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Investigating Postgraduate Students of Olabisi Onabanjo University's Use of Electronic Information Resources Using Technology Acceptance Model.

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**INVESTIGATING POSTGRADUATE STUDENTS OF OLABISI ONABANJO
UNIVERSITY'S USE OF ELECTRONIC INFORMATION RESOURCES USING
TECHNOLOGY ACCEPTANCE MODEL.**

BY

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Abstract:

Research remains an integral part of university postgraduate studies. Literature is a key ingredient of research report writing, while paper based information resources are often difficult to remotely access, the internet has encouraged and enhanced information resources access and use. It is therefore pertinent that universities worldwide should ensure the provision and access to information resources, particularly those available in electronic format. This study thus investigated the use of electronic information resources (EIR) by postgraduate students of the Olabisi Onabanjo University using the Davis Technology Acceptance Model (TAM). A survey research design was adopted for this study and the population for the study comprised Four Hundred and Sixty-Two (462) postgraduate students of the Faculty of Social and Management Sciences of Olabisi Onabanjo University, Ago-Iwoye, Nigeria. Using Yamane (1973) formula, Two Hundred and Fourteen respondents were identified for the study. 214 copies of the questionnaire were administered and 183 copies were retrieved. Out of the 183 copies retrieved, 178 copies were found useful for further use. The return date was 83%. The study found that the TAM parameters influence the use of EIRs by the students, the study thus recommend the sustenance of regular subscriptions to the various EIR database being currently provided by the university. The study also recommend that the postgraduate school should partner with librarians in teaching the 'literature review' aspect of Research Methodology.

Keywords: Electronic Information Resources (EIR), Electronic information resources use. Information Resources, Technology Acceptance Model (TAM)

Introduction:

The advent and adoption of Information Communication Technology (ICT) to information resources publishing, processing, storing and dissemination have led to the growth and development of electronic information resources management. Various databases had through the development been established. The trend has led to the creation and establishment of digital libraries, otherwise known as electronic libraries, virtual libraries and multimedia libraries. Students, lecturers and other researchers have been benefitting from the development as access to electronic information resources has been enhanced, even where remotely located in as much as you have access to the internet.

Electronic information resources (EIR) have changed the face of scholarly communication with the introduction of the World Wide Web (Nwone & Mutula 2019; Steele 2014). Electronic information resources play a critical role in improving teaching, learning, and research. The ability to store information electronically, provide multiple and concurrent access, provide ease of access across regional boundaries, and accessible through electronic systems and networks are the motivating characteristics of electronic information resources. EIR has grown in popularity among higher education institutions around the world, and academics use it to access relevant and current information for a variety of purposes, including teaching, learning and research. It has therefore been embraced by members of the academic community, particularly in the universities. Members of the university communities are therefore through the electronic platform have access to variety of electronic information resources.

Nwone & Mutula (2019) as well as Mittal & Bala (2013) listed online databases, e-journals, e-books, internet resources, CD-ROM and open access catalogue (OPAC) as examples of electronic information resources. Using electronic information resources therefore desires skills in accessing and navigating information resources available electronically. Odunewu & Aluko-Arowolo (2018) posits that effective use of electronic information resources is subject to the user's ability to use a computer, knowledge of content availability and the ability to articulate search terms intelligently. The ability to access the web and navigate through is also a major necessity. With the relevant skills and web access as well as the availability of electronic information resources, it is expected that students, particularly graduate students should embrace the electronic resources. This seems not the case in some African countries, Nigeria inclusive as observations at seminars within the universities reveal that many research students are not really exploiting the available electronic information resources. Previous studies corroborated this observation. Mollel & Mwantimwa (2019) from literature reviewed listed limited information literacy skills, users' poor attitudes; low Internet bandwidth, unreliable power, shortage of funds to subscribe to e-resources, lack of time, inaccessibility to some databases, use of long passwords, and lack of computers as some of the factors limiting the use of electronic information resources.

However those who embraced the technology product gave some reasons for using the electronic information resources, and these include speed, easy search function, ease of use, flexibility,

convenience, and portability (Aregbesola & Oguntayo 2014; Bar-Ilan et al. 2003). The aim of this study is to assess the use of electronic information services by postgraduate students of Olabisi Onabanjo University, Ago-Iwoye, Nigeria using the Technology Acceptance Model (TAM).

Olabisi Onabanjo University was founded by the Ogun State Government of Nigeria in year 1983 and graduated its first set in year 1987 after eighth semesters of study. The university is named after the first executive governor of Ogun State who was an indigene of Ijebu-Ode in Ogun State. The university is the first state university in Nigeria and it had since continue to grow and contributing to the manpower needs of the nation. The university was considered fit for the use of Technology and Acceptance Model to investigate postgraduate students' use of electronic information resources as no known study has done that before.

Technology Acceptance Model (TAM) was propounded by David (1989) to describe the determinants of new computer technology use behavior. He posits that users' behaviour towards the use of new technology is influenced by certain factors, and that the factors are perceived usefulness, perceived ease of use, attitude, intention to use and actual use. Perceived Usefulness is defined as a potential user's subjective likelihood that using a particular system (e.g., a single platform E-payment system) will improve his or her actions, while Perceived Ease of Use is the degree to which the potential user expects the target system to be simple to use (Davis, 1989). This simply points to the belief that the perceived benefits of use and the system's navigation ease will lead to the right attitude to use the system and that the right attitude leads to the intention to use which enhances actual use. It is therefore the aim of this study to analyse the use of electronic information resources by the university students using the TAM parameters which are perceived usefulness, perceived ease of use, attitude and intention to use.

Research Objectives:

The following research questions were formulated to guide this study:

- 1) Find out the demographic characteristics of the Olabisi Onabanjo University's postgraduate students.
- 2) Probe into the level of the students' perception of the usefulness of EIR.
- 3) Find out the students level of perceived ease of use of EIR.
- 4) Probe into the students' attitude to EIR use.
- 5) Find out the students intention to use EIR.
- 6) Establish the influence of perceived usefulness of EIR on the use of EIR by postgraduate students of Olabisi Onabanjo University.
- 7) Find out the influence of perceived ease of use of EIR on the students use of EIR
- 8) Determine the influence of students' attitude on their use of electronic information resources.
- 9) Establish the influence of students' intention to use electronic information resources on their actual use of the resources.

- 10) Find the composite influence of perceived usefulness, perceived ease of use, attitude and intention to use on the use of electronic information resources.

Research Question:

- 1) What are the demographic characteristics of the postgraduate students of Olabisi Onabanjo University?
- 2) What is the level of the postgraduate students' perceived usefulness of EIR?
- 3) What is the postgraduate students' perceived ease of use of EIR?
- 4) What is the postgraduate students' attitude to EIR use?
- 5) What is the level of the postgraduate students' intention to use EIR?

Research Hypothesis:

- 1) There is no significant influence of perceived usefulness on the students use of electronic information resources
- 2) There is no significant influence of perceived ease of use on the students' use of electronic information resources.
- 3) There is no significance influence of the students' attitude on their use of electronic information resources.
- 4) There is no significant influence of the students' intention to use on their use of electronic information resources.
- 5) There is no significant influence of perceived usefulness, perceived ease of use, attitude and intention to use on their use of electronic information resources.

Statement of problem

Unrestricted access to information resources had been the bedrock of academic success stories worldwide. With the advent and adoption of information technology to information dissemination, it is expected that it will increase the impact of information resources on the academic activities of teaching, learning and research. Electronic information resources aid immediate access to a wide variety of information resources on any particular area of interest; not minding where one is located. Geographical boundaries do not matter as many electronic information resources are deployed through the World Wide Web. This development is expected to motivate students and researchers to use the electronic information resources. This does not seem to be the case in Nigeria as previous studies and preliminary investigations reveal that our students and researchers are not exploiting electronic information resources enough. This assertion was corroborated by Okiki (2012) when he observed insignificant use of resources by academic staff members of university of Lagos. This revelation should be a source of concern to librarians, particularly when these resources do cost a fortune. It is in the light of this that the study is adopting the Technology Acceptance Model to evaluate use of electronic information resources by the postgraduate scholars of the Olabisi Onabanjo University, Ago-Iwoye, Nigeria.

Literature Review:

The advent and application of Information Communication Technology ICT to document generation, preservation and dissemination has led to the proliferation, availability and acceptability of electronic information resources access and use, particularly in the academia. Mwantimwa (2017) and Mardhusudhan, (2010) posits that ICT has changed means by which researchers and academics access and use electronic resources. Electronic Information Resources (EIR) are documents that can be accessed through the web or storage devices like computer external drive, flash drive, and CD-ROM using computer systems. According to Ankrah and Atuase (2018), and Haridasan and Khan (2009), EIRs are resources that is electronically stored and can be accessed electronically using computers systems and networks. Electronic resources afford researchers and academics fast access to reliable resources. Tyagi (2011) supports this submission when he submits that researchers and academics' access and use of e-resources enhance their reach to current teaching and research materials, and as such it has become a substitute for printed materials. Tyagi's submission that e-resources had become a substitute to printed materials may be contestable, as not all vital educational resources are available in electronic format, particularly in Africa. This is not to say that there are no genuine efforts to digitize educational resources in print.

Electronic information resources had proven to be a good and reliable source of relevant information and resources for teaching and research. Ankrah and Atuase (2018) submit that current and up-to-date information that are beneficial to information seekers are available electronically. A major benefit of electronic information resources is that with the internet, it can be used anywhere in the world without necessarily visiting the library. Ankrah and Atuase (2018) opine that the major benefit of electronic resources to users is that it be accessed without being present in the library. Other benefits include the ability of multi-users to use the same resource at the same time from different locations. This is not possible with information resources in print format. Once, a user is consulting it, others can't access same resource.

The benefits of electronic information resources use for research should encourage/academic institution community members to engage in aggressive exploitation of electronic information resources. Findings in some developing countries do not present this expected outcome. Egberongbe (2011) investigated the use and impact of electronic resources at the University of Lagos and found that the electronic resources are poorly used. In the same vein, Fiankor and Akussah (2012) probed into the use of electronic resources for policy making by district assembly members in Ghana and found low awareness of various electronic information resources among the district members. Low awareness will definitely contribute to low use of the 'e' resources; as one can only sought what one knows is available. Bankole (2012) also investigated internet services and electronic information resources use by Olabisi Onabanjo University scientists and reported low usage induced by poor awareness. Ankrah and Atuase (2018) captured this scenario by reporting that in spite of the benefits of electronic information resources, literature reveals poor usage of the resources. This development should spur librarians and other information resources to continually investigate the use of electronic information

resources, particularly in the tertiary institution. One major model that had been successfully used in investigating use of technological products is the Davis devised Technology Acceptance Model (TAM).

The Technology Acceptance Model was used by Davis (1999) to explain computer use behavior. He identified the predictors of computer technology acceptance. In the area of technology acceptance, TAM is probably the most widely used. (Taherdoost, 2018), (Wu, 2009). The model described the influence of individuals to use new technology, and their motivators are perceived usefulness, ease of use, and attitude towards use. These three motivators were deemed by the model to lead to intention to use and eventual use of new technologies.

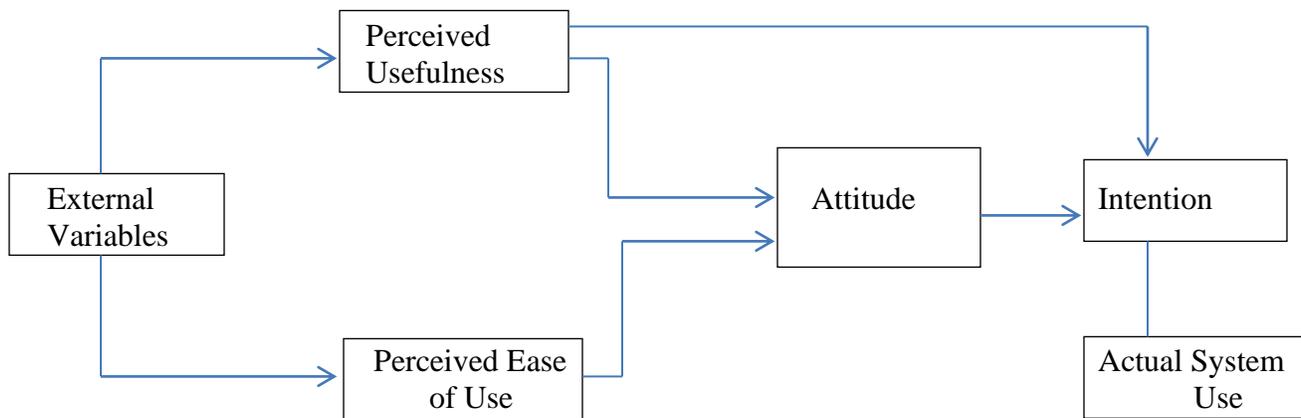


Figure 1: Original Technology Acceptance Model (TAM) Davis, 1989

Figure 1 clearly diagrammatically explains the belief of TAM that the actual use of technology is induced by motivators that include perceived usefulness, ease of use and attitude to such technology product.

TAM remains of the most popular model that had been used to determine the acceptance or otherwise of information technology platforms. Agrawal (2013) actually qualified it as ‘one of the most influential models that had been extensively used in the studies of the determined of LIS/IT acceptance. This study is thus adopting the model to investigate the acceptance and use of the electronic information resources by the postgraduate students of the Olabisi Onabanjo University, Ago-Iwoye, Nigeria.

Methodology

A survey research design was adopted for this study. The population for the study comprised Four Hundred and Sixty-Two (462) postgraduate students of the Faculty of Social and Management Sciences of Olabisi Onabanjo University, Ago-Iwoye, Nigeria. Yamane (1973) formula at 95% confidence limit was used to device the sample population for the study. Two Hundred and Fourteen respondents were thus identified for the study. The data gathering instrument for the study was a structured questionnaire divided into three sections. Section A tagged demographic information scale was used to draw demographic data; section B tagged electronic information use scale was used to generate data on the access, frequency, purpose and challenges encountered in the use of EIR. Section C tagged technology acceptance scale was used to gather data on the respondents perceived usefulness, perceived ease of use, attitude and intention to use electronic information resources.

Face and content validity of the instrument was done by exposing the instrument to colleagues and other experts in the study area. Cronbach Alpha was used to test the instruments reliability and the scores for each of the sections ranged from 0.852 to 0.925. 214 copies of the questionnaire were administered and 183 copies were retrieved. Out of the 183 copies retrieved, 178 copies were found useful for further use. The return date was 83% and the questionnaires were extracted for relevant data which were analysed using simple percentages and inferential statistics to rest the hypotheses.

Results

Research Question 1: Find out the demographic characteristics of the Postgraduate Students

Table 1: Respondents Socio-Demographic Characteristics

Survey Items	Classification	Percentage %
Gender	Male	55.2
	Female	44.8
	Total	100.0
Age/Years	< = 35 years	52.9
	36 – 45 years	32.2
	46 – 55 years	12.6
	>= 56 years	2.3
	Total	100.0
Programme of study	PGD	2.2
	Masters	62.5
	M/Phil	25.3
	Ph.D	7.0
	Total	100
Educational Qualification	Bachelors	82.3
	PGD	10.7
	Masters	7.0
	Total	100

Computer use experience	< 1 year	9.2
	1 – 5 years	17.2
	6 – 10 years	35.6
	11 – 15 years	18.4
	16 – 20 years	5.9
	21 – 25 years	8.0
	> = 26 years	5.7
	Total	100

N = 174

Analysis of Table 1 reveals that we have more male candidate than female among the postgraduate students in the faculties; as 55.2% are male and female accounts for 44.8%. The table also reveals that majority of the students 52.9% are below the age of 35 years while 2.3% are above 55 years of age. The largest percentage (65.5%) of the students are offering masters degree programmed while the least (2.2%) are on the Postgraduate Diploma (PGD) programme. **Table 1 further reveals that majority of the students posses Bachelors degree (82.3%) while 10.7% possess postgraduate diploma while 7.0% have the masters degree.** The table (Table 1) also provides information on the students' computer use experience majority 35.6% have been using computers for 6 – 10 years.

Research Question 2: Find out the students perceived usefulness of EIR

Table 2: Postgraduate Students perceived usefulness of EIR

Perceived Usefulness	Strongly Agree %	Agree %	Sum of agreement %	Strongly disagree %	Disagree %	Sum of disagreement %	Not sure %
Use of EIR improves my academic performance	67.4	27.9	95.3	2.0	2.7	4.7	-
User of EIR enhances my research effectiveness	59.3	34.9	94.2	3.1	2.7	5.8	-
User of EIR improves my research output	53.5	39.5	93.0	2.3	4.7	7.0	-
Use of EIR aids my manuscript preparation	37.2	54.7	91.9	2.3	4.7	7.0	1.2

N = 174

Table 2 reveals that majority of the respondents (95.3%) agreed that the use of electronic information resources improves their academic performance, closely followed by 94.2% who agreed that the user of EIR enhances their research effectiveness, and 93.0% believed that EIR use improves their research output, while 91.9% agreed that it aids their manuscript preparation. This finding points at the need for the university to regularly subscribe to electronic information resources and make such available and widely accessible; as the postgraduate students find such eminently useful.

Table 3: Find out the students' perceived ease of use of EIR

Perceived Ease of Use	Strongly Agree %	Agree %	Sum of agreement %	Strongly disagree %	Disagree %	Sum of disagreement %	Not sure %
EIR sourcing on the web is quite easy	26.7	58.1	84.8	4.7	10.5	15.2	-
Easy to identify and download relevant EIR	27.9	54.0	81.9	4.7	12.8	17.5	-
Searching for and using EIR is not complicated	16.3	52.3	68.6	8.1	23.3	31.4	-
EIR access is not difficult for me	29.1	52.3	81.4	2.3	15.1	17.4	1.2

N = 174

Table 3 reveals that majority of the respondents agreed that EIR is easy to use. 84.8% agreed that sourcing for EIR on the web is quite easy, 81.9% also affirm that it is easy to identify and download EIRs, 81.4% agreed that accessing EIR is not difficult while 68.6% of the respondents agreed that searching for and using EIR is not complicated. The implication of these findings is that majority of the postgraduate students find EIRs easy to use, as such the university library should intensify efforts in making the EIRs available and accessible, while the library administrators engage in library users' education that will target the minority of the students who disagreed with the EIR being easy to use.

Table 4: Probe into the student's attitude to EIR use

Attitude	Strongly Agree %	Agree %	Sum of agreement %	Strongly disagree %	Disagree %	Sum of disagreement %	Not sure %
Will keep using EIR as it makes my academic work enjoyable	36.0	58.1	94.1	4.7	-	4.7	1.2
Enjoy using EIR and have no cause to stop	36.0	58.1	94.1	3.5	1.2	4.7	1.2
User of EIR is quite rewarding to me	33.7	58.1	91.8	4.7	1.2	5.9	2.3
EIR use makes my manuscripts/assignment preparation interesting	36.0	57.0	93	3.5	3.5	7.0	-

N = 174

Table 4 present the respondents attitude to EIR use, and that of the majority of the respondents are positive. 94.1% agreed to keep using EIR because it makes their academic work enjoyable, 94.1% also enjoy using EIR and do not have a cause to stop its use. 91.8% find the use of EIR rewarding while 93% agreed that it makes the manuscripts/assignment preparation interesting.

This findings also points to the need for the university library to ensure training opportunities for postgraduate students to maximally exploit the available electronic information resource. Where users display positive attitude to the use of EIR. It is only expected that the university library will complement such by ensuring ready availability and unalloyed accessibility of the resources. Frustrations which may be occasioned in non-availability and difficult accessibility of the resources can change the attitude to negative.

Table 5: Find out the intention to continually user the EIR

Intention to use	Strongly Agree %	Agree %	Sum of agreement %	Strongly disagree %	Disagree %	Sum of disagreement %	Not sure %
I look forward to assignments/chores/activities that will make me use EIR	36.0	57.0	93	3.5	3.5	7	-
I will continue to use EIR for my manuscript preparation	29.1	53.5	82.6	5.8	10.5	16.3	1.2
Using EIR actually worth it	39.5	52.3	91.8	4.7	3.5	8.2	-
Will continue to use EIR in pursuance of my academic and research endeavours	47.7	45.3	93	3.5	3.5	7	-
Flexibility of using EIR will make me continue to prefer it to paper based information resources	37.2	52.3	89.5	3.5	7.0	10.5	-

N = 174

Table 5 reveals the postgraduate students' intention to use EIR. Majority of the respondents agreed to sustained intention to use EIR. 93% respectively agreed that they look forward to assignments/chores/activities that will make them use EIR and that they will continue to use EIR in pursuance of their academic and research endeavours. 89.5% state that the flexibility of using EIR will make them continue to prefer it to paper based information resources. 91.8% agreed that using EIR worth it while 82.6% will continue to use EIR for their manuscript preparation. This revelation points to the gap the university library should fill; and that is the provision of the EIR to the entire university community. Subscriptions to worthwhile databases should be sustained while additional ones are worked upon.

Hypothesis Testing

Ho1: There is no significant influence of perceived usefulness on the students' of EIR

Table 6: Regression analysis showing perceived usefulness as a predictor of students EIR use.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	26.636	3.306		8.056	.000
	Perceived Usefulness	.718	.185	.286	3.885	.000

R² = 0.82, F = 15.094

a. Dependent Variable: Use of Electronic Information Resources

Table 6 presents the analysis of the influence of perceived usefulness on postgraduate students use of electronic information resources and it reveals that perceived usefulness plays a significant role in influencing postgraduate students' of EIR. The relative contribution of perceived usefulness to use of EIR is expressed as beta weights, (B = .286, t = 3.885; P <.05). This outcome indicates that perceived usefulness of EIR significantly influence EIR use. Perceived usefulness of EIR actually accounted for 82% of the total variation on use of EIR by postgraduate students (R² = 0.82, P < 0.05). Therefore, the null hypothesis is hereby rejected. The inference drawn is that perceived usefulness is a good predictor of EIR use by postgraduate students of Olabisi Onabanjo University, Ago-Iwoye.

Ho2: There is no significant influence of perceived ease of use on students' use of EIR

Table 7: Regression analysis showing perceived ease of use on students' use of EIR.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17.371	2.689		6.460	.000
	Perceived Ease of Use	1.377	.166	.536	8.278	.000

R² = 0.28, F = 68.519

a. Dependent Variable: Use of Electronic Information Resources

Table 7 presents the analysis of influence of perceived ease of use on postgraduate students' use of electronic information resources. The relative contribution of the independent variable (perceived ease of use) to the dependent variable (EIR use) expressed as beta weights, ($B = .536$; $t = 8.278$; $P < .05$) indicates that significant influence exists between perceived ease of use and postgraduate students use of EIR. Perceived ease of use actually accounted 28.7% of the total variation on EIR use by hypothesis is hereby rejected. The inference drawn is that perceived ease of use is a significant predictor of EIR use by postgraduate students of Olabisi Onabanjo University, Ago-Iwoye.

H_{03} : There is no significant influence of the student attitude on their use of EIR.

Table 8: Regression analysis showing the influence of students' attitude on their use of EIR.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.338	2.927		5.239	.000
	Attitude	1.147	.138	.537	8.290	.000

$R^2 = 0.28$, $F = 68.718$

a. Dependent Variable: Use of Electronic Information Resources

Table 8 presents the influence of students attitude on their use of electronic information resources and it is revealed that the students attitude to EIR use significantly influence their use of EIR. The relative contribution of attitude to use of EIR expressed as beta weights, ($B = .537$, $t = 8.290$; $P < .05$). Thus outcome indicates that attitude actually accounted for 28.8% of the total variation on EIR use by the postgraduate students. Therefore, the null hypothesis is hereby rejected. The influence is that attitude is a significant predictor of EIR use.

Ho4: There is no significant influence of the students' intention to use and their use of EIR

Table 9: Regression analysis showing the influence of students' intention to use and their use of EIR

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	24.110	3.246		7.429	.000
	Intention to Use	.901	.190	.342	4.745	.000

R² = 0.12, F = 22.514

a. Dependent Variable: Use of Electronic Information Resources

Table 9 presents the influence of students' intention to use EIR on their use of the resources. The table revealed that intention to use significantly influence the use of EIR by the students. The relative contribution of intention to use EIR expressed as beta weights, (B = .342, t = 4.745; P < .05). Thus outcome indicates that intention to use actually accounted for 11.7% of the total variation on EIR use by the postgraduate students. Therefore the null hypothesis is hereby rejected. The influence drawn is that intention to use is a significant predictor of EIR use.

Ho5: There is no significant influence of perceived usefulness, perceived ease of use, attitude and intention to use on postgraduate students' use of EIR

Table 10: Regression analysis showing the influence of perceived usefulness, perceived ease of use, attitude and intention to use on postgraduate students' use of EIR

Coefficients^a

Model	Unstandardized coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	15.193	3.157		4.812	.000
Perceived usefulness	.222	.054	.242	40.78	.000
Perceived ease of use	.850	.215	.331	3.957	.000
Attitude	1.281	.262	.599	4.885	.000
Intention to use	-.737	.293	-.280	-2.517	.013

Table 10 presents the analysis of the influence of perceived usefulness perceived ease of use, attitude and intention to use on postgraduate students use of EIR; and it reveals that the students, as they jointly accounted for 36% of the total variation revealed that the individual variable's relationship with the use of EIR. The co-efficient of perceived usefulness gave a value of 0.054 and (P < .05). The co-efficient of perceived ease of use, attitude and intention to use gave values

of 0.215, 0.262, and 0.293. They are all significant at $P < 0.05$ level. Therefore, the null hypothesis is hereby rejected. The influence drawn is that all the variables (perceived usefulness, perceived ease of use, attitude and intention to use) are good predictors of students' use of EIR.

Discussion:

This study examined postgraduate students of Olabisi Onabanjo University's use of EIR using the Technology Acceptance Model (TAM) as the determinant. TAM variables include perceived usefulness, perceived ease of use, attitude and intention to use. The study's finding revealed that there were more male students than female students, and that majority of the students were under thirty-five (35) years of age. It is expected that students in this category should be technology savvy, and as such be effective users of EIR. The study also revealed that majority of the users has more than six (6) years computer use experience. It is therefore tenable that they do not have issues accessing EIR; as the resources are deployed through computer technology.

The study revealed that the perceived usefulness of EIRs is very high among the students as majority of them submitted that the use of EIR improves their academic performance, research effectiveness, research output and manuscript development. They also claimed to find information resources on the web easy, as they also find it easy to identify and download electronic information resources. The study also identified that the postgraduate students possess positive attitude to EIR use. These impacted positively on the intention to continually use the EIRs. The TAM indicators (perceived usefulness, perceived ease of use, attitude and intention to use) were found to positively influence the use of EIRs by the postgraduate students.

Recommendations:

Olabisi Onabanjo University should sustain regular subscription to electronic information resources. Efforts should be intensified in the provision of electronic information resources to the students by ensuring availability and quick accessibility to the electronic information resources 24 hours a day. Geographical boundary restrictions should be removed. Students should be able to access the resources anywhere in the world. The University library should ensure regular training and retraining of the students in the access and use of EIR. The university's postgraduate school should partner with librarians in the teaching of 'review of literature' which is an integral part of the 'Research methodology' course.

References

- Adeoye, A. A. & Olanrewaju, A. O. (2019) Use of Technology Acceptance Model (TAM) to evaluate library electronic information resources use by undergraduate students of Lead City *Library Philosophy and Practice*, 1-24.
- Agrawal, S. K. (2013) Knowledge management. *International Journal of Advance Research in Computer Science and Management Studies*, 1(7).
- Ankrah, E. & Atuase, D. (2018). The Use of electronic resources by postgraduate students of the University of Cape Coast. *Library philosophy and Practice (e-journal)*.1632. Accessed on 3rd January, 2021 at <https://digitalcommons.unl.edu/libphilprac/1632>
- Aregbesola, A. & Oguntayo, S. (2014) Use of electronic resources by faculty members in Landmark University. *Computing, Information Systems, Development Informatics and Allied Research Journal*, 5(2), 53 – 58.
- Bar-Llan, J., Peritz, B. C. & Wolman, (2003). A Survey on the use of electronic database and electronic journals. *Journal of Academic Librarianship*, 29(6), 363 – 376.
- Davis, F. D. (1989) A Technology Acceptance Model for empirically testing new end-user information systems: Theory and result doctoral dissertation. Cambridge: MIT, Sloan School of Management.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance. *MIS Quarterly*, 13(3), 319 – 340.
- Haridasam, S. & Khan, M (2009) Impact and use of e-resources by social scientists in National Social Science Documentation Centre (NASSDOC) India. *The Electronic Library*, 27(1), 117-133.
- Iroaganachi, M. A. & Izuagbe, R. (2018) A comparative analysis of the impact of EIR use towards research productivity of Academic Staff in Nigerian Universities. *Library Philosophy and Practice (e-journal)*. 1702. <https://digitalcommons.unl.edu/libphilprac/1702>
- Kumar, S. & Singh, M. (2011). Access and use of electronic information resources by scientists on National Physical Laboratory in India: A case study. *Singapore Journal of Library and Information Management*, 40, 33-49.
- Mittal, P. & Bala, M. (2013). Use of e resources in universities. *International Journal of Innovative Research in Computer and Communication Engineering*, 1(6)

- Mollel, M. M. & Mwantimwa, K. (2019). Users acceptance of e-resources usage at the institute of Finance Management, Tanzania. *International Journal of Education and Development Using Information and Communication Technology*, 15(4), 5 – 21.
- Nwone, S. A. & Mutula, S. (2019). Determinants of use of electronic information resources by the professoriate in Nigerian universities: Extending the Unified theory of acceptance and utilization of technology model. *South African Journal of Information Management*, 21(1), a1108. <https://doi.org/10.4102/sajim.v21ii.1108>
- Odunewu, A. O. & Aluko-Arowolo, T. K. (2019). Information literacy, computer competence and use of electronic resources by Olabisi Onabanjo University faculty members. *Journal of Information Engineering and Applications*, 8(4), 19=25.
- Oduwole, A. A. & Oyewunmi, O. (2010) Accessibility and use of web-based electronic resources by physicians in a psychiatric institution in Nigeria. *Program: Electronic Library and Information Science*, 44(2), 109-121.
- Okiki, C. O. (2012). Electronic information resources awareness, attitude and use by academic staff members of University of Lagos, Nigeria. *Library Philosophy and Practice (e-journal)*, paper no. 834.
- Steele, C. (2014). Schorlarly communication, schorlarly publishing, and university libraries. Plus Ca Change?. *Australian Academic and Research Libraries*, 45, 241-261.
- Taherdoost, H. (2018) A review of technology acceptance and adoption models and theories. *Procedia Manufacturing*, 22, 960-967.
- Wu, P. F. (2009) User acceptance of emergency alert technology: A case study in Proceeding of the 6th International ISCRAM Conference Gothenburg, Sweden.