted out criteria for evaluation of information sources to include: authority, accuracy, objectivity, currency and coverage in terms of printed resources. In a related duty, Uzoegbu (2010) outlined the characteristics of efficient and reliable website to include name of author, whether individual or corporate; provide hyperlink to bibliographic or references; contains recent date and shows evidence of peer-review, usually revealed in a statement on the fore pages of the documents, or noticed in the copyright statement of the web page, contains the publisher's name and address at the bottom of the page. Based on these, Uzuogbu (2010) concluded that information that cannot show evidence of these characteristics are least likely to be authoritative, accurate, current, relevant, reliable and least worthy of utilisation. These characteristics, therefore, served as key criteria for ascertaining the worth of information sources utilised.

Babalola (2012) observed that, quality education bequeaths on its recipients the capacity to think critically and analytically, as well as generate novel ideas, noting that, the purpose of university education is to produce creative and original thinkers who can

contribute meaningfully to the development of society.

3.1 Research Methods

The research design adopted for the study was ex-post facto, since the researchers did not have direct control of the independent variable as their manifestations had already occurred and could therefore not be manipulated. The research area was South-South Geo-political Zone of Nigeria. The population of the comprised 9507 registered undergraduate library users from three (3) selected federal universities in 2018/2019 academic session in the Zone. The stratified random sample technique was used to select 10% each of the registered users from the universities studied, which constituted 952 sample size as shown in Table 1 below.

Table 1: Sample Frame

S/N	Institutions	Population	Sample Size	Percentage
1	University of Uyo	3456	346	10%
2	University of Port Harcourt	3035	304	10%
3	University of Calabar	3016	302	10%
	Total	9507	952	

Source: Records of registered undergraduate users in 2018/2019 academic session from three university libraries in the study area.

The instrument used for data collection was developed by the researchers. The instrument was vetted by two experts in educational measurement in the University of Uyo. In the process, some items were rewarded while others were replaced.

The scale used was a four (4) point Likert-type assessment scale. The questionnaire used was divided into two sections (A and B). Section "A" contained demographic information, while section "B" contained information on knowledge of evaluation of information sources. The reliability of the instrument was obtained by using Cronbach alpha approach. The reliability coefficient obtained for the two-sub scales were 0.76 for evaluation of information sources and 0.76 for utilisation of information sources respectively, indicating that the instrument was significantly reliable enough to be used for the study. Mean (x) and standard deviation (Sd) were used to analyse the data collected. The hypothesis was tested using simple multiple regression analysis as shown in Table 2. The simple regression analysis was used to analyse the data. The result is presented in Table 4.

Table 2: Cronbach Alpha Reliability Estimate

S/N	Variable	Items	Co-efficient
1	Knowledge of Evaluation of information sources	8	0.76
2	Utilisation of information resources	20	0.76

Source: Field Survey 2019.

The two variables in the study are: knowledge of evaluation of information sources (Independent variable) and utilisation of information resources (Dependent variable) by undergraduate students in federal universities in South-South, Nigeria. These variables are continuous, since they are human-related variables, hence, parametrics statistics were used.

4.1 Results

4.2 Testing of Hypothesis

Table 3: Descriptive Analysis of Mean and Standard Deviation of the Variables

S/N	Variable	Mean	Standard deviation	N
1	Knowledge of evaluation of information	14.28	3.96	950
2	Exploitation of information	45.55	10.48	950

Source: Field Study 2019.

One null hypothesis was tested. The hypothesis states that: knowledge of evaluation of information sources has no significant influence on the exploitation of information resources by undergraduate students in federal universities in South-South, Nigeria. This was tested on 952 respondents.

Descriptive analysis of the mean and standard deviation are presented in Table 3. The interpretation can be inferred by comparing the calculated mean with the population mean. Knowledge of evaluation of information sources had a mean score of 14.28 out of a maximum 15. If this value is compared with the expected mean of 15, the mean of the variable is relatively lower than the expected mean. It can thus be inferred from the results that the undergraduate students' knowledge of evaluation of information sources and utilisation of information resources in federal universities in South-South, Nigeria is relatively low.

Table 4: Simple Regression Analysis of Influence of Knowledge of Evaluation of Information Source on Utilisation of Information Resources by Undergraduates Students in Federal Universities South-South, Nigeria

R	R. Square	Adjusted R. Square	Std. Error of Estimate	
.423[a]	.179	.178	9.505	
	Sum of Squares	**DF**	**Mean Square**	**F.**
Regression	18702.750	1	18702.750	207.009
Residual	85739.990	948	90.348	
Total	104442.740	949		

a. **Dependent Variable:** Utilisation of information resources
b. **In prediction (constant):** Knowledge of evaluation of information sources

The findings revealed that the regression model produced a regression coefficient R = 423, which indicates that, there is strong positive influence of knowledge of evaluation of information sources and proper utilisation of information resources. This implies that the more knowledge of evaluation information sources, the more exploitation of information resources.

An R^2 value of .179 indicates that knowledge of evaluation of information sources accounted for 17.9% of the influence as a single variable on proper exploitation of information resources in the study area. This finding is an indication that knowledge of evaluation of information sources has a relatively high influence on the exploitation of information resources. The F. value of the analysis of variance (ANOVA) obtained from the regression Table is F= 207.00 to 2 decimal places and significant value of .000 (or P< .05) at the degree of freedom (df) 1 and 949. The implication of this results is that the null hypothesis was rejected, and the findings drawn from the results is that knowledge of evaluation of information sources has significant influence on proper utilisation of information resources by undergraduate

students in federal universities in South-South, Nigeria.

5.1 Discussion of Findings

The findings revealed that the knowledge of evaluation of information sources has relatively high influence on appropriate exploitation of information resources in the study area. There is an R^2 value of .179, indicating that evaluation of information sources account for 17.9% of the undergraduate students' exploitation of information resources thus underscoring the need for the teaching of information evaluation skills to students at undergraduate level.

The result of study is in line with Igwe and Uwa (2015), who observed that the proliferation of information sources and new technologies has brought about decisive human changes in human communication process and behaviour. Information literacy programmes should focus on empowering citizens by providing them with competencies, knowledge, skills and attitude necessary to engage in traditional library setting and in global environment. They further opined that evaluating information sources or content means to verify for reliability and credibility of the sources in today's global environment.

From the study, when compared the knowledge of evaluation of information sources and appropriate exploitation of information resources, had a mean scored of 14.28, which is relatively lower than expected mean of 15, it can be inferred that the undergraduate students knowledge of evaluation of information sources is relatively low in the federal universities in South-South Zone of Nigeria. Findings also agree with Park's (2003), who found unethical use of library resources to include: misleading presentation of documents written by other people and citing false references, among others. It can be inferred that students lack adequate knowledge in terms of evaluation of information sources and their utilisation, which implies that efforts should be geared towards effective teaching of information evaluation skills in the teaching of the use of library to undergraduate students.

The findings also underscore the need for appropriate knowledge on the evaluation of information sources, while utilising information resources by undergraduate students.

5.2 Implications of the Study

- Effective teaching of information literacy skills has a significant influence on exploitation of information resources in an academic environment.
- Students can improve their information handling capabilities through relevant and appropriate information skills training programmes in Nigerian universities.
- Students are more likely to utilise information resources more appropriately if they have adequate knowledge of evaluation of information sources and it implications in academic research.

Conclusion and Recommendations

From the findings, it can be conclude that lack of adequate knowledge of evaluation of information sources significantly influenced exploitation of information resources by undergraduate students in federal universities in South-South, Nigeria. Information literacy programmes for student users are an important component of university library system, as they serve to guide users to identify and locate resources, in addition to informing them on how information sources can be evaluated and exploited optimally. From the foregoing, it may be inferred that lack of information literary skills and competence had a negative impact on undergraduate students' exploitation of information resources. Based on the findings, it is recommended that:

- University authorities should adopt proactive measures in the teaching of literacy programmes.
- Adequate provision should be made for the recruitment of qualified personnel and key

infrastructure for teaching for teaching information literacy programmes. There should be appropriate policy framework for students to learn information literacy skills beyond first year of their study.

• User education programmers currently being taught in Nigeria universities should be reviewed, taking full recognisance of print and online resources, in addition to inculcating ethical values in scholarship.

• Knowledge of evaluation of information sources should form the focus during practicals in the university library. There should be an active collaboration between the faculty members and the librarians for the purpose of effective teaching of information literacy skills in Nigerian universities.

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