

Iguehi Joy Ikenwe

Ambrose Alli University, Edo State, Nigeria
 e-mail: iguehi.ikenwe@aauekpoma.edu.ng
 ORCID ID: 0000-0002-6478-4532

Anthony Oboite Solomon

Federal College of Education Technical Ekiadolor, Edo State, Nigeria
 e-mail: aosolomon59@gmail.com
 ORCID ID: 0000-0002-1713-4764

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Relationship between undergraduate students search skills and usage of electronic information resources in Ambrose Alli University (AAU) Nigeria

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Iguehi Joy Ikenwe (PhD) is a Senior Lecturer and researcher in the Department of Library and Information Science, Ambrose Alli University, Ekpoma, Edo State. She holds a B.Sc. in Library and Information Science, Delta State University, Abraka; MSc in Library, Archival and Information Science, University of Ibadan, and PhD at the Nnamdi Azikiwe University, Awka, Nigeria. She is a Chartered Librarian with Library Registration Council of Nigeria, and a member of the Nigeria Library Association. She has written many book chapters and articles in national and international reputable journals and presented papers at national and international conferences. Her areas of interest are Information/Digital Literacy, Digital Libraries, Information Behaviour, ICTs, Library/Information Management, Knowledge Management, and Emerging Technologies in Libraries.

Anthony Oboite Solomon is an Assistant Librarian and Researcher at the College Library, Federal College of Education (Technical) Ekiadolor, Benin City, Nigeria. He holds a Bachelor of Science Degree in Library and Information Science (BLIS) from Ambrose Alli University, Ekpoma, Nigeria; a Postgraduate Diploma in Education (PGDE) from the Nigerian Teachers' Institute (NTI) Kaduna, affiliated to the University of Port Harcourt, Nigeria; and a Master of Science Degree in Library and Information Science (MLIS) from Lead City University, Ibadan, Nigeria. He has authored and co-authored several articles in reputable local and international journals, and co-authored a chapter in a book. His research interests include digital librarianship, ICT in libraries, social media, and information seeking behaviour.

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ey words: Electronic information resources, Search skills, Undergraduates

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bstract: This research work investigated the relationship between undergraduate search skills and usage of electronic information resources (EIRs) in Ambrose Ali University (AAU), Edo State, Nigeria. The population of the study was 1,798 final year undergraduate students of AAU for the 2023/2024 academic session, with a sample of 113 from three Faculties. Accidental sampling and throwing of a dice were the adopted sampling techniques. The research instrument for data collection was a structured questionnaire, and data were analyzed using descriptive statistics of percentages, mean scores (\bar{x}), and standard deviation (SD) for the research questions while Pearson Product Moment Correlation Coefficient statistical method was used to test the hypothesis; and the data were presented in Tables. Findings showed that AAU undergraduate students can define their information needs and select articles with ease ($\bar{x} = 3.46$). They can use basic ICTs and possess basic search skills ($\bar{x} = 3.08$). While they mainly use OPAC ($\bar{x} = 3.8$), e-books ($\bar{x} = 3.8$), e-journals ($\bar{x} = 3.6$), online databases ($\bar{x} = 3.8$), e-thesis ($\bar{x} = 3.0$), and e-magazines ($\bar{x} = 3.0$), they use them for leisure ($\bar{x} = 3.1$), searching for internship opportunities ($\bar{x} = 3.6$), and class assignment ($\bar{x} = 3.3$). They encounter challenges like unavailability of relevant EIRs ($\bar{x} = 3.3$), lack of awareness of EIRs ($\bar{x} = 3.4$), inadequate searching skills ($\bar{x} = 3.3$), and high cost of internet access in their quest to use EIRs ($\bar{x} = 3.1$). Thus, the paper concluded that the undergraduate students of AAU possess the search skills and showed that there is a significant relationship between the search skills and the use of electronic information resources. The study recommended updates on the search skills and use, as well as provision of facilities to ensure equitable quality learning of the students.

Introduction

Electronic information resources (EIRs) are resources that are accessed with the aid of electronic gadgets. They provide information in digital formats, and have exploded in popularity and usage, changing the traditional way of teaching and learning. With the aid of EIRs, the students navigate the Internet, locating and using the wide arrays of learning resources. They become skilled in using the key

words, basic and advanced search for their educational activities. The EIRs have been found to reduce the stressful use of traditional documents in learning and researching (Jayakananthan & Jayaraj, 2019). But there seems to be a decrease in the utilization of EIRs by undergraduates. Little wonder Solomon and Obaseki (2018) averred that youths prefer to use technologies to keep in touch with close associates rather than educational purposes. This lack of interest in the usage of EIRs by undergraduates could be influenced by a plethora of reasons, which include lack of proper search techniques.

Search skills are the abilities information seekers possess that enable them effectively locate, evaluate, and manage information from all information sources, whether they are physical, digital databases, or search engines. The importance of search skills is to enable easy retrieval of information, whether on physical, hard copy, or on softcopy information sources. Thus, Kumar (2020) noted that academics ought to have clear understanding of the various search patterns in order to effectively retrieve any needed information. Information search, which is part of information seeking, focuses on the way information users interact with and manipulate different search tools for the gain of satisfying their information needs. The information search skills involve the proper formulation of search queries, and using key terms. The search skills are consciously learnt and deficiency in them can lead to difficulty in utilizing the rich databases online. Thus, the libraries offer these services to the members of the academic community.

The libraries as the information centres in the academic environment developed, subscribed, and enhanced their services to include all technological advances and best practices through the EIRs (Ikenwe, Adetona & Ose-Abame, 2021). The goal is to provide effective service delivery. However, the knowledge and use of them by students are the determinants for the learning global practices. Indeed, modern technologies have influenced the way information is being searched and used. With the knowledge of basic and advanced skills, one becomes digitally inclined and can retrieve any electronic information resources needed (Ikenwe & Udem, 2022).

Importantly, the use of EIRs is spread across all levels of education. The provision and usage of e-books, e-journal, e-thesis, and other EIRs adds value and the quality of equitable quality education (Ikenwe, Aiyebilehin & Adjarho, 2022). The resources help the students in carrying out research and projects, doing assignments, in leisure reading, and following up on socio-economic information. Although EIRs can present information overload and explosion, they have their values which cannot be underestimated. Therefore, there is a need for the undergraduate students to have the basic searching skills to enable them to navigate the internet for relevant information. To successfully utilize online information search skills, undergraduates need to be able to navigate the modern technologies.

Today, many scholars have joined the quest to gain the skills needed for the best global practices. Similarly, libraries from different sectors have embraced these technological revolutions and integrated them in their information service delivery. As the libraries serve the undergraduate students in tertiary institutions, it becomes pertinent to regularly evaluate the students' search skills and usage for the potential of improvement. Thus, this study examined the relationship between the undergraduate students search skills and the usage of electronic information resources in Ambrose Ali University (AUU) Nigeria.

Statement of the Problem

The knowledge of search skills enhances the effective usage of electronic information resources. This will create seamless navigation of the internet for there trievig of all the needed resources. It will also enable offline retrieval of information, making learning and research more interesting. However, experiences and observations have shown that many undergraduate students do not seem to have good searching skills which probably reduces their usage of electronic information resources. This could be challenging as the global practices of education require adequate use of ICT and retrieval of online resources. Perhaps, if the searching skills are facilitated, the undergraduate students will acquire the skills to achieve their learning and research objectives with the online sources. Thus, it is not very clear if the undergraduate students of Ambrose Ali University, Edo state Nigeria, have recently been examined to know their searching skills and usage of electronic information resources. This study is poised to determine that notion.

Research Questions

The following research questions formed the basis upon which this study was carried out. They are:

1. What search skills do the undergraduate students of Ambrose Alli University have for the use of EIRs?
2. What are the types of electronic information resources used by undergraduate students of Ambrose Alli University?
3. What do the undergraduate students of Ambrose Alli University use EIRs for?
4. What are the challenges that mitigate the search skills and usage of EIRs of the undergraduate students of Ambrose Ali Unviversity?

Hypothesis

There is no significant relationship between undergraduates' electronic information resources search skills and their usage of electronic information resources.

Literature Review

Academic libraries are rapidly embracing EIRs. With advances in information technology, the definition of libraries is changing as is the definition of information resources (Naik, et al., 2019). In the past, information resources were seen as tangible entities, but now they have advanced from conventional print documents to documents that can be shared electronically. Al Bataineh et al. (2021) noted that EIRs perform important roles in students' education, as they provide most up-to-date information, and they take forms like e-journals, databases, and e-books. Kumar (2020) averred that a common characteristic of online EIRs is that their utilization is influenced by the web or internet. Thus, the web and the Internet provide possibilities for communicating and delivering EIRs from one location to another in the quickest time with the students having access to information on a global scale. But then, this is enabled when the students are imbued with search skills.

Search skills are simply the ability to seek, find, retrieve, and use information. It can be online or offline. According to Saidu et al. (2023), search skills are a series of activities and capabilities that people adopt in order to locate where information is, what type of information it is, the format the information is presented in, and the ways the information is accessed. The indication is that search skills involve retrieval, evaluating, and utilization of information to meet a need. It can then be surmised that search skills are essential in today's complex and rapidly evolving libraries and other information environment. They enable students to effectively and efficiently locate, evaluate, and use information from various sources (Valmorees & Acedera, 2024). Thus, it can be deduced that search skills are critical as integral quality of one's personality whose willingness and ability push them to independently find solutions to new problems (Adedeji, 2023). This is the power of effective use of EIRs.

Students use EIRs for different purposes as well as different types for their learning purposes. Gamit (2018) observed that students mainly utilize EIRs for class assignments and research purposes. However, there is a varying degree to which students use EIRs. Al Bataineh et al. (2021) opined that the scientific productivity of students increased because of the high level of consumption of the EIRs; the research also reported that that majority of these students (57%) were satisfied using EIRs, and 58% of them feel using EIRs was fun. The author also reported that a major reason for each insufficient skill of most students is lack of training. However, Kumar (2020) observed that the EIRs with the highest levels of usage were e-teaching materials, e-tutorials, e-books, e-reference resources, and e-magazines.

Evidences showed that the undergraduate students' search skills and usage of electronic information resources. For instance, the study of Valmorees and Acedera (2024) reported that there is a significant connection between students' information needs, how they search for information, and their information literacy skills; as those who have higher information needs and actively seek information

are more likely to have better information literacy skills. Also, the study of Sambo, Precious, and Olawepo (2023) reported that there is a moderate positive and significant relationship between students' computer hardware search skills and EIRs. The report also stated that there is a high and significant relationship between students' computer software search skills and their use of EIRs in university libraries in South-West Nigeria. Similarly for Adedeji (2023), there is a significant relationship between information and research search skills and search engine use, as both information search skills and research skills are prerequisites to the successful utilization of search engines that house a plethora of EIRs.

There are several challenges militating against the access and usage of EIRs. Bello and Bokoh (2021) affirmed that a major challenge to access and use EIRs is insufficient computer competency because it affects users' ability to search relevant resources for their study. The author also stated that there was lack of assistance from library personnel, lack of awareness of the existence of such information, poor infrastructure, unstable power supply. Others are inaccessibility of some EIRs, incomplete and inaccurate information in the library, poor internet access, inadequate ICTs, difficulty in locating some EIRs, and information overload. This deficiency is central because without having access to the EIRs, one cannot assess its contents to meet their information needs (Solomon and Obaseki, 2018). For Muzzammil and Ansari (2019), the challenges militating against the use of EIRs are lack of knowledge in using EIRs, inadequate infrastructure facilities, lack of time and useful information.

To overcome some of the challenges encountered while using EIRs, the user needs to understand some search skills that aid in information retrieval. Raghavan (2022) noted that different search skills have been developed over the years. For Kumar (2020), search skills are the methods employed by users in getting information to satisfy their information needs; further positing that it is important for users to have a brisk understanding of the different search techniques like Boolean search, proximity search, and phrase search among others. The activities involved in applying whatever search technique one has chosen can be done either passively or actively (Kah, et al., 2022); by implication, one can gain deeper knowledge about a phenomenon or about the search technique to adopt in studying a phenomenon either by active or passive information seeking behaviours.

Research Methodology

The study adopted the survey research design. The population of this study comprised 1,798 final year undergraduate students in Ambrose Alli University for the 2023/2024 academic session. Three departments within the three faculties were selected as samples. Selection of the faculties was done using accidental sampling, while the department within each faculty was selected by throwing of a dice. Thus the sample size was one hundred and thirteen (113) students. The breakdown is as follows:

Three faculties were selected for the study: Faculty of Arts, Faculty of Education, and Faculty of Social Sciences. For each of these faculties, a department was selected. For Faculty of Arts, the Department of French was selected with 32 respondents; for Faculty of Education, the Department of Library and Information Science was selected with 60 respondents; and for Faculty of Social Sciences, the Department of Psychology was selected with 21 respondents. That gave a total of 113 respondents for the 2023/2024 academic session.

A questionnaire was used to collect data for the study. The questionnaire contained two (2) sections. Section A contained the bio-data of the respondents. This section was developed by the researchers. Section B contained items on the research questions. The items were adapted from Al Bataineh et al. (2021), and Bello and Bokoh (2021). Face and content validity were done by two lecturers in Library and Information Science. 131 copies of the questionnaire were distributed offline, and in hard copies to the respondents in their respective Departmental Final Year Lecture Halls; a total of 84 copies were duly filled and returned. The data were analyzed using descriptive statistics of percentages, mean scores (\bar{x}) and standard deviation (SD) for the research questions while Pearson Product Moment Correlation Co-efficient statistical method was used to test the hypothesis. The scale used for the analysis of the data was Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). For the decision rule, the criterion Mean is 2.5; that is items with mean of 2.5 and above were accepted, while those with mean lesser than 2.5 were rejected. The data were presented in Tables.

Analysis and Presentation of Data

Table 1: Demographic data of the respondents

Demographic Characteristic	Freq.	%
Gender		
Males	37	47
Females	41	59
Age bracket		
16-20	27	32.1
21-25	43	51.1
26-30	11	13
31 and above	3	3.6
Faculty/Department		
Art/French	17	20.2
Education/Library and Information Science	44	52.4
Social Sciences/Psychology	23	27.4
N = 84		

Research Questions

- Table 2: Search skills of the undergraduate students of Ambrose Alli University
SCALE: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD)

Statements	SA	A	D	SD	\bar{x}	St.D
	F %	F %	F %	F %		
Search skills						
I can define my information needs	68(80.9%)	16(19.0%)	-	-	3.8	0.95
I can locate information	50(59.5%)	25(29.7%)	10(11.9%)	2(2.3%)	3.5	0.88
I can select vital information with ease.	52(61.9%)	27(32.1%)	3(3.5%)	5(5.9%)	3.5	0.87
I can summarize information	55(65.4%)	22(26.1%)	2(2.3%)	8(9.5%)	3.5	0.87
I understand the terminologies used to access electronic information	39(46.4%)	38(45.2%)	5(5.9%)	5(5.9%)	3.3	0.82
I can use information sources to increase research topic familiarity	49(58.3%)	14(35.7%)	9(10.7%)	15(17.8%)	3.2	0.8
Grand Mean					3.46	
Operational Skills						

Criterion Mean: 2.5

For the strategic skills, there are seven (7) items, with means ranging from 3.66 to 2.1. With a criterion mean of 2.5, it showed that the majority of the students are unable to use title search in OPAC, which had a mean of 2.1; but other items had means higher than the criterion mean. However, the grand mean of 3.17 showed that the students have high strategic skills when it comes to information search skills.

Research Questions 2: What are the types of electronic information resources used by undergraduates in Ambrose Alli University?

Table 3: Use of Electronic information resources

SCALE: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD)

EIRs Used by Undergraduates	SA F %	A F %	D F %	SD F %	\bar{x}	St.D
Online Public Access Catalogue (OPAC)	57(79%)	20(13.5%)	7(4.7%)	3(2.0%)	3.8	0.95
e-books	51(68.2%)	8(26.3%)	2(1.3%)	6(4.0%)	3.8	0.95
e-journals	55(78.3%)	18(12.1%)	10(6.7%)	4(2.7%)	3.6	0.91
Online databases (Eb-scohost, Agora, Ardl, Goali, Hinari, Oare)	48(72.9%)	5(24.3%)	1(0.6%)	3(2.0%)	3.8	0.95
Audio-Visual information resources	38(45.9%)	45(51.3%)	4(2.7%)	-	3.4	0.85
e-newspaper	38(45.9%)	45(51.3%)	4(2.7%)	-	3.4	0.85
e-manuscript	-	34(45.9%)	-	50(54.0%)	1.4	0.36
e-thesis	43(49.3%)	14(30.4%)	-	20(13.5%)	3.0	0.75
e-data archives	2(1.2%)	36(44.5%)	4(2.7%)	45(51.3%)	2.0	0.50
e-magazines	43(49.3%)	14(30.4%)	-	20(13.5%)	3.0	0.75
Criterion Mean: 2.5						

Table 3 shows the types of EIRs used by undergraduate students. The Table revealed that the types of EIRs used by the undergraduate students are OPAC, e-books, and online databases, each with a mean of 3.8, respectively. Others are e-journals with a mean of 3.6; audio-visuals and e-newspapers each with a mean of 3.4. While e-thesis and e-magazines each had a mean of 3.0, respectively. Also, EIRs rarely used by the undergraduate students were e-data archives with a mean of 2.0, and e-manuscripts with a mean of 1.4. In all, we see that the undergraduate students make use of EIRs in tertiary institutions in Nigeria.

Research question 3: What do the undergraduate students of Ambrose Alli University use EIRs for?

Table 4: Purpose of use of EIRs by undergraduate students of Ambrose Alli University
SCALE: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD).

Purpose of use of EIRs	SA		A		D		SD		\bar{x}	St.D
	F	%	F	%	F	%	F	%		
I use EIRs to source materials for research/ project writing	53	(77.0%)	20	(13.5%)	9	(6.0%)	5	(3.3%)	3.6	0.9
I use them to do class assignments	61	(41.8%)	14	(50.6%)	11	(7.4%)	1	(0.6%)	3.3	0.87
I use EIRs to augment my lecture notes	38	(66.8%)	27	(18.2%)	5	(3.3%)	7	(4.7%)	3.3	0.76
I use EIRs to search for scholarship opportunities	37	(66.2%)	43	(29.0%)	5	(3.3%)	2	(1.3%)	3.3	0.85
I use EIRs to search for internship opportunities	79	(73.6%)	-		-		2	(2.0%)	3.6	0.87
I use the EIRs to retrieve current literature for extra studies	59	(60.1%)	13	(29.7%)	5	(3.3%)	10	(6.7%)	3.6	0.79
I use EIRs for leisure reading	83	(76.3%)	-		2	(2.0%)	2	(1.3%)	3.1	0.69
Criterion Mean: 2.5										

Table 4 shows the purposes for which undergraduate students use EIRs. They use EIRs to source materials for research and project materials, for internship opportunities, and for getting literature for extra studies with mean scores of 3.6, respectively. Other purposes for which undergraduate students use EIRs were to do their assignments, augment their lecture notes, and search for a scholarship opportunity; as each item had a mean scores of 3.3, respectively. The students also use EIRs for leisure reading, with a mean score of 3.1. This shows that undergraduate students use EIRs for varied purposes, in a bid to meet their information needs.

Research question 4: What are the challenges that mitigate the search skills and usage of EIRs of the undergraduate students of Ambrose Alli Unviversity?

Table 5: Challenges that affect the search skills and usage of EIRS

SCALE: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD).

Challenges encountered	SA		A		D		SD		\bar{x}	St.D
	F	%	F	%	F	%	F	%		
Lack of awareness to electronic information resources	68	(80.9%)	10	(11.9%)	-		6	(7.1%)	3.4	0.85
High cost of internet access (subscription)	34	(66.2%)	35	(23.6%)	10	(6.7%)	5	(5%)	3.1	0.79
Poor internet services by network providers	16	(54.0%)	56	(37.8%)	10	(10.3%)	2	(2%)	3.4	0.85
Inadequate searching skills	34	(22.9%)	42	(39.1%)	3	(2.0%)	5	(5%)	3.3	0.83
Lack of adequate information retrieval skills	15	(53.3%)	45	(30.4%)	9	(6.0%)	15	(31%)	3.2	0.8
Unavailability of e-resources relevant to my information needs	69	(46.6%)	5	(7.1%)	4	(55.7%)	6	(30%)	3.3	0.82
Excessive academic workload	15	(53.3%)	45	(30.4%)	9	(6.0%)	15	(31%)	3.2	0.8
Criterion Mean: 2.5										

Table 5 discusses the problem encountered in using EIRs by AAU undergraduates. These are: lack of awareness of EIRs (mean: 3.4), poor internet service (mean: 3.4), unavailability of relevant EIRs (mean: 3.3), inadequate searching skills (mean: 3.3), lack of adequate information retrieval skills (mean: 3.2), excessive academic workload (mean: 3.2), and high cost of internet access (mean: 3.1).

Test of Hypothesis

There is no significant relationship between undergraduate electronic information resource search techniques and their use of electronic information resources.

Table 6: Pearson's correlation on the relationship between electronic information resources search techniques and usage of electronic information resources

Correlation	Electronic information resources search techniques	Usage of electronic information resources
Electronic information resources search techniques		.792**
Pearson Correlation	1	
Sig. (2-tailed)		.000
N	84	84
usage of electronic information resources	.792**	
Pearson Correlation	.000	1
Sig (2-tailed)		
N	84	84
** Correlation is significant at the 0.01 level (2-tailed)		

The result in Table 6 shows the relationship between the search skills and use of electronic information resources by the undergraduate students of AAU. It was tested at 0.05 significance level with ($r = .792$; $N=84$; $p < .01$). Therefore, the hypothesis which states there is no significant relationship between the search skills and use of electronic information resources by the undergraduate students of AAU is hereby rejected. Hence, there is a significant relationship between the two.

Discussion of Findings

The search skills possessed by the selected final year undergraduate students of Ambrose Alli University are the ability to define, locate, select, summarize, use, and retrieve EIRs for their learning. They also operate the keyboards, scan images, and access online databases, as well as use boolean operators and search engines in retrieving EIRs. These findings are in agreement with Al Bataineh et al. (2021) who observed that undergraduates of Amman Arab University find it easy as well as flexible to use EIRs and the findings of Gamit (2018) that most students possess basic computer skills. Bello and Bokoh (2021) and Jayakananthan and Jayaraj (2019) also noted that the students in Ogun State Nigeria and Sri Lanka possessed basic computer knowledge. However, the findings of Kumar (2020) reported that undergraduate students do not use Boolean

operators and truncation. These confirmations indicate the benefits of the critical knowledge and search skills of the students for quality education.

Interestingly, the types of EIRs used by undergraduate students as reported in the findings align with the study of Kumar (2020) who stated that students use e-teaching materials, e-tutorials, e-books, e-reference resources, e-magazines, e-journals, e-reports, e-databases, e-thesis, and dissertation. What this means is that the EIRs are accessed, used, and retrieved. It shows the power of the Internet to provide the needed resources for learning and research. In other words, if these EIRs are not sought for and used, then the global practices of integrating ICT in the classroom will be in vain.

The purposes for which the undergraduate students use EIRs which indicated leisure, search for internship opportunities, class assignment, extra studies, research/project writing, augment lecture notes, and search for scholarship opportunities indicate that search skills are really beneficial in educational sector (Gamit, 2018). Although, Muzzammil and Ansari (2019) noted that “the purposes why users of the Court Library at Delhi High Court Bar Association use EIRs are for updating subject knowledge, keeping abreast with current information, writing a book or article, consulting reference documents, and finding relevant information on areas of specialization.” Their differences show in the sector and the population that use the EIRs. The point remains that students will always look out for the major objectives of their study.

On the challenges of using EIRs by AAU undergraduate students, the unavailability of relevant EIRs, lack of awareness, inadequate search skills, and poor internet service may allude that the academic library has the responsibilities of providing the resources. The research findings are related to the study of Muzzammil and Ansari (2019) who noted that the challenges encountered in using e-resources are lack of knowledge on how to use e-resources, inadequate ICT infrastructure facilities, lack of relevant information, and other factors like lack of time. The implication is that if the necessary facilities are not provided for, and the students are not taught how to retrieve information, the level of education may never be the same for all the students in every country.

The finding revealing a significant relationship between the search skills and use of EIRs by undergraduate students of Ambrose Alli University shows that the right steps were taken in teaching the mode of information retrieval for quality learning. It implies that the good practices are adopted in the Nigeria universities.

Conclusion

EIRs have been found to enrich learning and research activities. They have shown that they open wide spaces for information search in the Internet. Thus, the undergraduate students need the knowledge and search skills for EIRs to succeed in their academics in the technological era. Therefore, this study concluded that the undergraduate students of AAU possess search skills for the use of EIRs, they

use different types of EIRs as they navigate their skills while searching. They use the EIRs for different purposes which spread across the learning objectives and extracurricular activities. The challenges with the search skills of EIRs may affect the students' use which may affect the values of education in the country. The rejection of the hypothesis shows that there is a significant relationship between the search skills and the use of EIRs by the undergraduate students of AAU. Indeed, to retrieve the needed EIRs, undergraduate students must be able to master necessary information search skills.

Recommendations

The following recommendations were made based on the findings:

1. There should be continuous training of the undergraduate students to update and increase search skills in the use of EIRs as new technological advances appear at a high speed.
2. The new EIRs that come in new databases should be subscribed for in the academic libraries. This will increase the varieties of choices for online learning.
3. The purpose of use of these EIRs should be monitored using the web tracker to ensure that appropriate educational databases are accessed. Thus, awareness and ethical use of the Internet should be shared.
4. ICT and Internet facilities should be provided to enable adequate use of search skills and the resources therein.

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Iguehi Joy Ikenwe

Ambrose Alli University, Edo State, Nigeria
 e-mail: iguehi.ikenwe@aauekpoma.edu.ng
 ORCID ID: 0000-0002-6478-4532

Anthony Oboite Solomon

Federal College of Education Technical Ekiadolor, Edo State, Nigeria
 e-mail: aosolomon59@gmail.com
 ORCID ID: 0000-0002-1713-4764

Związek między umiejętnościami wyszukiwania studentów studiów licencjackich a korzystaniem z elektronicznych zasobów informacyjnych na Uniwersytecie AmbroseAlli (AAU) w Nigerii

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Dr Iguehi Joy Ikenwe jest starszym wykładowcą i pracownikiem naukowym na Wydziale Bibliotekoznawstwa i Informacji Naukowej Uniwersytetu Ambrose Alli w Ekpoma w stanie Edo. Ukończyła studia licencjackie Bibliotekoznawstwa i Informacji Naukowej na Uniwersytecie Stanowym Delta w Abraka; Magister bibliotekoznawstwa, archiwistyki i informacji naukowej na Uniwersytecie w Ibadan oraz doktor na Uniwersytecie Nnamdi Azikiwe w Awka w Nigerii. Jest dyplomowanym bibliotekarzem w Nigeryjskiej Radzie Rejestracji Bibliotek oraz członkiem Nigeryjskiego Stowarzyszenia Bibliotek. Napisała wiele rozdziałów książek i artykułów w renomowanych czasopismach krajowych i międzynarodowych oraz wygłaszała referaty na konferencjach krajowych i międzynarodowych. Jej obszary zainteresowań to informatyka/umiejętności cyfrowe, biblioteki cyfrowe, zachowania informacyjne, technologie informacyjno-komunikacyjne, zarządzanie bibliotekami/informacją, zarządzanie wiedzą oraz nowe technologie w bibliotekach.

Anthony Oboite Solomon jest asystentem bibliotekarza i pracownikiem naukowym w Bibliotece Uniwersyteckiej, Federalnej Wyższej Szkole Edukacji (Technicznej) Ekiadolor,

Benin City, Nigeria. Uzyskał tytuł licencjanta w dziedzinie bibliotekoznawstwa i informacji naukowej (BLIS) na Uniwersytecie Ambrose Alli w Ekpoma w Nigerii; Dyplom ukończenia studiów podyplomowych w zakresie edukacji (PGDE) w Nigeryjskim Instytucie Nauczycielskim (NTI) w Kadunie, afiliowanym przy Uniwersytecie Port Harcourt w Nigerii; oraz tytuł magistra bibliotekoznawstwa i informacji naukowej (MLIS) uzyskany na Uniwersytecie Lead City w Ibadan w Nigerii. Jest autorem i współautorem kilku artykułów w renomowanych czasopismach lokalnych i międzynarodowych oraz współautorem rozdziału w książce. Jego zainteresowania badawcze obejmują bibliotekarstwo cyfrowe, technologie informacyjno-komunikacyjne w bibliotekach, media społecznościowe oraz zachowania związane z poszukiwaniem informacji..

Słowa kluczowe: elektroniczne zasoby informacyjne, umiejętności wyszukiwania, studenci studiów licencjackich

S**treszczenie:** W niniejszej pracy badano związek między umiejętnościami wyszukiwania na studiach licencjackich a wykorzystaniem elektronicznych zasobów informacyjnych (EIR) na Uniwersytecie Ambrose Alli (AAU), w stanie Edo, Nigeria. Populacja badania składała się z 1798 studentów ostatniego roku studiów licencjackich AAU na sesję akademicką 2023/2024, na próbie 113 z 3 wydziałów. Przypadkowe pobieranie próbek i rzucanie kostką były przyjętymi technikami próbkowania. Instrumentem badawczym do zbierania danych był ustrukturyzowany kwestionariusz, a dane analizowano przy użyciu statystyk opisowych procentów, średnich wyników (\bar{x}) i odchylenia standardowego (SD) dla pytań badawczych, podczas gdy do przetestowania hipotezy wykorzystano metodę statystyczną współczynnika korelacji Pearsona, a dane przedstawiono w tabelach. Wyniki wykazały, że studenci studiów licencjackich AAU mogą z łatwością definiować swoje potrzeby informacyjne i wybierać artykuły ($\bar{x} = 3,46$). Potrafią korzystać z podstawowych technologii informacyjno-komunikacyjnych i posiadają podstawowe umiejętności wyszukiwania ($\bar{x} = 3,08$). Chociaż korzystają głównie z OPAC ($\bar{x} = 3,8$), e-booków ($\bar{x} = 3,8$), e-journali ($\bar{x} = 3,6$), internetowych baz danych ($\bar{x} = 3,8$), e-prac dyplomowych ($\bar{x} = 3,0$), and e-czasopism ($\bar{x} = 3,0$), używają ich do wypoczynku ($\bar{x} = 3,1$), poszukiwania możliwości odbycia stażu ($\bar{x} = 3,6$), i rozwiązywania zadań domowych ($\bar{x} = 3,3$). Napotykają oni wyzwania, takie jak niedostępność odpowiednich EIR ($\bar{x} = 3,3$), brak wiedzy na temat EIR ($\bar{x} = 3,4$), niewystarczające umiejętności wyszukiwania ($\bar{x} = 3,3$), oraz wysokie koszty dostępu do internetu w dążeniu do korzystania z EIR ($\bar{x} = 3,1$). W związku z tym w artykule stwierdzono, że studenci studiów licencjackich AAU posiadają umiejętności wyszukiwania i wykazano, że istnieje istotny związek między umiejętnościami wyszukiwania a korzystaniem z elektronicznych zasobów informacyjnych. Badanie rekomenduje aktualizację umiejętności wyszukiwania i użytkowania, a także dostarczenie udogodnień w celu zapewnienia równej jakości nauki uczniów.

Iguehi Joy Ikenwe

Ambrose Alli Universität, Bundesstaat Edo, Nigeria
 E-Mail: iguehi.ikenwe@aauekpoma.edu.ng
 ORCID ID: 0000-0002-6478-453255

Anthony Oboite Solomon

Bundeskolleg für Technische Bildung Ekiadolor, Bundesstaat Edo, Nigeria
 E-Mail: aosolomon59@gmail.com
 ORCID ID: 0000-0002-1713-4764

Zusammenhang zwischen der Fähigkeit von Bachelorstudenten, Informationen zu suchen, und der Nutzung elektronischer Informationsressourcen an der Ambrose Alli Universität (AAU) in Nigeria

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Dr. Iguehi Joy Ikenwe ist Hochschullehrerin und wissenschaftliche Mitarbeiterin im Institut für Bibliotheks- und Informationswissenschaft der Ambrose Ali Universität, Ekpoma, im Bundesstaat Edo (Nigeria). Sie hat einen Bachelorabschluss im Fachbereich Bibliotheks- und Informationswissenschaft (Bundesuniversität Delta, Abraka), einen Masterabschluss im Bereich Bibliotheks- und Informationswissenschaft (Ibadan Universität) sowie einen Dokortitel (Nnamdi Azikiwe Universität in Awka). Sie ist ebenfalls Diplombibliothekarin am Nigerianischen Bibliotheksregistrierungsrat und Mitglied des Bibliotheksverbands Nigerias. Sie veröffentlichte zahlreiche Buchkapitel und Artikel in renommierten lokalen und internationalen Fachzeitschriften und hielt Vorträge während lokalen und internationalen Tagungen. Zu ihrem Forschungsinteresse gehören: digitale Information/Kompetenz, digitale Bibliotheken, Informationsverhalten, Informations- und Kommunikationstechnologien (IKT), Bibliotheks-/Informationsmanagement, Wissensmanagement und neue Technologien in Bibliotheken.

Anthony Oboite Solomon ist Bibliotheksassistent und Forscher in der Bibliothek des Bundeskollegs für Technische Bildung Ekiadolor, Benin City, Nigeria. Er hat einen Bachelorabschluss im Fachbereich Bibliotheks- und Informationswissenschaft (BLIS) der Ambrose Ali Universität, Ekpoma, Nigeria, ein Diplom des Aufbaustudiums im Bereich der Bildung (PGDE) von Nigerian Teachers' Institute (NTI) Kaduna, verbunden mit der Universität in Port Harcourt, Nigeria, sowie einen Masterabschluss im Bereich Bibliotheks- und Informationswissenschaft (MLIS) an der Lead City Universität, Ibadan, Nigeria. Er ist Autor und Mitautor von einigen Artikeln in renommierten lokalen und internationalen Fachzeitschriften sowie Mitautor eines Buchkapitels. Sein Forschungsinteresse umfasst digitales Bibliothekswesen, Informations- und Kommunikationstechnologien (ICT) in Bibliotheken, Sozialmedien und Verhaltensweisen im Zusammenhang mit der Informationssuche.

S **chlüsselworte:** elektronische Informationsressourcen; Recherchefähigkeiten; Bachelorstudenten

Z **usammenfassung:** In der Studie wurde der Zusammenhang zwischen den Fähigkeiten der Studierenden, Informationen zu suchen, und der Nutzung elektronischer Informationsressourcen (Electronic Information Resources, EIR) an der Ambrose Ali Universität (AAU) im Bundesstaat Edo in Nigeria untersucht. Die Untersuchungspopulation umfasste 1798 Studierende im letzten Jahr des Bachelorstudiums an der AAU im akademischen Jahr 2023/2024, wobei die Stichprobe 113 Personen aus 3 Fakultäten umfasste. Die angewandten Stichprobenverfahren waren Zufallsstichproben und Würfel. Das Forschungsmittel zur Datenerhebung war ein strukturierter Fragebogen, und die Daten wurden mithilfe der deskriptiven Statistik in Prozenten (%), Durchschnittswerten (\bar{x}) und Standardabweichung (SD) für die Forschungsfragen analysiert, während zur Überprüfung der Hypothese die statistische Methode des Pearson-Korrelationskoeffizienten verwendet wurde; die Daten wurden in Tabellen dargestellt. Die Ergebnisse zeigten, dass die Studierenden des Bachelorstudiums an der AAU ihre Informationsbedürfnisse leicht erkennen und Artikel auswählen können ($\bar{x} = 3,46$). Sie sind in der Lage, grundlegende ICT-Technologien zu nutzen und haben grundlegende Suchfähigkeiten ($\bar{x} = 3,08$). Obwohl sie hauptsächlich OPAC ($\bar{x} = 3,8$), E-Books ($\bar{x} = 3,8$), E-Journals ($\bar{x} = 3,6$), Online-Datenbanken ($\bar{x} = 3,8$), E-Thesen ($\bar{x} = 3,0$) und E-Magazine ($\bar{x} = 3,0$) nutzen, verwenden sie diese hauptsächlich für Freizeitaktivitäten ($\bar{x} = 3,1$), auf der Suche nach Praktikumsmöglichkeiten ($\bar{x} = 3,6$) und zur Erledigung von Klassenaufgaben ($\bar{x} = 3,3$). Sie begegnen Herausforderungen wie der Unzugänglichkeit geeigneter EIR ($\bar{x} = 3,3$), mangelndem Bewusstsein für EIR ($\bar{x} = 3,4$), unzureichenden Suchfähigkeiten ($\bar{x} = 3,3$) und hohen Kosten für den Internetzugang im Hinblick auf die Nutzung von EIR ($\bar{x} = 3,1$). Im Artikel stellte man fest, dass die Studierenden des Bachelorstudiums an der AAU über Suchfähigkeiten verfügen, und zeigte, dass es eine signifikante Beziehung zwischen Suchfähigkeiten und der Nutzung elektronischer Informationsressourcen gibt. In der Studie wurden Aktualisierungen bezüglich der Suchfähigkeiten und ihrer Nutzung sowie die Bereitstellung von Einrichtungen zur Gewährleistung einer gleichwertigen Bildungsqualität für die Studierenden empfohlen.