Subscribed Database and Students' Utilization in Polytechnic Libraries of Akwa Ibom State

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Abstract
This study investigated the extent of availability of subscribed databases and students' utilization in Polytechnic libraries of Akwa Ibom State. Four objectives and research questions were raised to guide the study. The descriptive survey research design was used for the study. The study area was Akwa Ibom State. The population of the study consisted of 4,846 registered library users from three (3) Polytechnics in Akwa Ibom State. The academic libraries are; Federal Polytechnic, Ukana, Essien Udim; Akwa Ibom State Polytechnic, Ikot Osurua, Ikot Ekpene and Foundation Polytechnic, Ikot Idem, Ikot Ekpene. A sample size of 357 was drawn using Krejcie and Morgan sampling (1970) size table. Thereafter, a stratified random sampling was used to sample the 357 respondents for the study. A structured questionnaire titled "Subscribed Databases and Students Utilisation Questionnaire (SDSUS) was used to elicit responses from the respondents. The instrument was face validated by the Researcher. Frequency distribution and percentages were used to analyze the data. The result of the study revealed that Polytechnic libraries in Akwa Ibom State subscribe to databases. The subscribed databases are EBSCO and Research4Life, which comprised of HINARI, AGORA, ARDI, GOALI and OARE. However, the result showed that these databases were not well utilized, due to irregular renewal of subscription, lack of internet connection, slow internet connectivity, shortage of power supply and lack of information literacy. The study concluded that the renewal of subscription and provision of fast and reliable internet connection would increase patronage. It recommended among others that management of Polytechnic libraries should renew the subscription of expired database and provide reliable internet connection in order to enhance the use of subscribe database.
Keywords: Subscribed Database; Students' Utilization; Polytechnic Libraries

1.1 Introduction

Polytechnic libraries are academic libraries which are established to satisfy the information needs of every member of the academic community where it is located. Their main purpose is to support teaching, learning and research. In recent years, polytechnic libraries have witnessed a substantial shift, which is influenced by the advancement of information technology (IT) and it has drastically changed the operation of libraries. One particular technology that had tremendously influenced research and scholarly communication in most academic libraries is database. A database is an organized collection of information of a particular subject or multidisciplinary subjects. It provide access to wealth of useful

research from academic journals, newspapers and magazines, e-books, relevant web resources, and various multimedia.

Ansari and Raza (2018) defined a database as a collection of information that is organized so that it can easily be accessed, managed, and updated. Okello-Obura *et al.* (2020) described databases as modern systems of storing and retrieving information with the aid of electronic devices. Deptula (2023) viewed it as a searchable electronic index of published, reliable resources. According to Regis College (2023), database is an electronic collection of information, organized to allow users access information by searching in various ways. Academic libraries provide database to facilitate easy accessibility and retrieval of information.

There are two types of databases: Open or Free database and subscribe database. Free or open source database is a database with a codebase that is free to view, download, modify, distribute and reuse. Subscribed database are those that are acquired by purchase or annual contract. Both databases are very vital for researchers because of their current information contents. Nevertheless, management of Polytechnic libraries prefer subscribed database due to their exhaustiveness. Ola *et al.* (2023) buttressed that scholars prefer subscribed databases due to its completeness. Polytechnic libraries subscribed to databases relevant to their academic programmes. These include ProQuest, Scorpus, Web of Science, ScienceOpen, Jstor, Research4life covering five databases such as HINARY, EBSCOhost Online Access, to Research in the Environment (OARE), Access to Research for Development and Innovation (ARDI) and Access to Global Online Research in Agriculture (AGORA). Nelson (2021) corroborates that databases mostly subscribed by academic libraries include ProQuest, EBSCOhost (Elton B Stephens CO (company), Journal Storage (JStor), Access to Research for Development

and Innovation (ARDI) and Online Access to Research in the Environment (OARE).

Consequently, students and other scholars in the Polytechnic use these databases. Utilization is the most important facet of library practice. Subscribed databases must be adequately used; else, the essence of subscription becomes void. Barfi *et al* (2018) defined utilization as the aggregate of the resource's that is accessible and usable in the library. It is the resources used at a given time by library users which according to Iton and Iton (2016) include all print and subscribed databases. In view of the place of subscribed database in study, teaching and research, this study aimed to investigate the availability of subscribed databases and the extent to which students in Polytechnic libraries in Akwa Ibom State use them.

1.2 Problem Statement

Polytechnic libraries are meant to be vibrant hubs of knowledge and support for staff, students and researchers, through the quality of electronic information resources provided. They are meant to play significant roles in the advancement of academic activities. Subscribed databases in Polytechnic libraries aim to bridge the information gap, connecting users to the vast and diverse resources available across multiple disciplines. Unfortunately, it is observed recently that utilization of these subscribed databases in most polytechnic libraries has declined. Some researchers attributed this decline to inadequate power supply, lack of internet connection, slow internet connectivity and digital devices (Onaolapo, S.A. 2016; Okiki & Asiru, 2011). This has led to growing concerns as a lot of funds are being spent on database subscription with the expectation that the use of these resources will bridge the gaps in information resources delivery. This study therefore seeks to investigate the extent to which subscribed databases are available for students' utilization in Polytechnic libraries of

Akwa Ibom state?

1.3 Objectives of the Research

The main purpose of this study is to investigate the extent to which subscribed databases are available for students' utilization in the Polytechnic libraries of Akwa Ibom State. The specific objectives of the study are to:

1. Determine the types of subscribed databases available for students' utilization in Polytechnic libraries of Akwa Ibom State.
2. Examine the extent to which students utilized the subscribed databases in Polytechnic libraries in Akwa Ibom State.
3. Ascertain if there are any challenges faced by students in utilization of subscribed databases in Polytechnic libraries of Akwa Ibom State.

1.4 Research Questions

The following research questions were raised to guide the study:

1. What types of subscribed databases are available for students' utilization in Polytechnic libraries in Akwa Ibom State?
2. To what extent do students utilize the subscribed database in Polytechnic libraries of Akwa Ibom State?
3. What are the challenges faced by students in the course of utilizing these subscribed databases in Polytechnic libraries of Akwa Ibom State?

2.1 Literature Review
2.2 Subscribed Databases

A subscribed database is a large, regularly updated file of digitized information (bibliographic records, abstracts, full-text documents, directory entries, images, statistics, etc.). It is related to a specific subject or field and consisting of records of uniform format organized for ease and speed of search and retrieval. Abubakar and Akor (2017) defined database as electronically operated storehouses of state-of -the art information on different fields of learning. Emmasiegbu and Anaehobi (2021) described it as an organized collection of information of a particular subject or multidisciplinary subject. These databases have varied information content in different filed of knowledge. Deptula (2023) described database as a searchable electronic index of published, reliable resources. The Regis College (2023) described database as an electronic collection of information, organized to allow users access information by searching in various ways.

Pathshala (2020) affirmed that subscribed database cover variety of types of information sources e.g. articles, books, conference papers, dissertations and theses reports, all in one database. Other databases cover one main discipline, for example Education, Library and Information Science or Chemistry. There are also multi-disciplinary subscribed databases such as Science Direct and Web of Science. Electronic information resources are very useful in the university community both in developed and developing nations of the world.

In the same vein, Ahmed (2020) emphasized that the information content in subscribed databases are current and useful to researchers. Ujunwa and Anaehobi (2020) pointed out that subscribed databases are characterized by the kind of data they contain that is word, numbers or by their subject matter. Word-oriented databases contain word or text as the principal data, whereas numbers-oriented databases often referred to as databanks, contain numbers, symbols, series, graphs and tables. Cantrell (2020) opined that these databases are becoming very important these days as they are more up-to-date, and can be accessed anywhere, crossing all geographical boundaries. Emmasiegbu and Anaehobi (2021) buttressed that such subscribed databases are very valuable and

useful for timesaving while conducting research activities

Akpojoto (2016) submit that the most effective way to attract users into the library is to make available relevant databases. Edem and Egbe (2016) supported the assertion that database availability and collection completeness are major objectives that determine library size and influence patronage. It is imperative that the mission of academic libraries is to support their parent institution in the provision of teaching, research and community service. To achieve this, academic libraries carry out specific functions of making available relevant information resources in print as well as subscription to different databases.

Adeniji *et al.* (2015) buttressed that the subscription of database content in a library is the measure of the effectiveness of the library. They also maintained that most libraries consider it also as their task for the subscription of e-books and journals to their users. Emphasizing on the need for academic libraries to constantly subscribe to database content for their growing clientele, Okike (2020) emphasized that subscription of databases in academic libraries has become inevitable because of information explosion and widespread use of information.

Otulugbu (2017) opined that subscribed database is primarily aimed at solving key problems in the traditional scholarly communication system. Its benefits are not confined to scholars and librarians because, despite its specialized nature, scholarly literature can be of potentially great utility to other users as well. Gupta (2019) noted that libraries are no longer simply consumers of scholarly information, but users of subscribed databases. Otulugbu (2017) maintained that subscribe database is compatible with copyright, peer review, revenue, print, preservation, prestige, career advancement, indexing and supportive service associated with conventional scholarly literature.

In Nigeria, subscribed database is one source of electronic resources that access to and usage are encouraged by university librarians across the country through Nigerian University Libraries Consortium (NULIB) in partnership with Electronic Information for Libraries Network (elFL.Net) and National Universities Commission (NUC) (Okiki & Asiru, 2011). The aim is to promote wider access to electronic resources in order to encourage excellence in teaching and research in Nigerian universities. Since the cost of subscriptions of relevant online databases by individual universities is relatively high, the cost is drastically reduced by the collaboration among NULIB, elLF.Net and NUC.

Adenariwo and Sulyman (2022) pointed out that EBSCO database content is revised and augmented, usually on a regular basis, to provide current information or to add recently published sources and it is designed to provide information about a very specific topic, as opposed to a range of topics, usually for limited users. Abubakar and Akor (2017) affirmed that EBSCO database is updated on a regular basis as new issue is published and indexed. Echezona and Ugwuanyi (2020) submitted that the emergence of EBSCO was viewed as an unprecedented development for cholars as the database contains millions of current information from field of knowledge. Yebowaah and Plockey (2017) pointed out that EBSCO has made available current literature in different fields for researchers. This submission was supported by Adenariwo and Sulyman (2022) that in modern times, the content of libraries is not restricted to physical formats such as books, magazines or journals.

2.2. Utilization of Databases

Utilization is an essential factor for justifying the value and existence of academic libraries. Utilization is the remote access to library databases. It deals with the frequency of students and other users visit or use of either

physical or electronic information. Taylor (2019) supported that the realization of the goals of the institution largely depends on the use of its resources by all categories of students. Nwankwo *et al.* (2019) is of the opinion that the library's success should be measured not in terms of what it has (inputs) but of what it does (utilization). Taylor (2019) affirmed that libraries exist inordinately to help students be able to access their vast print and digital resources (database). In view of this, Edem and Egbe (2016) avowed that students utilization is one among the several factors that drives the library profession, which is in consonant with the first Law of Library Science that says, "books are for use". Okiki (2020) added that academic libraries are repositories where information is acquired, processed, preserved and made available for users.

3.1 Methodology

Descriptive survey design was adopted for this study. The study area is Akwa Ibom State. The population of the study consisted of 4,846 registered library users from three (3) Polytechnics in Akwa Ibom State. The Polytechnics are; Federal Polytechnic, Ukana, Essien Udim; Akwa Ibom State Polytechnic, Ikot Osurua, Ikot Ekpene and Foundation Polytechnic, Ikot Idem, Ikot Ekpene. A sample size of 357 was drawn using Krejcie and Morgan (1970) sampling size table. Thereafter, Stratified random sampling procedure was used to sample the 357 respondents for the study. A structured questionnaire titled "Subscribed Databases and Students Utilisation Questionnaire(SDSUS)" was used to elicit responses from the respondents. It was divided into two sections. Sections 'A' and 'B'. Section 'A' contained questionnaire items generated in line with variables under study, while section B elicited information on utilization of subscribed database. The questionnaire was developed using 4-point rating scale; Strongly Agree, Agree, Disagree, Strongly Disagree and Very Often, Often, Rarely, Never. The instrument was face validated by the Researcher. It took the Researcher four days to administer and collect copies of the instrument. Five (5) copies of the instruments were not returned which represent 98.6% return rate. Response rate for those that returned the questionnaire was 100%. Frequency distribution and percentages were used to analyze the data.

Table 3.1: Distribution of Population of the Study

S/N	Polytechnic Libraries	Registered Library Users
1.	Federal Polytechnic, Ukana	87
2	AkwaIbom State Polytechnic, Ikot Osurua	4,068
3	Foundation Polytechnic, Ikot Idem,	691
	Total	4846

Source (Circulation Desk of the Respective Institutions under Study, 2021-2023 Academic Sessions)

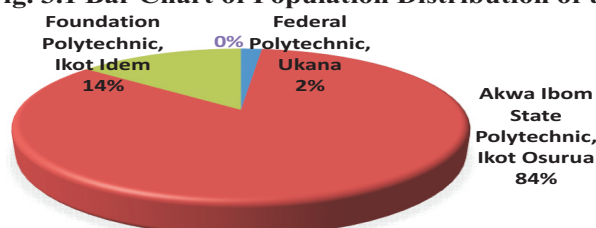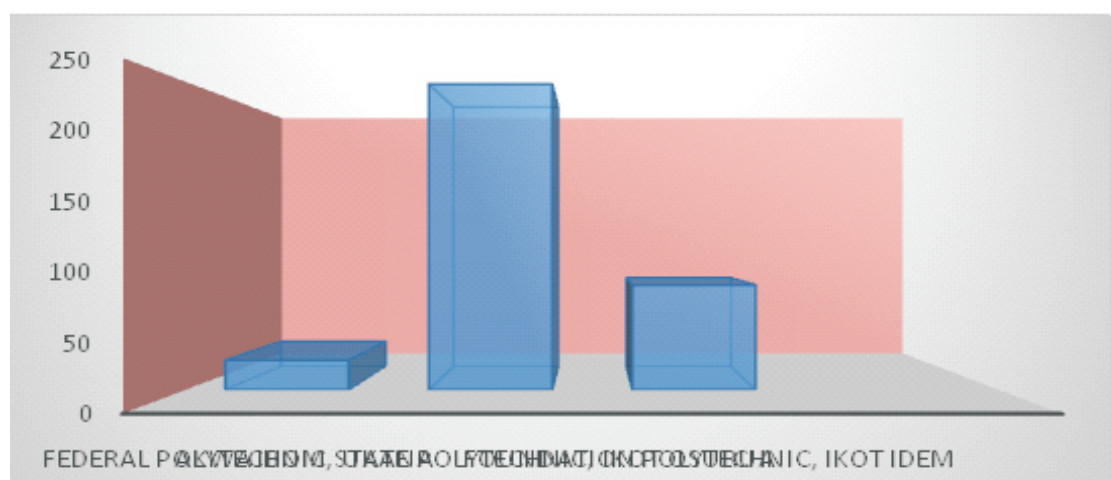**Fig. 3.1 Bar Chart of Population Distribution of the Study**

Table 3.2: Using Stratified Random Sampling Technique

S/N	Polytechnic Libraries	Sample Size
1.	Federal Polytechnic, Ukana	24
2.	Akwa Ibom State Polytechnic, Ikot Osurua	248
3.	Foundation Polytechnic, Ikot Idem,	85
	Total	357
		Out of the tffotal

Fig. 3.2: Column   Chart of sample size

Out of the total sample size of 357, 69.5% came from Akwa Ibom state Polytechnic; 6.7% came from Federal Polytechnic, Ukana, while 23.8% came from Foundation Polytechnic Ikot Idem. On had hoc basis, more variability is expected from the smaller size strata than the bigger ones. Consequently, this was compensated for, by taking relatively bigger sample size from the smaller polytechnics.

4. Result and Analysis
Research Question one
What types of subscribed databases are available for students' utilization in Polytechnic libraries of Akwa Ibom State?

Table 4.1.1:   Frequency and Distribution Table of Respondents on Types of Subscribed databases available for students' utilization in Polytechnic Libraries of Akwa Ibom State

	Types of subscribed Databases	SA	A	Total	%	SD	D	Total	%
1	Elton B Stephans Company (EBSCO)	172	161	333	94.6	10	9	19	5.4
	Institute of Electrical and Electronic Engineering (IEEE)	-	2	2	0.6	151	149	350	99.4
2	Research4Life:								
	I. Access to Global Online Research in Agriculture (AGORA)	208	112	310	88.1	30 - -	12 - -	42 - -	11.9 - -
	II. Access to Research for Development and Innovation (ARDI)	179	120	299	84.9	9 -	10 -	19 -	5.4 -

	III. Research for Global Justice (GOALI)	172	100	272	77.2				
	IV. Online Access to Research in the Environment (OARE)	150	106	256	72.7				
	V. Health Inter-Network Access to Research Initiative (HINARI)	136	99	235	66.8				
3	Jstor	-	-	-	-	111	152	263	74.7
4	ProQuest	-	-	-	-	101	119	220	62.5
5	Web of Science	-	-	-	-	149	153	352	100
6	Nexis	-	-	-	-	210	142	352	100
7	Academic Search	-	-	-	-	175	177	352	100

Data obtained in table 4.1.1 above indicated that Polytechnic libraries in Akwa Ibom State subscribed to databases and the databases subscribed by Polytechnic libraries in Akwa Ibom State subscribed are EBSCO, and Research4Life comprising of AGORA, ARDI, GOALI, OARE, HINARI.

Research Question Two
To what extent do students utilize the subscribed database in Polytechnic libraries in Akwa Ibom State?

Table 4.1.2: Extent of Students Utilization of Subscribed Databases in Polytechnic Libraries in Akwa Ibom State

S/N	Items	Very Often	Often	Total	%	Rarely	Never	Total	%
1	How often do you use the subscribed e-books	27	102	129	36.6	81	142	223	63.4
2	How often do you use the subscribed e-journals	23	99	122	34.7	111	119	230	65.3
3	How often do you use the subscribed e-reference sources	17	103	120	34.1	91	141	232	66.4
4	How often do you use the subscribed e-serials	31	105	136	38.6	142	74	216	61.4

Data obtained in Table 4.1.2 above indicate that 129 (36.6%) respondents often used e-books. One hundred and twenty-two (122) (34.7%) often used e-journals. One hundred and twenty (120) (34.1%) and 136 (38.6%) often used e-reference and e-serials respectively.

Research Question three
What are the challenges faced by students in the course of utilising subscribed databases in Polytechnic libraries of Akwa Ibom State?

Table 4.1.3: **Challenges faced by Students in Utilizing Subscribed Databases in Polytechnic Libraries in Akwa Ibom State**

S/N	Items	SA	A	Total	%	SD	D	Total	%
1	Epileptic power supply	100	142	242	68.8	58	52	110	31.2
2	Poor Internet connectivity	142	176	318	90.3	16	18	34	9.7
3	Lack of user education	153	118	270	76.7	32	50	82	23.3
4	Poor information literacy	31	51	82	23.3	170	100	270	76.7
5	Inadequate computers	71	72	143	40.3	98	111	209	59.7
6	Breakdown of computer systems	99	91	190	54	99	63	162	56

4.2: Summary of Findings

Data obtained in Table 4.1.3 above indicate that poor internet connectivity is the major challenges hindering the effective use of subscribed databases in Polytechnic libraries in Akwa Ibom State. Three hundred and eighteen (318) (90.3%) respondents agreed that they could not use the subscribed databases due to poor internet connection. Other challenges affecting the use of subscribed database include epileptic power supply (242) (68.8%), lack of user education (270) (76.7%) and breakdown of computer systems (190) (54%).

5.1 Discussion of Findings

The findings are discussed based on results obtained.

5.2 Types of Databases subscribed for students' utilization in Polytechnic libraries of Akwa Ibom State

Analysis of the data obtained on types of databases subscribed by Polytechnic libraries in Akwa Ibom State showed that EBSCO and Research4life, which comprised of AGORA, ARDI, GOALI, OARE and HINARI are the databases subscribed by Polytechnic libraries in Akwa Ibom State. The result of this study is in agreement with Kinengyere, Kiyingi and Bazirake (2012) and Fagbami (2014) that most of the resources available in African universities like Nigeria are from EBSCO Host, which are easily accessible to libraries in developing nations that have internet connectivity to support teaching, learning and research work. Abubakar **and**Akor (2017) corroborated the findings that EBSCO database is used by several academic libraries because it is updated on a regular basis as new issues are published and indexed.Echezona and Ugwuanyi (2020) supported that the emergence of EBSCO was viewed as an unprecedented development as the database contains millions of current information from different field of knowledge.

5.3 Extent of Student's Use of subscribed database in Polytechnic libraries in Akwa Ibom State

Results of the Findings on types of databases subscribed by Polytechnic libraries in Akwa Ibom State showed that students in Polytechnic libraries in Akwa Ibom State do not frequently use subscribed databases. The result of this study is in agreement with Joshua and Felix (2022) study on awareness and utilisation of online databases among the Postgraduate Students in Ahmadu Bello University, Zaria. The result showed that the level of utilisation of online subscribed databases by postgraduate students is low.

4.5 Challenges of Student's Utilization of Subscribed Databases in Polytechnic

libraries in Akwa Ibom State

Results of the Findings on challenges of student's utilization of subscribed databases in Polytechnic libraries show that the primary challenge of student's utilization of subscribed database in Polytechnic libraries in Akwa Ibom State is poor internet connection. Most of the respondents agreed that poor internet connectivity hinder them from using the subscribed databases. Other challenges that hinder students use are poor power supply, lack of user education and breakdown of computer systems. The result of this study is in agreement with Quadri and Idowu (2014) study that poor internet connectivity, lack of relevant e-resources in various disciplines, erratic power supply, and lack of technical expertise were the major challenges faced by the respondents.

Conclusion

The study evidently showed that Polytechnic libraries in Akwa Ibom State subscribed to databases. The subscribed databases are EBSCO, Access to Global Online Research in Agriculture (AGORA), Access to Research for Development and Innovation (ARDI), Research for Global Justice (GOALI), Online Access to Research in the Environment (OARE) and Health InterNetwork Access to Research Initiative (HINARI). However, these databases are not well utilized by students due to irregular renewal of subscription to the databases, poor internet connectivity, shortage of power supply, inadequate information literacy and user education.

Recommendations

Based on the above findings the following recommendations were made:

i. Management of Polytechnic libraries should regularly renew the subscription to databases whenever it expired in order to facilitate constant use of e-resources by students.

ii. Management of Polytechnic libraries should subscribe to databases that are more relevant in order to provide more learning and research opportunities to students.

iii. Fast and reliable internet should be provided in all Polytechnic libraries in Akwa Ibom State.

iv. Management of Polytechnic libraries should ensure that power are supplied constantly in order to enhance the use of subscribe databases

v. Seminars and workshops should be organized by Polytechnic libraries to enhance the information literacy of students.

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