



## ASSESSMENT OF UNDERGRADUATE STUDENTS' USE OF ELECTRONIC DATABASES IN UNIVERSITY OF DELTA, AGBOR, DELTA STATE, NIGERIA

By

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### Abstract

This study investigated the assessment of undergraduate Students' usage of electronic databases by university undergraduates in the University of Delta, Agbor, Delta State, Nigeria. A descriptive survey research design was used for this study. The population of the study comprise all undergraduates in the University of Delta, Agbor, Delta State. Three (3) objectives guided this study. Purposive sampling techniques were used for the study. The instrument of data collection was a questionnaire. The study findings revealed that the level of usage of e-databases was low; some of the databases used by university undergraduates include HINARI, OARE, EBSCOHOST, AGORA and PROQUEST. The level of accessibility to the electronic database by university undergraduates in the University of Delta, Agbor, Delta State, Nigeria was generally low. The study recommended that university management should subscribe to relevant databases, which will enhance the types of electronic databases used by university undergraduates in the University of Delta Agbor, Delta State. also, the University of Delta Agbor should provide speedy and reliable internet service on its campus, which will increase university undergraduate access to electronic databases.

**Keywords:** Usage, Electronic Database, University, Undergraduates, Delta State.

### Introduction

The utilization of electronic databases has been influenced by the incorporation of technology into libraries. Development of Information and Communication Technology (ICT) and its acceptance in library service delivery has made usage of e-database easier. Emmasiegbe and Anaehobi (2021) posited that the use of electronic databases by undergraduates in the academic setting had both direct and indirect effects on students' and academic staff efficiency. In addition to teaching and community service, students and academic staff's members are expected to conduct high-quality research and impart ideas relevant to their areas of expertise. In the digital transformation, e-books, e-journals, e-databases, and e-magazines have replaced print books, magazines and journals as knowledge centres. Instead of heavily relying on print-based

materials, academic libraries now use electronic database resources (Habiba & Ahmed, 2020). Usage of e-databases is measured by the level of use electronic database, types of e-database use; the purpose of electronic database use. Types of e-database use: There are various types of e-database available in the university library these includes: AGORA, EBSCOHOST, ILODOC, JSTOR, HINARI, OARE, PROQUEST, LISTA, SCOPUS, WESTLAW, MERALD LIBRARY and SCIENCE DIRECT. Level of e-database use: This has to do with the level at which undergraduates students use e-database available in the library. Purpose of e-database use: There is various purposes for utilizing e-database by undergraduates some utilize e-database to carry out class assignments, obtain course-related information, or update knowledge, writing journal, writing project, preparing for



examination, preparing for seminar, and recreation and leisure.

A study by Habiba and Ahmed (2020) posited the commonly types of electronic databases resources used are: HINARI, OARE, ELSEVIER, EBSCOHOST, AGORA and PROQUEST. E- databases are widely available and can be accessed from anywhere and by many users at the same time. It is therefore convenient to use. University management through university libraries spend large amounts of money on these resources to satisfy the teaching, learning and research needs of its staff and students. As universities spend substantial amount of money from their budgets on payment of subscription to electronic databases annual, it is only appropriate and economical that these databases are optimally utilized to contribute to the academic achievement of students and staff. Non-usage of electronic database by university undergraduate students may have effect on academic performance in Nigeria university educational system as a whole.

A study by Emmagnebu and Anaehobi (2021) revealed some of the challenges to the use of electronic databases in public university libraries include: lack of user education and guidance on the use of databases, erratic power supply, slow internet connection, difficulty in locating relevant e-resources, inaccessibility to username and password to some databases, non-subscription of relevant databases by university libraries. A correspondent study that noted factors that promote the use of electronic database are timely availability, easy access and full text searching of the electronic information resources in the database. Effective usage of e-resources in academic institutions are marred by a variety of factors such as difficulty in getting information due to poor retrieval skills, unfamiliarity with database interface and resources as well as poor information literacy and evaluation skills (Madondo, Sithole & Chisita, 2017). Subsequently, much has not been done to explore assessment of usage of electronic databases by university undergraduates in Delta State Nigeria, notably Nigerian university. It then becomes appropriate to know the purpose of usage of electronic database by university undergraduates,

types of databases use and level of use of electronic databases.

### **Statement of the problem**

Electronic database is one of the tools put in place by university management for students to support research, teaching and learning. Subscription, availability and ease of access to e-database in university libraries help students to utilize e-databases in such libraries. An investigation by Baro, Endouware and Obogu (2011) on use of electronic databases resources by students of Delta State university Abraka,, Nigeria, reported that majority of the students are not aware of e-databases and do not use the online information resources such as MEDLINE, HINARI, CINAHL databases. Observation by this researcher show low use of e-databases as evidenced by low logging in statistics and unused database terminals. Non-usage of electronic databases may have effect on academic performance of undergraduates in Nigeria university's educational system as a whole. Based on these, the study investigated the assessment of undergraduate students use of electronic databases in university of Delta, Agbor, Delta State, Nigeria

### **Objectives of the Studies**

The objectives of the study are to:

1. determine the purpose undergraduates student use electronic databases by university of Delta, Agbor, Delta State, Nigeria;
2. ascertain the type of e-database use by undergraduates students of university of Delta Agbor, Delta State, Nigeria;
3. find out the level of use of e-database by university undergraduates students of university of Delta, Agbor,Delta State Nigeria;

### **Review of Related Literature**

#### ***Purpose Undergraduate Students Use Databases***

An observation by Joel (2020) revealed that the purpose to which undergraduates students in university in Brono State Nigeria, use e-resources included using library's electronic database resources for research or writing project; to do class assignments; to augment class works; using the electronic catalogue (OPAC) for sourcing information in the library; using the internet in the



library for generally source of information in the library. Electronic database resources is necessary for undergraduates' students mainly because it provide better, faster and easier access to information than printed media. Also it help end users (university undergraduates students) to; expand accessibility, increase usability and effectiveness; establish new ways for students to use information to be more productive in their academic activities; keep undergraduates students abreast with current developments in their respective subject fields.

A study by Mommoh and Gomina (2023) titled utilization of electronic database resources in university of Abuja library by undergraduate students used descriptive survey research design to solicit response from undergraduate students in science (3520) and Arts (3,750) faculties. The finding result shows that students used electronic resources in University of Abuja library for academic activities but not as expected. Inadequate skills for exploiting electronic resources was assessed low. Information retrieval skills is the major determinant of utilization of electronic database resources. A preliminary study by Odiri (2016) on undergraduate student's utilization of electronic resources in tertiary institutions in Delta State Nigeria revealed that students of Delta State University, Abraka Campus rely and use the internet heavily to get relevant information to meet their needs, than any other e-resources. The main reason for the poor use of others is inadequate access and lack of necessary skills to use them. The findings showed that students of Delta State University, Abraka Campus use electronic resources always because of its fast nature.

Bassey and Odu (2015) carried out a study titled evaluation of the extent of utilization of electronic library resources and services by undergraduate Students in University of Calabar library, Calabar –Nigeria. Survey research design was used for the study. Population of the study was 4, 211 registered users for 2013/2014. The study revealed that inadequate number of computers and users preferred the electronic library over the physical library are some of the findings, the study suggested that there is need to increase the number of computers in the e-library to accommodate more users at the same time.

Abubakar and Akor (2017) highlighted that the global trend is now characterized with a fundamental shift from traditional information environment to an e-environment where emphasis is placed more on the acquisition of e-resources e-books, e-journals, online databases, CD-ROM databases, OPAC and internet sources are gradually replacing the importance and use of printed materials in most of our knowledge based management system. Awareness and use of electronic information resources are very crucial so as to keep undergraduates students' alert of the available media through which they can access needed information. Awareness is core to the usage of electronic information resources; where materials are in closed access, users' ease of access to such e-resources is by far reduced, but where they are in open access (not subscription-based), undergraduate students find and use them.

#### *Types of E-databases undergraduate students Use*

A study by Habiba and Ahmed (2020) posited the commonly types of electronic databases resources used are: HINARI, OARE, ELSEVIER, EBSCOHOST, AGORA and PROQUEST. E- databases are widely available and can be accessed from anywhere and by many users at the same time. It is therefore convenient to use. University management through university libraries spend large amounts of money on these resources to satisfy the teaching, learning and research needs of its staff and students. As universities spend substantial amount of money from their budgets on payment of subscription to electronic databases annual, it is only appropriate and economical that these databases are optimally utilized to contribute to the academic achievement of students and staff. Non-usage of electronic database by university undergraduate students may have effect on academic performance in Nigeria university educational system as a whole.

Electronic database is a source of information that university undergraduate access and usage is being encouraged by university librarians across the country through Nigerian University Libraries Consortium (NULIB) in partnership with (eIFL).Net Electronic Information for Libraries Network and National Universities Commission (NUC) (Okiki, 2018). The major aim is basically



to promote wider access to types of electronic database resources in order to encourage excellence in teaching/research in Nigerian universities. Since the cost of subscriptions of relevant electronic databases by individual university is relatively high, the cost is drastically reduced by the collaboration among NULIB, eILF.Net and NUC. University libraries in Nigeria are gradually developing their electronic resource database collections. Some of the major databases that are available are; Access to Global On-line Research in Agriculture (AGORA), Directory of Open Access Journals (DOAJ), The Health Internet-work Access to Research Initiative (HINARI), EBSCOHOST (EltonB Stephens CO (company), Journal Storage (AJOL), Access to Research for Development and Innovation (ARDI), Online Access to Research in the Environment (OARE) (Okiki, 2018).

Findings showed that the fundamental difficulty associated with the non-use of electronic database resources was a lack of basic searching skills. This finding backs with Lawal's findings (2021). That is information retrieval skills has a major role to play in usage of electronic information resources. Undergraduate students effectively access and use the following databases for their academic productive; AGORA, PROQUEST, EBSCOHOST, OARE, HINARI, Science Direct, DOAJ, Emerald Library, LISTA, JSTOR, SCOPUS, World Bank e-Library, WESTLAW and ILODOC.

#### ***Level of electronic database Use by University Undergraduates***

A study by Adekunle and Ojemola, (2021) posited that the level of electronic databases use by university undergraduates provide quick access to peer-reviewed, accurate and comprehensive information, electronic databases uses cause knowledge update, increase research output and facilitate knowledge sharing. As a forerunner of academic excellence, electronic databases assist in preparation of courseware, curriculum and self-educational development, generation of up-to-date information thus contributing to academic excellence. A correspondent study that noted factors that promote the level of use of electronic database are timely availability, easy access and full text searching of the electronic information resources

in the database. Effective usage of e-resources in educational institutions are marred by a variety of factors such as difficulty in getting information due to poor retrieval skills, unfamiliarity with database interface and resources as well as poor information literacy and evaluation skills (Madondo, Sithole & Chisita, 2017).

An observation according to Olarongbe and Ibrahim (2017) revealed that various factors were responsible for ineffective use of subscribe databases by undergraduates in federal university libraries in Nigeria. Some of them include: lack of constant power, lack of online access, lack of technical know-how, dislike of reading from a screen, lack of awareness. A study conducted by Bashurun, Isah and Adisa (2017) showed that the level of use of electronic databases by undergraduates students and academic staff in Unilorin, was not at the expected level, effectively usage of e-databases enhance the learning and resource process as stated in the mission statement of the university, low usage was reported for e-books, bibliographic databases and e-journals in their study.

Kore and Samuel (2023) examined the level of usage of electronic databases in academic libraries in Ghana. The experience of Ghana Communication Technology University Library (GCTUL). The study investigated the use of electronic databases (e-databases) by faculty members at the Ghana Communication Technology University Library (GCTUL). The study used a descriptive research method. Questionnaire were used for the data collection. The Statistical Package for the Social Sciences (IBM-SPSS 21.0) was used for data analysis. The finding of the study revealed that most faculty members were aware of the availability of databases in the library. Additionally, the findings established that Emerald, as well as Taylor and Francis, were ranked highly in terms of availability, accessibility and use electronic databases. The study also identified problems such as difficulty in downloading information as well as poor internet connectivity.

#### **Methodology**

Descriptive survey research design was used for this study. The population of the study is 5000 university undergraduates in university of Delta Agbor, Delta State, Nigeria. A sample is a



relatively small portion of the overall population. The main objective of researchers is to isolate a small set of units from a much larger population so that they may examine the smaller group and draw reliable generalizations about the larger group. Proportionate sampling technique was used, to take a sample size 266. The instrument for data collection was questionnaire. A total of 266 copies of the questionnaire administered while 266 copies were returned, representing 100% response rate. The criterion mean for the study was set at 2.50 indicating that any mean above 2.50 was considered high and the mean below 2.50 was considered low. Research questions used 4- point Likert scale.



**Data Analysis and Discussion**

**Presentation of Results and Discussion of the Findings: Response Rate**

This section adopted descriptive analysis, such as mean and standard deviation, to show the patterns of data distributions of the variables of focus in this study. Table 1: Below is shown the purpose for which undergraduate students in the University of Delta Agbor, Delta State, Nigeria, make use of electronic databases for academic pursuit.

<i>Statements</i>	<b>SA Freq. (%)</b>	<b>A Freq. (%)</b>	<b>D Freq. (%)</b>	<b>SD Freq. (%)</b>	<b>Mean <math>\bar{x}</math></b>	<b>Standard Deviation (SD)</b>
Updating my knowledge	80 (30.1)	122 (45.9)	20 (7.5)	44 (16.5)	2.89	1.02
Sharing knowledge	63 (23.7)	127 (47.7)	38 (14.3)	38 (14.3)	2.81	0.96
Group discussion	60 (22.6)	118 (44.4)	56 (21.1)	32 (12)	2.77	0.93
writing my thesis	62 (23.3)	103 (38.7)	51 (19.2)	50 (18.8)	2.67	1.03
writing my assignments	47 (17.7)	122 (45.9)	44 (16.5)	53 (19.9)	2.61	1.00
writing my dissertation	59 (22.2)	98 (36.8)	42 (15.8)	67 (25.2)	2.56	1.10
Preparing for examinations	38 (14.3)	120 (45.1)	54 (20.3)	54 (20.3)	2.53	0.97
Preparing for workshops	38 (14.3)	61 (22.9)	115 (43.2)	52 (19.5)	2.32	0.95
writing of journal articles	42 (15.8)	51 (19.2)	117 (44)	56 (21.1)	2.30	0.97
Recreation and leisure	22 (8.3)	82 (30.8)	85 (32)	77 (28.9)	2.18	0.95

**Purpose of E-Database Use (Mean = 2.56, SD= 0.99), I make use of e-database for ...**

**Table 1:** shows that the university undergraduates in university of Delta Agbor, Delta State Nigeria, generally agreed that they used electronic databases ( $\bar{x}$ =2.56) was generally high. The study indicated that undergraduates student in university of Delta Agbor, Delta State Nigeria generally agreed they had different purposes for using electronic databases, specific data points further suggest that undergraduates in university of Delta, Agbor Delta State made use of e-databases in order to achieve the following purposes, for: updating knowledge ( $\bar{x}$ =2.89), sharing knowledge ( $\bar{x}$ =2.81), group discussion ( $\bar{x}$ =2.77), writing thesis ( $\bar{x}$ =2.67), writing assignments ( $\bar{x}$ =2.61), writing dissertation ( $\bar{x}$ =2.56) and preparing for examinations ( $\bar{x}$ =2.53). On the other hand, undergraduates in university of Delta, Agbor Delta State did not use e-databases to preparing for workshops ( $\bar{x}$ =2.32).

**Type of E-Database Use**

<i>Statements</i> <b>I make use of</b>	<b>SA Freq. (%)</b>	<b>A Freq. (%)</b>	<b>D Freq. (%)</b>	<b>SD Freq. (%)</b>	<b>Mean <math>\bar{x}</math></b>	<b>Standard Deviation (SD)</b>
AGORA	143 (53.8)	80 (30.1)	32 (12)	11 (4.1)	3.33	0.85
EBSCOHOST	137 (51.5)	80 (30.1)	23 (8.6)	26 (9.8)	3.23	0.97



PROQUEST	144 (54.1)	64 (24.1)	20 (7.5)	38 (14.3)	3.18	1.08
OARE	62 (23.3)	45 (16.9)	77 (28.9)	82 (30.8)	2.33	1.14
HINARI	60 (22.6)	39 (14.7)	93 (35)	74 (27.8)	2.32	1.11
ILODOC	41 (15.4)	40 (15)	108 (40.6)	77 (28.9)	2.17	1.02
SCOPUS is to	27 (10.2)	28 (10.5)	102 (38.3)	109 (41)	1.90	0.96
LISTA is to	27 (10.2)	22 (8.3)	93 (35)	124 (46.6)	1.82	0.96
JSTOR is to	25 (9.4)	29 (10.9)	80 (30.1)	132 (49.6)	1.80	0.97
WESTLAWA is to	13 (4.9)	23 (8.6)	120 (45.1)	110 (41.4)	1.77	0.80
DOAJ is to	16 (6.0)	27 (10.2)	97 (36.5)	126 (47.4)	1.75	0.87
<b>Average Overall Mean</b>	<b>2.40</b>	<b>0.99</b>				

**Table 2** In the same vein, despite that the undergraduates in university of Delta Agbor, Delta state generally stated that they did not use all the listed types of databases; they specifically used the following: AGORA ( $\bar{x}$ =3.33), EBSCOHOST ( $\bar{x}$ =3.23) and PROQUEST ( $\bar{x}$ =3.18); while they did not use DOAJ ( $\bar{x}$ =1.81), SCOPUS ( $\bar{x}$ =1.72) and WESTLAWA ( $\bar{x}$ =1.67). Further analysis showed that although undergraduates in university of Delta Agbor, Delta State generally indicated that the level at which they used electronic databases was low; they specifically pointed out that they used AGORA ( $\bar{x}$ =3.29), EBSCOHOST ( $\bar{x}$ =3.08) and PROQUEST ( $\bar{x}$ =3.03) highly; while the level at which they used JSTOR ( $\bar{x}$ =1.80), WESTLAWA ( $\bar{x}$ =1.77) and DOAJ was low.

**Level of databases use by university undergraduates**

<i>Statements</i> I make use of	SA Freq. (%)	A Freq. (%)	D Freq. (%)	SD Freq. (%)	Mean $\bar{x}$	Standard Deviation (SD)
AGORA is to	152 (57.1)	62 (23.3)	30 (11.3)	22 (8.3)	3.29	0.97
EBSCOHOST is to	132 (49.6)	63 (23.7)	30 (11.3)	41 (15.4)	3.08	1.11
PROQUEST is to	133 (50)	59 (22.2)	23 (8.6)	51 (19.2)	3.03	1.17
HINARI is to	71 (26.7)	39 (14.7)	108 (40.60)	48 (18)	2.50	1.07
OARE is to	71 (26.7)	34 (12.8)	98 (36.8)	63 (23.7)	2.42	1.12
ILODOC is to	26 (9.8)	28 (10.5)	110 (41.4)	102 (38.3)	1.92	0.94
SCOPUS is to	27 (10.2)	28 (10.5)	102 (38.3)	109 (41)	1.90	0.96
LISTA is to	27 (10.2)	22 (8.3)	93 (35)	124 (46.6)	1.82	0.96
JSTOR is to	25	29	80	132	1.80	0.97



	(9.4)	(10.9)	(30.1)	(49.6)		
WESTLAWA is to	13 (4.9)	23 (8.6)	120 (45.1)	110 (41.4)	1.77	0.80
DOAJ is to	16 (6.0)	27 (10.2)	97 (36.5)	126 (47.4)	1.75	0.87
<b>Average Overall Mean</b>	<b>2.40</b>	<b>0.99</b>				

**Table 3:** This analysis suggests that the level of electronic databases use by university undergraduates in university of Delta Agbor, Delta State, Nigeria was generally low. On the other hand, AGORA, PROQUEST and EBSCOHOST were the most accessed electronic databases by university undergraduates, one can conclude that though the respondents possess skills to retrieve information from the database, however some of the databases seem to be un accessible.

**Discussion of findings**

The study findings are discussed in line with the objectives of the study.

The finding on the purpose of usage of e-database by university undergraduates in university of Delta, Agbor, Delta State Nigeria revealed was high usage of e-databases. The study disagrees with Joel (2020), who reported that undergraduate students use electronic database resources for research or writing project; to do class assignments; to augment class works; using the electronic catalogue (OPAC) for sourcing information in the library; using the internet in the library for generally source of information in the library.

The findings on types of electronic databases use by university undergraduates in university of Delta Agbor, Delta state Nigeria was low. The study agrees with Habiba and Ahmed (2020) that in developing countries, the commonly used electronic databases resources are: HINARI, OARE, EBSCOHOST, AGORA and PROQUEST. The study was back with Okiki, (2018). That major types of electronic database are available are; AGORA, DOAJ, (HINARI, EBSCOHOST, AJOL, ARDI and OARE

The findings on the level of use of electronic database by university undergraduates in university of Delta, Agbor Delta State, Nigeria was generally low. The finding corresponds with the study by Bashurun, Isah and Adisa (2017) showed that the level of use of electronic databases by undergraduates’ students was not at the expected level, low usage was reported for e-books, bibliographic databases and e-journals in their study.

**Conclusion**

This study investigated assessment of undergraduate students usage of electronic database by university undergraduates in university of Delta Agbor, Delta state Nigeria. The study found that the purpose of usage of e-database by university undergraduates in Agbor, Delta State Nigeria was high. HINARI, OARE, EBSCOHOST, AGORA and PROQUEST are the common types of database use. The level of electronic databases by university undergraduates in Agbor, Delta State, Nigeria was generally low.

**Recommendations**

Based on the findings of this study the following recommendations are made

1. The university administrator (director of physical planning) DPP should provide adequate infrastructures this will increase the Purpose of usage of electronic database by university undergraduate in university of Delta Agbor, Delta State.
2. University of Delta Agbor, should provide free, speedy and reliable internet service in their campus for students to



access electronic databases. This will enhance the types of databases use by university undergraduates in the institution.

3. The director of the Information and Communication Technology unit ICT of the University of Delta should subscribe to relevant electronic databases such as ILODOC, HINARI, SCOPUS, WESTLAWA and DOAJ This will enhance the types of electronic databases used by university undergraduates in the University of Delta, Agbor, Delta State.

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