DEMOGRAPHIC CORRELATES OF POSTGRADUATE STUDENTS' PERCEPTION OF E-LEARNING IN RIVERS STATE UNIVERSITIES, NIGERIA

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ABSTRACT
The study investigated demographic correlates of postgraduate students' perception of e-learning in Rivers State universities. Three research questions and three hypotheses were formulated to guide the study. The descriptive survey design was employed in the study. The population comprised all the postgraduate students in Rivers State universities. 50 participants were drawn from the department of guidance and counselling in the tertiary institutions in Rivers State that have institutionalized e-learning (25 from LAUE and 25 from RSU) using cluster and stratified random sampling techniques. Research data were obtained from the respondents using one validated instrument titled "Students Perception Of E-learning Scale (SPES)". The instrument had a reliability index of 0.71 when subjected to test re-test measure of stability. The collected data were analyzed using Mean scores for the research questions and Independent t-test for the hypotheses. The findings of the study revealed that the postgraduate students' perception of e-learning differs along the lines of gender, level of study and marital status. None of these disparities was found to be statistically significant. The researcher made some recommendation among which is that: Inclusive awareness, reorientation and etiquette programmes on e-learning should be organized for the postgraduate students irrespective of their social differences (gender, level of study, and marital status) inclusive.
KEYWORDS: *Post-Graduate Students; e-learning, perception.*

INTRODUCTION
Electronic learning, also known as online learning or distance-education has gained much ground in 21st-century education. It has been adapted and adopted for instruction, interaction, demonstration and experimentation in school and non-school settings. Thus, there is a paradigm shift from actual to virtual learning in our society. As the name implies, virtual learning is a form of learning that makes use of electronic technologies to create experiences that mould and modify behaviour. It is a network-enabled transfer of knowledge, skills and values. Albert, Dimitrios and Nati (2012) espoused that electronic learning is technology-driven, delivery-system oriented, communication-based and educational evolution oriented. Hence, one can deduce that it is the application of educational technology to deliver revolutionizing communication-based instructions.

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E-learning can be traced back to the 1980s when distance learning and televised courses came into limelight. Over the years, it has evolved into computer-managed learning; computer-aided instruction, synchronous online learning, and asynchronous online learning and fixed e-learning, adaptive e-learning, linear e-learning, interactive online learning, individual online learning and collaborative online learning. The prototypes of e-learning can be bifurcated into computer-based e-learning and internet-based e-learning for easy identification and/or classification. The former which subsumes computer-managed learning and computer-based instruction take place offline, while the latter an umbrella term for the other prototypes of e-learning takes place online.

E-learning offers a plethora of links to relevant information. It is efficient, flexible, re-useable, convenient, interactive, attractive, and independence inclined (Clover, 2017). The merits of e-learning make it relevant to the current scheme of things. However, this form of learning as espoused by Clover (2017) has some pitfalls which include but not limited to accessibility challenges, the limited scope of assessment, insecurity, copying syndrome (property theft) and cognitivity with little or no room for affectivity and psycho-productivity. Be that as it may, the researcher observed that the institutionalization of e-learning in our society has generated a wide range of controversies amongst its end users. The controversies have always been over the pros and cons of this development. The stance of learners on this issue which may not be unconnected with their perception is highly decisive as they are the key actors in our educational sector.

The term perception refers to the identification, interpretation and organization of information. It is the manner in which something is regarded, understood or interpreted. Steven (2020) packaged perception as the sensory view of the world. Perception involves recognizing/organizing environmental stimuli and reacting to them. The said stimuli could be visual, auditory, olfactory, hepatic and gustatory. Perception as a concept word was supposedly derived from Latin "perceptio" which means to gather or receive. Suffice it to state that perception is the personal reception of information. It is sensation personified. It is equally interpretation, view, and/ or reaction. How individuals view things tends to vary. To buttress this fact, Iwuama, Nwachukwu and Obimba (2010) recounted a sage which states that; men are not disturbed by things but by their views. This shows that people's views over things vary and that this variation in view is responsible for inter and intrapsychic disturbances towards stimuli.

This study will focus on the demographic correlates of postgraduate students' perception of

institutionalization of e-learning. E-learning is a new innovation in our system of education. Before now, the system of education in the State has been relatively orthodox. Postgraduate students normally had their classes in the four walls of the university; where lecturers employ arrays of teaching methods and teaching aids to impart knowledge into the learners in situ.

This is in keeping with the psycho-educational view of learning which includes but is not limited to getting relevant knowledge in person, being cultivated and being modified as a result of worthwhile experiences (Mba, 2004). Like every new programme, the institutionalization of e-learning in Rivers State is bound to instigate divergent perception worth investigating.

Martins and Baptista (2016) conducted a research study on academics e-learning adoption in higher education institutions: a matter of trust. The researchers investigated how academics ensconce e-learning through systematic identification and projection of its strengths and weaknesses in tertiary institutions. Research data was collected from 62 academics using grounded theory narrative showed change and integration through collective understanding.

Keller and Cernerud (2002) investigated students' perceptions of e-learning in university education at Jonkoping University in Sweden. A customized questionnaire was used to obtain research data from 5,150 students. The collected data were analyzed using Multiple Regression Analysis to accommodate students' perception in relation to gender, age, previous knowledge of computers, attitude to technology, learning styles and the strategy of implementing e-learning. The result of the study revealed that the strategy of implementing e-learning was highly decisive in influencing students' perception. It was further revealed that students did not regard access to e-learning on campus as beneficial. Male students, students with previous computer knowledge, and students with a positive attitude towards nouveau technologies were all less positive towards e-learning when compared with their counterparts on the other side of the divide.

Popovici and Mironov (2015) investigated students' perception of using e-learning technologies. Their findings revealed that students' perception varied significantly on the basis of personal social differentials and e-learning practices. Tamara (2014) investigated students' perceptions of e-learning at the University of Jordan. Tamara's findings revealed that the students are highly prepared and positive towards the e-learning system. It was further revealed that the students were anticipating using it in more advanced ways.

Similarly, Kalyanasundaram and Madhavi (2019) investigated students' perception of e-learning

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with special emphasis on their reactions towards online certificate courses such as; foreign exchange management, operations research, medical law and genetics. The usability, user-friendliness, course content and test friendliness were put into consideration. The result of the study revealed that students who embraced online learning felt positive about e-learning.

Linjawi and Alfadda (2018) investigated students' perception, attitudes and readiness towards online learning in dental education in Saudi Arabia. The result of the study revealed that the respondents had a high level of computer skills, technology access and perceived importance of online technology. They showed acceptable levels of e-learning experience and social influence on e-learning adoption. Level of study was found to moderate students perception towards e-learning significantly.

Chukwuere, Mavetera & Mnkandia (2017) investigated students' perception of culture-oriented e-learning in South Africa. Their findings revealed that the perception of the studied children was mixed, in that; some of them accepted the English language as a means of communication while others opted for a hybrid of their native language and English language. It was further revealed that their challenges stem from lack of engagement to the inflexible e-learning system leading to the discovery of factors that facilitate culture-oriented-e-learning system.

In a related study, Anchalee and Jonathan (2016) investigated students' acceptance and readiness for e-learning in northeastern Thailand. The result of the study revealed that students have a slightly positive perception of e-learning in northeastern Thailand. It was further revealed that the studied children use mobile technologies extensively and have as well used social media platforms for fun but are not familiar with other collaborative e-learning tools.

Until now, only a few studies have been conducted on the demographic correlates of postgraduate students' perception of the institutionalization of e-learning in Rivers State Universities. It was against this background that the researcher conducted the study.

STATEMENT OF THE PROBLEM

The institutionalization of e-learning in Rivers State came as a surprise to many. The programme was instituted suddenly on the heels of the COVID 19 lockdown. The lockdown literally shutdown vital sectors of the Nigerian economy, the educational sector inclusive. Students and teachers were forced to leave school and educational activities were placed on hold. No institution dared to engage in formal scholastic activities in the State for the time being owing to the prevalent fear of spreading coronavirus disease; a virulent contagious illness with no known cure as at the time of conducting this study and the fear of lethal repercussion following the lockdown of schools, markets and luxury centres by the State government.

As the virus continued ravaging the globe with no end in sight; the State government resolved to adopt e-learning at the ivory tower to save what is left of academic activities in the State from comatose. Little or no prior preparation/consultation of the student's population was made. The scheme was not trial-tested and the perceptions of the students were not put into due consideration.

Postgraduate students being the guinea pigs of the programme in the State were literally impelled or compelled to learn online via; zoom, and Whatsapp, receive and submit mandatory assignments using their mails, and take exams online in ways that deviate from the established norm. The ways the affected students perceive these innovations individually require proper investigation as their perceptions have far-reaching implications. The problem of the study therefore was to investigate demographic correlates of post-graduate students' perception of the institutionalization of e-learning in Rivers State.

Purpose of the Study

The purpose of the study was to investigate demographic correlates of postgraduate students' perception of the institutionalization of e-learning in Rivers State.

In specific terms, the study intends to:

1. Determine the extent to which gender influences postgraduate students' perception of e-learning in Rivers State Universities;
2. Determine the extent to which level of study influences postgraduate students' perception of e-learning in Rivers State Universities;
3. Determine the extent to which marital status influences postgraduate students' perception of e-learning in Rivers State Universities.

Research Questions

The following questions guided the conduct of the study:

1. What is the mean difference between male and female postgraduate students' perception of e-learning in Rivers State Universities?
2. What is the mean difference between master's and doctoral postgraduate students' perception of e-learning in Rivers State Universities?
3. What is the mean difference between single and married postgraduate students' perception of e-learning in Rivers State Universities?

Hypotheses
The following null hypotheses were formulated to guide the study:

1. There is no significant mean difference between male and female postgraduate students' perception of the institutionalization of e-learning.
2. There is no significant mean difference between masters and doctoral postgraduate students perception of the institutionalization of e-learning.
3. There is no significant mean difference between single and married postgraduate students' perception of the institutionalization of e-learning.

METHODOLOGY
The study employed a descriptive survey design. The population of study encompassed all the postgraduate students in Rivers State Universities. 50 participants were drawn from the department of guidance and counselling in the tertiary institutions in Rivers State where e-learning has been institutionalized (25 from IAUE and 25 from RSU) using a purposive sampling technique. Research data were obtained from the respondents using one validated instrument titled "*Students Perception Of E-learning Scale (SPES)*". The instrument had a reliability index of 0.71 when subjected to test re-test measure of reliability. The collected data were analyzed using Mean scores for the research questions and independent t-test for the hypotheses.

RESULTS
Research Question One: What is the mean difference between male and female postgraduate students' perception of e-learning in Rivers State Universities?

Table 1: Mean score analysis of the difference between male and female postgraduate students perception of e-learning

Gender	Mean	N	Std. Deviation
male	35.7600	25	3.53883
female	34.8000	25	3.05505
Total	35.2800	50	3.30763

Table 1 shows the mean difference between male and female postgraduate students perception of e-learning in Rivers State universities. An overview of the table shows that the mean score of the male students' perception of e-learning is 35.76 while that of their female counterparts is 34.80. This showed that male students have a more positive perception of e-learning than their female counterparts.

Research Question Two: What is the mean difference between master's and doctoral postgraduate students' perception of e-learning in Rivers State Universities?

Table 2 Mean score analysis of the difference between master's and doctoral postgraduate students perception of e-learning in Rivers State Universities

Level of study	Mean	N	Std. Deviation
masters	35.3200	30	3.40000
PhD	35.7600	20	3.74477
Total	35.5400	50	3.54683

Table 2 shows the mean difference between masters and doctoral postgraduate degree students' perception of e-learning. An overview of the table revealed that the mean score of the perception of e-learning amongst the master's degree students is 35.3200 while that of their counterparts at the doctoral level is 35.7600. This shows that doctoral students have a more positive perception of e-learning than their colleagues at the master's level.

Research Question Three: What is the mean difference between single and married postgraduate students' perception of e-learning in Rivers State Universities?

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Marital status	Mean	N	Std. Deviation
single	36.6800	25	2.57747
married	36.9600	25	2.18861
Total	36.8200	50	2.37065

Table 3 shows the mean difference between single and married postgraduate students perception of e-learning in Rivers State universities. An overview of the table revealed that whereas the mean score of single postgraduate students perception of e-learning is 36.6800 and that of their married counterparts is 36.9600. This shows that married postgraduate students have a more positive perception of e-learning than their single counterparts.

Hypothesis One: There is no significant mean difference between male and female postgraduate students perception of the institutionalization of e-learning.

Table 4: Independent t-test analysis of the significance of the difference between male and female postgraduate students perception of e-learning

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
Equal variances assumed	1.211	.277	1.027	48	.310
Equal variances not assumed			1.027	46.999	.310

Table 4 above shows that there was no significant mean difference in the scores of male (M=35.76, SD=3.54) and female (M=34.80, SD=3.05505) postgraduate students perception of e-learning as the calculated t-value of 1.027 has a p-value of 0.310 which exceeds the significant p-value of 0.05. Thus the null hypothesis is retained. The implication is that gender does not significantly influence postgraduate students perception of e-learning.

Hypothesis Two: There is no significant mean difference between master's and doctoral postgraduate students' perception of the institutionalization of e-learning.

Table 5: independent t-test analysis of the significance of the difference between master's and doctoral postgraduate students perception of e-learning

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
Equal variances assumed	.511	.478	-.435	48	.666
Equal variances not assumed			-.435	47.559	.666

Table 5 above shows that there was no significant mean difference in the scores of masters (M=35.32, SD=3.40) and PhD (M=35.76, SD=3.74) postgraduate students perception of e-learning as the calculated t-value of -0.435 has a p-value of 0.666 which exceeds the significant p-value of 0.05. Thus, the null hypothesis is retained. The implication is that level of study does not significantly influence postgraduate students' perception of e-learning.

Hypothesis Three: There is no significant mean difference between single and married postgraduate students' perception of the institutionalization of e-learning.

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Table 6: independent t-test analysis of the significance of the difference between single and married postgraduate students perception of e-learning

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	**Sig.**	**t**	**df**	**Sig. (2-tailed)**
Equal variances assumed	1.288	.262	-.414	48	.681
Equal variances not assumed			-.414	46.771	.681

Table 6 above shows that there was no significant mean difference in the scores of single (M=36.68, SD=2.57747) and married (M=36.96, SD=2.18861) postgraduate students perception of e-learning as the calculated t-value of-0.414 has a p-value of 0.681which exceed the significant p-value of 0.05. Thus the null hypothesis is retained. The implication is that the extent to which marital status influences postgraduate students perception of e-learning is not statistically significant.

DISCUSSION OF RESULTS

The result of research question one revealed that male and female postgraduate students' perception of e-learning differs slightly. The male students were found to have a more positive perception of e-learning. This is in line with the findings of Keller and Cernerud (2002) on the existence of slight disparity in students' perception of e-learning based on gender. This disparity though it is small requires proper consideration. This is so because it has far-reaching implications when it comes to diagnosis or prognosis of learning difficulties. One of the plausible reasons for this disparity is gender-based use of smartphones and other digital devices with internet accessibility. Although such devices are commonly used by both gender in this 21st century. Observations show that it is more pronounced among the female folks. It is common knowledge that females start using smartphones at an early age to catch fun. Howbeit, males catch up later on and use smartphones for earning owing to stereotypical gender roles.

The result of research question two revealed that level of study influences postgraduate students perception of e-learning slightly. Doctoral students were found to have a more positive perception of e-learning than their counterparts with a masters degree. This is in line with the findings of Popovici and Mironov (2015). Experientially, doctorial students are more advanced than masters' students in their academic pursuit. They are at the apogee of their academic sojourn. Masters students on their part are not nouveau in the system. They have wealth of experience as well. This no doubt equips them with the nitty-gritty of e-learning. In all, their perception of e-learning has something to do with their level of study. This leads to another assumption, probably the course content, method of delivery, duration of the study, and other extraneous differentials affects the perception of the studied postgraduate students towards e-learning.

The result of research question three revealed that postgraduate students perception of e-learning differs based on marital status. Married postgraduate students were found to have a more positive perception of e-learning than unmarried ones. This result has something to do with marital responsibility. Being married or unmarried are two sides of the same coin. Postgraduate students' perceptions are affected by their marital status in no small ways. The married postgraduate students automatically assume the responsibility of taking good care of their spouse, sharing quality time with him or her and participating in parenting. Here, gender roles come into play. On the other hand, an unmarried postgraduate student does not shoulder such responsibilities. Time management and allied marital status-oriented responsibilities are the crucial factors here. The postgraduate students' perception of e-learning therefore depends largely on their marital status.

RECOMMENDATIONS

Based on the findings of the study, the researcher recommended as follows:

1. Gender should not be dwelt upon when educating postgraduate students on the modalities and utilities of e-learning as it has an insignificant influence on their perceptions.
2. Inclusive awareness, reorientation and etiquette programmes on e-learning should be organized for the postgraduate students irrespective of their class levels as they share similar sentiments.
3. Adjustment programmes should be organized for both the single and married postgraduate students to enable them to

make judicious use of the opportunities that e-learning offers them.

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