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Influence of Adjustment Factors on Use of Online Databases by Postgraduate Students in Four Private Universities in South-West, Nigeria

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***Abstract*:** Online databases have been created for use by students and researchers of which postgraduate students constitute a major part. However, past studies have revealed low utilisation of online databases by postgraduate students and observations have shown that adjustment factors (perceived enjoyment and objective usability) could be responsible. This study examined the relationship between adjustment factors and the use of online databases by postgraduate students in four private universities in South-West, Nigeria. The research design employed for this study was the descriptive survey of the correlational type. Population comprised one thousand and sixty seven (1067) postgraduate students in four private universities (Afe Babalola, Babcock, Lead City and Redeemers) Purposive sampling technique was used to select two common faculties and a sampling fraction of 70% of the population of each faculty was used to select the sample size of 513. Data was collected using questionnaire and analysed using descriptive and inferential statistics (pearson moment correlation, multiple regression and ANOVA). Findings revealed that there is a significant relationship between: perceived enjoyment and use of online databases in Afe Babalola, Lead City, and Redeemers universities; objective usability and use of online databases in Afe Babalola, Babcock and Lead City universities. Postgraduate students are likely to continue to use online databases if they perceive the usage to be enjoyable and if they are able to perform their various academic tasks with the online databases.

Keywords: *Objective usability, online databases, perceived enjoyment, postgraduatestudents.*

Introduction

Postgraduate students undergo academic programmes which require in-depth work on specific research problems over a period of time (Powell, 2016). They are therefore expected to have a broad and highly detailed knowledge of their subjects and related disciplines, and then carry out research in partial fulfillment of the award of a higher degree (Adeyemi & Oluwabiyi 2013). In order to meet this expectation, they require information resources which would enable them carry out their research and other academic activities. These resources are provided by the university libraries which function to meet the information needs of its users including postgraduate students.

Among the resources provided by the university libraries are the online databases. Online databases are collections of electronic information sources by publishers from various fields and disciplines accessed through a computer network and also through the internet (Gakibayo, Ikoja-Odongo and Okello-Obura, 2013). They have become a very important part of a library's collection owing to their importance and numerous benefits accruing to their use. The use of online databases helps postgraduate students in actualizing their objectives by providing them with well-sourced, efficient and exhaustive well of information that can be used for research, curiosity or just for reading pleasure. Through online databases, postgraduate students can have access to journal articles, or references to such articles, e-books, reference sources, conference papers and reports. Their use also provides the opportunity for enhanced academic performance and promotion of scholarship (Igbo and Imo 2013). Other advantages of use of online databases includeeasy access, ability to work from any location, and availability of resources that the postgraduate students would not otherwise have access to.(Kwadzo, 2015).

In spite of these enormous benefits, low utilization of online database by postgraduate students has been observed in Nigerian universities (Edem and Egbe, 2016). This has failed to justify the investments on electronic information resources including online databases in Nigerian universities. Okiki and Asiru (2011) explained that the enormous cost incurred in acquiring and maintaining both the material and human resources required to provide online databases would not be justified if the postgraduate students do not effectively use the online databases. It is therefore imperative to investigate the factors which influence the effective use of online databases among postgraduate students in Nigerian universities which may include adjustment factors (perceived enjoyment, objective usability).

Perceived enjoyment and objective usability (adjustment factors) are likely important determinants of use of online databases by postgraduate students. Perceived enjoyment is the degree to which a person believes that adoption of

a particular technology is interesting and associates its adoption with enjoyment (Liao, Tsou and Shu 2008). Perceived enjoyment had been proven to be an important antecedent to behavior intention and a critical factor in some online activities. It has also been found to have an effect on the frequency of usage of technology (Wahab, Jusoff, Al Momani, Noor, and Zahari, 2011). Perceived enjoyment influences the adoption of information technologybecause it makes users to be intrinsically motivated. If users perceive the use of information technology to be enjoyable, they might become intrinsically motivated and this in turn results in frequent use of the technology (Zhang, Chen and Lee, 2014).

Objective usability refers to how easy a database is to use in its actual sense, independent of user experience (Mahapatra and Das, 2013). It assesses how easy user interfaces are to use to achieve specific objectives even if the user does not have a prior knowledge on how to use it (Tsai, Chien, and Tsai, 2014). Objective usability influences a student's behavior towards the use of a technology by either encouraging or discouraging him on future use of the system.

Owing to the numerous benefits of the use of online databases by postgraduate students, it is important that postgraduate students find the use of online databases enjoyable and also useful in performing the specific academic tasks. The extent to which a technology would be easy to use depends on the extent to which the technology can assists an individual in performing his or her portfolio of tasks (Goyal, Purohit and Bhaga 2011). Also, perceived enjoyment determines continuous usage of a technology and, if a user finds the technology to be pleasant and fun to use, he will look forward to using it in the future (Nguyen, 2015).

Literature review

According to Cambridge dictionary (2016), an adjustment factor is the figure introduced to balance the effect of something that is not typical or representative. Technology Acceptance Model (TAM3) suggests two specific adjustment factors: perceived enjoyment and objective usability. According to Holden and Rada (2011), as the users' experience with a system increases, they are expected to adjust their opinions and judgments on the use of that system to reflect their interactions with it. The factors responsible for the adjustment are perceived enjoyment and objective usability.

Wang, Lin and Liao (2010), in investigating the individual difference antecedents of perceived enjoyment in the acceptance of blogging found out that perceived enjoyment was a significant determinant of blogging intention. Individuals who are high in perceived enjoyment of blogging, that is, expect to enjoy the pleasantness and fun associated with blogging will be more motivated to write a blog than individuals who are low in perceived enjoyment of blogging.

In the same vein, Khalid (2014) opines that when a student finds a technology to be enjoyable, he will learn in a self-paced and interactive way and also view dealing with the challenges to be fun. In agreement with this, Nguyen (2015)

upholds that perceived enjoyment determines continuous usage of a technology and, if a user finds the technology to be pleasant and fun to use, he will look forward to using it in the future. This is because the student is most likely motivated and satisfied with the technology.

The listed studies support the position that perceived enjoyment positively influences a student's use of a technology. However, Teo (2011) discovered from his study that perceived enjoyment does not have any significant effect on students' intention to use the internet based learning medium (ILM).

According to Tsai, Chien, and Tsai (2014), objective usability determines if an individual can operate a technology efficiently, effectively, and satisfactorily. O'Connell, Freed and Rothberg (2010) describe the role and importance of objective usability in the use of technology to support disabled students' learning. They discovered from their study that the lack of experience, and sensory and learning disabilities of the students do not hinder them in accessing the information on the websites because the latter has some features which make it easy to operate even by students with disabilities.

Similarly, Goyal, Purohit and Bhaga (2011) explains that the extent to which a technology would be easy to use depends on the extent to which the technology can assists an individual in performing his or her portfolio of tasks. In examining the objective usability of web portals as an example of a technology, Oliha (2014) highlights the features of a web portal which makes it easy to operate by every student including those without prior experience of its use. The features include the following: a single point of entry to application and services, the ability to communicate and collaborate, personalization, and integration of functions and data from multiple systems. These features direct the student step-wisely to achieve his objectives. The in-built instructions which guides the student in the use of the web portal renders users experience as an unnecessary requirement for operating the web portal.

Although these authors have looked into how perceived enjoyment and objective usability can influence the use of technology, none of them has looked into their impact on the use of online databases by postgraduate students.

Conceptual model

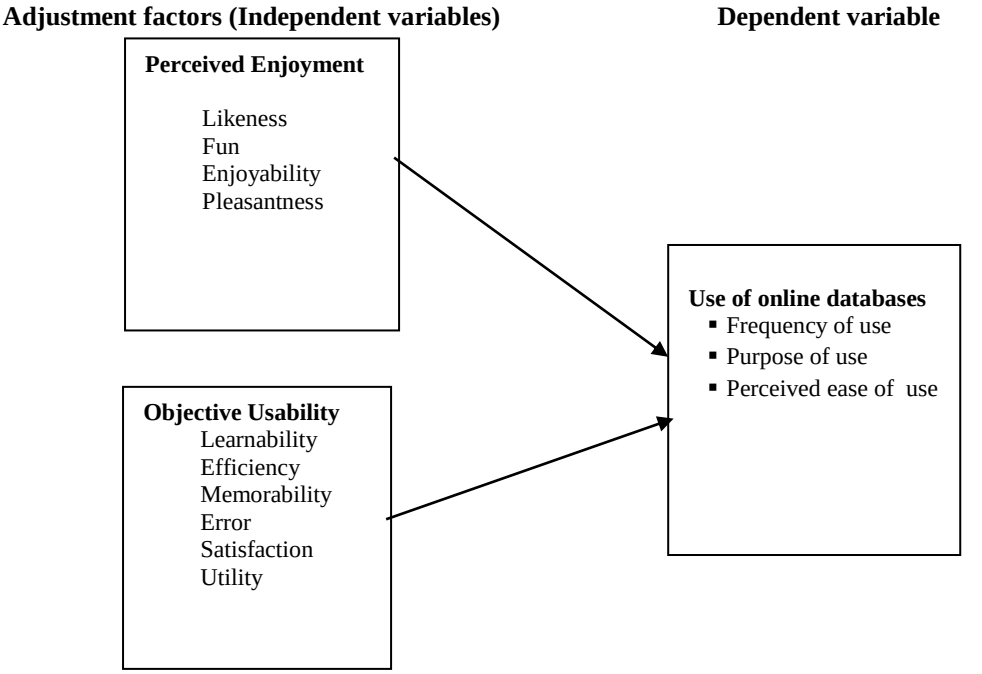

Figure 1

The independent variables are perceived enjoyment and objective usability while the dependent variable is the use of online databases. The figure shows that the adjustment factors (perceived enjoyment and objective usability) can determine the use of online databases by the postgraduate students.

Statement of the problem

In spite of the provision of online databases by private universities in Nigeria, studies still record their low utilization by postgraduate students in these universities. Although many reasons why this may occur have been proposed in the extant literature, none of the authors have looked into how adjustment factors impacts the use of online databases by the postgraduate students. This study is set to examine the influence of adjustment factors on use of online databases by postgraduate students in four private universities in South-West, Nigeria.

Research questions

The research questions are:

1. How does perceived enjoyment correlate with the use of online databases by postgraduate students in selected private universities in South-West, Nigeria?
2. What is the relationship between objective usability and use of online databases by postgraduate students in selected private universities in South-west, Nigeria?
3. How does perceived enjoyment and objective usability jointly influence the use of online databases by postgraduate students in selected

private universities in South-west, Nigeria?

Hypothesis

Ho1: There is no significant relationship between perceived enjoyment and use of online databases by the postgraduate students.

Ho2: There is no significant relationship between objective usability and use of online databases by the postgraduate students.

Methodology

This study adopts descriptive survey design. This is because surveys are very effective in describing the characteristics of a large population and its flexibility makes it applicable in many modes including online surveys, email surveys, social media surveys, paper surveys, mobile surveys, telephone surveys, and face-to-face interview surveys. Due to the anonymity of surveys, respondents tend to be as open and honest as possible and therefore are able to give valid and candid answers thereby ensuring a dependable result (Wyse, 2012).

The demerits of the research design include the biasness of the researcher in the wording of the questions of the questionnaire and the untruthfulness of the participants. In spite of its disadvantages, the descriptive survey research design is an appropriate methodology as it helps to gather data with the intention of describing the existing conditions, identifying standards against which existing conditions can be compared or determine the relationship that exist between specific events at a particular point in time.

Population comprised one thousand and sixty seven (1067) postgraduate students in four private universities in South-west, Nigeria (Afe Babalola, Babcock, Lead City and Reedemer's). Purposive sampling technique was used to select two faculties common to the four universities. The common faculties are Faculty of Science, and Faculty of Social Management & Science which have a total number of 733 in the four universities. A sampling fraction of 70% of the population was used to select the sample size of 513 (Table 1). Data was collected using a questionnaire and analysed using descriptive and inferential statistics. The result was presented and discussed in percentages. Pearson product moment correlation is employed to measure the correlation between the variables.

Table 1

Study Population and Sample Size of Study

University	Total population of PG students in the two common faculties	Population of PG students in Faculty of Science	Population of PG students in Faculty of Social Mgt. & Science	Sample size per faculty (70%)
Afe Babalola	79	20	59	55
Lead City University	63	6	57	44
Redeemer's University	85	34	51	60
Babcock	506	36	470	354
Total	733	96	637	513

Note. The population of PG students presented in the first column represent the number of PG students in the two faculties' common to the four universities.

Results and discussion

A total number of five hundred and thirteen (513) copies of the questionnaire designed for this study were administered to respondents in the four universities (Afe Babalola, Lead City, Redeemer's and Babcock universities). A total of four hundred and eighty seven (487) questionnaires were returned, giving an overall response rate of 94.9%.

Research question one: How does perceived enjoyment correlate with the use of online databases by postgraduate students in selected private universities in South-West, Nigeria?

Table 2 presents the results on the frequency of use of online databases by the postgraduate students. The scales used for frequency of use of online databases by postgraduate students in the four private universities were: daily, weekly, monthly, occasionally, and Med Central, and DOAJ were regularly used. Table 3 presents the result on perceived enjoyment of online databases by postgraduate students. The scales used to measure the perceived enjoyment of online databases by postgraduate students were: strongly agree, agree, undecided, disagree, and strongly disagree. But for the purpose of reporting, strongly agree and agree were modified to become agree (A) while, strongly disagree, and disagree were modified to become disagree (D). Results in Table 3 shows that 92.4% and 81.1% of the respondents in Afe Babalola and Redeemer's Universities respectively indicated that they enjoyed using online databases.

never. For the purpose of reporting, daily and weekly were modified to become regularly used (RU), monthly and occasionally were modified to become occasionally used (OU). The highest response rate was recorded in Redeemer's University with 77.4% of the respondents indicating that they regularly used Science Direct followed by 75.5% who used HINARI.

On the contrary, 72.5% of the respondents in Lead City University and 65.7% in Babcock University indicated that they never used DOAJ. However, the least regularly used online database was Proquest as indicated by 13.2% in Redeemer's University. Similarly, 14.4% of the respondents in Babcock indicated that they regularly used JSTOR. Hence, the percentage of the response rate in favour of regular use of online databases was quite low in the four universities. Observation of the results in Table 2 therefore showed that although it is obvious that most of the respondents in the four universities never used many of the online databases, HINARI, Science Direct, Pub

However, low response rates on enjoyment of online databases were recorded as 24.5% and 42.5% from Redeemer's and Lead City Universities.

In Afe Babalola and Babcock Universities, 90.5% and 87.4% respectively submitted that the use of online database is fun.

In Redeemer's University however, 30.2% indicated that the postgraduate students have a likeness for using online databases. The high response rate on perceived enjoyment and a corresponding high rate on frequency of use of online databases by respondents in Redeemers University establish the influence of perceived enjoyment on use of online databases.

2: Frequency of use of online databases by postgraduate students

Types of Online Databases	Afe Babalola						Babcock						Lead City						Redeemer's					
	NU		OU		RU		NU		OU		RU		NU		OU		RU		NU		OU		RU	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
HINARI	20	37.7	16	30.2	17	32.0	116	34.0	164	48.1	61	17.8	21	52.5	7	17.5	12	30	2	3.8	11	20.7	40	75.5
AGORA	21	39.6	21	39.6	11	20.8	185	54.3	58	17	98	28.8	23	57.5	11	27.5	6	15	34	64.2	7	13.2	12	22.6
JSTOR	20	37.7	15	28.3	18	33.9	225	66.0	67	19.7	49	14.4	23	57.5	12	30	5	12.5	37	69.8	6	11.4	10	18.8
Science Direct	21	39.6	19	35.9	13	24.5	141	41.4	152	44.6	48	14.1	21	52.5	9	22.5	10	25	6	11.3	6	11.3	41	77.4
Pub Med Central	23	43.4	19	35.8	11	20.7	183	53.7	70	20.6	88	25.8	20	52.5	8	20	11	27.5	8	15.1	7	13.2	38	71.7
Proquest	24	45.3	16	30.2	13	24.6	186	54.5	63	18.4	92	26.9	25	62.5	8	20	7	17.5	40	75.5	6	11.3	7	13.2
AJOL	19	35.8	23	43.4	11	20.8	223	65.4	65	19.1	53	15.5	26	65.0	7	17.5	7	17.5	37	69.8	5	9.5	11	20.7
DOAJ	19	35.8	24	45.3	10	18.9	224	65.7	73	21.4	44	12.9	29	72.5	4	10	7	17.5	8	15.1	7	13.2	38	71.7

Key: NU – Never used; OU – Occasionally used; RU – Regularly Used

Table 3: Perceived enjoyment of online databases by the postgraduate students

Likeness	AfeBabalola				Babcock				Lead City				Redeemers			
	D		A		D		A		D		A		D		A	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Using online databases is desirable for me	5	9.5	47	88.6	85	25	185	54.3	7	17.5	27	67.5	17	32.1	36	67.9
I express willingness to use online databases	3	5.7	46	86.8	20	5.9	298	87.4	14	35	16	40	34	64.1	18	33.9
I find the use of online databases appealing	5	9.5	43	81.1	74	21.7	246	72.1	11	27.5	21	52.5	34	64.1	16	30.2
I don't mind using online databases	4	7.6	47	88.7	68	19.9	236	69.2	9	22.5	27	67.5	8	15.1	46	73.5
I use online databases voluntarily	3	5.7	47	88.7	27	7.9	252	73.9	12	30	21	52.5	12	22.6	39	73.6
I am disposed to using online databases	16	30.1	33	62.3	43	12.6	278	81.5	11	27.5	27	67.5	9	17	42	79.3
I dislike using online databases	30	56.6	20	37.7	81	23.8	233	68.3	16	40	19	47.5	14	26.4	37	69.8
Fun																
Online databases are fun to use	6	11.3	42	79.2	79	23.2	226	66.3	12	30	23	57.5	23	43.4	29	54.7
Online databases are pleasant to use	2	3.8	48	90.6	32	9.4	281	82.4	8	20	21	52.5	14	26.4	35	66
Use of online database is interesting	2	3.8	48	90.5	21	6.1	298	87.4	9	22.5	28	70	13	24.6	39	73.6
Use of online database is exciting	6	11.3	46	86.8	24	7	299	87.7	11	27.5	19	47.5	14	26.4	38	71.7
Use of online database is amusing	4	7.6	42	79.3	34	10	292	85.6	11	27.5	25	62.5	34	64.1	16	30.2
Us of online database is boring	9	17	26	49	140	41	184	53.9	11	27.5	18	45	17	32	36	67.9
Enjoyment																
Using online database is delightful	3	5.7	49	92.4	56	16.4	260	76.3	14	35	23	57.5	9	16.9	43	81.1
Using online database is satisfying	3	5.7	45	84.9	37	10.9	290	85	13	32.5	20	50	7	13.2	46	86.8
Using online database is a good way to spend my leisure time	11	20.7	40	75.4	41	12.1	285	83.6	11	27.5	22	55	14	26.4	39	73.6
Using online database involves me in an enjoyable process	6	11.3	46	86.8	35	10.2	292	85.7	17	42.5	17	42.5	39	73.6	13	24.5
The use of online database arouses my curiosity	16	30.2	35	66.1	174	51	151	44.3	13	32.5	16	40	19	35.9	31	58.5
P**leasantness**																
Use of online database is undelightful	37	69.8	12	22.7	174	51.1	150	44	23	57.5	9	22.5	40	75.5	11	20.8
Using online database pleases me	6	11.3	46	86.8	40	11.7	279	81.9	13	32.5	15	37.5	18	34	35	66
Using online database leaves me happily satisfied	4	7.6	48	90.6	41	12	292	85.6	13	32.5	21	52.5	20	37.8	33	62.2
Using of online database is pleasurable	6	11.3	46	86.8	37	10.9	296	86.8	11	27.5	18	45	15	28.3	38	71.7
Using online database is enjoyable	9	17	43	81.1	39	11.5	296	86.8	12	30	20	50	17	32.1	36	67.9
Using of online database is stress-free	15	28.3	36	67.9	51	15	279	81.8	13	32.5	18	45	12	22.7	41	77.4
Use of online database is unpleasant	32	60.4	19	35.8	174	51	152	44.5	19	47.5	16	40	43	81.1	10	18.9

Key: D – Disagree; A – Agre

Research question two: What is the relationship between objective usability and use of online databases by postgraduate students in selected private universities in South-west, Nigeria?

The results of the objective usability of online databases by the postgraduate students are presented in Table 4. The scales used to measure the objective usability of online databases by postgraduate students were: strongly agree, agree, undecided, disagree, and strongly disagree. But for the purpose of reporting, strongly agree and agree were

modified to become agree (A) while, strongly disagree, and disagree were modified to become disagree (D)). Objective usability was measured using learnability, memorability, efficiency, error and satisfaction. Results in Table 4 show that respondents who indicated that they found it difficult to remember how they previously used online databases, that is, memorability were in Babcock (32.0%), Lead City (30.0%) and Redeemer's (24.5%) and this was found to be the second least by respondents. Learnability of online databases enjoyed a very high response rate from Afe Babalola (90.5%) and Babcock (84.85%) followed by Redeemer's (79.3%) and then, Lead City University (72.5%). Efficiency of online databases received a high response rate in all the four universities but was exceptionally high in Afe Babalola (94.4%) and Babcock (87.1%). Errors encountered in the use of online databases received a low response rate, between 27.3% to 56.6% in all the four universities. Satisfaction derived in the use of online databases had a very high response rate in all the universities, between 62.5% and 96.2%.

The use of means other than online databases by postgraduate students for information retrieval was found to have the least number of respondents in Redeemer's University (20.7%) followed by Lead City University (22.5%). The low response rate indicates that utility derived from using online databases is high.

Table 4: Objective usability of online databases by postgraduate students

Learnability	**Afe Babalola**				**Babcock**				**Lead City**				**Redeemer's**			
	D		**A**		**D**		**A**		**D**		**A**		**D**		**A**	
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
It is easy to learn to use online databases	10	18.8	43	81.1	90	26.4	251	73.6	18	45	22	55	10	18.9	39	73.6
he terminologies used in online databases are easily understandable	13	24.5	40	75.5	60	17.6	281	82.4	11	27.5	29	72.5	16	30.2	37	69.8
Online databases offer easy to understand menus	6	11.3	47	88.7	63	18.5	278	81.6	19	47.5	21	52.5	15	28.3	38	71.7
Online databases have appropriate help functions	5	9.4	48	90.5	51	15	290	85	18	45	22	55	29	54.7	24	45.3
Online databases provide well organized help functions for new users	8	15.1	45	84.9	52	15.3	289	84.8	21	52.5	19	47.5	11	20.7	42	79.3
It does not take a great deal of effort for new users to become proficient in the use of online databases	12	22.7	41	77.4	62	18.2	279	81.8	20	50	20	50	17	32.1	36	68
Use of online database is difficult to learn	22	41.5	31	58.5	161	47.2	180	52.8	26	65	14	35	14	26.4	39	73.6
Efficiency																
Online databases are designed to help find what I want	11	20.8	42	79.2	103	30.2	238	69.8	16	40	24	60	17	32.1	10	68
Use of online database requires little effort	12	22.7	41	77.3	59	17.3	282	82.7	15	37.5	25	62.5	16	30.2	10	69.8
I get results of searches quickly when I use online databases	9	17	44	83	56	16.4	285	83.6	15	37.5	25	62.5	14	47.2	24	52.8
I can complete a result finding task quickly with the use of online databases	3	5.7	50	94.4	44	12.9	297	87.1	14	35	26	65	19	35.9	30	64.1
Use of online database produces quick result	9	17	44	83	44	12.9	297	87.1	21	52.5	19	47.5	27	50.9	26	49
Use of online database wastes time	28	52.9	25	47.2	203	59.6	138	40.4	23	57.5	17	42.5	37	69.8	16	30.2
Memorability																
I can easily remember the steps required to use an online database	10	18.9	43	81.2	139	40.7	202	59.3	20	50	20	50	16	30.2	37	69.8
I find it difficult to remember the steps required to use online databases	25	47.2	28	52.8	164	48.1	177	51.9	23	57.5	17	42.5	16	30.2	37	69.8
It usually takes long before I remember how I used an online database	28	52.8	25	47.2	201	59	140	41.1	22	55	18	45	14	26.4	39	73.5
Use of online database is interactive	7	13.2	46	86.8	98	28.7	243	71.2	20	50	20	50	14	26.4	39	73.6
Use of online database leaves a lasting memory	7	13.2	46	86.8	56	16.4	285	83.5	15	37.5	25	62.5	16	30.2	37	69.8
Use of online database is complex	23	43.3	30	56.6	150	44	191	56	24	60	16	40	36	67.9	17	32.1
I find it difficult to remember how I previously used an online database	28	52.8	25	47.2	232	68	109	32	28	70	12	30	40	75.5	13	24.5
Error																
I encounter errors in the use of online databases	26	49	27	50.9	248	72.8	93	27.3	19	47.5	21	52.5	30	56.6	23	43.3
The results I get are different from what I expect	20	37.8	33	62.2	179	52.5	162	47.5	22	55	18	45	28	52.8	25	47.2
It is normal to encounter errors in the use of online databases	12	22.7	41	77.4	174	51.1	167	48.9	15	37.5	25	62.5	25	47.2	28	52.8
I achieve high precision results whenever I use online databases	8	15.1	45	85	54	15.8	287	84.2	22	55	18	45	20	37.7	33	62.3
Satisfaction																
I am comfortable using online databases	2	3.8	51	96.2	62	18.2	279	81.8	18	45	22	55	8	15.1	45	85
I feel very confident using online databases	3	5.7	50	94.4	41	12	300	88	16	40	24	60	10	18.8	43	81.1
I enjoy using online databases	2	3.8	51	96.2	35	10.3	306	89.7	14	35	26	65	4	7.6	49	92.5
Use of online database is educative	4	7.6	49	92.4	34	10	307	90.1	14	35	26	65	17	32.1	36	67.9
Online databases are helpful	3	5.7	50	94.4	35	10.3	306	89.7	15	37.5	25	62.5	13	24.5	40	75.5
Use of online database is beneficial to me	5	9.5	48	90.6	117	34.3	224	65.7	14	35	26	65	14	26.4	39	73.5
I am not satisfied using online databases	18	33.9	35	66	53	15.5	288	84.4	20	50	20	50	19	35.8	34	64.2
Utility																
Using online databases is not expensive	8	15.1	45	84.9	81	23.7	260	76.3	20	50	20	50	20	37.8	33	62.2
I achieve results when I use online databases	6	11.3	47	88.7	60	17.6	281	82.4	23	57.5	17	42.5	17	32.1	36	67.9
I am satisfied with the use of online databases	11	20.8	42	79.2	57	16.7	284	83.3	21	52.5	19	47.5	36	67.9	17	32.1
I employ other means to get the information I need even after using online databases	25	47.2	28	52.8	82	24.1	259	76	31	77.5	9	22.5	42	79.3	11	20.7

From the results in Table 4 and the corresponding responses on frequency of use of online databases on Table 2, a high response rate on learnability and ease of use of online databases by respondents in Babcock and Redeemers University led to a corresponding high frequency of use.

Research question three: How does perceived enjoyment and objective usability jointly influence the use of online databases by postgraduate students in selected private universities in South-west, Nigeria?

Table 3 shows the results on perceived enjoyment while Table 4 displays the responses on objective usability of online databases by the postgraduate students. From the results, there is a high response rate from respondents in Redeemers University on both perceived enjoyment (81.1%) and objective usability (79.3%). A high response rate on frequency of use of online databases by respondents in Redeemers University suggests that perceived enjoyment and objective usability have a joint influence on use of online databases by the postgraduate students. In Afe Babalola University however, although a high percentage of respondents (92.4) indicated that they find online databases to be enjoyable and an equally high percentage (90.5) also finds it easy to understand and use, usage of online databases was recorded to be low among the respondents.

Statistical test results

Information on relationship between perceived enjoyment and use of online databases by postgraduate students in the four universities is presented in Table 5 while, relationship between objective usability and use of online databases by postgraduate students in the four universities is presented in Table 6. Table 5 shows that a significant relationship exists between perceived enjoyment and use of online databases in Afe Babalola University ($r = .182$, $p<0.05$), Lead City University; ($r = .549$, $p<0.05$) and Redeemer's University ($r = .180$, $p<0.05$). This implies that the more the postgraduate students perceive online databases to be enjoyable, the more they will use them. Therefore, the null hypothesis 1 is rejected. However, there is a weak relationship between perceived enjoyment and use of online databases in Babcock University ($r = .095$).

Table 5: Relationship between perceived enjoyment and use of online databases by postgraduate students

Variable	N	Mean	Std.	R	Df	Sig.
Afe Babalola University						
Perceived Enjoyment (Adjustment)	53	71.7	13.662	.182*	52	.017
Use of online databases	53	18.8	9.550			
Babcock University						
Perceived Enjoyment (Adjustment)	341	69.0	15.540	.095	340	.081
Use of online databases	341	16.4	8.405			
Lead City University						
Perceived Enjoyment (Adjustment)	40	59.1	22.199	.549**	39	.000
Use of online databases	40	15.8	9.344			
Redeemer's University						
Perceived Enjoyment (Adjustment)	53	69.8	9.399	.180*	52	.018
Use of online databases	53	19.8	4.720			

**Significant at 0.05

Table 6 shows that a significant relationship exists between objective usability and use of online databases in Afe Babalola University ($r = .352$, $p<0.05$), Babcock University ($r = .353$, $p<0.05$) and Lead City University ($r = .588$, $p<0.05$). This implies that the more the postgraduate students perceive an online database to be useful for the purposes intended, the more they will use online databases. Therefore, the null hypothesis 2 is rejected. However, there is a weak relationship between objective usability and use of online databases in Redeemer's University ($r = .237$).

Table 6: Relationship between objective usability and use of online databases by postgraduate students

Variable	N	Mean	Std.	R	Df	Sig.
Afe Babalola University						
Objective usability (Adjustment)	53	103.1	11.0	.352*	52	.011
Use of online databases	53	18.8	10.0			
Babcock University						
Objective usability (Adjustment)	341	99.5	13.8	.353**	340	.000
Use of online databases	341	16.4	8.4			
Lead City University						
Objective usability (Adjustment)	40	85.8	23.0	.588**	39	.000
Use of online databases	40	15.8	9.3			
Redeemer's University						
Objective usability (Adjustment)	53	94.8	13.2			

Use of online databases	53	19.8	4.7	.237	52	.088

**Significant at 0.05

The results show that the percentage of the response rate in favour of regular use of online databases was quite low in the four universities. This agrees with the view of Edem and Egbe (2016) that the utilization of online databases by postgraduate students in Nigerian Universities is quite low. The recorded high perceived enjoyment rate and a corresponding high frequency of use of online databases by participants in Redeemers University confirms the position of Wahab et al (2011) on influence of perceived enjoyment on frequency of use of technology.

High response rate on objective usability of online databases by postgraduate students in Redeemers University corresponds to a high frequency of use of online databases by the same participants. This result correlates with the claims of Tsai et al (2014) that objective usability determines the continuous usage of online databases.

Conclusion

From the statistical test results, there are established relationships between perceived enjoyment and use of online databases, and objective usability and the use of online databases by the postgraduate students, therefore, hypotheses 1 and 2 are rejected. Perceived enjoyment and objective usability influence the use of online databases by postgraduate students. It can therefore be inferred that the more postgraduate students find the use of online databases to be enjoyable, the more they will be willing to use them. Also, if postgraduate students are able to meet their various academic needs with the use of online databases, they will be more inclined to make use of them in the future.

Recommendations

From the study, it has been revealed that the availability of online databases in a university does not automatically lead to their frequent usage by the postgraduate students. Therefore, tertiary institutions should not be carried away by the sole need to make online databases available. They should also be guided by the need to ensure that the online databases subscribed for and provided for postgraduate students are user friendly and can be used to perform various academic purposes. In addition, they should also endeavour to ensure that the online databases provided for the postgraduate students should be accompanied with instructional procedures which can make them easy to learn, understand and operate.

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