



Indexing and Abstracting Practices for Effective Service Delivery in Academic Libraries in Rivers State, Nigeria

Comfort N. Owate

Department of Library and Information Science,
Faculty of Education, University of Port Harcourt, Rivers State, Nigeria
comfort.owate@uniport.edu.ng | 08033129709

&

Boma Torukwein David-West

boma.davidwest@uniport.edu.ng
ORCID:ID <https://0000-0002-2747-6379>

Abstract

This study investigated indexing and abstracting practices for effective service delivery in academic libraries in Rivers State. Two research questions and two hypotheses guided the study. The population consists of 49 information professionals in the three universities in Rivers State. University of Port Harcourt (20), Rivers State University (19) and Ignatius Ajuru University of Education (11) respectively. A sample size of 49 information professionals in the three Universities representing 100% of the population served as respondents. Census sampling technique was used for the study. In doing this, all the information professionals that made up the population were used. The mean scores and standard deviation were used to answer the research questions while the z-test statistics was used to test the hypotheses at 0.05 level of significance. The result amongst others revealed that, University of Port Harcourt library does not fully practice indexing and abstracting due to lack of ICT tools, lack of training and lack of technical expertise. Further findings revealed that Ignatius Ajuru University and Rivers State University practice indexing and abstracting for effective service delivery. It was recommended among others that information professionals should be trained on indexing and abstracting to acquire the necessary skills for effective service delivery to users.

Key Words: Indexing, Abstracting, Academic, Libraries, Service, Delivery.

Introduction

In every academic library, indexing and abstracting play significant roles in information access and retrieval processes. They obviously save time of library users and help to facilitate rapid and easy access to pertinent and relevant information resources. According to (David-West, 2019) indexes, abstracts and bibliographies are secondary sources that interprets and rearrange primary sources in order to satisfy the information needs of users. The processes of indexing and abstracting have played a major role in ensuring the smooth flow of scholarly communication and quick access to information resources by library users., Indexing and abstracting services have for a long time served many scholars and researchers all over the world through the provision of notable tools for information discovery and rationally managing information overload. On this note, the process of indexing technically begins with analysis of the subject of the document which seeks to identify terms that must align with the subject either by extracting words directly from the document or assigning words from a controlled vocabulary in which the terms in the index are presented in a systematic order. Given the depth of indexing, an indexer in this context must decide how many terms to include and how specific the terms should be. Conversely, abstracting hinges on giving brief summary of any research article, review, dissertation, thesis, conference proceeding or any in-depth analysis of a



particular subject or discipline which helps readers to quickly identify and ascertain the purposes enshrined in the paper or document.

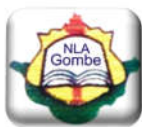
An abstract obviously appears at the beginning of a well-articulated manuscript, acting as the gate way for any given scientific paper or patent publication. It is seen as an intellectual summary of an information package. In various academic disciplines, abstracting and indexing services are significantly aimed at compiling a body of literature for that particular subject matter which covers the main points of a piece of writing. According to Musa and Dangani. (2013) considering executive summaries that is written specifically for non-specialist audiences, abstract is perceived to use the same level of technical language and expertise found in the article itself. Therefore, without indexes and abstracts to journals and other interesting publications, academic pursuits may have been impossible because tracing a piece of information would have also been very difficult. If this is the situation, there is need for adequate concentration to be given to indexing and abstracting to enable libraries and information centers to discharge their respective responsibilities in an efficient manner.

Conceptually, an index is seen as a systematic arrangement of entries designed to enable respective users locate necessary information in a document. Meanwhile, Khan (2014) regarded an index as a list of names detailed alphabetically with other inclusions like, formulae, topics, terms, numbers, places, and similar significant items in completed works in the form of books, set or bound journal with pages of works which referenced exactly to material discussed. On this note, Boston College Library Glossary arrangement (2014) sees abstract as a brief summary of an article in a scholarly published journal which usually surface at the entry of the article, an electronic index to a journal or printed materials like magazine, newspaper, articles that provides citation to the articles in line with a brief summary of each of the articles. It is also seen as a meaningfully articulated summary of a paper presented at a workshop or conference. Basically, the purpose of an index or abstract in any endeavor is for effective and efficient access to information either through structured record, with respect to random stores of information or books and databases or information found with internet search engines.

According to Ali, Hamza, Muhammad (2015) there are various types of indexes, depending on what is being used as access points. Some of these indexes are subject index, title index, author index, chain index, specific index, back of book index and relative index. Indicative abstract, informative abstract, critical abstract, subject abstract, descriptive abstract author's abstract and review. Nevertheless, Musa and Dangani (2013) in their work revealed that, lack of use of indexing and abstracting services by patrons is largely due to lack of awareness of its availability, lack of professional staff and funds and production are the major problems faced in the course of providing indexing and abstracting services..

Statement of the Problem

Indexing and abstracting services are recognized as one of the most comprehensive ways to represents information, depict professionalism and librarian's competency level, they enable the availability of surrogate copies, specific components of a literary work and other descriptors with the aim of providing well detailed, sieved and representation of information to meet the needs of users. Meanwhile, in order to make these information resources easily accessible to library users catalogues cards, bibliographies, indexes and abstracts are provided to aid in easy access to the relevant materials whenever it is required. Indexes and abstracts facilitate easy access to information resources and services. Despite the effort of libraries in ensuring quick access and retrieval of information resources, it seems that indexes and abstracts have not received much attention by library users, and even if it does, most of the personnel's handling this aspect seems to be untrained and the facilities to professionally embark on the job seems



to be lacking as well. In some instance, some University libraries like the University of Port Harcourt library seems not to engage in the full practice of indexing and abstracting services in their library which have cost a lot of setbacks in the timely retrieval and dissemination of information. Also, the Ranganathan law of save the time of the user is being neglected. It is on this note that the study seeks to examine the indexing and abstracting practices for effective service delivery in academic libraries in Rivers State, Nigeria.

Aim and Objectives of the Study

The study investigated indexing and abstracting practices for effective service delivery in academic libraries in Rivers State. The objectives of the study are to:

1. Ascertain the extent to which indexing and abstracting services are practiced by information professionals in academic libraries in Rivers State.
2. Identify the challenges militating against the practice of indexing and abstracting services in academic libraries in Rivers State.

Research Questions

1. To what extent are indexing and abstracting services practiced by information professionals for effective service delivery in academic libraries in Rivers State?
2. What are the challenges militating against the practice of indexing and abstracting for effective service delivery in academic libraries in Rivers State?

Hypotheses

1. There is no significant difference between the mean scores of abstracting and indexing practices by information professionals and effective service delivery in academic libraries in Rivers State.
2. There is no significant difference between the mean scores of challenges militating against the practice of indexing and abstracting and effective service delivery in academic libraries in Rivers State.

Review of Literature

Indexing and abstracting is a simple but a complicated work for those not trained to do it. This is so because, there are specific things that must be well noted by an indexer before the work can be satisfied as correctly done. According to Olayinka (2013) an indexer must ensure the correctness or accuracy of the work indexed in terms of spellings, presentation of information in the index, uniformity or consistency, completeness of bibliographic data, clarity which deals with specific and concise subject heading and consideration of the language of the users. In abstracting, every work must be done in a way to help the readers decide if they should read an entire article and to remember key findings on a topic and anticipate what is coming in the text to make the reading of the text easier and efficient, making keywords visibly important to readers to quickly check the usefulness of a particular work to their research. Umar, Mohammed and Shittu (2014) conducted a study on an assessment of indexing and abstracting services Nuhu Bamalli Polytechnic library the study revealed that indexes and abstracts were available and mostly used by staff and students.

Due to these technicalities involved and some institution seem not to have plans of indexing because they lack policies on whether the information is relevant to the needs of library users, timeliness of the articles, number of terms to be assigned per article, terms to be used by the user to search for the article, and whether the articles are relevant to academic libraries and disciplines have made many to stop the act of indexing and abstracting (Matanji, 2012). More so, one of the scopes of the practice of librarianship is rendering of services involving technical expertise in indexing, meanwhile, some librarians are not properly trained in the art of indexing



and for any library to operate effectively, it must ensure that librarians are trained on how materials can be properly indexed and abstracted (Akinwumi, 2013). However, many issues have plunged the effectiveness of indexing and abstracting in the libraries. According to Matanji (2012), one of the issues is that, some publishers of periodicals indexes seem not employ qualified indexers while others compile poorly-generated indexes.

Also due to economic reasons there has been cancellations of periodical subscription including indexing services due to high cost and this have brought universities and libraries of the poor countries to the brink of chaos. In the same vein, Kumar (2017) figured out that, indexing and abstracting in many libraries are not in practice due to the fact that ICT tools that information professionals can effectively utilized for efficient work performance are not readily in place. Some of these tools he mentioned includes; the use of communication technology like emails, fax, video conferencing and internet, voicemail, telephone and remote control technology which is design to provide a platform to work with a remotely located computer system to smartly access all subscribed e-resources anytime and anywhere with inclusive of library security such as Closed, Radio Frequency Identification (RFID) and Quick Response (QR) Code Technology.

Doyle (2019) also foresaw some skills information professionals would need to possess in a technological library operations that are somewhat not yet developed by librarians to include online collaboration skills, email management competency, sophisticated online research skills, desktop publishing, word processing skills, social media management with respect to e-library users, spreadsheet, text digitization, content management, document management, library automation, web design and development, database management and retrieval skills to be able to operate the digital library confidently and effectively. There are numerous challenges notable in the libraries in terms of indexing and abstracting activities as found out by Emmanuel and Osulale (2019), which includes network problem, Privacy concerns, lack of train librarians, Low level of technology penetration and lack of awareness in the promotion of library resources and services. Hamza and Umar (2013) also found in their study that, lack of professionals or knowledgeable staff and funds to underwrite production cost is a major problem in the effective provision of indexing and abstracting service, lack of use of indexing and abstracting services by patrons also surfaces due to lack of awareness of its availability, lack of facilities and absence of a comprehensive Nigerian thesaurus are all challenges faced in providing indexing and abstracting services. On the other hand, inadequate facilities, insufficient funds and lack of awareness, lack of training programme to enhance the skills and knowledge in librarians and unqualified staff are major challenges militating against the effective provision of indexing and abstracting services (Jones, 2018). In another scenario, even when there are professionals to do the work, the staff strength to undertake the activity of indexing and abstracting in the libraries seem not enough to carry out the job efficiently and effectively.

Kasa (2012) also mentioned problems of poor subscription to current information resources, difficulty in changing technologies, staff competencies, the dependence of the system on catalogue descriptors which is somewhat duplication of efforts and waste of resources, time, high drudgery and costs to retrospectively convert resources as some of the challenges. However, David, et al. (2020) listed inadequate time to carry out abstracting function, lack of policies and procedures in abstracting, lack of manpower to do the job, lack of motivation to perform the task and lack of concern management of higher institutions to prioritize abstracting and indexing activity in the library. They added that, abstracts are continuously useful to the academic and research community and that library practitioners must find time to create or innovate ways of abstracting important documents useful to their users. ``. On this note, if



indexing and abstracting activity must go on in the way it should be, professional staff interest, training, provision of needed and required facilities must be necessarily be put into workable consideration, if not the perplexing situation and conditions of indexing and abstracting practices would continuously remain the same.

Methodology

The study employed descriptive survey research design. The population consists of the 49 information professionals in the three universities in Rivers State. University of Port Harcourt (20), Rivers State University (19) and Ignatius Ajuru University of Education (11) respectively. A sample size of 49 information professionals in the three universities representing 100% of the population served as respondents. Census sampling technique was used for the study. In doing this, all the information professionals that make up the population were used. The instrument that was used for data collection in this study was a 12-item. The questionnaire was divided into two sections: section A was used to collect demographic data from the respondents, while section B which is the questionnaire instrument with 10 items was used to gather responses from the respondent. The criterion means of 2.50 was used as the bench mark for agreeing or disagreeing to responses in the mean calculations in the study.

The 4- points modified likert rating scale of High Extent (HE) = 4 points; Moderate Extent (ME)=3 points, Low Extent (LE) = 2 points; and Very Low Extent (VLE) = 1 point and Strongly Agree (SA) = 4 points; Agree (A) = 3 points; Disagree (D) = 2 points; and Strongly Disagree (SD) = 1 point) was used as response options to guide the respondents’ opinions on the instrument.. Mean scores and standard deviations were used to answer the research questions while the z-test statistics was used to test the hypotheses at 0.05 level of significance.

Results and Discussions

Research Question 1: To what extent are indexing and abstracting services practiced by information professionals in academic libraries in Rivers State?

Table 1: Mean and Standard Deviation Analysis on the extent indexing and abstracting services are practiced by information professionals in academic libraries in Rivers State.

	\bar{X}	SD ₁	\bar{X}	SD ₂	\bar{X}	Remarks
1 Indexing and abstracting in your library is not practiced regularly due to the fact that ICT tools that information professionals can effectively utilized for efficient work performance are not readily in place.	3.57	1.55	1.59	1.36	2.58	Moderate Extent
2 Indexing and abstracting in your library are skeletally practiced due to the fact that information professionals are not trained to do the job	3.38	1.43	2.02	1.23	2.70	Moderate Extent
3 In your University, it is in practice but technical expertise in the libraries are not properly trained on how materials can be properly indexed and abstracted	3.60	1.57	1.94	1.25	2.77	Moderate Extent
4 While practicing indexing and abstracting in your university, semi-literate staff are used in the place of professional indexers and abstract specialist.	3.28	1.36	1.60	1.37	2.44	Low Extent
5 It is not taking seriously because publishers of periodical indexes seem not to employ qualified indexers while others compile poor-generated indexes.	2.99	1.25	1.85	1.29	2.24	Low Extent
Grand mean and standard deviation	3.36	1.43	1.80	1.30	2.58	



Table 1 showed that, items number 1,2,3,4 and 5 had mean scores above the criterion mean of 2.50 indicating that, to a high extent indexing and abstracting in University of Port Harcourt is skeletal practice due to the fact that ICT tools that information professionals can effectively utilized for efficient work performance are not readily in place, indexing and abstracting in the library were skeletally practiced due to the fact that information professionals are not trained to do the job, technical expertise in the libraries are not properly trained on how materials can be properly indexed and abstracted, even when practiced, semi-literate staff are used in the place of professional indexers and abstract specialist and it is not taking seriously because publishers of periodical indexes seem not to employ qualified indexers while others compile poor-generated indexes. On the other hand, the result as showed for state universities indicated that, items number 1,2,3,4 and 5 had mean scores below the criterion mean of 2.50 indicating that, to a very high extent indexing and abstracting are practice due to the fact that ICT tools that information professionals can effectively utilized for efficient work performance are readily in place, indexing and abstracting in the library are not skeletally practiced because information professionals are trained to do the job, technical expertise in the libraries are properly trained on how materials can be properly indexed and abstracted, semi-literate staff are not used in the place of professional indexers and abstract specialist and it is taking seriously because publishers of periodical indexes seem to employ qualified indexers while others compile good-generated indexes

Research Question 2: What are the challenges militating against the practice of indexing and abstracting services by information professionals in academic libraries in Rivers State?

Table 2: Mean and Standard Deviation Analysis on the challenges militating against the practice of indexing and abstracting services in academic libraries in Rivers State.

	\bar{X}	SD ₁	\bar{X}	SD ₂	\bar{X}	Remarks
1 Lack of training programme to enhance the skills and knowledge in librarians	3.28	1.36	2.01	1.22	2.65	Agreed
2 lack of facilities and absence of a comprehensive Nigerian thesaurus	3.35	1.41	2.13	1.19	2.74	Agreed
3 lack of professionals or knowledgeable staff	3.43	1.45	2.12	1.18	2.78	Agreed
4 Lack of policies and procedures in indexing and abstracting materials	3.36	1.41	2.66	1.32	3.01	Agreed
5 Staff strength to undertake the activity of indexing and abstracting in the libraries seem not enough to carry out the job efficiently and effectively.		1.31	2.12	1.18	2.66	Agreed
Grand mean and standard deviation	3.32	1.39	2.12	1.22	2.77	

Table 2 showed that, items number 1,2,3,4 and 5 had mean scores above the criterion mean of 2.50, indicating that, the challenges militating against the practice of indexing and abstracting services by information professionals in academic libraries in university of Port Harcourt is the lack of training programs to enhance the skills and knowledge in librarians, lack of facilities and absence of a comprehensive Nigerian thesaurus, lack of policies and procedures in indexing and abstracting materials, staff strength to undertake the activity of indexing and abstracting in the libraries seem not enough to carry out the job efficiently and effectively. Meanwhile, the result for State Universities indicated that, items number 1,2,3 and 5 had mean scores below the criterion mean of 2.50 accept item 4 with a mean score of indicating that, 2.66 which is above the criterion mean of 2.50, are not challenges militating against the practice of indexing and abstracting services by information professionals in academic libraries in State Universities



but the staff strength to undertake the activity of indexing and abstracting in the libraries seem not enough to carry out the job efficiently and effectively.

Test of Hypotheses

Ho₁: There is no significant difference between the mean scores of indexing and abstracting practices by information professionals and effective service delivery in academic libraries in Rivers State.

Table 4.6: z-test Analysis of the Difference between indexing and abstracting practices by information professionals and effective service delivery in academic libraries in Rivers State.

Subject	N	\bar{x}	SD	Df	z-cal.	z-crit.	Level of Sig	Remark
Information Professionals in University of Port Harcourt	15	3.10	1.50	2				
				273	3.45	±1.96	0.05	Not Sig.
Information Professionals in State Universities	25	3.02	1.26					

The result of table 1 showed that the z-calculated value of 3.45 is greater than the z-critical value of ±1.96 at degree of freedom of 38 at 0.05 level of significance. Therefore, we fail to accept the null hypothesis and uphold that, there is a significant difference between the mean scores of indexing and abstracting practices by information professionals and effective service delivery in academic libraries in Rivers State.

Ho₂: There is no significant difference between the mean scores of challenges militating against the practice of indexing and abstracting and effective service delivery academic libraries in Rivers State.

Table 4.6: z-test Analysis of the Difference between the challenges militating against the practice of indexing and abstracting and effective service delivery in academic libraries in Rivers State

Subject	N	\bar{x}	SD	Df	z-cal.	z-crit.	Level of Sig	Remark
Information Professionals in University of Port Harcourt	15	2.86	1.23	2				
				273	2.76	±1.96	0.05	Not Sig.
Information Professionals in State Universities	25	2.97	1.23					

The result of table 7 shows that the z-calculated value of 2.76 is greater than the z-critical value of 1.96 at degree of freedom of 38 at 0.05 level of significance. We therefore fail to accept the null hypothesis and uphold that, there is a significant difference between the mean scores of challenges militating against the practice of indexing and abstracting and effective services delivery in academic libraries in Rivers State.

Discussion of findings

The result of this study revealed that, to a high extent indexing and abstracting in University of Port Harcourt is not fully practiced due to the fact that ICT tools are not readily in place and were skeletally practiced due to the fact that information professionals are not trained to do



the job, lack of technical expertise, and even when practiced, semi-literate staff are used in the place of professional indexers and abstract specialist. Meanwhile, in the State universities, ICT tools are readily in place, indexing and abstracting in the library are not skeletal practiced, information professionals are trained, technical expertise in the libraries are properly trained and semi-literate staff are not used in the place of professional indexers and abstract specialist. This finding is in consonance with Mataniji (2012) who found some institution not seem to have plans of indexing because they lack policies on whether the information is relevant to the needs of library users. Akinwumi (2013) also found that, some librarians are not properly trained in the art of indexing and for any library to operate effectively; it must ensure that librarians are trained on how materials can be properly indexed and abstracted.

The result of this study also found that, the notable challenges of indexing and abstracting services by information professionals in academic libraries in university of Port Harcourt is the lack of training programs, lack of facilities and absence of a comprehensive Nigerian thesaurus, lack of professionals or knowledgeable staff, lack of policies and procedures in indexing and abstracting materials. This study coincides with the findings of Hamza and Umar (2013) who found lack of professionals or knowledgeable staff and funds to underwrite production cost as a major problem in the effective provision of indexing and abstracting services, lack of facilities and absence of a comprehensive Nigerian thesaurus are all challenges faced in providing indexing and abstracting services. Jones (2018) also found inadequate facilities, insufficient funds, lack of awareness, lack of training programs to enhance the skills and knowledge in librarians and unqualified staff as major challenges militating against the effective provision of indexing and abstracting services.

Conclusion

In the light of the findings of this study, it is clear that, indexing and abstracting are important services that enhances libraries and librarians practices but due to some circumstances not beyond the capacity of some institution to carry out the programs smoothly, they tend to keep mute on how the services can be revitalized to support the roles of libraries to users.

Recommendations

Based on the findings of the study, the researchers recommended that:

1. Technological infrastructural facilities should be put in place and train information professionals to acquire the skills needed to rightly carry out indexing and abstracting services to the advantage of individuals and society.
2. Universities institutions should check and reform staff strength to undertake the activity of indexing and abstracting in the libraries and be involved enough to carry out the job efficiently and effectively in academic libraries in Rivers State.

References

- Akinwumi, O.S. (2013). Indexing and abstracting services in libraries: A legal perspective. *International Journal of Academic library and Information Science*, 1(1) 1-9
- Ali, G., Hamza, M. & Muhammad, N. U. (2015). An appraisal of indexing and abstracting services in the institute of education library, Ahmadu Bello University Zaria, Nigeria. *Journal of Humanities and Social Science*, 20, (1), 42-46.
- Boston College Library Glossary (2014). An assessment of indexing and abstracting services. <http://www.bc.edu/libraries/help/howdoi/howto/glossary.html>.



- David, A. C, Wina B. D., Judy Ann P. J. & Jeazel S. T. (2020). Knowledge, practice and challenges of library practitioners on abstracting. <https://digitalcommons.unl.edu/libphilprac/4334/>.
- David-West, Boma T. (2019). Availability and utilization of reference sources in academic libraries. *Library Philosophy and Practice*. <https://digitalcommons.unl.edu/libphilprac>
- Doyle, A. (2019). Information and communications technology (ICT) skills of librarians. *Electronic Library*, 33(3), 502 – 523.
- Emmanuel, U. O. & Osulale, K. A. (2019). Utilization of social media platforms by librarians for promoting library resources and services in Nigerians' Tertiary Institutions in Cross River State. *Global Journal of Educational Research*, 18, 1-8.
- Hamza, U. M. & Umar, B. D. (2013). Assessment of the use of indexing and abstracting service by patrons of Federal College of Education Katsina. *Journal of Information and Knowledge Management*, 12 (1), 59-65.
- Jones, R. (2018). The value of indexing for accelerating research. <https://www.elsevier.com/blog/article/the-value-of-indexing-for-accelerating-research>.
- Kasa. M. G. (2012). Efficacy of indexing and abstracting services in the dissemination of agricultural information resources in the institute for agricultural research LIBRARY, Ahmadu Bello University, Zaria. *International Journal of Advancements in Research & Technology*, 1(5), 1-13.
- Khan, R. H. (2014). Definition of index and abstract. <https://www.academia.edu/2472451/>.
- Kumar, N. B. (2017). Use of information communication technology (ICT) and library operation: An overview. <http://eprints.rclis.org/32231/>.
- Matanji, P. H. M. (2012). *In-house indexing of periodical literature: A study of university libraries in Kenya, University of South Africa, Pretoria*. <http://hdl.handle.net/10500/5802>.
- Musa, H.U. & Dangani, U.B. (2013). Assessment of the use of indexing and abstracting service by patrons of Federal College of Education Katsina. *Information and Knowledge Management*, 3(12), 59-65.
- Olayinka, S. A. (2013). Indexing and abstracting services in libraries: A legal perspective. *International Journal of Academic Library and Information Science*, 1(1), pp. 1 -9
- Umar, M.A., Mohammed, A. & Shittu, M. (2014). An assessment of indexing and abstracting services In NuhuBamalli Polytechnic library, Zaria, Nigeria. *Research on Humanities and Social Sciences*, 4 (8), 21-29.