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EXPLORING STUDENTS' VIEWS ON DETERMINANTS OF ACADEMIC SUCCESS OF E-LEARNERS IN A NIGERIAN UNIVERSITY

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Abstract: *The Nigerian educational system is today beset by numerous problems. None of these is more genuine and tenacious than students' poor academic performance across all educational levels. This is one of the greatest drawbacks to educational advancement. The purpose of this paper was to explore students' views on factors influencing academic performance of e-learners. The population consisted of all students from second year to fourth year of the National Open University, South West geo-political zone. The respondents were asked to express their views on factors perceived to influence their academic performance. The study employed a qualitative study design as a means of carrying out the research. The sample of the study was made up of 48 respondents from the University which were selected using purposive sampling technique. Data were collected through focus group interviews, the interviews were audiotaped and transcribed, and data was analyzed through thematic analysis. The results of this study revealed factors such as computer reliance and knowledge, benefit of Internet, prior ICT experience, collaborative learning, parent influence – ICT literacy, self-efficacy and motivation and progressive use of computer and benefits as factors perceived by the students to influence their academic performance. Based on the findings of this study, it was recommended that distance e-learners should be encouraged to register for ICT training before being admitted into higher institutions. It was also recommended that the management of the university should give open access to the Internet and e-mail in the university by establishing ICT learning resource centres that give room for students to access relevant software, applications and technology of any form.*

Keywords: *ICT experience; self-efficacy; academic success; e-learning.*

Introduction

Academic success of students is a principal yardstick of academic attainment at university level. Students with higher levels of achievement in higher institutions have high tendency to obtain good employment and salaries. Academic success is a key factor in education of a country because it can be seen as a determinant of success of education of a country (Coetzee, 2011). Academic success assumes a crucial role in producing the best quality graduates who will become outstanding pioneers in the workforce in a nation, and hence be in control of the nation's economic and social advancement. This can only be achieved if a nation values its education and is ready to bring innovation into the delivery system of learning.

The priority for educational stakeholders is the quality of students' academic success. The variables that contribute effectively to the academic success of students at all educational levels have been an issue of interest to stakeholders in education, trainers, policy makers, administrators and researchers. Most studies that have been conducted on variables influencing academic performance of students concentrate more on students at regular universities (face-to-face) in Nigeria but there is little or no research on variables influencing academic success of students under an e-learning setting and specifically a distance e-learner. This is partly because Nigeria, as a developing country, is at an infant stage of technology development, which makes it difficult to implement e-learning as mode of instruction. Recently the National Universities Commission (NUC), a body that regulates university operations, approved four universities to run e-learning in Nigeria. The National Open University of Nigeria (NOUN) was among the universities which received the approval. NOUN is the only uni-mode university mandated for open and distance learning in Nigeria, while the rest are dual mode. NOUN is the first fully fledged university that operates in an exclusively open and distance learning mode of education in Nigeria.

According to Singh (2013), academic performance refers to how students deal with their studies and students manage their studies and how they adapt to or fulfil diverse assignments given to them by their instructors. Academic performance can be defined as perfection in all academic disciplines in class as well as extracurricular activities. It includes excellence in sport, behaviour, confidence, communication skills, punctuality, assertiveness, arts, culture and the like. Martha (2010) studied the variables influencing student performance and measured the students in Uganda's achievement as their performance in

tests and coursework. The most critical and appropriate approach to measure the student academic performance in Malaysia is the Cumulative Grade Point Average (CGPA). Nigeria as a developing country also uses GPA to measure academic performance of students semester by semester.

Stevenson, Shin-Yin and James (2001) conducted a study on Chinese, Japanese and American students' academic achievement in Mathematics and measured performance in perceptual speed, coding skill, spatial abilities, vocabulary, verbal memory and general information. They found that Japanese and Chinese students performed better than their American counterparts. The outcomes in these distinctive parts of performance influence academic achievement in Mathematics. North Central Association (2000) gave methods for measuring student learning outcomes. These are evaluating learning increases through pre-test and post-test measures, and survey and self-report measures. Measurement of outcome is viewed as the best method for discovering data about students.

Considine and Zappala (2002) reported that parent's income or social status positively affects students' scores in examinations. According to Minnesota (2007), higher education performance is dependent upon the academic performance of graduate students. Many studies have been conducted in the area of students' performance and these studies identify and analyse the number of factors that affect the academic performance of the student at school, college and even at university level. Their findings reported the students' effort, previous schooling, parents' educational background, family income, self-motivation of students, age of student, learning preferences and entry qualification of students as important factors that have an effect on the student's academic performance in different settings. The current study is aimed at determining the factors that affect the academic performance of distance

Statement of the Problem

Academic performance of students is one of the critical factors for judging educational standards and quality in Nigeria. The key reason behind this study is a recent decline in the standard of education in Nigeria and this is evident in the low academic performance in public examinations for all the educational levels, with distance education being no exception, as reported by Adedeji et al. (2011). The decline in standards of education in Nigeria has led to low academic performance of students in Nigerian higher institutions because of disadvantaged education background in both primary and post-primary education levels respectively. Kolawole and Dele (2002), as quoted by Olanipekun and Aina (2014), noticed that academic performance of Nigerian students is one of the existing educational concerns which have attracted public

discussion in recent times because of low level of academic performance in all educational levels. Academic performance of high school and higher institutions students is becoming problematic (Aina and Olanipekun, 2014).

Measuring academic performance of students in tertiary institutions has never been an easy task because it cannot be easily quantified precisely. Student performance may be seen to be a result of environmental, socioeconomic or psychological factors. However, refusal to understand these factors may slow down the educational system and lead to higher failure rates. This does not stop here, but it will create a chain effect by subjecting the throughput of good quality results to an unacceptable level of attrition. Therefore, it is necessary to analyse the factors that relate to suboptimal academic performance in order to set up a possible practical remedy (Schwerdt & Wuppermann, 2008). The majority of studies (Ajadi, Salawu & Adeoye, 2008: Oye et al 2011 and Okopi & Pindar, 2014) on e-learning in Nigeria focused on the problems, challenges, attitudes and expectations of e-learning and the motivation of distance e-learners' persistence. A small number of studies (Oladejo, 2010; Pitan, 2015; Ojokheta, 2010) on academic performance of distance learners in Nigeria focused on self-regulation, environmental influence and persistence. The researchers have observed from the literature review that there was limited research on the factors influencing academic performance of distance e-learners. This serves as an incentive for this research to fill up the existing important research gap in the literature.

Review of Related Literature

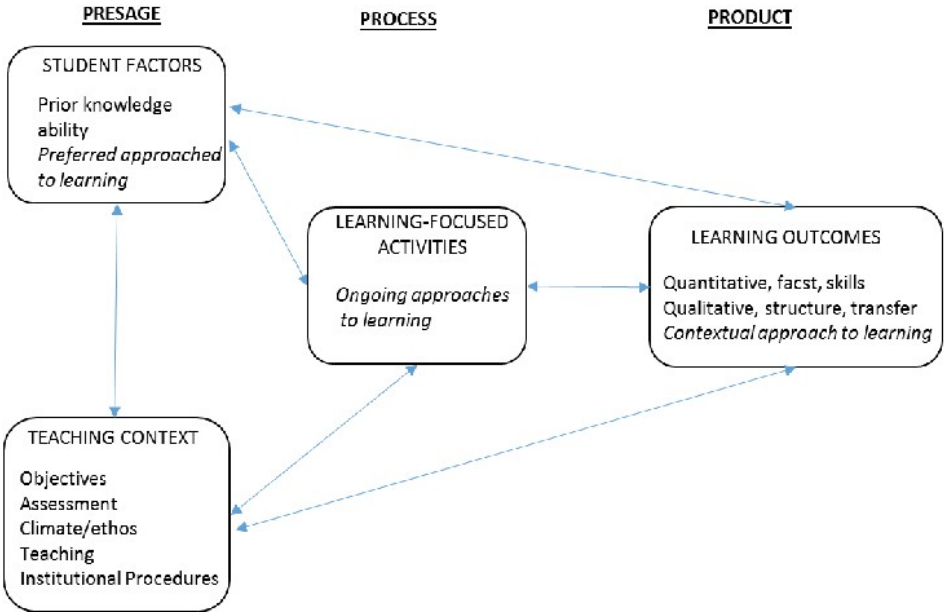
Asdaque, Khan and Rizvi (2010) found that students who used the Internet for downloading assignments and books/journals had a higher CGPA compared to those who used the Internet for purposes other than assignments or downloading software/songs. Ogedebe (2012) reported in his study that 79% of his participants agreed that Internet improved their academic performance. Siraj, Salam, Hasan, Roslan, & Othman(2015) concluded that high Internet usage brings about better academic performance because the Internet gives students the benefits of entering the information. Other researchers, (Lamb & Johnson, 2007; Jones, 2010; Chawner & Lewis, 2013), remarked that collaborative learning assisted students to interact with each other by participating in online discussions and sharing the knowledge gathered with one another. Bliss and Lawrence (2009) reported that group work through computer-mediated collaboration brings about improvement in academic performance, interaction and critical thinking. Kumar & Pokhrel (2017) who found that collaborative mobile learning and individual e-learning resulted to improved academic performance among the students in

contrast to the traditional method. Adekunle, Oguns & Ayegbo (2014) found a relationship between parents' computer literacy and academic performance of computer science students. In another study, based only on the quantitative results, Olukayode and Govender (2019) found a range of critical factors that influenced/best predicted academic achievement and amongst them were frequency of engagement with ICT, marital status, previous academic performance and previous qualification. Valcke, Bonte, Wever and Rots (2010) investigated the impact of parenting style on the Internet use of primary school pupils. They found that the parental style, parent Internet behaviour and parents' educational background significantly predicted the Internet usage of children at home. Other researchers, (Joo, Lim., & Kim (2013); Mega, Ronconi, & De Beni, 2014)) found that self-efficacy influences students' academic achievement. Abd-Elmotaleb and Saha (2013) as well as Govender and Govender (2009), remarked that students with high senses of self-efficacy have a tendency to engage in challenging tasks and show excellent academic performance in comparison with students who lack such confidence. Meral, Colak, & Zereyak (2012) reported that self-efficacy is an important variable on students' academic performance and self-efficacy has more influence on academic performance than socioeconomic variables.

Ahmad et al. (2011) defined academic performance as a way of quantifying the academic success of a student. Academic performance is related to the knowledge and skills developed by a student in various courses of study. Academic performance can be measured in several ways. The majority of researchers (Broh, 2000; Darling, 2005; Galiher, 2006; Stephen & Schaban, 2002) across the globe utilised the GPA to measure student performance. In Pakistan, Hijazi and Naqvi (2006) used test results to measure students' performance for the specific subject in a particular semester. Garner-O'Neale and Harrison (2013) noted that the level of academic performance is calculated using tests, assignments and final examination results and is dependent on the standards put in place by the educational institution. Pitan (2015) remarked that today's modern society expects everybody to be a high achiever. She noted that the key criteria to determine one's actual potentials and capabilities may be academic performance, which has turned into an index of the student's future and upward mobility. Academic performance is usually measured by levels and test scores (Kingdon 2007). In South Australia, Tan and Yates (2007) noted that academic performance is measured in terms of past examination performance, performance in the midterms and failure in modules. Maiyo & Ashioya (2009) commented that in Kenya, education is examination oriented and consequently the main assessment for performance is through examinations. As stated by Ali et

al. (2009), the social and economic improvement of the nation is fundamentally connected with student academic performance.

3P Model of Learning Approaches



The theoretical framework that supports this study is Biggs' (1999) 3P model of the student approaches to learning theory. The 3P model proposed by Biggs (1999) explains why students learn in different ways and how students' approach to teaching is related to quality of learning and outcome. The model integrates teaching-, student- and process-based approaches to learning. According to the 3P model, learning is seen as a progression from presage (learning context) through process (learning acts) to products (learning achievement). According to Chan (2011), the model was developed initially by Dunkin and Biddle (1974). This illustrated learning in the classroom with multi-components integrated system with a combination of presage, process and product. The three components are (1) prior learning environment and student characteristics (presage), (2) approach to learning (process) and (3) the learning outcomes (product). Personal and situational factors (presage) were proposed in the model to influence a student to use a particular approach to learning (process) which affects the learning outcomes (product) (Chan, 2011). The 3P Model of learning approach which was adopted in this study outlined the influence of presage, process and product factors. The three stages are applicable to this study, fit the model, and the variables are explained as they are related to this study.

a. Presage Stage

According to Bonsaksen, Tore, Ted, Hua, Kenneth (2017), the presage factors are linked to the background of students (socio-demographic factors) and readiness for better understanding. Also, presage comprises the situational context where learning occurs, which includes the specific area of specialisation and its traditions, the constantly adopted teaching and evaluation forms, and the time spent engaging with the appropriate time tasks. In summary, the presage stages are those factors that form the context and background for the learning experience. The presage variables integrate factors in place before learning takes place.

a. Process Stages

The process factors concentrated on learning activities which involve the real activities that happen in the lecture room. In the process stage the model begins with the interaction of student factors and learning setting or environment. This interaction regulates students' perceptions, and the perceptions drive the methods chosen to managing the teaching task. Gibbs (2010) viewed learning approach as the ability to engage students with feedback quality.

Product Stages

The last construct in the model, product, describes the outcomes achieved in the learning process. According to Gibbs (2010), this stage is referred to as learning outcomes, that is, academic performance and employability. The product factors were recognised as students' learning outcomes which can be described quantitatively (how much was learnt), qualitatively (how well it was learn), or both quantitatively and qualitatively. The learning outcome, which is also known as student achievement, is the product and reflects what we want the student to do (Jamieson, 2015).

The qualitative responses in this study are the perception of the distance e-learners (process stage). According to the participants, although it was not quantitatively proved that collaboration learning (learning activities), that is, the process of exchange ideas and knowledge among their colleagues and facilitators influence their academic performance (learning outcome). Before students will be able to collaborate or share ideas and knowledge with fellow students in a discussion forum, they must have prior ICT experience, which is a presage factor according to the model. This shows that there is a linear movement or a straight line from prior ICT experience to collaborative (exchange of knowledge) to academic performance. Distance e-learners under this study perceived the knowledge they acquired through interaction with colleagues during discussion under an e-learning setting as influencing their academic performance (learning outcome). Also, during the qualitative results revealed that the participants proved that prior ICT experience, parental influence (ICT literacy), benefit of Internet, progressive use of a

computer and self-efficacy or motivation influenced their academic performance. These perceptions cannot be isolated from their background or student's activities that take place before learning started, which is referred to as presage stage according to the model. There is a link between these perceptions and students' activities, which will eventually reflect in their academic performance. For instance, the participants commented that they were able to perform better under an e-learning setting because of their prior ICT experience. The presage in this case is prior ICT experience which was their background or prior experience before learning started, process stage is e-learning activities such course participation, discussion forum or interactive forum while academic performance is the leaning outcome. This study supports previous studies that prior ICT knowledge influences distance e-learners' learning processes and their academic performance. They were able to participate effectively because of the link. The explanation above proves that this study fits into the three stages of the model.

Purpose of the Study

The purpose of this study was to explore students' views on factors influencing academic performance of e-learners.

Research Question

Based on the purpose of the study, the below research question was raised:

i) What are the factors perceived by e-learners to influence their academic performance?

Research Method

This study adopted a qualitative case study design. Qualitative studies are known for their ability to understand phenomena from the participants' point of view (Croswell, 2013). The study investigated factors affecting e-learners' academic performance from the point of view of the students themselves. The study was conducted in a university under an e-learning setting. The university was chosen because it has experienced a decline in academic performance and graduation rates, and hence it was considered an information-rich site.

Population and Sampling

Students from second year up to fourth year participated in the study to form the population of the study. A purposive sample of 25 male and 23 female students participated in the study. These students were drawn from second to final year and were deemed experienced enough with teaching and learning practices in the university to provide useful insights on factors affecting students' academic performance of e-learners .

Data Collection

The researchers used focus group interviews as a mode of collecting data from the participants. The researchers arranged for 8 focus groups, each containing 6 participants. Each session were audio-recorded with the permission of the participants. A laptop computer was used both for audio recording the conversation as well as for preparation of transcription. In addition to that, the researcher used a smartphone for audio recording. The phone was used to ensure that the complete focus group interview was recorded and also to verify the recording for the purpose of transcription.

Reliability and Validity

Validity in qualitative research is associated with the authentic nature of the findings of the study and the conclusions drawn from that piece of work (Bryman, 2012). According to Maree (2010), validity and reliability in qualitative research refer to research that is credible and trustworthy. In order to ensure reliability and validity of the outcomes of the study, the researchers ensured that there were no biases and undue influence during the whole interviewing process. This process adhered to the recognized procedures, which ought to be followed when coding, categorizing and analyzing data. The researchers reflected his position through engagement in the field as an insider in the process of data generation as he was involved in conversations with participants and undertook observations of events and activities. Finally, the researchers included primary data in the results to allow the reader to see the basis upon which the researchers' conclusions were made. For instance, some of the participants' views were given with actual quotations as evidence.

Data Analysis

Thematic analysis was adopted in analyzing the data collected. Several hours of audio recording was obtained. This was transcribed and then analysed. The data analysis was arranged under themes.

Results of the findings

Themes Emerging from the Study

The following themes emerged from the study after transcription.

Theme 1: Computer Reliance and Knowledge

The participants commented that without a computer they cannot do anything under an e-learning system of learning and this indicates their total reliance on computers. They believed that their computer knowledge assisted them in using a computer for various activities. This is what the participants had to say:

> *Without computer knowledge, I wouldn't be able to do anything, due to computer age that is the reason. It is everything will do with computer. If I don't have knowledge of computer, I will not be able to perform under e-learning setting(**Respondent 4)***

*Let me say in our Open University here, without computer knowledge you can't do anything(**Respondent 17)***

*By handling the computer, I improve on it as I'm using the computer by studying, by reading through the computer. As I'm using the computer, I understood more of my subject areas(**Respondent 23)***

*When I got to NOUN, I learnt more about computer because I'm going to use computer for exam and other things. When I got here I used computer often, everyday, regularly. Even though, I'm planning to have café on my own(**Respondent 34)**.*

*My computer knowledge makes me to perform in e-exams better than pen-on-paper exams because we are in computer age. People are ready to sit down with computer rather than sit down with book and read(**Respondent 41)***

*So, I can say with my computer, it influences my performance, even in my exam I'm having good grade. I work with computer a lot. I don't have computer knowledge before I was admitted, I only have elementary knowledge(**Respondent 44)***

Theme 2: Benefit of Internet

The participants commented that the benefit from Internet usage in term of downloading useful materials, Google searching for relevant information and for electronic examination has really influence their academic performance.

The following are extracted from the responses of the participants:

*I opened my laptop searched for all cases online as a Law student and I was able to download them(**Respondent 4) (Respondent 11)**.*

*I think we are learning in higher way because you have to go deep and deep down search by yourself and study on your own before facing the examination(**Respondent 24)***

*It affects my academic performance because searching for what you don't know and bring it to academic world boost your ego. When you are talking of ICT, it goes wide you have to go Internet to google to gain one or two things(**Respondent 28)**.*

*We download our course materials/contents from the Internet and that have assisted me to improve on my academic performance(**Respondent 30)**.*

*I got a lot of information and development day by day through the Internet, ICT and this has reflected in my performance. Had it been that I don't know how to access Internet my performance will be lower(**Respondent 40)***

*Do your assignment, your TMA even doing it at home online is part of ICT. It really influences performance because doing assignment you have to google, search the net(**Respondent 41)**.*

Theme 3: Prior ICT Experience

Almost all the participants were unanimous in supporting that prior ICT experience influenced distance e-learners' academic performance. They commented that those who have ICT experience will likely perform higher than their counterparts without ICT experience because of their mode of study.

The following are extracted from the responses of the participants:

> *Like where I worked before in accounting firm, we exposed to computer come here now make it easier (**Respondent 4)***
>
> *If one has prior ICT experience, it will add like 100% contribution to his present academic performance(**Respondent 18)***
>
> *If you are study English without prior ICT experience, it might affect your academic performance. In short, ICT experience determines the academic performance(**Respondent 24)***
>
> *I was able to perform because of ICT experience. I have gone for different trainings on ICT. Assuming I don't know have knowledge of ICT, it will have affected my academic negatively(**Respondent 33)***
>
> *There is a correlation between ICT work experience and academic performance. My mates called me" guru" in the class but that is the result of my work experience. I have pre-knowledge of computer both theory and practical before I gained admission(**Respondent 34)***
>
> *With my ICT previous experience it make me know that this is the keyboard, monitor unlike those who are not having previous experience. There is different between person who is able to hold mouse before been admitted and those who cannot. The mostly different is the background (**Respondent45)***
>
> *It really helps me because I was working in a computer company as an engineer where I do interact with computer at times. I do engineer work all these stuffs with computer. So, I have some much interest in computer before getting to school and it impacted expensive and good thing into my career. When I get here to use computer to do my exam and test, it wasn't a problem for me and it influences my performance very well(**Respondent 48)**.*
>
> *It helps to share our ideas with students from other study centres. We are being using it very good for us. We have seen a lot of past questions. It really helps in our exam and test **(Respondent 1)***

4: Collaborative Learning

Almost all the participants commented positively that the interactive (i-learn) forum at NOUN brings about collaborative learning. According

to the participants, the forum enabled them to come together to share ideas and knowledge in their areas of specialisation with their colleagues, university staff and facilitators. Those who are not constantly on the forum also agreed that the forum helps them to have collaborative learning among their colleagues and facilitators across the nation and thereby influences their academic performance.

The following are extracted from the responses of the participants:

> *You meet different people you have not come across before; he/she shed more light on what you don't know before. If you are the one that know the topic, you bring the topic and started chatting on the topic. I think it really helps(**Respondent 4)***
>
> *This is an interaction forum, an i-learn blog when you are entering on the blog everyday and you are close to your departmental students. They will discuss something that will sink to your brain because the questions you pulled you will see many ways of solving them. You will see many things there in educational aspects. The social aspect is also there because when we are not social we can't organise ourselves. This has really contributed to my academic performance because we share ideas and knowledge on that i-learn(**Respondent 8)***
>
> *We interact with facilitators, colleagues from other centres all over the country. This is a forum where people come together to share ideas(**Respondent 11)***
>
> *The usefulness of that i-learn is that anybody from other universities can log in because many useful materials are there for students to make use of. People interact there, to exchange ideas and share knowledge(**Respondent 19)***
>
> *On getting there, you put the question on the forum. Is there anybody that can show more light about this particular subject matter and before you know people from different study centres will respond, you will be enlightened. This will definitely contribute to my performance(**Respondent 21)***
>
> *It gives room for interaction with students from other centres not only Akure centre across the whole centres in the federation. They are sometime you can get past question, likely questions when you answer them.I think that has really helped me in one of my exams, the likely questions that may come out in the examination. When you practice it, it becomes part and parcel of you. That interaction forum really influences my academic performance((**Respondent 33)***

Theme 5: Parent Influence – ICT Literacy

Some participants commented that their parents' ICT literacy influenced their academic performance positively. They commented that they were

earlier introduced to computer by their parents because they were ICT literate, and they were also encouraged by their parents.
Below are some of their responses.

> *Because my father is educated, he introduced me to computer so that I can have more knowledge. He did so because he is ICT literate/compliance. What I can't get in the school and I will get it online. That is why my parents supported me. Although what one do continuously will become part of him(**Respondent 11)***
> *He bought palmtop for me, being a computer and ICT literate. In short, my parent ICT education really influences my academic performance (**Respondent 20)***
> *I think this has influenced my academic performance because of his ICT literacy and the knowledge transferred. My Dad is computer literate, being an educated person. There is a widely know philosophy that we are in computer age and everybody believe this is true. So, being an educated person he was the one that asked me how to do you do your TMA? Don't you need a computer? Don't you need a phone to do those things? He bought palmtop for me, being a computer and ICT literate. In short, my parents' ICT education really influences my academic performance(**Respondent 43)***
> *They are computer literate. Assume they are not computer literate; it will not influence my (**Respondent 47)***

Theme 6: Self-Efficacy and Motivation

The participants totally disagreed that their courses of study do not influence their academic performance in any way under e-learning during the focus group interview but their self-efficacy and motivation do.
The following quotes were extracted from their responses:

> *The academic performance doesn't depend on your course of study but determination to excel. I don't agree that students in computer science will perform better than those of us Law under e-learning setting. Even if you are not computer literate but you can determine to be one(**Respondent 5)***
> *The course of study does not determine the academic performance of students under e-learning setting. What determine my performance is the interest and the knowledge of ICT(**Respondent 11)***
> *The academic performance doesn't depend on your course of study but determination to excel. I don't agree that students in computer science will perform better than those of us Law under e-learning setting. Even if you are not computer literate but you determine to be one(**Respondent 19)***

*Course of study has nothing to do with academic performance of students under e-learning setting but determination and interest do(**Respondent 33)***

*The fact my colleague is study computer doesn't indicate that he will perform better than me. What matters is how to manipulate computer not course of study(**Respondent 36)***

*The course of study does not determine the academic performance of students under e-learning setting. What determine my performance are the interest and the knowledge of ICT(**Respondent 39)***

*In my year 1, I happened to be the one that scored highest mark in CIT 100 which is a general computer course and despite that the fact that I'm not study computer. This was possible because of self motivation/ determination(**Respondent 42)***

*Everything being equal 1+1=2, computer science may have edge over others but not everybody due to determination. The way they use it may be a little fast but due to determination one can perform well irrespective of course of study. If I work harder I can beat the person in computer whether is e-learning setting or not(**Respondent 46)***

*I don't believe that the person in computer technology can perform more than me studying agricultural extension management since e-learning system is not until you know the whole computer before you can operate system. The whole thing is for you to get yourself prepare for the examination with computer. So far you know how to operate computer, I don't think those in computer technology can perform better than me. It depends on your seriousness and how you concentrate not the course of study(**Respondent 48)***

Theme 7: Progressive Use of Computer and Benefits

The participants commented that as they were progressing in computer usage for educational purposes from year to year, so also their academic performance improves. They also commented that the more they continue to progress in computer usage for their learning, the more improvement in their knowledge which reflects positively in their academic performance.

The following are extracted from their responses:

*Every year I can see that I'm upgrading, adding more knowledge to my knowledge (**Respondent 5)***

My first year was easy because I was average in term of ICT but now I'm improving and we did general course then but now we are on three unit course, congent courses. It takes reading and

*browsing. This really contributes to my performance(**Respondent 13)***

*What I have not been exposed to, I think every semester, and I'm exposed to it. So that it has improved my knowledge(**Respondent 17)***

*You know as an empty student, it is very compulsory for the students that have just been admitted in any university to be developing academically. In my first semester of 100 level, I experienced many things and knew a lot of things and in my second year I also know a lot of things. The knowledge I acquired in my 100 level has nothing to do with that of 200 level. The knowledge I acquired in my 200 level is very advance. Even it helps to be a student that can speak publicly and to have confidence in myself confidence. In short my year of study has a lot to do my academic performance(**Respondent 25)***

*When I first got in first semester, everything was new. I will perform better because things are no longer new and my feets are on ground(**Respondent 29)***

*Because of the school I am right now. We do most of the things online. Because of my frequent engagement with ICT, I'm able to learn more(**Respondent 31)***

*I will perform better in my year 2 because things are no longer new and my feets are on ground(**Respondent 38)***

*There is an improvement in year by year. I was a Novice in ICT in my year 1 but I observed rapid improvement in year2 likewise year 3(**Respondent 42)***

Discussions of the Findings

The participants' comments in theme 1 have revealed that computer reliance and knowledge influences their academic performance. This may be because computer knowledge assisted them in using a computer for educational activities or purposes. The participants commented in theme 2 that the benefit from Internet usage in term of downloading useful materials, Google searching for relevant information and for electronic examination has really influence their academic performance. This may suggest that benefit from Internet usage for educational purpose play a significant role in the academic performance of distance e-learners or frequency usage of Internet for educational purposes contribute positively to the academic performance of distance e-learners. The result of the finding is supported by Asdaque et al(2010) who found that students who used the Internet for downloading information for assignments and books/journals had a higher CGPA compared to those who used the Internet for purposes other than assignments or downloading software/songs. The result of the findings is in line with

Ogedebe (2012) who reported in his study that 79% of his participants agreed that Internet improved their academic performance. The result of the findings is in agreement with Siraj et al (2015) who concluded that high Internet usage brings about better academic performance because the Internet gives students the benefits of entering the information. They reported that computer-illiterate students indicated that the lack of computer experience influenced their ability to pass computer-related subjects. The participants commented in theme 3 that those who have ICT experience will likely perform higher than their counterparts without ICT experience because of their mode of study. The participants commented in theme 4 that the collaborative learning helps them to share ideas and knowledge among their colleagues and facilitators across the nation and thereby influences their academic performance. Participants commented positively that the interactive (i-learn) forum in their university brings about collaborative learning. This may due to the fact that the forum enabled them to come together to share ideas and knowledge in their areas of specialisation with their colleagues, university staff and facilitators. The result above was supported by previous studies (Lamb & Johnson, 2007; Jones, 2010; Chawner & Lewis, 2013) who remarked that collaborative learning assisted students to interact with each other by participating in online discussions and sharing the knowledge gathered with one another. This study is consistent with the findings of researchers Bliss and Lawrence (2009) who reported that group work through computer-mediated collaboration brings about improvement in academic performance, interaction and critical thinking. This study is also in agreement with Kumar et al. (2017) who found that collaborative mobile learning and individual e-learning resulted to improved academic performance among the students in contrast to the traditional method. The results of this finding are consistent with the study conducted by Adekunle et al. (2014) to determine the relationship between parents' computer literacy and academic performance of computer science students. They concluded that there was a significant relationship between the two. The result of the finding is similar to the study carried out by Valcke, Bonte, Wever and Rots (2010) on the impact of parenting style on the Internet use of primary school pupils. They found that that parental style, parent Internet behaviour and parents' educational background significantly predicted the Internet usage of children at home.

Participants' comments in theme 6 revealed that those with high self-efficacy and motivation will likely perform higher than their counterparts with low self-efficacy and motivation. This may be because academic performance of distance e-learners depend on determination and interest. These researchers supported the above comments that self-efficacy influences students' academic achievement: Joo et al. (2013)

and Mega et al. (2014). Consistent with the above were Abd-Elmotaleb and Saha (2013) who remarked that students with high senses of self-efficacy have a tendency to engage in challenging tasks and show excellent academic performance in comparison with students who lack such confidence. The comments are also in line with Meral et al (2012) who reported that self-efficacy is an important variable on students' academic performance and self-efficacy has more influence on academic performance than socioeconomic variables.

Conclusion

The researchers concluded that the following themes emerged from the study are factors perceived by the students to influence their academic performance:

- Computer Reliance and Knowledge;
- Benefit of Internet;
- Prior ICT experience;
- Collaborative learning;
- Parent influence – ICT literacy
- Self-efficacy and motivation' and
- Progressive Use of Computer and Benefits

Recommendations

The researchers therefore recommend that distance e-learners should be encouraged to register for ICT training before admitted into higher institutions. This will enable them to acquire previous ICT knowledge and exposure. The researcher recommends that instructors should concentrate on interactive learning tasks in order to encourage collaborative learning to facilitate sharing of knowledge and ideas. Course facilitators should continually promote the setting up of online tutorial study groups or discussion forums intended for sharing of ideas and knowledge. The participants agreed that their parents' ICT exposure or literacy influenced their academic performance. The researchers recommend that the university should promote adult education by providing ICT literacy courses. The participants commented that the benefit from Internet usage in terms of downloading useful materials, Google searching for relevant information and for electronic examination has a real influence on their academic performance. The researcher recommends therefore that the university should sustain present Internet links and connect additional PCs to the Internet. The management of the university should give open access to the Internet and e-mail in the university by establishing ICT learning resource centres that give room for students to access relevant software, applications and technology of any form. Government should subsidise Internet access in all the universities in Nigeria for educational purposes

in order to improve academic performance. Government should make Internet connectivity a priority for the university by increasing bandwidth to enable the students to use the Internet effectively for educational purposes. The participants agreed that under an e-learning setting, those with high self-efficacy and motivation will likely perform higher than their counterparts with low self-efficacy and motivation. Therefore, as stated above, the need for frequent engagement with ICT and students ICT literacy are necessary which will also lead to self-efficacy and self-motivation. The researcher recommends that the management of the university should integrate learner control in an e-learning setting as a component of the course design, which will enable the distance e-learners to have high self-efficacy over their learning environment.

Limitations of the Study

The researchers were only able to cover four centres of NOUN in South-Western Nigeria, because of the vast extent of the land and spread of study centres across the nation. Otherwise, the researchers would have covered many more areas in South-Western Nigeria. Therefore, any prediction or generalisations can only be applied over these four study centres.

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