

Perception, Attitude and Proficiency of Postgraduate Students as Correlates of Electronic Information Resources Usage for Research in Universities in North-West, Nigeria

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Abstract

The study investigated perception, attitude and proficiency of postgraduate students as correlates of electronic information resources usage for research in universities in North-west, Nigeria. The study was guided by two research objectives and two research hypotheses. The study adopted a descriptive correlational research design. A sample size of 530 was drawn out of a population of 26,531. Copies of questionnaire were distributed to the respondents out of which 499 were returned and used for the study. Data were analyzed using inferential statistics (simple linear and multiple regressions). The study found that there is significant composite effect of perception, attitude and proficiency level of the postgraduate students on the electronic information resources usage for research in universities in North-west, Nigeria ($Adj.R^2 = 0.170$, $F = 35.04$, $p < 0.05$). It is also revealed that there is significant relative contribution of postgraduate students' perception ($\beta = 0.177$, $p < 0.05$) and proficiency ($\beta = 0.309$, $p < 0.05$) in the prediction of electronic information resources usage for research. However, attitude ($\beta = 0.066$, $p > 0.05$) is non-significant predictor of electronic information resources usage for research in universities in North-west, Nigeria. Therefore, the study recommended that university library management should intensify advocacies, awareness campaign and sensitization exercises in order to sustain the postgraduate students' perception and proficiency to electronic information resources usage for research. On the other hand, University librarians should work persistently and diligently to improve postgraduate students' attitude toward electronic information resources usage for research.

Keywords: Perception, Attitude, Proficiency, Electronic Information Resources, Usage, Research

1.1 Introduction

Universities are regarded as the highest educational institutions of learning which offer undergraduate and postgraduate programmes and award bachelor, master and doctorate degrees. A university whether

public or private is a centre of higher learning that has a core mandate for teaching, learning and research. Universities around the world have been agents of development of their immediate communities and the world at large through research that leads to advancement in

knowledge in different areas of human existence. University education system in Africa and specifically Nigeria is developing and advancing both in number and absorption of technologies into its teaching, learning, and research processes (Osman and Kwafua, 2020).

The university libraries on the other hand are the nerve centres of the institutions have equally joined the universal trends in providing information to their users with the aim of enhancing teaching, learning and research that go on in the institutions and also meet up with the global bandwagon in researches (Ukachi et al. 2014).

Research as a concept is a persistent search for solution to an identified problem or new knowledge. In the same vein, Peel (2020) asserted that research is an investigation undertaken in order to discover new facts and get additional information. The purpose of research is to discover answers to questions through application of scientific procedures. The main aim of research is to find out the truth which is hidden and which has not been discovered yet. Though, each research study has its own specific purpose. Research is of great significance which cannot be overemphasized because it remains the only continuous process through which human society from different stages followed and develop. Human progress and development especially in our contemporary information society was attributed to research (Blaikie and Priest, 2019).

In this study, research is regarded as postgraduate students' theses and dissertations writing which serve as a basic requirement for the award of postgraduate degrees in any discipline. The presentation of good theses and dissertations of postgraduate students to their schools depend on the use of information more particularly the electronic information resources. Similarly, Electronic information resources according to Daramola (2016) consist of information resources provided in

electronic formats such as: e-journals, e-books, online databases, e-theses and e-dissertations, electronic conference proceedings, electronic technical reports, electronic reference documents, CD-ROM databases, Online Public Access Catalogues (OPAC), and computer-based electronic networks. Electronic information resources usage for research in the study refers to the utilisation and exploitation of electronic information resources with full extent for getting required information for writing projects, theses and dissertations. The electronic information resources usage offers access to authoritative, reliable, accurate and timely access to information that might be useful for research. In similar note, Abubakar et al. (2017) asserted that electronic information resources usage has gained prominence in universities across the globe and many postgraduate students are availing themselves of the opportunity to exploit these resources to access relevant, current and updated information for theses and dissertations writing.

The bottom-line of all the activities and collections in the library is the effective and efficient usage of the resources by library patrons. To achieve this, responsibility rests on the librarians to continually investigate the perception, attitude and proficiency of the patrons particularly the postgraduate students with regards to making use of electronic resources that are available in the university libraries.

Perception is the way of conceiving the technology either positively or otherwise, the way one takes in technology through one's senses. Perception according to Oriogu, et al. (2018), "is the set of processes by which an individual becomes aware of and interprets information about the environment. It is also an inner disposition towards electronic information resources, or individuals with an outcome that is either positive or negative". Perception of the postgraduate students toward electronic information resources is their

feelings, vision, sensations and understanding with regards to electronic information resources at their disposal. The way postgraduate students perceive electronic information resources in the library determines its value and rate of utilization (Abubakar, et al. 2017).

Another variable that can influence the use of electronic information resources is attitude. Attitude is complex mental state involving values, beliefs and disposition to act in a certain ways. It is a mood and a stance toward a technology. Attitudes are ways that people think and react to a technology or something. According to Aiyebilehin, et al. (2017), attitudes are reactions, retorts, bias, fears, and responses about technology or something. Postgraduate students' attitudes toward use of electronic information resources simply refers to the postgraduate students' positive or negative reactions or responses toward exploring electronic information resources. Attitudes represent the conceptual value of these technologies in the minds of students. Positive attitudes are fundamental in implementing new technologies. This means that positive attitude prompts action while a lukewarm attitude results in negligence or lack use of electronic information resources for research (Massoro and Adewale, 2019). Universities use considerable proportions of their budgets to provide this technology for their students so as to assist the students in their research and learning process, as such the students need to be proficient.

Proficiency is the set of skills and competencies needed to find, retrieve, manage and use electronic information resources. It is the state of being skilful and competent in the use of electronic information resources. In the same vein, proficiency according to Abba and Adamu (2019) refers to ability or skills in operating or using Internet services and resources for academic activities. In this regard, postgraduate students with a

wide range of knowledge, skills and competencies are more likely to use e-resources than those without skills because use depend on the skill and knowledge level of information users. Owing to information explosion, it is, therefore, expedient for postgraduate students to be proficient because searching for books in a card catalogue is gradually giving way to searching for information through the Online Public Access Catalogue (OPAC). Levels of proficiency may vary among higher education students entering universities.

Effective exploitation of electronic information resources goes hand in hand with proficiency. This means that postgraduate students that are proficient are likely to maximise use of electronic information resources whereas, those without proficiency may end up underutilising electronic information resources or be in frustration and lack of confidence because use depend on proficiency. As such, proficiency can influence use of electronic information resources. In support of the above statement, Anyim (2018) opined that proficiency enables the users to make effective use of the different types of electronic information resources and lack of proficiency among users might lead to underutilization of digital library resources. This means that due to lack of proficiency to navigate various e-portals, databases and other e-resources, users may conclude in their minds that the library has nothing valuable for them. Therefore, this would lead to frustration and may likely affect their overall development. Therefore, this study attempted to determine perception, attitude and proficiency of postgraduate students as correlating factors to the electronic information resources usage for research in universities in North-west, Nigeria.

1.2 Statement of the Research Problem

Development of Information and Communication Technologies which came

about as a result of technological innovations have led to the emergence of electronic form of information which brought about changes in the way people search for information and effective utilisation process. These rapid technological advances have transformed many institutions of learning like universities and their libraries.

Evidences from previous empirical researches have shown that many university libraries in Nigeria are now providing resources in electronic formats. Many of the university libraries have made significant investment in providing electronic resources and other computer-based technologies so that postgraduate students can gain access to information that will enhance their scholarly research works. Preliminary investigation and available literature have indicated low use of electronic information resources by patrons especially postgraduate students in most university libraries in Nigeria (Doosur & Mwuese, 2013; Omeluzoret al. 2016; Lawal & Yahaya, 2020). This has diminished the potentials and payback, considering the enormous investment on e-resources. One begins to wonder what factors are responsible for this situation. In the same vein, the review of literature revealed dearth of studies on perception, attitude and proficiency of postgraduate students to the electronic information resources usage for research, particularly on their combined effects in the study area. As a result of these uncertainties therefore, this study investigated perception, attitude and proficiency of postgraduate students as correlating factors to the electronic information resources usage for research in universities in North-west, Nigeria.

1.3 Objectives of the study

The objective of the study is to investigate the perception, attitude and proficiency of the postgraduate students as correlates of electronic information resources usage for research in universities in North-west,

Nigeria. The specific objectives of the study are to:

1. Determine if there is any composite effect of perception, attitude and proficiency level of the postgraduate students and the electronic information resources usage for research in universities in North-west, Nigeria.
2. Ascertain if there is relative effect of perception, attitude and proficiency level of the postgraduate students in the universities in North-west, Nigeria and the electronic information resources usage for research in universities in North-west, Nigeria;

1.4 Research Hypotheses

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

1. There is no significant composite effect of perception, attitude and proficiency level of the postgraduate students and the electronic information resources usage for research in universities in North-west, Nigeria.
2. There is no significant relative effect of perception, attitude and proficiency level of the postgraduate students and the electronic information resources usage for research in universities in North-west, Nigeria.

2.1 Literature Review

Many empirical studies have been carried out within and outside Nigeria on perception, attitude and proficiency of library users on the electronic information resources usage for research. Some of these studies that are relevant to this study have been selected to carry out this empirical review as follows: Arilesere and Akinosho (2023) investigated the lecturer's awareness, perception, and utilization of institutional repositories in two universities in Nigeria. The findings from the hypotheses revealed that there was a positive significant relationship between perception,

and utilization of IRs. Jatto and Diyaolu (2021) investigated Users' attitudes to the use of electronic resources and services by undergraduate students of McPherson University, Ogun State, Nigeria. The study established that There was a significant relationship between attitude and use of EIRs ($r = 0.329^{**}$ $N=294$ $P>0.000$). It was concluded that attitude of undergraduate students determine their use of EIRs. In addition, Eravwoke (2021) investigated psychological factors, digital literacy skills and use of electronic information resources by postgraduate students in the faculty of education, Delta State University, Abraka. The study revealed that postgraduate students possess the digital literacy skills, and lastly, no significant relationship was found between postgraduate students' digital literacy skills and their usage of electronic information resource.

Again, Adetayo, et al. (2023) investigated the Leadership styles, staff motivation and job satisfaction in private university libraries in Osun State, Nigeria. The study revealed that there is a joint significant influence of Leadership styles and Staff motivation on job satisfaction of library staff in private universities in Osun State, Nigeria. In other words, Leadership styles and Staff motivation are significant predictors of job satisfaction of library staff in private universities in Osun State, Nigeria. Awujoola and Abioye (2023) examined institutional, legal and ethical factors as precursors of Consortium Building Readiness among university libraries in successful Consortium Building among university libraries in South-western Nigeria. Exchange and Resources Dependence, Social Exchange, Socio-Technical in south-western Nigeria were enumerated. The instruments used were Institutional Factors ($\alpha=0.75$), Legal Factors ($\alpha=0.79$), Ethical Factors ($\alpha=0.89$), Consortium Building Readiness ($\alpha=0.81$) scales. The Institutional Factors, Legal

Factors and Ethical Factors jointly influenced Consortium Building Readiness ($R = 0.47$; $F(3; 545) = 51.17$; $Adj. R^2=0.22$), contributing 22.0% of its variance.

3.1 Research Methodology

The study adopted descriptive correlational research design. The population of the study comprised of 26,531 postgraduate students. Multistage sampling procedure was used for the study. Using proportionate sampling technique 530 was taken as sample size of the study. The study used structured questionnaire as the instrument for data collection. The data collection instrument for the study was subjected to face and content acceptance and validated by 3 experts. The questionnaire was subjected to reliability text and the results revealed the questionnaire was found reliable for the study with an overall reliability coefficient of 0.88. The researcher personally administered the copies of the questionnaire to the respondents in all the eleven (11) selected universities with the help of research assistants. The data collected from the research instrument was analysed using version 20.0 of the Statistical Package for Social Sciences (SPSS). The hypotheses were analyzed using inferential statistics of linear and multiple regression analysis.

4.1 Results and Discussion of Findings

Hypothesis one

H_{01} , There is no significant composite effect of perception, attitude and proficiency level of the postgraduate students and the electronic information resources usage for research in universities in North-west, Nigeria.

Hypothesis one was tested with multiple linear regression analysis. The result of the regression analysis is presented in table 1.

Table 1: Significant Composite Effect of Perception, Attitude and Proficiency Level of the Postgraduate Students and the Electronic Information Resources Usage

Source	DF	Sum of Square	Mean Square	F-value	p-value
Regression	3	1691.953	563.984	35.036	.000 ^b
Error	495	7968.127	16.097		
Total	498	9660.080			

Significant at $p < 0.05$

The result presented in the table 1 revealed a p-value of .000 which is less than the alpha level of .05 at 3 and 495 degrees of freedom. This provided enough statistical evidence to conclude in this section that there is composite effect of perception, attitude and proficiency level of the postgraduate students and the electronic information resources usage for research in universities in North-west, Nigeria is statistically significant ($F = 35.04$, $p < 0.05$). Equally, the table 1 revealed that the prediction of perception, attitude and proficiency on the electronic information resources usage for research in universities in North-west, Nigeria yielded a coefficient of multiple regression, $R = .419$ multiple $R^2 = .175$ and multiple $R^2(\text{adjusted}) = .170$. The table further suggests that the 3 independent variables (perception, attitude and proficiency level of the postgraduate students) jointly contributed (17.0% of the total variance) to the electronic information resources usage for research in universities in North-west, Nigeria.

The table also shows a significant F ratio 35.04 which denotes that R^2 is not due to a chance. This finding is in consonance with the findings of Adetayo, et al. (2023) who reported joint contributions of the independent variables (Leadership styles and staff motivation) on the dependent variable (job satisfaction) in private university libraries in Osun State, Nigeria. In the same

vein, Awujoola and Abioye (2023) revealed that independent variables (Institutional Factors, Legal Factors and Ethical Factors) have joint effect on the dependent variable (Consortium Building Readiness with $R = 0.47$; $F(3; 545) = 51.17$; $\text{Adj. } R^2 = 0.22$) in their investigation on institutional, legal and ethical factors as precursors of Consortium Building Readiness among university libraries in successful Consortium Building among university libraries in South-western Nigeria. The finding also corroborates Akande (2009) who in his study revealed that independent variables (personnels' knowledge and perception) have joint contribution on the dependent variable (attitude towards preservation of information resources). This implies that, there is a significant relationship among the respondents' knowledge, perception, and attitude towards preservation of information resources.

Hypothesis Two

H_{02} : There is no significant relative effect of perception, attitude and proficiency level of the postgraduate students and the electronic information resources usage for research in universities in North-west, Nigeria.

Hypothesis two was tested with simple linear regression analysis. The result of the regression analysis is presented in table 2.

Table 2: Significant Relative Effect of Perception, Attitude and Proficiency Level of the Postgraduate Students and the Electronic Information Resources Usage for research

Variables	Unstandardized coefficients		Unstandardized	Rank	t	Sig
	B	Std. Error	Beta (β)			
(Constant)	30.047	2.462			12.203	.000
Proficiency	-.134	.018	0.309	1 st	-7.324	.000
Perception	-.141	.036	0.177	2 nd	-3.859	.000
Attitude	.043	.029	0.066	3 rd	1.472	.142

Dependent Variable: electronic information resources usage for research,

Looking at the individual contributions from table 2, it can be seen that proficiency made the utmost contribution ($\beta = 0.309$, $p < 0.05$) which is significant to electronic information resources usage for research. Followed by the postgraduate students' perception ($\beta = 0.177$, $p < 0.05$) which is also significant respectively, in the prediction of electronic information resources usage for research in universities in North-west, Nigeria. The highest predictor of the two is proficiency ($\beta = 0.309$), before perception ($\beta = 0.177$).

However, attitude ($\beta = 0.066$, $p .05$) is non-significant predictor of electronic information resources usage for research in universities in North-west, Nigeria. This finding corroborates the findings of Awujoola and Abioye (2023) revealed that independent variables (Institutional Factors, Legal Factors and Ethical Factors) have relative effect on the dependent variable (Consortium Building Readiness). The finding is in line with the findings of Akande (2009) who reported on relative contribution of the independent variable (perception of preservation of information resources) made a significant contribution to the prediction of the dependent variable (library personnel's attitude towards preservation of information resources with Beta = 0.232; $df = 507$; $t =$

3.616, $P < 0.05$). Whereas, independent variable (Knowledge of preservation) does not make a significant contribution (Beta = 0.042; $df = 507$; $t = 0.651$, $P > 0.05$) on the dependent variable (library personnel's attitude towards preservation of information resources). This shows that knowledge of preservation is not a significant predictor of library personnel's attitude towards preservation of information resources in Nigerian federal university libraries.

Conclusion

The research established that the varied indicators of perception, attitude and proficiency level of the postgraduate students have significant joint effect on the electronic information resources usage for research in universities in North-west, Nigeria. From the findings, the study revealed that there is positive composite effect of perception, attitude and proficiency level of the postgraduate students on the electronic information resources usage for research in universities in North-west, Nigeria.

However, Looking at the individual contributions of independent variables on the dependent variable, proficiency made the utmost contribution which is significant to electronic information resources usage for research followed by the postgraduate

students' perception which is also significant respectively, in the prediction of electronic information resources usage for research in universities in North-west, Nigeria. The highest predictor of the two is proficiency before perception whereas; attitude is non-significant predictor of electronic information resources usage for research in universities in North-west, Nigeria.

Recommendations

The results of this study have implication to professional librarians, university management, National Universities Commission (NUC) and to Government at all levels. The following recommendations were made to address the challenges based on the findings of the study:

1. Since the findings of the study revealed that postgraduate students' proficiency level and perception were respectively significant predictors of electronic information resources usage for research in universities in North-west, Nigeria. Hence, university library management should intensify advocacies, awareness campaign and sensitization exercises in order to sustain the postgraduate students' perception and proficiency to electronic information resources usage for research.
2. University librarians should work persistently and diligently to improve postgraduate students' attitude toward electronic information resources usage for research.

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