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COMPUTER LITERACY AMONG UNDERGRADUATE STUDENTS IN NIGERIA UNIVERSITIES

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ABSTRACT: *The study is aimed at investigating the effect of gender, socio-economic status and settings on computer literacy among undergraduate students in Nigeria universities. 300 undergraduate students were randomly selected form 3 universities in the geo-political zones in the southern Nigeria. A questionnaire containing 20 items was drawn in line with the 3 hypothesis raised for the study. The instrument was validated by experts in test and evaluation as well as Higher Education administration experts. The reliability of the instrument was established using the test-re-test method. The data collected was analyzed using the Pearson Product Moment correlation coefficient statistic and it was established at 0.86 which shows that the instrument is reliable. The 3 hypothesis were analyzed using the t-test statistical method. The study shows that there is a significantly difference between male and female undergraduate students in computer literacy. The socio-economic status of students affect their exposure to computer recourses. There is a significant difference between students brought up in urban and rural settings in their exposure and use of the computers. Plausible suggestions were made if computer literacy is to be given a pride of pace among undergraduate student*

KEYWORDS: Computer Literacy, Undergraduate Students, Nigeria Universities

INTRODUCTION

With the emergence of Information and Communication Technologies (ICT), computers have become an essential tool necessary for the effective implementations of all ICT programs. Students in higher institutions of learning especially the universities are expected to have a sound knowledge of computer appreciation to be able to cope with the modern world.

Adeyinka and Mutala (2008) described computer literary as knowing some basics using the computer, for example, to save and open a file, use a word processing program, send and receive e-mail etc. it means having some sort of level of comfort around computers rather than having some fear or a feeling of foreboding (New York Times, 2006). The role of computer knowledge in the life of every average Nigerian student cannot be underestimated. Adagunodo and Idowu

(2004) indicate that knowledge, skills and confidence with computer technology are now an asset for entering the competitive employment market. They pointed out that every aspect of life from education, leisure and work environment to social interactions is being influenced by computer technology. With the increasing use of ICT in education the world over, new skills and competencies among students are required for them to executively learn.

In Nigeria today, computer technology has become so important that students who do not have access to computers and internet were likely to get further behind their peers who did have such access. It must be noted that many examinations in Nigeria are conducted using the computer technology. The National Open University which was opened to cater for those ho could not get direct admission in the regular universities now write their examinations using the computer. Most universities have also adopted the use of the computer in conducting examination for the Post Unified Matriculation Examination. Plans have also been concluded to conduct the Unified Admission and Matriculation Examination using the computers. So, it becomes imperative that students should be equipped with digital literacy competencies to be able function effectively in the changing word.

New York Times company (2006) points out that in most places of business, a computer is a standard tool. In the banking sector classroom interaction as well as automated library environment, the computer remains a standard tool that must be used and it is in the best interest of students to have a sound knowledge of computer technology. Institutions of higher learning in Nigeria especially the universities had made frantic efforts to enforce computer literacy among the students by introducing computer studies as a General Studies course which remains a basic requirement for graduation. In most primary and secondary schools in Nigeria especially the privately owned schools, the computer remains an object for advertisement not minding if they are functional or not.

With the introduction of the computer studies in the General Studies Unit, it is expected that the impact of computer literacy must be felt among Nigerian Undergraduates but Okebukola (2003) Iamented that a greater percentage of the Nigeria undergraduate students apply a theoretical approach to the learning of computer studies and do not possess any practical skill in computer operations. One would expect that such training will be focused at making the average Nigerian undergraduate to be computer literate and not merely to pass the examination at the end of the semester.

The concept of computer literacy can best be explained as the ability to make use of computer system to word process documents, analyze data, develop small computer programmes, browse internet and install software (Idowu 2004). Mitra (2008) perceive computer literacy as the amount of computer knowledge required and the length of computer usage Loyd and Gessard (2004) conceive computer literacy based on the amount of the time spent on the computer, ownership of computer and number of computer related courses taken but Francis and Kay(2003) explained that computer literacy is concerned with computer experience and use , programming skills and ability to use software Hall (2005) classified computer literacy according to the type of user. The emergent user, the progressive user, the high user and the dependent user. The emergent user is characterized by having acess to computer(s) at home and at work, such a user has access to and

knows how to use word processing, e-mail, web, and download information to compact discs. The progressive user are those who are ready for whatever it takes for them to have the knowledge of computer. They spend their time and money to learn more about the technology. The high users are those who are well verse in computer technology; they know how it works and how it can be manipulated. The dependent user on the other hand, are those who don't know anything about computer and not making attempt to learn it. They depend on those who know much about computer to help them out in case they have something to do on computer.

In a study conducted by Kay (2003) on computer literacy level of pre-service teachers, the respondents rated themselves as having low knowledge and very low programming skills Furst-Bowe (2005) in a related study noted that computer literacy among undergraduate students showed considerable variations. In Nigeria, these variations can be viewed from the gender perspective, socio- cultural settings, economic status of parents, and the environment with which the student was brought up. Idowu (2004) noted that traditionally, girls tend to be interested in computers, but use them less often in their spare time but they have more negative attitude towards computer. Okebukola (2003) further stated that girls are often less computer literate than boys. Silver (2001) in his research, indicated that male students are very interested in how technology works and how technology is used. Kembler (2009) in his study observed that boys seem happy to sit for hours with computers but end up playing computer games or messing around with the computer just to see what it can do. Girls on the other land, tend to want the computer to do something useful for them. The study further revealed that girls will find computer more attractive if it is presented in an easy way. The socio-cultural setting of the undergraduate student affects his knowledge of computer as noted by Idowu (2004). There are female children in virtually all Nigerian homes. The girl–child is responsible for domestic chores while the boy-child is often less busy and so he has more time to fret around the computer often unlike the girl child who may he busy in the kitchen. The boy-child associates with his peer group with little or no control but the girl-child is well monitored by parents. While the boy-child can learn easily from friends, the girl-child lives a regimented life especially for fear of "early or unwanted Pregnancy".

The socio-economic status of parents contributes to the variations observed in computer literacy among undergraduate students as observed by Fust-Bowe (2005). Most students with parents of high socio-economic status often possess their own laptops and with this, knowledge of computer technology is enhanced unlike the students from homes of low economic status. They may not be exposed to this form of knowledge prior to their admission into the university. So there is a variation at the entry point; while some students already have a pre-knowledge of the computers, others may be touching the computer for the first time in the university.

In Nigeria, there are urban and rural settings. In the urban areas, the basic amenities are often provided such as electricity and water while in the rural areas these basic amenities are completely absent. Children brought up in the urban areas are exposed to computer knowledge as they see it in banks, support-markets etc while those in the rural areas may only have a faint idea of the computer, coupled with the fact that there is no electricity to attract such technology to the rural villages. Adeyinka and Mutula (2008) stated clearly that the environment has a serious influence on computer literacy. In Nigeria today the unified Joint Admission and Matriculation Examination

is to be written using the computer with students from rural areas who have no pre-knowledge of the computer technology.

This paper is intended to find out if there is any significant relationship between gender, socio-economic status of parents and environment on computer literacy among undergraduate students in Nigerian universities.

Objective

The objective of this study is to:

1) Examine if there is a significant difference between male and female undergraduate students in computer appreciation.
2) Find out if there is a significant difference between students with parents of high socio-economic status and those with low socio-economic status in computer literacy.
3) Determine if there is a significant difference between student from urban and rural environment in computer literacy.

Hypothesis

The following hypothesis are formulated to guide the study.

1. There is no significant difference between male and female undergraduate students in computer literacy.
2. There is no significant difference between students with parents of high socio-economic status and those with law socio-economic status in computer literacy.
3. There is no significant difference between students from urban and rural environment in computer literacy.

METHODOLOGY

The study employed a descriptive survey method which affords the researcher to describe the differences in computer literacy of the undergraduate student based on gender, socio-economic status of parents and environment. The population of the study comprised regular undergraduate students in Nigerian universities. 3 universities were carefully selected from the geo-political zones in the southern Nigeria using the simple random sampling technique-south East: Enugu state university south west; Ogun State University, Abeokuta, and south-south; Niger Delta university Wilberforce Island Bayelsa State. 300 students were randomly selected using the proportional sampling technique. The respondents include 174 males and 126 female students. The instrument used for this study is a questionnaire titled Computer Literacy Among Undergarments Students-CLAUS). It is divided into two sections. Section A sought information about the demographic data of the respondent while the section B contain items related to the effect of gender, socio-economic status of parents and environment on computer literacy among undergraduate students. The questionnaire was validated by three experts in school administration and computer studies. The reliability of the questionnaire was established using the test re-test method and the data collected was analyzed using the Pearson Product Moment Correlation Coefficient statistics and it was established at 0.86 which shows that the instrument is reliable. The questionnaire was administered by the researcher and 10 research assistants. The data collected was analyzed using the t-test analysis.

RESULT

3 hypothesis were formulated for the study and data collected to test each hypotheses.
HO1: There is no significant difference between male and female undergraduate students in computer appreciation.
This hypotheses was tested with items 1-5 in the questionnaire.

Table 1: T-test of gender comparison on computer appreciation

Variables	N	X	Sd	Df	t cal	t crit	Remark
Male student	174	1.73	8.53	298	1.99	1.96	S*
Female students	126	0.33	6.43				

Table 1 shows that the t-cal of 1.99 is greater than the t-crit of 1.96 which holds that there is a significant difference between male and female undergraduates students in computer appreciations. This findings support the views of silver (2001) and Idowu (2004).
HO2: There is no significant difference between undergraduate with high socio-economic status and those with low socio-economic status in computer literacy.
Items 6-0 in the questionnaire answered this hypotheses
Table 2: T-test of socio-economic static of parents and computer literacy.

Variables	N	X	Sd	Df	t cal	t crit	Remark
High socio-economic status	158	2.74	7.64	298	4.04	1.96	S*

Low socio-economic status 142 0.34 5.04

There is a significant difference between students with parents of high socio-economic status and those with low socio-economic status in computer literacy. The calculated t-value of 4.04 is greater than the t-critical value of 1.96.

HO3: There is no significant difference between students from the urban and rural environment in computer literacy. This hypotheses was tested with items 11-15 in the questionnaire.

Table 3: t-test of urban and rural environments on computer literacy

Variables	N	X	Sd	Df	t cal	t crit	Remark
Urban	150	2.62	5.01				
	298	3.17	1.96				S*
Rural	150	1.07	3.22				

The calculated t-value of 3.17 is greater than the critical t-value of 1.96 which holds that the there is a significant difference between students who live in urban and rural environment in computer literacy.

FINDINGS

From the analysis of data gathered, it was discovered that.

1. There is a significant difference between male and female undergraduate students in computer literacy.
2. There is a significant difference between students with parents of high socio–economic status an those with low socio-economic status in computer literacy.
3. There is a significant difference between students who live in rural and urban environment in computer literacy.

Discussion

The undergraduate students formed the population of the study. In analyzing the data collected concerning if it there is any significant difference between male and female students in computer literacy. It was discovered that a significant difference exist. The result corroborates the finings of Idowu (2004) who pointed out that if male and female undergraduate students are given equal access to the usage of the computers, the male students are likely to be the main users while the female students are likely to show less interest. The male students dominate available computer resources.

On the issue of the effect of the socio-economic status of parents and students interest or usage of the computer resources, it was also discovered that undergraduate students with parents of high socio-economic status are more likely to be more interested and more exposed to the usage of the computer resources than students from low socio-economic background. This finding is in agreement with Jackson et al (2001) who believed that students from high socio-economic background are exposed to facilities such as power supply, comfortable accommodation, computer related equipments which will trigger a better exposure to computer resources than students with low socio-economic status who are majorly found in the rural areas with no electricity or other computer related devices. Ownership of laptops among undergraduate students are more with students of parents which high socio-economic status.

Undergraduate student in urban settings are exposed to computer study centers and other computer related resources while students from rural settings are not adequately exposed to computer resources as discovered in the study. Idowu (2004) agreed in his study that setting enhances computer literacy while urban settings favour computer literacy rural settings lack the desired exposure.

RECOMMENDATION

It is therefore recommended based on the findings of the study that:-

- Computer literacy should be encouraged among male and female undergraduate students in Nigeria.
- Female students should be more exposed to computer resources by the university authority by establishing computer centres in the female hostels.
- Though computers studies is a general course offered in the universities, it should be made more practical based rather than theory.
- Students should be encouraged to possess personal laptops as part of the registration requirements and the cost built into the school fess.
- Lecturers should be encouraged to use the computers in the presentation of lectures especially the power point package.
- Basic amenities such as electricity should be provided in the rural areas in Nigerian to bridge the gap between the urban and rural areas in terms of technological development.
- The cost of computers should be affordable to both the poor and the rich.

CONCLUSION

Computer remains the only gadget that houses the power of technological advancement. The nation today is technologically driven and a sound knowledge of computer appreciation is advocated for all undergraduate students irrespective of gender, class or socio-economic status. Although, the findings of the study shows that there is a significant difference among male and female students in computer literacy. The study shows a significant difference in terms of socio-economic status and setting as it affects computer literacy. Knowledge of computer still remain very important if the undergraduate students are trained to take over the socio-economic and

political situations in the country. No economic sector in the nation survives without the computer. The undergraduate students must be encouraged to be computer literate.

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