INFORMATION LITERACY SKILLS AND COMPUTER SELF-EFFICACY OF ELECTRONIC RESOURCES USE AMONG ACADEMIC STAFF IN FEDERAL POLYTECHNIC, EDE, OSUN STATE, NIGERIA

BLESSING DAMILOLA ABATA-EBIRE
Federal Polytechnic, Ede,
Osun State.
ebireblessing@gmail.com

ADEBOWALE JEREMY ADETAYO
Adeleke University, Ede,
Osun State.
adebowale.adetayo@adelekeuniversity.edu.ng
&
OMOBOLA ABIGAIL BABARINDE
Adeleke University, Ede,
Osun State.
babarinde.omobola@adelekeuniversity.edu.ng

ABSTRACT

Electronic resources are vital for achieving the cardinal goals of polytechnics. However, it is unclear if the lecturers have information literacy abilities and computer self-efficacy for using electronic resources. Therefore, the study investigated the influence of information literacy skills and computer self-efficacy on the use of electronic resources by academic staff in Federal Polytechnic, Ede. The descriptive survey design was adopted for the study. Data were analyzed using descriptive and inferential statistics. Of the 186 respondents, findings revealed that the levels of computer self-efficacy, information literacy skills and electronic resources use of the lecturers were high. A positive and significant relationship was found between computer self-efficacy and electronic resource use (r=0.525, p<0.05), information literacy skills and electronic resource use (r=0.442, p<0.05). Computer self-efficacy and information literacy skills had a positive joint influence on the use of electronic resources by academic staff in Federal Polytechnic, Ede. The study, therefore, concludes that information literacy and computer self-efficacy can enhance the use of electronic resources for the good of the academic activities and research endeavours of the lecturers, which would eventually translate to better service delivery not only to the Federal Polytechnic, Ede, but also to the generality of the higher institutions in Nigeria.

Introduction

Tertiary education in Nigeria is delivered via two primary channels: polytechnics and universities. Polytechnic education's major goal is to promote technical and vocational education and training, technology transfer, and skill development. It is critical to a country's human resource development because it creates skilled labour, increases industrial productivity, and improves the quality of life. Polytechnic education,

in general, is intended to give technical knowledge that will aid society in fulfilling its industrial objectives (Babalola, 2019). As a result of the technical nature of polytechnics, the use of electronic resources (ER) becomes essential. Electronic resources are electronic information storage systems that may be accessed via computer networks and electronic systems. It might be a piece of information in the library that can only be accessed electronically through ICT. Likewise, Suresh and Ravi (2020) defined ER as any electronic device that offers a collection of data that requires computer access, whether it is text referring to full-text bases, image collections, electronic journals, other multimedia products, numerical, graphical, or time based, as a commercially available title that has been published with the intention of being marketed.

E-resources can also provide users with quick and simple access to critical information. They support academic staff by transmitting, acquiring, downloading, and exchanging information on any topic of interest. Iroaganachi and Izuagbe (2018) highlighted that e-resources utilize knowledge from many fields acquired to satisfy lecturers' intended needs constructively. It also provides searching, evaluating, accessing, and placing these information resources appropriately to meet various information needs. E-resources offer an advantage over conventional records since printed documents are easily lost, forgotten, and dis-coloured. Many of these difficulties associated with traditional records are eliminated and lecture delivery is improved by the use of e-resources to store information. As such, the transfer and exchange of information and expertise from lecturers to students have improved. E-resources are deemed to have a high potential for learning, teaching, and research because of their ability to disseminate new research findings and provide remote access without physical constraints (Ridwan, Felix, & Mohammed, 2019).

However, to reap the full benefits of ERs, lecturers must learn how to use the ICT enabling technologies that allow these resources to be accessed and utilized (Adetayo, 2022). Kpolovie and Awusaku (2016) emphasized that lecturers must be competent and efficient in their use of ICT to succeed in today's highly competitive environment, which depends on such information literacy skills. The capacity to seek, identify, locate, assess, and critically evaluate material obtained on the internet is referred to as information literacy. Wesleyan University (2016) defined information literacy as a valuable skill that allows one to quickly manage the massive information accessible due to the current information explosion. To make the most of the ever-expanding list of electronic resources, lecturers must learn the fundamental information literacy skills required to identify, retrieve, and use of electronic resources. This indicates that developing skills in e-resources use requires a deep foundation of the knowledge of ICT itself and coordination of such knowledge in manners that enable the application.

Ayoku and Victoria (2015) identified e-mailing, word processing, formatting, internet and database searching as some of the abilities that lecturers must have to enjoy the benefits of e-resources for academic productivity. As a result, lecturers' capacity to successfully use e-resources is rapidly acknowledged as an essential component of their teaching. In this technological age, a lack of information literacy skills may be a barrier to lecturers' utilization of e-resources, thereby lowering their lecture delivery. To fully realize the potential of e-resources, computer self-efficacy is crucial. Self-efficacy was proposed by Bandura (1977), arguing that people who question their efficacy are more inclined to perceive recurrent achievement as the result

of tedious effort rather than proof of their competence. Self-assured people are more confident in their skills after comparable accomplishments. This means that persons with low self-efficacy, even when they are capable of completing a work, perceive it as a "laborious effort" or struggle, rather than attributing it to their competence, which makes the activity unpleasant and leads to a propensity to avoid doing such responsibilities.

On the other hand, those with high self-efficacy credit success to their abilities, which makes them confident and ready to participate in such activities. This is the reason why academic staff can demonstrate computer self-efficacy when using electronic resources. Computer self-efficacy refers to an individual's assessment of their competence to utilize a computer (Okike & Adetoro, 2019). Academic staff with poor self-efficacy are more inclined to avoid using computers. Even if they do, they may perceive it as a complex activity, but academic staff with high self-efficacy may be driven to continue using the computer, feeling that they can employ it, therefore increasing personal abilities through practice. Academic staff with strong computer self-efficacy are more inclined than others to experiment with new technologies, software, or databases. When it comes to using e-resources, lecturers with high computer self-efficacy may be expected to be more likely to utilize them than lecturers with low computer self-efficacy, as the latter may lack confidence or shy away from using computer-based resources.

As a result of the electronic character of e-resources, academic staff are expected to be knowledgeable and confident in using ICT devices. These abilities include, but are not limited to, understanding of data input, file organization and management, explaining fundamental computer operations, familiarity with computer software packages, and navigation of the World Wide Web. Despite this assertion, the anecdotal report indicated that this e-resource had not been used as expected, particularly among polytechnic lecturers. Against this backdrop, this study examines the information literacy skills and computer self-efficacy of e-resources use among academic staff in Federal Polytechnic, Ede, Osun State, Nigeria.

Statement of the Problem

Electronic resources have been created to assist academic staff in carrying out effective and high-quality teaching, learning, and research activities. They are among the ubiquitous sources of knowledge utilized by individuals and nations worldwide to satisfy the demands of growth and development. ICTs are the steam engines that harness these resources. Academic staff information literacy and computer self-efficacy increase e-resource usage for teaching and research productivity, relevance, and intellectual contributions to the academic community.

Despite the enormous benefits of e-resources, anecdotal data suggests that lecturers' efficient utilization of e-resources is still a work in progress in the polytechnic environment. As a result, it is unclear if the lecturers have information literacy abilities and computer self-efficacy for using e-resources. Against this backdrop, the study is motivated to assess the academic staff information literacy skills and computer self-efficacy in the use of e-resources in Federal Polytechnic, Ede, Osun State.

Objectives of the Study

The broad objective of the study was to investigate the influence of information literacy, computer self-efficacy on the use of e-resources by academic staff in Federal Polytechnic, Ede, Osun State, Nigeria. Specifically, the study seeks to:

1. ascertain the types of e-resources available for use by academic staff in the Federal Polytechnic Ede, Osun State, Nigeria;
2. find out the purpose(s) of use of e-resources by academic staff in the Federal Polytechnic Ede, Osun State, Nigeria;
3. determine the frequency of use of e-resources by academic staff in the Federal Polytechnic Ede, Osun State, Nigeria;
4. ascertain the information literacy skills level of academic staff in the Federal Polytechnic Ede, Osun State, Nigeria; and
5. investigate the level of computer self-efficacy of lecturers in the Federal Polytechnic Ede, Osun State, Nigeria;

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. There is a significant relationship between information literacy skills and use of e-resources by academic staff in Federal Polytechnic, Ede.
2. There is a significant relationship between computer self-efficacy and use of e-resources by academic staff in Federal Polytechnic, Ede.
3. Information literacy skills and computer self-efficacy will have significant joint influence on the use of e-resources by academic staff in Federal Polytechnic, Ede.

Methodology

The study utilized the descriptive survey design, whose purpose was to describe the relevant aspects of the phenomena of interest. The design was appropriate for this study because it provided an accurate representation of how the independent variables (information literacy skills and computer self-efficacy) determined the dependent variable (e-resources) by academic staff in Federal Polytechnic Ede, Osun State, Nigeria.

Population of the Study

The study population consisted of 469 academic staff in the Federal Polytechnic Ede, Osun State, Nigeria, as shown in Table 1.

Table 1: Study Population

Schools	Population
School of Applied Science	160
School of Business Studies	136
School of Engineering	78
School of Environmental Studies	84
Library	11
Total	469

Source: Human Resource Development Office, 2021

Sample Size and Sample Techniques

Multi-stage sampling techniques was employed for the study. At the first stage, purpose sampling technique was used to select only the academic staff on permanent appointment in the four schools and the library. At the second stage, proportionate stratified sampling technique was used in the selection of academic staff across the three categories (lecturers, technologist and instructors) in the schools using 40% of the population. At the third stage simple random sampling techniques was used in selecting the respondents to the research instrument.

Table 2: Sample Size

Schools	Population	Percentage	Sample
School of Applied Science	160	40%	64
School of Business Studies	136	40%	54
School of Engineering	78	40%	31
School of Environmental Studies	84	40%	33
Library	11	40%	4
Total	**469**		**186**

The instrument employed for data collection was a structured questionnaire. For face validity, the instrument was scrutinized by experts in the field of the subject matter of this study to look into the items involved critically. Suggestions made by experts were effected in the questionnaire before it was finally administered. After the scrutiny and correction of the questionnaire, the copies of the questionnaire were administered to the lecturers in Federal Polytechnic, Ede, Osun State, Nigeria. Three research assistants were recruited and trained to assist the researchers with administration, monitoring and collection of copies of the questionnaire.

The data was collated and analyzed using descriptive and inferential statistics. Descriptive statistics such as frequency counts, percentages, mean and standard deviation scores were used to measure research objectives 1-5, while Pearson Product -Moment correlation (PPMC) and multiple regression were used to test the hypotheses. PPMC was used to test hypotheses one (1), and two (2), whereas multiple regression was used to test hypothesis three (3).

Analysis and Results

The questionnaire was circulated among 186 respondents. A total of 176 copies of completed questionnaire were collected, showing a response rate of 94.6%. Therefore, the completely 176 copies of the questionnaire retrieved were used in the analysis of this study

Demographic Characteristics of the Respondents

This section reports the information on demographic characteristics such as the respondents' name of school, department, gender and years of experience. The data on these characteristics were analyzed using descriptive statistics of frequency counts and percentages; as presented in Table 2.

Table 2: Demographic Distribution of the Respondents

Name of School	Frequency	Percentage (%)
School of Applied Science	37	21.0
School of Business Studies	71	40.3
School of Engineering	37	21.0
School of Environmental Studies	31	17.6
Total	_176_	_100.0_
Gender	**Frequency**	**Percentage (%)**
Male	102	58.0
Female	74	42.0
Total	_176_	_100.0_
Age Range	**Frequency**	**Percentage (%)**
Below 30 years	7	4.0
30 – 35 years	21	11.9
36 – 40 years	57	32.4
41 – 50 years	74	42.0
Above 50 years	17	9.7
Total	_176_	_100.0_
Work experience	**Frequency**	**Percentage (%)**
1 – 5 years	25	14.2
6 – 10 years	82	46.6
11 – 15 years	35	19.9
16 – 20 years	20	11.4
Above 20 years	14	8.0
Total	**176**	**100.0**

The information provided in Table 2 revealed four schools represented in the study, with the School of Business Studies having the highest number 71(40.3%) while the School of Environmental Studies had the lowest number of respondents 31(17.6%). This could be said to be proportionate to the number of academic staff in each school represented. The majority of respondents (58.0%) were male within the age bracket of 41-50 years (42.0%), followed by 36-40 years (32.4%). This implies that most of the academic staff in Federal Polytechnic, Ede were middle-aged. In terms of work experience, the majority (46.6%) are between 6-10 years. This suggests that the participants in the study were quite experienced professionals capable of responding appropriately to the questions raised in the study.

Table 3: Types of Electronic Information Resources Available for Use

	E-resources	Yes		Yes		Mean	STD
		N	%	N	%		
1	E-journal	154	87.5	22	12.5	1.88	0.332
2	Manuscripts	73	41.5	103	58.5	1.46	0.431
3	E-books	97	55.1	69	39.2	1.76	0.196
4	E-thesis	87	49.4	79	44.9	1.68	0.469
5	E-data archives	56	31.8	120	68.2	1.38	0.467
6	E-newspaper	80	45.5	89	50.6	1.58	0.467
7	E-bibliographic database	105	59.7	71	40.3	1.60	0.492
8	E-magazines	84	47.7	92	52.3	1.52	0.501
9	E-mails	165	93.8	11	6.3	1.98	0.325
	Weighted mean = 1.65, Standard deviation = 0.409						

The result in Table 3 revealed that the respondents used different types of electronic information resources, as indicated by the overall weighted mean score of 1.65, on a scale of 1-2. The respondents used electronic information resources such as e-mails (mean=1.98), e-journals (mean=1.88), e-books (mean=1.76), e-bibliographic database (mean=1.60) and e-magazines (mean=1.52). On the other hand, the type of electronic information resources less used by the respondents were manuscripts (mean =1.46) and e-data archives (mean=1.38). The result suggests that the respondents used various types of electronic information resources for academic, research and community services, as required for their jobs. The above result showed that e-mails, e-journals, e-books, and e-newspapers were the most utilized resources by the respondents on their job while e-data archives and manuscripts were the least utilized.

Table 4: Purpose of E-resources Use Academic Staff

	e-resources used for:	Yes		Yes		Mean	STD
		N	%	N	%		
1	Lecture delivery	119	67.6	57	32.4	1.68	0.469
2	Research purposes	133	75.6	43	24.4	1.86	0.196
3	Leisure	77	43.8	99	56.3	1.39	0.467
4	News/Information	127	72.2	49	27.8	1.73	0.490
5	Access e-mail	165	93.8	11	6.3	1.96	0.528
	Weighted mean = 1.72, Standard deviation = 0.430						

The result in Table 4 revealed that the respondents used electronic resources for purposes such as accessing e-mail (mean=1.96), research purposes (mean=1.86), news information (mean=1.73) and lecture delivery (mean=1.68). On the contrary, only a minority (77, 43.8%) of the respondents claimed they used electronic resources for leisure, while the majority of the lecturers did not regard electronic resources for leisure (99, 56.3%, mean=1.39). This result implies that the respondents used electronic resources to access e-mail, conduct research, and lecture delivery without recourse to using the same for leisure.

Table 5: Frequency of Use of E-resources by the Respondents

E-resources	Frequent-ly Used		Occa-sionally		Rarely used		Not used		Mean	STD
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**		
E-journal	78	44.3	77	43.8	14	8.0	7	4.0	3.28	0.778
Manuscripts	35	19.9	49	27.8	85	48.3	7	4.0	2.20	0.896
E-books	56	31.8	84	47.7	26	14.8	10	5.7	3.23	0.867
E-thesis	40	22.7	70	39.8	35	19.9	31	17.6	2.73	1.005
E-data archives	28	15.9	43	24.4	49	27.8	56	31.8	2.39	1.078
E-newspaper	56	31.8	56	31.8	29	16.5	35	19.9	2.76	1.107
E-bibliographic database	28	15.9	49	27.8	63	35.8	36	20.5	2.41	0.985
E-magazines	35	19.9	71	40.3	56	31.8	14	8.0	2.72	0.873
E-mail	106	60.2	42	23.9	26	14.8	2	1.1	3.44	0.754
Weighted mean =2.94, Standard deviation = 0.927										

The result in Table 5 shows that the level of use of electronic resources by the respondents was considered high, as indicated by the weighted mean score (2.94), on a scale of 4. Specifically, e-mail (106, 60.2%, mean=3.44), e-journals (78, 44.3%, mean =3.28) and e-books (56, 31.8%, mean=3.23) were the three most frequently used. In contrast, manuscripts (mean=2.20), e-data archives (mean=2.39) and e-bibliographic database (mean=3.23), were less frequently used electronic resources. This result implies that most of the respondents used such electronic resources as e-mail, e-journals and e-books more frequently than the others like manuscripts and e-data archives, but the totality of the frequency of use of electronic resources was found to be high.

Table 6: Level of Information Literacy Skills Possessed by the Respondents

	Information Literacy skills' Ability	SA		A		D		SD		Mean	STD
		N	%	N	%	N	%	N	%		
1	Locate information in multiple sources	92	52.3	50	28.4	20	11.4	14	8.0	3.41	0.639
2	Browse online databases to locate needed information	76	43.2	64	36.4	18	10.2	18	10.2	3.27	0.827
3	Compare and evaluate critically whether the information collected is credible and relevant	42	23.9	65	36.9	41	23.3	28	15.9	2.92	0.627
4	Judge critically whether information on websites is authentic and accurate	57	32.4	71	40.3	28	15.9	20	11.4	3.16	0.677
5	Compare and evaluate critically whether the information is timely and appropriate	35	19.9	82	46.6	42	23.9	17	9.7	2.88	0.765
6	Format and publish ideas electronically in textual form	36	20.5	68	38.6	48	27.3	24	13.6	2.89	0.820
7	Create content in blogs, YouTube and personal web pages for the students	35	19.9	44	25.0	70	39.8	27	15.3	2.42	0.826
8	Format and publish ideas electronically in multimedia form	39	22.2	49	27.8	74	42.0	14	8.0	2.44	0.831

9	Decide when to adopt the continually emerging innovations in information technology	53	30.1	64	36.4	36	20.5	23	13.1	3.01	0.852
10	Know when to adopt latest product development in new information technologies	46	26.1	60	34.1	43	24.4	27	15.3	2.99	0.852
11	Understand how information is socially situated	56	31.8	77	43.8	26	14.8	17	9.7	3.03	0.827
12	Understand how information is socially produced	35	19.9	92	52.3	27	15.3	22	12.5	2.88	0.765

Weighted mean = 2.95, Standard deviation = 0.776, AM = 35.63, STD = 9.308

SA – Strongly Agree, A – Agree, D – Disagree, SD, Strongly Disagree

Respondents were asked to indicate their level of use of electronic resources. The result in Table 6 reveals that the information literacy skills possessed by the respondents were high, as indicated by the weighted mean score of 2.97, on a scale of 4. Expressly, the majority of the respondents affirmed their high level of information literacy skills through their responses as follows: Locate information in multiple sources (142, 80.7%, mean=3.41), Browse online databases to locate pertinent information (140, 79.5%, mean=3.27) and Judge critically whether information on websites is authentic and accurate (117, 66.5%, mean=3.16) were the three most highly ranked information literacy skills possessed by the respondents. On the other hand, the majority of the respondents affirmed in the negative to "Create content in blogs, YouTube and personal web pages for the students" (mean=2.42) and to Format and publish ideas electronically in multimedia form (mean=2.44). From these results, it could be concluded that the academic staff's level of information literacy skills among the respondents was high in almost all aspects of information literacy except content creation in blogs, YouTube, and personal web pages for the students.

Table 7: Level of Computer Self-efficacy of the Respondents

	Statement	SA		A		D		SD		Mean	STD
		N	%	N	%	N	%	N	%		
1	confident using e-resources even if there is no staff around to show me how to use it	63	35.8	85	48.3	21	11.9	7	4.0	3.56	0.784
2	confident using e-resources even if I have never used it before	43	24.4	84	47.7	42	23.9	7	4.0	2.93	0.800
3	confident using e-resources even if I only have library ori-entation	42	23.9	88	50.0	30	17.0	16	9.1	3.03	0.667
4	confident using e-resources if I see someone else using it before I try it myself	57	32.4	112	63.6	4	2.3	3	1.7	3.48	0.533
5	confident to retrieve documents from the e-resources when needed	54	30.7	88	50.0	20	11.4	14	8.0	3.37	0.604
6	have the necessary knowledge to use e-resources	61	34.7	67	38.1	28	15.9	20	11.4	3.44	0.711
7	have control over the use of e-resources for my ac-ademic activities	49	27.8	86	48.9	27	15.3	14	8.0	3.12	0.711
8	confident under-standing terms/words relating to e-resources use	40	22.7	79	44.9	32	18.2	25	14.2	3.07	0.748
9	it is quite easy to locate materials through the e-resources	56	31.8	77	43.8	22	12.5	21	11.9	2.95	0.961
	Weighted mean = 3.22, Standard deviation = 0.724										

SA – Strongly Agree, A – Agree, D – Disagree, SD, Strongly Disagree

The result in Table 7 revealed that the statement in item 1, which stated that "I feel confident using e-resources even if there is no staff around to show me how to use it" ranked highest in terms of the mean score with a mean score of 3.56 (STD=0.784). It also reveals that 63 (35.8%) of the respondents strongly agreed with this statement, 85 (48.3%) agreed, 21(11.7%) disagreed, and only 7(4.0%) strongly disagreed with this. This was followed by item 4, which stated that" I feel confident using e-resources if I see someone else using it before I try it myself" had the second highest score in terms of mean with a score of 3.48 (STD=0.0.533). This is evident in the responses given, where 61(34.7%) strongly agreed with the statement, and 67(38.1%) agreed with the statement, 28(15.9%) disagreed, and 20(11.4%) of the respondents strongly disagreed.

Further, the overall level of computer self-efficacy of the respondents was found to be high, considering the weighted mean of 3.22 on a scale of 4. Therefore, the respondents had a high level of computer-self efficacy.

Test of Hypotheses

This section discusses the findings of the study's hypotheses; as shown in Table 8.

Table 8: Summary of correlation analysis showing the relationship between information literacy skills and use of electronic resources

Variables	Mean	STD	N	Df	R	Sig	Remark
Information Literacy Skills	35.63	9.308					
Use of Electronic Resources	25.16	8.343	176	2	0.442	0.000	Sig.

Relationship between computer self-efficacy and use of electronic resources

Variables	Mean	St. dev.	N	Df	R	Sig	Remark
computer self-efficacy	28.95	6.519	176	2	0.525	0.000	Sig.
Use of Electronic Resources	25.16	8.343					

Joint Influence of Information literacy skills and computer self-efficacy on use of electronic resources

Variables	Beta (β)	T	R^2	Adj. R^2	F	Sig
(Constant)		8.389				
Information Literacy Skills	0.210	2.848	0.203	0.194	22.033	0.000
Computer Self-efficacy	0.325	4.416				

Dependent Variable: Electronic resources use
Predictors: Information Literacy Skills; Computer Self-efficacy
DF (F-Statistic) = 1, 174   DF (T-Statistic) = 173

H$_1$: There is a significant relationship between information literacy skills and use of electronic resources by academic staff in federal polytechnic Ede.

The result of hypothesis one, as shown in Table 8 revealed that the relationship between information literacy skills and use of electronic resources by the academic staff was positive and significant (r=0.442; P< 0.05). The significant p-value is 0.000, which is less than the 0.05 cutoff. As a result, the alternate hypothesis is accepted. This implies that there is a strong link between information literacy skills and the usage of electronic resources by the staff. In other words, there is a significant and positive link between information literacy skills and electronic resources among the staff. A higher level of information literacy is associated with greater use of electronic resources.

H$_2$: There is a significant relationship between computer self-efficacy and use of electronic resources by academic staff in Federal Polytechnic Ede.

The result of the hypothesis shown in Table 8 revealed that there was a positive and significant relationship between computer self-efficacy and use of electronic resources by the academic staff (r=0.525; P< 0.05). The alternate hypothesis, which states that there is a significant relationship between computer self-efficacy and use of electronic resources by the academic staff is accepted since the P is less than the 0.05

level of significance. This implies that there is a significant relationship between computer self-efficacy and academic staff usage of electronic resources. In other words, if computer self-efficacy increases, there is a likelihood that the academic staff will enhance their utilization of electronic resources as well.

H_3: Information literacy skills and computer self-efficacy will have significant joint influence on the use of electronic resources by academic staff in Federal Polytechnic Ede.

The result in Table 8 on the independent variables (Information Literacy Skills; Computer Self-efficacy) were regressed against the dependent variable (Electronic resources use) using multiple regression analysis. The table revealed that information literacy skills and computer self-efficacy had positive and significant influence use of electronic resources by the staff. . The R2 value was also 0.203, indicating that the two variables together accounted for 20.3% of the influence of the usage of electronic resources and that additional factors not included in this study may have accounted for the remaining variation. As a result, the alternate hypothesis ($H0_1$) is accepted. This finding shows that in order for electronic resources to be used efficiently, academic staff should have a high degree of computer self-efficacy and information literacy skills.

Discussion of the Findings

Academic staff at Federal Polytechnic Ede regarded many types of electronic information resources as necessary for academic, research, and community service purposes in the course of their employment. As a result, lecturers in the polytechnic used e-mails, e-journals, e-books, and e-newspapers the most, while e-data archives and manuscripts were used the least. This finding supports those of Olabode (2016) and Owolabi et al. (2016), who found search engines, e-newspapers, Internet services, e-mail services, online databases, and electronic databases as the most used by academics in Nigeria. This is also in line with Uzuegbu *et al.* (2012) and Ezema(2017), who found that lecturers commonly use electronic information resources in Nigerian universities for their research.

The findings indicated that lecturers in Federal Polytechnic Ede utilized electronic resources for various functions, but most crucially, to access e-mail, do research, and deliver lectures without resorting to using them for leisure. This finding supports Tella et al. (2017), who found that academics frequently use EIRs for research, curriculum creation, and self-educational development. Furthermore, the findings of this study support those of Iroaganachi and Izuagbe (2018) and Izuagbe *et al.* (2016) that academic staff are enthusiastic about using EIRs for teaching and research. However, it is crucial to highlight that efficient use of EIRs is entirely dependent on the competency of lecturers, the availability of computers, a reliable power supply, network connectivity, and Internet access (Simon & Ogom, 2015), which are often a challenge in Nigerian campuses (Adetayo & Williams-Ilemobola, 2021).

Most academic staff at Federal Polytechnic, Ede utilized specific electronic resources more frequently than others, such as e-mail, e-journals, and e-books, but the overall frequency of use of the resources was found to be high. This finding is consistent with those of Ani et al. (2015), that lecturers mostly use e-books, e-theses/ dissertations, e-journals, e-conference papers, online databases, CD-ROM databases, e-conference papers, and e-newspapers/e-magazines. These resources provide lecturers with knowledge that extends outside the confines of their university. With the development of EIRs, the traditional barriers of geographical location and time have

been removed, resulting in greater global information access and intellectual engagement among academics from both developed and developing countries worldwide. To support this, Owolabi et al. (2012) found that EIRs had become a vital asset in the educational sector, significantly boosting access to research output, teaching, and learning.

The academic staff at Federal Polytechnic, Ede had a high degree of information literacy skills in nearly all information literacy elements, except content creation in *blogs*, *YouTube*, and personal websites for students. Similarly, a strong and positive relationship was established among the lecturers between information literacy skills and electronic resources. It found that a greater degree of information literacy skills resulted in a higher level of utilization of electronic resources. This supports Grgic's (2016) contention that scholarly communication is impossible without adopting IL skills-scholars from all disciplines must know how to search for information, assess it, and generate and communicate new knowledge in a correct, ethical manner. According to Onuoha and Adetayo (2015) and Adetayo, Komolafe and Olalere (2022), a lack of information search abilities causes individuals to be late and frustrated while attempting to finish course-related activities that need research.

The level of computer self-efficacy of academic staff in Federal Polytechnic Ede was found to be moderately high. Furthermore, there is a significant relationship between computer self-efficacy and academic staff utilization of electronic resources. This backs up Adekunjo et al. (2018)'s claim that individuals with low confidence in their abilities to utilize computers perform worse on computer-based activities. This is also consistent with the findings of Sadiku and Kpakiko (2017) that people with better computer self-efficacy are more likely to use e-resources.

Conclusion

The study established positive correlations among the variables of interest, indicating that there is an urgent need to capitalize on the opportunities provided by the relationships. This will improve the use of e-resources for the betterment of lecturers' academic activities and research endeavours and eventually translate to better service delivery to the lecturers and the generality of higher institutions in Nigeria. The study's findings revealed that information literacy skills and computer self-efficacy were key elements that might affect and explain academic staff's usage of e-resources at Federal Polytechnic, Ede. As a result, academic institutions that suffer from poor utilization of e-resources among their academic staff should take a cue from this study and improve their academics' information literacy skills and computer self-efficacy.

Recommendations

As a result, the study recommends as follows:

1. That high levels of computer self-efficacy among lecturers be harnessed by using computer devices and applications to deliver lectures, offer assignments, tutorials, lectures, and practical sessions for students.

2. Although the lecturers at the Federal Polytechnic were found to have a high degree of information literacy, there is a need to develop this and channel it into academic and research activities. This might be accomplished if the Polytechnic library integrated applications such as mobile apps via which lecturers, particularly those from the FPE, could access the most recent library collection and databases without visiting the library.

3. It is necessary to conduct frequent orientation for academic staff to maintain the level of information and computer literacy skills to get the most out of them and be in sync with global best practices.

REFERENCES

Adekunjo, O. A., & Unuabor, S. O. (2018). Computer self-efficacy and attitudes toward internet usage among library and information science postgraduate students in two library schools in Nigeria. *American Journal of Educational Research and Reviews*, *3*(24).

Adetayo, A. J. (2022). Are physical libraries popular for research in the Internet age post-COVID -19? *Internet Reference Services Quarterly*, 1–15.

Adetayo, A. J., Komolafe, R. S., & Olalere, J. O. (2022). Virtual learning and library usage during COVID-19 pandemic: The Adeleke University experience. *Journal of Library & Information Services in Distance Learning*, 1–21.

Ani, O. E., Ngulube, P., & Onyancha, B. (2015). Perceived effect of accessibility and utilization of electronic resources on productivity of academic staff in selected Nigerian universities: *SAGE Open*, *5*(4).

Ayoku, O. A., & Okafor, V. N. (2015). ICT skills acquisition and competencies of librarians: Implications for digital and electronic environment in Nigerian universities libraries. *The Electronic Library*, *33*(3), 502–523.

Babalola, A. (2019, December 4). Dichotomy between polytechnic, university education: Need for technological training, development. *Vanguard News*.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215.

Ezema, R. I. E., & Leonard, A. (2017). Access to electronic information resources by students of federal college of education in south east Nigeria. *Nigerian Libraries*, *49*(1–2), 56–64.

Grgic, I. H. (2016). Information literacy and open access in Croatian academic libraries. *Library Review*, *65*(4–5), 255–266.

Iroaganachi, M. A., & Izuagbe, R. (2018). A comparative analysis of the impact of electronic information resources use towards research productivity of academic staff in Nigerian universities. *Library Philosophy and Practice (e-Journal)*, *1702*.

Izuagbe, R., Hamzat, S. A., & Joseph, E. I. (2016). Electronic information resources (EIR) adoption in private university libraries: The moderating effect of productivity and relative advantage on perceived usefulness. *Journal of Information Science Theory and Practice*, *4*(1), 30–48.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities: *Educational and Psychological Measurement*, *30*(3), 607–610.

Okike, B. O. I., & Adetoro, N. (2019). Computer self-efficacy of librarians and users as influencers of university libraries' information system security: Evidence from Nigeria. *Covenant Journal of Library and Information Science*, *2*(1), 68–82.

Olabode, O. (2016). Impact of electronic resources use on academic performance of Undergraduates in Nigeria. *Information Impact: Journal of Information and Knowledge Management*, *7*(2), 56–65.

Onuoha, U. D., & Adetayo, A. J. (2015). Lecturers' use of social media for research activities in private universities in Ogun State, Nigeria. *Benue Journal of Library, Management and Information Science (Bjlmis)*, *5*(2), 31–41.

Owolabi, K. A., Ajiboye, B. A., Lawal, O. W., & Okpeh, S. C. (2012). Use of electronic information sources (EIS) by faculty members in Nigerian universities. *Library Philosophy and Practice (e-Journal)*, *721*.

Owolabi, S., & Okocha, F. (2016). Utilization of information resource by undergraduate students

of University of Ibadan. *Journal of Education and Practice*, 7(13).

Oyeleke, S. (2021, August 23). *Full list: Top 50 polytechnics in Nigeria -Webometrics*. Punch Newspapers.

Ridwan, S. M., Felix, T. S., & Mohammed, M. F. (2019). Assessment of ICT competencies and use of electronic information resources by lecturers in universities in Benue State, Nigeria. *International Journal of Information Management Sciences*, *3*(1), 1–20.

Sadiku, S. A., & Kpakiko, M. M. (2017). Computer self efficacy and use of electronic resources by students in Nigerian university libraries. *Journal of Applied Information Science and Technology*, *10*(1), 91–99.

Simon, B. R., & Ogom, O. J. (2015). Evaluation of the extent of utilization of electronic library resources and services by undergraduate students in University of Calabar Library, Calabar – Nigeria. *Education Journal*, *4*(2), 89.

Suresh, M., & Ravi, S. (2020). Online database use by science research scholars of Alagappa University, Karaikudi: A study. In *Handbook of Research on Digital Content Management and Development in Modern Libraries* (pp. 86–102). IGI Global.

Tella, A., Orim, F., Ibrahim, D. M., & Memudu, S. A. (2017). The use of electronic resources by academic staff at the University of Ilorin, Nigeria. *Education and Information Technologies*, *23*(1), 9–27.

Uzuegbu, C. P. (2012). The role of university libraries in enhancing local content availability in the Nigerian community. *Library Philosophy and Practice (e-Journal)*, *733*.

Wesleyan University. (2016). *Information literacy competency standards for higher education*.

AUTHORS' PROFILES

Abata-Ebire Blessing Damilola is an academic staff member at the Federal Polytechnic, Ede in Osun State. Her areas of interest for research include library science, social media, knowledge management, and health information systems. She has various publications in reputable journals and is currently working on projects involving virtual learning, turnover intention, and emerging technologies. She is a Tai Solarin University of Education graduate.

Adebowale Jeremy Adetayo is an academic staff of Adeleke University. His research interest is Information Science, Health Information Management, and Library Science. He has published many articles in reputable journals and currently working on projects relating to pandemics, vaccines and virtual learning. He has is a Ph.D. in Library and Information Science.

Omobola Abigail Babarinde is a graduate of Information Resources Management from Babcock University with a Master degree in Library and Information Science from Adeleke University. She is an Oracle Certification Administrator (OCA) and Information Technology Infrastructure Library (ITIL) certified. She is an Acquisition/Circulation Librarian at Adeleke University Library Ede, Osun State. Her area of research interests includes library database management, human resource management, health information literacy and library personnel management. She is a member of Nigerian Library Association (NLA) and Association of Women Librarian in Nigeria (AWLIN).