

ASSESSMENT OF AGE AND GENDER AS THE DETERMINANTS OF ICT SKILLS ACQUISITION AMONG SECONDARY SCHOOL TEACHERS IN UYO LOCAL GOVERNMENT AREA OF AKWA IBOM STATE

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ABSTRACT

The study sought to determine the influence of age and gender on ICT skills acquisition among secondary school teachers in Uyo Local Government Area of Akwa Ibom State. A survey research design was adopted for the study. This study was carried out in some selected secondary schools within the Uyo Local Government Area of Akwa Ibom State. The population of the study consisted of all the newly recruited teachers in all public secondary schools selected for this study within Uyo Local Government Area. A simple random sampling technique was used to select one hundred and ninety-five (195) teachers selected across the entire Local Government Area. This gave a total of 195 respondents used for the study. The instrument used in this study for data collection was a questionnaire titled "Demographic Variable and ICT Skills Acquisition among Teachers Questionnaire (DVICTSATQ)". Face and content validation of the instrument was carried out by an expert from University of Uyo in testing, measurement, and evaluation to ensure that the instrument has the accuracy, appropriateness, and completeness for the study under consideration. The reliability of the instrument was obtained by using test-retest method. The survey data was organised and analyzed, and the research questions were answered using the mean (\bar{x}), while the independent Chi-square (χ^2) was used to test the null hypotheses. The test for significance was done at 0.05 alpha levels. Based on the above findings, it was concluded that age and gender had significant influence on ICT skills acquisition by teachers in secondary schools in Uyo Local Government Area. This means teachers' age and gender reveal a positive impact on the issue of ICT skills acquisition and utilisation among teachers in secondary schools. One of the recommendations made was that the government, through the Ministry of Education, should take into consideration certain variables about teachers such as age and gender at the point of recruitment because of the importance of ICT skills to education in modern society.

KEYWORDS: Age, Gender, ICT skills acquisition, Secondary school teachers, and Uyo Local Government Area

Introduction

The advent of ICT applications in the educational sector, especially at the foundation level, has created a great impact on academic research and other educational development, including teachers' teaching design and approaches. Educational materials are now available in different types, both online and in hardcopy, to enhance effective teaching and learning activities. Teachers as character moulders need to acquire certain basic skills that will facilitate the teaching-learning process. This is only achievable when certain demographic variables are taken into consideration to ensure a holistic approach towards the realisation of the objectives of education at the secondary level.

Demographic variables or factors, and how they promote or hinder the realisation of ICT skills among teachers in Uyo Local Government Area and the country as a whole, are becoming increasingly important. In the context of this research study, demographic variables refer to gender, age, marital status, teaching experience, and educational qualification of teachers in secondary schools. A teacher with good ICT knowledge stands taller than his or her contemporaries who have not yet understood the essence of embracing the trend. Udo (2004) argued that teachers have assumed a global reckoning because of the materials they get from the internet for their teaching profession. Teachers who appreciated ICT before now have experience to share with those who have not. Aside from teachers acquiring skills in ICT, there is no other issue that should be addressed as a matter of urgent national importance than that of skills acquisition in ICT considering the benefits people stand to gain from this training.

For our educational sector to reach the expected height, it requires the training and retraining skills and the intellect of the teachers in the application of ICT skills for knowledge creation, dissemination and utilisation effectively and efficiently (Deligo, 1989). It is pertinent to state that because of the contending forces of demand from other sectors of the economy, it becomes aptly difficult for the government to single-handedly sponsor teachers' training. Thus, this requires the collaborative partnership of the private sector to assist in the intervention training programme of all the demographic variables and ICT skills acquisition among teachers in secondary school in Uyo, specifically focused on age and gender of teachers as independent variables.

Statement of the Problem

The present world is driven by the influence of ICT in all aspects of human life. It is for this reason that the Federal Government of Nigeria has directed that computer education be included in the school curriculum ranging from the primary level. However, the recent observation revealed low ICT skills acquisition among the teachers. The government, through its various agencies, has organised some intervention programmes to upgrade the teachers in the acquisition of the basic skills in computers in order to contribute to an effective teaching and learning process. The study therefore aims at examining the present state of affairs by empirically determining the influence of age and gender on teachers' ICT skills acquisition in secondary schools in Uyo metropolis.

Purpose of the study

Generally, the study sought to demine the influence of demographic variables on ICT skills acquisition among secondary school teachers. In specific terms, the study aimed at determining the following;

1. The influence of age on ICT skills acquisition among secondary school teachers.
2. The influence of gender on ICT skills acquisition among secondary school teachers.

Research Questions

The following research questions were stated to guide the study.

1. How does age influence ICT skills acquisition among secondary school teachers?
2. To what extent does gender influence ICT skills acquisition among secondary school teachers?

Hypotheses

The following hypotheses were formulated to guide the study;

1. There is no significant influence of age on ICT skills acquisition among secondary schools' teachers.

2. Gender does not significantly influence ICT skills acquisition among secondary schools' teachers.

Literature Review

Teacher's Age and ICT skills Acquisition

Conceptually, demographic variables in relation to the age of a teacher under study have to do with years spent in the profession and the actual age of the teacher involved. According to Kinsley and Garry (2012), skills acquisition is an activity that is most suited for young minds and those who are fresh in any profession. ICT skills are complicated in nature, and therefore, for the teachers' desire to undergo training in such a field will be too strenuous if age is not considered in the arrangement. The age consideration of teachers in the acquisition of skills in ICT is very important if the best is derived from them. Teachers' competence and effectiveness on the job is acquired through formal education and mostly through experience gained over the years on the job. Experience comes as a result of years in the service as a teacher. This has to do with the advancement in age of such a teacher. The acquisition of skills by teachers in the secondary school system should also take into consideration the readiness of the teachers and their age in the training for ICT skills.

The current trend in education needs ICT skills in both curriculum delivery and extra-curricula activities. The present and modern approach to organising school skills acquisition by teachers in the secondary school system should also be taken into consideration. The system requires that teachers be ICT inclined irrespective of the age of the teacher concerned. The school system is meant to be staffed with qualified and competent ICT-compliant teachers if such a school system is to compete with its contemporaries within and outside Nigeria. Bello (1981) opined that young and inexperienced people who enter into the teaching profession with ICT knowledge at the present time will find it difficult to cope with the system. They are discouraged by their gradual failure to measure up to the demands. Ozigi (2001) observed that staff effectiveness, whether in the school system or other walks of life, depends on the effective application and utilisation of the knowledge gained from ICT skills acquisition.

Teachers' Gender and ICT skills Acquisition

Gender refers to the state of maleness or femaleness of a teacher and their readiness for skills acquisition in ICT. Okeke and Wood (1980) stated that gender issues are an ending

debate in the human society of work. They claimed that the effects of man and woman cannot be measured in the same parameter because their differences are natural, and neither can be said to possess the same strength and stamina. Therefore, skills acquisition tends to be based on gender considerations. For example, many female teachers do not place a high value on learning ICT skills to improve their teaching abilities; instead, they consider some trading in the school system (Ozigi, 2001). Recent statistics in the United States of America show that only the average woman can be likened to their male counterparts in terms of knowledge attainment, even in the ICT environment (Jacob, 2002).

Opala (2000) is also of the opinion that males are more likely to be effective in skills acquisition in ICT areas than females. There are other researchers (Hanson and Bremback) who have also seen women teachers as predominantly literary. In other words, men are seen to be more practical, more scientific and more technologically oriented than women. A study conducted by Edem (2006) on teachers' positions and the effects of poor attitude on ICT skills acquisition in secondary schools in Mbo Local Government Area. The study focused on the possible causes of the poor attitude on the part of the teachers and what should be done to alleviate the situation for effective service delivery in the school system. Five research questions and null hypotheses were formulated to guide the study. A survey research design was used in studying 250 secondary school teachers. In this case, 50 respondents were studied in each selected study. The researcher developed a questionnaire which was used as a research instrument for the collection of data necessary for the study.

After the administration, all the copies were retrieved, scored, and collected. The collected data were subjected to related test analysis in order to test hypotheses. The result of the finding showed that the calculated value was greater than the t-critical value (1-99) at 0.5 level of significance under a two-tailed test, with 1-99 degrees of freedom during each test of hypotheses. The findings revealed that the five null hypotheses were rejected because there is a significant influence of teachers' poor attitude toward ICT skill acquisition in secondary schools, which has affected educational service delivery. Based on this empirical framework, it is imperative to state here that teachers' position attitudes towards ICT skills acquisition variables such as age and gender should be given serious attention.

Methodology

A survey research design was adopted for the study. This study was carried out in some selected secondary schools within the Uyo Local Government Area of Akwa Ibom State. The population of the study consisted of all the newly recruited teachers in all public secondary schools selected for this study within Uyo Local Government Area. A simple random sampling technique was used to select one hundred and ninety-five (195) teachers selected across the entire Local Government Area. This gave a total of 195 respondents used for the study. The instrument used in this study for data collection was a questionnaire titled "Demographic Variable and ICT Skills Acquisition among Teachers Questionnaire (DVICTSATQ)". Face and content validation of the instrument was carried out by an expert from University of Uyo in testing, measurement, and evaluation to ensure that the instrument has the accuracy, appropriateness, and completeness for the study under consideration. The reliability of the instrument was obtained by using test-retest method. The survey data was organised and analyzed, and the research questions were answered using the mean (\bar{x}), while the independent Chi-square (χ^2) was used to test the null hypotheses. The test for significance was done at 0.05 alpha levels.

Results

Research Question One

How does age influence ICT skills acquisition among secondary schools' teachers?

Table 1: Respondents' opinion on the influence of teachers' age on ICT skills acquisition in secondary schools

S/N	ITEMS	N	TOTAL	X	REMARK
1.	ICT skills acquisition is acceptable by younger teacher below 35 years.	86	320	3.1	Accepted
2.	Skills acquisition is readily acceptable by average age of 36 to 45 years.	86	278	3.2	Accepted
3.	ICT skills acquisition is not limited by age.	86	276	3.2	Accepted
4.	Age is not a barrier to ICT skills acquisition.	86	316	3.7	Accepted
5.	ICT skills acquisition promote teaching effectiveness but limited by age	86	286	3.3	Accepted

In table 1, the finding shows that there is an influence o teachers' age on ICT skills acquisition in secondary schools. This is determined by rating scale being below the 2.5 cut off point.

Research Question Two

To what extent does gender influence ICT skills acquisition among secondary school teacher?

Table 2: Respondent's opinion on the influence of gender on teachers' skills acquisition in secondary schools

S/N	ITEMS	N	TOTAL	X	REMARK
6.	Female readily accepts ICT skills acquisition	86	300	3.1	Accepted
7.	Males avail themselves more to ICT skills acquisition demand	86	280	3.3	Accepted
8.	Gender is not a barrier to ICT skills acquisition demand	86	276	3.2	Accepted
9.	Male teachers are hesitant to ICT skills acquisition	86	309	3.6	Accepted
10.	Female teachers object to any form of ICT skills acquisition training	86	262	3.0	Accepted

In the table 2, the respondents accepted the entire item numbered 6-10 meaning that there is an influence of gender on ICT skills acquisition by teachers in Uyo. This is determined by the rating scales being 2.5 as cut off point.

Testing of Hypotheses

The hypotheses were tested using the Chi-square (X²) statistics.

Hypotheses One

There is no significant influence of age on ICT skills acquisition among secondary schools' teachers

Table 3: Chi-Square Analysis of the Influence of Age on ICT Skills Acquisition among Secondary Schools Teachers

S/N	ITEMS	SA	A	D	SD	TOTAL	X ²
1.	ICT skills acquisition is acceptable by younger teachers below 35 years.	70	10	4	2	86	12.95
2.	Skills acquisition is readily acceptable by average age of 36 to 45 years.	40	28	16	2	86	12.68
3.	ICT skills acquisition is not limited by age.	42	24	16	4	86	7.68
4.	Age is not barrier to ICT skills acquisition.	68	9	6	3	86	10.19
5.	ICT skills acquisition promote teaching effectiveness but limited by age.	50	20	10	6	86	2.49
	TOTAL	270	91	52	17	430	45.84

The calculated Chi-square(X²)

Degree of freedom (DF) = 12

Critical value of 0.005 for x at 12 degree of freedom

Since the x calculated value of 45.82 is greater than the critical value of 21.03 at 0.05 level of significance, hence there is significant influence of age on ICT skills acquisition of teachers in secondary schools in Uyo.

Hypotheses Two

There is no significant influence of gender on ICT skills acquisition by teachers in secondary school in Uyo.

Table 4: Chi-square analysis of the influence of gender on ICT skills acquisition among secondary schools' teachers

S/N	ITEMS	SA	A	D	SD	TOTAL	X ²
1.	Female readily accepts ICT skills acquisition.	52	26	6	2	86	13.18
2.	Males avail themselves more to ICT skills acquisition demand.	50	16	12	8	86	1.71
3.	Gender is not a barrier to ICT skills acquisition demand	48	12	24	2	86	11.52
4.	Male teachers are hesitant to ICT skills acquisition	68	5	9	4	86	14.31
5.	Female teachers object to any form of ICT skills acquisition training.	40	20	16	10	86	8.66
	TOTAL	258	79	67	26	430	49.38

The calculated chi-square (X²) = 49.38

Degree of freedom (DF) = 12

Critical value of 0.05 for x at 12 degree of freedom = 21.3

Since the χ^2 calculated value of 49.38 is greater than the critical value of 21.03 at 0.05 level of significance, the result therefore implies that there is significant influence of gender on ICT skill acquisition by teachers in secondary schools in Uyo.

Discussion of the Findings

The analysis of teachers' age on ICT skills acquisition in secondary schools in Uyo reveals that there is a significant influence of the age of teachers on the ICT skills acquisition. The implication is that for teachers to accept to be trained on the ICT skills, the programme must take into consideration the age of such teachers to get the best and the quality of skills so needed from the teachers. The result of the study is in consonance with the view of Ozigi (2001) who stated that staff effectiveness whether in the school system or any other organization depends on the ICT appraisals and moreover on the application of the knowledge gained from the ICT skills acquisition in the current trend of working environment. The result of the data analysis in table 4 was also significant.

The analysis of teacher's gender and ICT skills acquisition by teachers in secondary schools in Uyo reveals that there is significant influence of teachers' gender on ICT skills acquisition. The implication is that the gender status does directly affect the issue of ICT skills acquisition for teachers in the teaching profession. According to Okeke and Wood (1980) who stated that gender issue is an unending debate in the human society of work. They said the effort of man and that of a woman cannot be measured in the same parameter since their differences is stemmed from nature and both cannot be said to possess the same strength and stamina. Opeala (2000) is also of the opinion that males are more likely to be effective in skills acquisition in ICT areas than females.

Conclusion

Based on the above findings, it was concluded that age, and gender had significant influence on skills ICT acquisition by teachers in secondary schools in Uyo Local Government Area. This further means teachers' age, and gender reveal a positive impact on the issue of ICT skills acquisition and utilization among teachers in secondary schools.

Recommendations

Based on the findings made and the conclusion drawn in the study, the following recommendations were made that:

1. Government through the Ministry of Education should take into consideration certain variables about teachers such as age, gender and educational qualification at the point of recruitment because of the important of ICT skills to education in the modern society.
2. Practical approach should be used by relevant authorities to encourage teachers to embark on ICT skills acquisition to improve their teaching skills and effectiveness in the classroom.

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