

Perceived Ease of Use and Extent of Use of Digital Information Resources by Library and Information Science Undergraduates in University of Benin

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Abstract

Purpose: The study surveyed Library and Information Science (LIS) undergraduates' perceived ease of use (PEOU) and extent of use of digital information resources (DIRs) in University of Benin (UNIBEN).

Design/Methodology/ Approach: Descriptive research design was adopted in the study while the population comprised 421 LIS undergraduates in UNIBEN and a sample of 200. Questionnaire was used to gather data for the study and data were analyzed with the use of tables, percentages, mean and chi-square for the hypothesis.

Findings: The findings show that LIS undergraduates majorly used web resources, databases, e-journals, e-project, e-newspaper and WIFI. The findings also show high perceived ease of use of DIRs by LIS undergraduates. It equally revealed the purpose LIS undergraduates use DIRs which is to acquire global knowledge, self-development, enhance learning, acquire more knowledge and augment class notes. The major challenges that impede LIS undergraduates use of DIRs are: slow internet connectivity, insufficient IT knowledge and skill to effectively use DIRs, insufficient staff assistance and insufficient staff training. It also revealed a significant relationship exists between PEOU of undergraduates and extent of use of DIRs.

Implication: The study implies that the extent of use of digital information resources depends enormously on the PEOU of digital resources. Where there is high perceived ease of use, the extent of utilization will increase but where there is low perception, digital information resources will be underutilized. Thus, when there are no accrued benefits to users, DIRs will not be used. To improve the extent of utilization of available DIRs for academic activities, undergraduates' perception must be worked on through intensive training in the use of digital library.

Originality/ Value: The value of this study lies in the finding that the extent of use of digital information resources depends on the perceived ease of use of undergraduates towards it, not just its availability.

Keywords: Perceived Ease of Use, Extent of Use, Digital Library, Digital Library Resources, LIS Undergraduates, University of Benin, Nigeria.

Introduction

This new age of information offers great opportunities and possibilities for information to be disseminated in different formats especially through technologies. In recent times, university education is one critical system that has experience basic transformation by the application of technological advancement through digital revolution. In any university educational system, the library plays a "pivot" role to achieve its vision and mission. This is why university library is regarded as the 'nerve centre

and heart' of the institution. Yusuf and Iwu (2010) referred to university library as a "store house of information or a record of human experience to which users may turn to for information". In other words, information service provision is a necessity to library users most especially undergraduates in need of information from diverse format. Interestingly, the scenario has shifted with the use of Information and communication technology, as many university libraries have introduced digital libraries to augment the traditional (print) library. According to Anyim (2018), "the rationale for

adoption of digital libraries in universities is solely to provide electronic resources for students and staff in order to enhance educational development and provide educational resources for effective teaching, learning and research activities.

Digital library can be defined as a computer-based library system that is used to acquire, process, organize, preserve, as well as to search and disseminate digital content to end users of information and recorded knowledge of man. Ogunsola (2011) defined digital libraries as "collection of library resources in electronic/digital format at various locations, which can be accessed and used with great ease using computer information technology for the purpose of teaching, study, research, learning, leisure and decision making". While in 2018, Ju and Albertson opined that "digital libraries have been developed to collect, ingest, manage and disseminate information of all types from both centralized and distributed collections". It is worthy to state that digital libraries in recent times have become increasing significance, especially to undergraduates of higher learning as it enhances speedy searches and access to information and knowledge globally through communication networks. Thus, Simon and Ogom (2015) submitted that "university libraries are leveraging with the benchmark of full digital library operations, providing quicker and multiple access to limitless streams of information resources simply referred to as digital information resources".

Digital information resources (DIRs) are information content in electronic format such as databases, e-books, e-journals amongst others, accessible through internet connected technologies, which aids academic activities like; teaching, learning and research. In support of this, Adetunla (2016) pointed out that "the creation of digital information resources has no doubt, made an essential impact on teaching and learning process". In other words, DIRs are vital sources of information and backbone of academic activities in this technological age. However, Library and Information Science (LIS) undergraduate PEOU of

digital libraries is a crucial component in the use of its information resources and facilities. In this context, PEOU is the extent or degree to which LIS undergraduates believe that the usage of digital technology is not too stressful or energy consuming, but requires less effort for its usage. Amusa and Atinmo (2018) defined PEOU as "the extent to which the resources can be used with little or non-constraints and their affordability". According to He, Chen and Kitkuakul (2018), "when people (LIS undergraduates) view digital technologies as easy to use, they are more confident and competent in using the technology".

This may not be far from the truth as undergraduates PEOU of DIRs seems to be a strong force that plays an eminent role in their acceptance and use of digital information system which to a very large extent, determines the extent to which they effectively use DIRs. This indicates that ease of use is a critical attribute to user acceptance and extent of digital information resources usage. Yamson, Appiah and Tsegah (2018) hinted that "perception of undergraduates about digital information resources is of extreme significance on the grounds that to a huge degree, it decides the level of the information resources usage in digital libraries". To this end, digital information resources perceived by LIS undergraduates to be easier to use, may likely be used by them. More so, digital information resources will be perceived as easy to use by LIS undergraduates, if interaction with the system is clearly understood, that is, flexible for them to interact and easy for them to learn.

Urhiewhu and Emojoorho study in 2015, revealed a low extent usage of digital information resources by undergraduates in UNIBEN, AAU, DELSU and FUPRE, which they suggested "will lag behind their research and learning in this digital age". What could be the factor behind this low usage? Also, some studies, especially in developed countries have shown that PEOU is a factor that influences the usage of technology. While, Amusa and Atinmo (2018) in Nigeria, lamented that PEOU is a factor that can influence the use of digital information resources, Bawden and Vilar (2006)

stated more systematic empirical studies to build up a base of solid evidence of users' PEOU of digital libraries that are solely needed. These prompted this study on PEOU and extent of use of digital information resources by LIS undergraduates in University of Benin, as they are trained to become information and knowledge disseminators and managers, who in turn will assist library users and information seekers. Thus, their PEOU and extent of use of digital information resources in their academic pursuit will boost their confidence in the profession and enhance their provision of information services in the digital age and in future.

Research Questions

1. What are the types of digital information resources used by Library and Information Science undergraduate in University of Benin?
2. What is the LIS undergraduate perceive ease of use of digital information resources in university of Benin?
3. To what extent do Library and Information Science undergraduates use digital information resource in University of Benin?
4. What are the purposes Library and Information Science undergraduates use digital information resources in University of Benin?
5. What are the challenges encountered by Library and Information Science undergraduates' in the use of digital information resources in University of Benin?

Hypotheses

H0: There is no significant relationship between Library and Information Science undergraduates' perceive ease of use and extent of use of digital information resources.

Literature Review

Concept of Digital Library Resources

"Digital information is becoming more and more important for academic community" (Egberongbe, 2011). Digital information resources are the information contents of a digital library. That is, digital information resources are information resources stored in electronic medium access through internet connectivity and require information technology such as

computers, laptop or smart phones to read and use its information content. Matusiak (2012:134) opined that "digital collections represent building block of digital libraries and are created locally by libraries and cultural heritage institutions, as opposed to digital content purchased or licensed". Okiki (2012) stated that "digital documents can be stored, accessed and delivered as and when required". Vanchakkanavar (2014) defined digital resources as "resources which requires computer access or any electronic product that delivers a collection of data, be it full text bases, e-journals, image collections and other multimedia". In addition, Konappa (2014) defined digital resources as "those materials that require computer access, whether through a personal computer, mainframe or handheld mobile device". Urhiewhu and Emojorho (2015) asserted that, digital information resources are "stored and made available in the forms, and the services of the library are also made available electronically". Olasore and Adekunmisi (2015) opined that digital resource is "any information source that a library provides access to in an electronic format and listed the types of digital information resources to include: CD-ROM, databases, electronic mails, OPAC and internet facilities. According to Akpojotor (2017:62) digital resources deliver the collection of information as full text, databases, e-journals, CD, internet, web technology e.t.c. Konappa (2014) grouped the types of digital resources as; "e-journals, e-books, databases, index and abstract, reference databases and e-images".

Undergraduates Perceived Ease of Use (PEOU) of Digital Information Resources

"Perceive ease of use has been shown to be an important factor in studies of information technology acceptance with internet and World Wide Web acceptance" (Brown, 2002). PEOU is a crucial component in technology acceptance model shown to have a drastic influence on the intention to use technology due to its usefulness. According to Urhiewhu and Emojorho (2015), technology acceptance model pointed out that the "attitude of a user toward a system was a major determinant of whether the system will be

used or rejected which in turn, was considered to be influenced by 2 major beliefs: perceive usefulness and perceive ease of use". Davis in Ayele and Screenivasao (2013) defined PEOU as the "degree to which a person believes that using a particular system would be free from effort".

More specifically, Akpojotor (2017:64) made it clear that "students perception of ease of use of digital technology determines whether they are to use digital resources or not". Interestingly, the more flexible a user can interact with digital technology system, the more it is perceived as easy to use. In other words, undergraduates PEOU of digital technology to a very large extent influence their use of digital information resources. More so undergraduates PEOU of digital information resources is very germane to their adoption and use of DIRs. Matusiak (2012:133) asserted that the "limited use of digital library resources for teaching and learning is associated with perception usefulness and ease of use, especially if considered in a broader information landscape, in conjunction with other library information systems, and in the context of web resources". Wang, Hao-Renke and Lu (2011) viewed PEOU of digital resources in libraries from another perspective as they stated that "advertisement of newly provided services improves the usefulness and the ease of use for users to use a system and concluded that advertisement is a significant and positive factor for perceived usefulness and perceived ease of use". In another perspective, Akinde and Adetimirin (2017) opined that "perception is influential and the belief that innovation should offer "added value" is important in determining technology acceptance, adoption and use". Matusiak (2012:133) summarized the limited use of digital libraries by undergraduates in academic libraries into the following perceptions:

Libraries are not viewed as user-friendly, which in turn discourages potential users from trying digital libraries provided by Library systems academic library. Second, academic libraries are perceived as places of primarily textual resources; perceptions of usefulness, especially in regard to relevance of content, coverage, and currency,

seem to have negative effect on user intention to use digital libraries, especially when searching for visual materials.

PEOU, as argued by Portz, et.al (2019), is "impacted by undergraduate's level of computer anxiety and computer self-efficacy". Computer anxiety in this context is when an undergraduate exhibits fear in the use of computers. While computer self-efficacy may be confided in their ability to figure information out or locate information.

Extent of Use of Digital Information Resources by Undergraduates

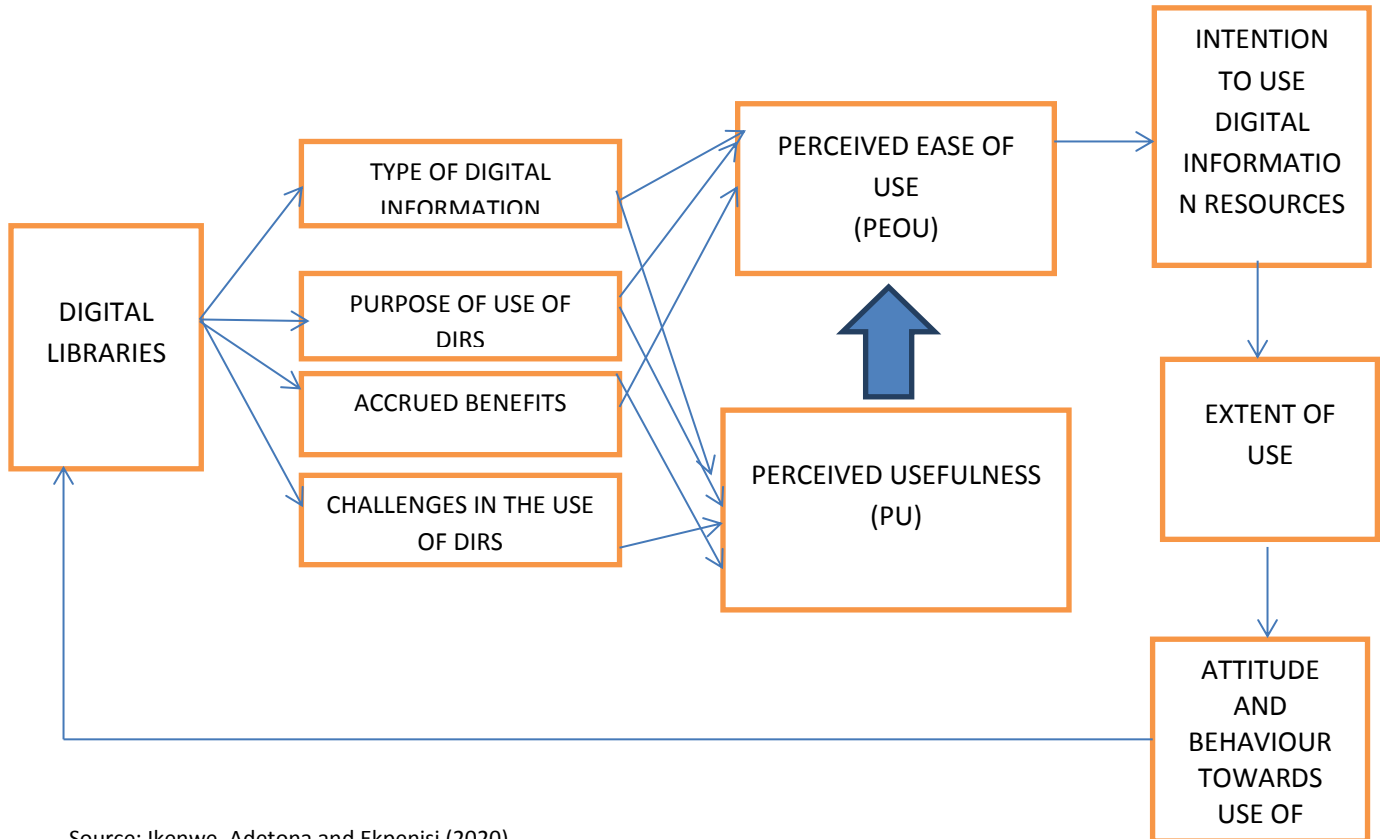
"One of the key features of effective learning today lies in the ability of learners to make use of digital materials that meet their needs and prepare them for ICT driven 21st century" (Olaniran, Duma and Nzima, 2017). However, "the use of digital libraries has seen steady growth in the past 2 decades; effective and extent of use of digital libraries depends on user acceptance, which in turn is affected by users' perception of the system ease of use" (Nov and Ye, 2008). In this light, Donghua in Akpojotor (2017) asserted that, in order to enhance acceptance and increase usage of e-resources, it is important to understand how users make decisions on selection and use of e-resources. According to Olaniran, Duma and Nzima (2017), "the level of success of any learning programs depends largely on the commitment of institutions in ensuring enabling environment for their learners in accessing and using e- resources for teaching and learning". Hong, Thong, Wong and Tam (2015) expressed that "research on digital libraries has shown that potential users may not use the system in spite of their availability".

Urhiewhu Okeke and Nwafor (2015) surveyed the extent of digital information resources usage by undergraduates in Delta and Edo states and reported undergraduates use e-project, e-journals, e-reference materials, e-seminar papers, e-books, e-newsletters and e-thesis to a high extent. The grand mean of 2.4 as reported by them, which shows that the undergraduates use other digital information to a low extent. Urhiewhu and Emoiorho (2015) also studied a

conceptual and adoption of technology acceptance model in digital information resources usage by undergraduates and found that digital information resources are used to a low extent by undergraduates in the area studied. Olaniran, Duma and Nzima (2017), assessing the utilization level of e-learning resources among undergraduates revealed web 2.0, e-journals, e-books and CD-ROM are the mostly used electronic resources. Mawere and Sai (2018) investigated

electronic utilization among university students in a developing county; a case of Zimbabwe and reported poor utilization of electronic resources due to lack of awareness and ignorance of the facilities among students.

Conceptual Framework for Perceived Ease of Use as a Factor that Influences Extent of Use of Digital Library



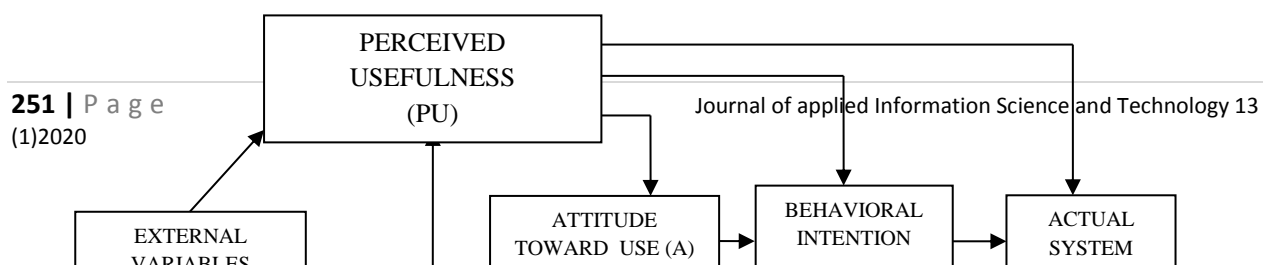
Source: Ikenwe, Adetona and Ekpenisi (2020)

Digital library is now in vogue and it houses different types of digital information resources (DIRs) such as databases, e-journals, e-books, CD-ROM, e-theses and project, e-conferences, web resources amongst others. However, undergraduates use DIRs to excel in their academic activities such as learning and research in this digital age. There are numerous benefits accrued to usage of digital information resources,

especially in this era where information is power. Moreso, in developing countries like Nigeria, there are challenges that impede its usage. This study buttresses that perceived usefulness (PU) of digital content and PEOU are critical factors that influences undergraduates' intention to use DIRs. This also determines the extent to which they use DIRs, which in turn influences their attitude and behavior towards the actual use of DIRs and digital services.

Theoretical Framework

Technology Acceptance Model (TAM)



Adopted from Ayele and Screenivasao (2013)

This research adopted Technology acceptance model (TAM) developed in 1989 by Davis Fred. TAM buttressed that there are external variables, which are factors that influence users’ decision to use or not use information system such as digital technology. These two factors are Perceived ease of use (PEOU) and Perceived usefulness (PU). These two factors are crucial determinants that affects users attitude, which also determines their behavioral intention in the actual use of the information system. A user is motivated to use digital libraries, when he/she anticipates there are accrued benefits; the information resources is useful to meet the desired information needs

when the information system in digital libraries is easy to use. However, TAM was adopted for this study because it has been widely used and it serves as a basic theoretical model to ascertain the actual usage of an information system in a university system.

Research Methodology

Descriptive survey research design was adopted for this study. The population consist undergraduates of Library and Information Science students in University of Benin (UNIBEN). See the table below for the total population of Library and Information Science student in UNIBEN.

Table 1

Level of study	Number of students
100 level	83
200 level	127
300 level	88
400 level	123
Total	421

Source: Office of the Head of Department of Library and Information Science in UNIBEN (2018).

The sample size for the study was 200 which show 47.51% of the total population. The research instrument used for the collection of data for the study was a self-constructed questionnaire titled “Perceived Ease of Use and Extent of Use of Digital Information Resources by library and information science undergraduates(PEOUAEOUODIR)”.The questionnaire was validated by two lecturers in the Department of library and information science, Ambrose Alli University, Ekpoma. The

reliability of the instrument was administered on a group of 30 LIS students in Ambrose Alli University, Ekpoma, Edo State, which yielded 0.81, 0.84, 0.55, 0.75 and 0.84. In analyzing the data from the field, descriptive statistics specifically tables, simple percentages and mean were used; while the hypotheses was tested using the Chi-square. All analysis was done using the Statistical Package for Social Sciences (SPSS).

Data Presentation and Analysis
Analysis of Returned and Unreturned
Questionnaire

Out of the 200 copies of questionnaire administered by the researchers, 180 copies were retrieved to produce the return rate of 90%.

Demographic Data

Table 2: Demographic Data of Respondents

Age	No. of Respondents	Percentage (%)
15 – 19 years	60	33.3
20 – 24 years	55	30.6
25 – 29 years	50	27.7
30 years and above	15	8.3
Gender		
Male	70	38.9
Female	110	61.1
Level		
100	60	33.3
200	55	30.3
300	50	27.8
400	15	8.3
N=180		

Table 2 shows that out of the 180 sampled respondents, 60 representing 33.3% of respondents were between 15 – 19 years old, 55 representing 30.6% were between 20 – 24 years old, 50 representing 27.7% were between 25 – 29 years, and the least which is 15 were 30 years and above. Also, majority of the respondents (110) were females representing 61.1%. While 70 respondents, were male representing 38.9%. This indicates that the female students were more than the male students. On the level of

respondents, 60 respondents representing 33.3% are in 100 level, 55 respondents representing 30.3% are in 200 level, 50 respondents representing 27.8% are in 300 level and 15 respondents representing 8.3% are in 400 level. This indicates that majority of the respondents were in 100-300 levels.

Research Question 1: What are the types of digital information resources used by library and information science undergraduates in University of Benin (UNIBEN)?

Table 3: Types of Digital Information Resources

S/N		Yes	No	Mean (\bar{x})		
1.	Web resources	120	66.7%	60	33.3%	1.67
2.	CD-ROMs	70	38.9%	110	61.1%	1.39
3.	Search engines	80	44.4%	100	55.6%	1.44
4.	Online index and abstract	80	44.4%	100	55.6%	1.44
5.	E-books	90	50%	90	50%	1.5
6.	E-journals	100	55.6%	80	44.4%	1.56
7.	E-project /Thesis	95	52.8%	85	47.2%	1.50
8.	WIFI	89	49.4%	91	50.6%	1.49
9.	E –magazine/ e newspaper	50	27.8%	130	72.2%	1.28
10.	Databases	120	66.7%	60	33.3%	1.67
Grand Mean					1.50	

Table 3 shows the type of digital information resources used by Library and Information Science undergraduates in University of Benin (UNIBEN). It is evident from the table that the

most used digital information resources by LIS undergraduates in UNIBEN are web resources, databases, e-journals, e-projects, e-books, WIFI, search engines and online index/abstract.

While CD-ROM and e-magazines/ e-newspaper had the lowest usage, which represents 38.9% and 27.8% respectively. Hence the grand mean is 1.50

Research Question 2: How do library and information science perceive the ease of use of digital information resources in university of Benin?

Table 4: Perceived Ease of Use of Digital Information Resources

S/N	Perception	Strongly Agreed	Agreed	Disagreed	Strongly Disagreed	Mean (\bar{x})
1.	I feel digital information resources are very convenient to use.	70 38.9%	30 16.7%	30 16.7%	55 30.6%	2.6
2.	I feel digital information resources are too technical to use	30 16.7%	50 27.8%	55 30.6%	45 25%	2.36
3.	Digital information resources require too much computer skills to use.	30 16.7%	30 16.7%	60 33.3%	60 33.3%	2.17
4.	Digital information resources are too expensive to use	40 22.2%	50 27.8%	60 33.3%	30 16.7%	2.6
5.	I feel digital information resources need computer network to use	70 38.9%	60 33.3%	30 16.7%	20 11.1%	2.7
6.	Digital information resources have increased the dissemination of information.	50 38.9%	45 25%	20 11.1%	60 33.3%	2.5
7.	I feel digital information resources are easy to use	55 30.6%	62 34.4%	33 18.3%	30 16.7%	2.8
8.	I feel digital information resources are easy to access	35 19.4%	64 35.6%	55 30.6%	26 14.4%	2.6
9.	I feel comfortable using digital information resources for academic work	55 30.6%	45 25%	32 17.8%	48 26.7%	2.6
10.	Digital information resources helps me to retrieve information for my personal development	35 19.4%	25 13.9%	55 30.6%	65 36.1%	2.17
Grand Mean						2.52

From table 4, it can be seen that majority of the respondents strongly perceived digital information resources as; digital information resources need computer network to use (38.9%), digital information resources are very convenient to use (38.9%), comfortable using digital information resources for academic work(30.6%)

and digital information resources are easy to use (30.6%).

Research Question 3: To what extent do Library and Information Science undergraduates use digital information resource in University of Benin?

Table 5: Extent of Use of Digital Information Resources

S/N		VHE		HE		LE		VLE		Mean (\bar{x})
1.	Web resources	20	11.1%	55	30.6%	55	30.6%	50	27.8%	2.25
2.	CD-ROM	15	8.3%	53	29.4%	22	12.2%	90	50%	2.0
3.	Search Engine	23	12.8%	55	30.6%	12	6.7%	90	50%	2.1
4.	Online index & abstract	17	9.4%	50	27.8%	53	29.4%	60	33.3%	2.13
5.	E-books	20	11.1%	15	8.3%	53	29.4%	92	51.1%	1.79
6.	E-journals	43	23.9%	69	38.3%	43	23.9%	25	13.9%	2.72
7.	E-project/Thesis	15	8.3%	50	27.8%	50	27.8%	100	55.6%	2.28
8.	WIFI	25	13.9%	62	34.4%	15	8.3%	43	23.9%	2.0
9.	E-newspapers/ magazine	15	8.3%	53	29.4%	63	35%	49	27.2%	2.2
10.	Databases	15	8.3%	43	23.9%	65	36.1%	57	31.7%	2.09
Grand Mean										2.16

Table 5 reveals that the respondents used e-journals (38.3%), WIFI (34.4%), web resources (30.6%) and e-newspapers (29.4%) are used to a high extent. While e-books, e-project/thesis, CD-ROM and search engines are used to a low extent. The grand mean is 2.16. It can therefore be

concluded that the undergraduates use digital information resources moderately.

Research Question 4: What is the purpose library and information science undergraduates use digital information resources in University of Benin?

Table 6: Purpose of Use of Digital Information Resources

S/N	Purpose	Strongly Agreed		Agreed		Disagreed		Strongly Disagreed		Mean (\bar{x})
1.	Global library information/knowledge	55	30.6%	50	27.8%	30	16.7%	45	25%	2.64
2.	To retrieve information on trending issues in LIS	30	16.7%	50	27.8%	55	30.6%	45	25%	2.36
3.	To do quality assignment	85	47.2%	50	27.8%	50	27.8%	20	11.1%	3.3
4.	To acquire more knowledge	30	16.7%	50	27.8%	55	30.6%	45	25%	2.36
5.	Sourcing for materials for research	57	31.7%	50	30.6%	65	36.1%	8	4.4%	2.9
6.	self-improvement	90	50%	20	11.1%	50	27.8%	20	11.1%	3.
7.	To augment class note	50	27.8%	60	33.3%	20	11.1%	50	27.8%	2.61
8.	To enhance learning	100	55.6%	30	16.7%	30	16.7%	20	11.1%	3.2
9.	For recreational purpose	60	33.3%	30	16.7%	20	11.1%	45	25%	2.31
10.	To acquire recent information in LIS	95	52.8%	25	13.9%	20	11.1%	40	22.2%	2.97
Grand Mean										2.8

From table 6, it can be deduced that the majority of the respondents strongly agreed that the purposes they use digital information resources are for global information/knowledge (30.6%), self-improvement (50%), to enhance learning, and recreational purpose (33.3%) and to acquire recent LIS information (52.8%) while some agreed they use digital information to acquire more knowledge and augment class notes. The grand mean of purpose the respondents use digital

information resources is 2.8. It can be concluded that the purpose of digital information usage is high, meaning digital information resources boost undergraduates' active learning outcome and expands their academic progress.

Research Question 5: What are the challenges encountered by Library and Information Science undergraduates in the use of digital information resources in University of Benin?

Table 7: Challenges encountered by LIS Students in the use of digital information resources

S/N		No. of Respondents	Percentage (%)
1.	Information anxiety	3	1.7
2.	Limited access to computer terminal	5	2.8
3.	Insufficient formal training by library staff on use of digital technology	13	7.2
4.	Inadequate search skills	15	8.3
5.	Inadequate power supply	10	5.6
6.	Insufficient staff assistance to facilitate easy access	22	12.2
7.	Insufficient IT knowledge and skill to effectively utilize the resources	31	17.2
8.	Time consuming	20	11.1
9.	Insufficient infrastructure	30	16.6
10.	Poor/ slow internet connectivity	31	17.2

Table 7 shows that the major challenges encountered by the respondents in the use of digital information resources are Poor/ slow internet connectivity (17.2%), insufficient IT knowledge and skill to effectively utilize the resources (17.2), insufficient infrastructure (16.6%) and insufficient staff assistance to

facilitate easy access (12.2%) while information anxiety and limited access to computer terminal, had the lowest percentages.

Test of Hypothesis: There is no significant relationship between library and information science undergraduates' perceived ease of use and extent of use of digital information resources.

Table 8: Relationship between LIS undergraduates PEOU and extent of use of DIR

Responses	O_1	e_1	$O_1 - e_1$	$(O_1 - e_1)^2$	$\frac{(O_1 - e_1)^2}{e_1}$
Strongly Agreed	70	45	25	625	13.9
Agreed	60	45	15	225	5
Disagreed	30	45	- 15	225	5
Strongly Disagreed	20	45	- 25	625	13.9
Total	180				37.8

Degree of Freedom (DF)

$(r - 1) (c - 1)$ at 0.05 level of significance

Where:

$r =$ number of rows = 4

$c =$ number of columns = 2

$(4 - 1) (2 - 1)$ at 0.05 level of significance

$(3) \times (1)$ at 0.05 level of significance

3 at 0.05 level of significance = 7.815

Comparing chi - square (χ^2) calculated value with Degree of Freedom (DF) = $37.8 > 7.815$

Decision Rule

If the calculated value is higher than the table value, the Alternative Hypothesis is accepted while Null Hypothesis is rejected or otherwise, the (H0) Null Hypothesis is accepted and Alternative Hypothesis rejected.

Decision

Since the calculated value of chi - square is 37.8 is greater than the table value of 7.815, we therefore reject the (H0) Null Hypothesis and accept (H1) Alternative Hypothesis which state that there is a significant relationship between Library and Information Science undergraduates' perceived ease of use and extent of use of digital information resources.

Discussion of Findings

The type of digital information resources majorly used by Library and Information Science undergraduates in University of Benin (UNIBEN) are web resources, databases, e-journals, and e-projects. The finding agrees with Hauwa (2014), who found online databases, e-books and e-journals as the types of digital information

resources majorly used by students. The findings show high perception of ease of use of digital information resources as most respondents perceive digital information resources as; very convenient to use, comfortable to use digital information resources for academic work and digital information resources are easy to use. This is in variance with Adetunla (2016) finding on undergraduates of private universities in Oyo state, who found that, electronic resources was perceived to be complex, non-flexible and not easy to use by their respondents. Finding agrees with Akpojotor (2017) who found postgraduate students have a very high positive perception towards the ease of use and usefulness of electronic information resources.

The findings equally revealed that the respondents use e-journals, WIFI, web resources and e-newspaper are used to a high extent. While e-books, e-project/thesis, CD-ROM and search engines are used to a low extent. This slightly agrees with the finding of Urhiewhu, Okeke and Nwafor (2015), as they found undergraduates use e-journals, e-newsletters, e-reference materials and e-thesis to a high extent. While on the contrary, Urhiewhu and Emojorho reported that digital information resources are used to low extent by undergraduates. However, some DIRs are used to a high extent as reported by this study.

Majority of the respondents strongly agreed that the purposes they use digital information resources are for global information/knowledge, self-improvement, to enhance learning, recreational purpose and to acquire recent LIS information while some agreed they use digital information to acquire more knowledge and augment class notes. This shows that digital information resources boost undergraduates' active learning outcome and expands their academic progress.

The findings also revealed a host of factors impede the use of digital information resources. These include: Poor/ slow internet connectivity, insufficient IT knowledge and skill to effectively utilize the resources, Insufficient infrastructure and Insufficient staff assistance to facilitate easy

access, Insufficient formal training by library staff on use of digital technology and Inadequate search skills. This finding is in agreement with the finding of Urhiewhu and Emojorho (2015), who's finding revealed the challenges encountered by undergraduates in usage of digital information resources include; inadequate bandwidth, network problems, lack of skill, lack of formal training on internet use, slow server and inadequate computers. The finding is slightly related with Olaniran, Duma and Nzima (2017), as they found technical related issues (inadequate skill), internet access related challenges and readability to impede DIR use. The findings equally revealed that there is a significant relationship between Library and Information Science undergraduates' perceived ease of use and extent of use of digital information resources. In agreement, Adetunla (2016) found a positive relationship between perceived ease of use and electronic information resources usage. The finding also corresponds with Akpojotor (2017) findings which show a significant relationship that exists between perceived ease of use and use of electronic information resources.

Conclusion

Based on the findings, a significant relationship exists between PEOU and extent of use of digital information resources. In other words, Perceived ease of use is a vital factor and backbone that influences the extent of use of digital information resources. Therefore, the study concluded that the extent of use of digital information resources depends enormously on the perceived ease of use of digital library technology. Where there is high perception of ease of use, the extent of utilization will increase but where there is low perception, digital information resources will be underutilized.

Recommendations

Based on the findings of this study, the following recommendations have been offered to increase the extent of use of digital information resources by undergraduates:

1. More awareness and sensitization by library management should be done to improve the usage of digital information resources.
2. Libraries should make provision for continuous training of students and provide all technical support to facilitate its use.
3. Undergraduates should ensure that they attend and participate in the training programs organized by their library for them.
4. University management should make available the finance and facilities needed for the sensitization and training programs.

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