



DEMOGRAPHIC FACTORS AND TEACHERS' EFFECTIVENESS AMONG SECONDARY SCHOOL TEACHERS IN CALABAR EDUCATION ZONE CROSS RIVER STATE, NIGERIA.

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(Received 7, March 2022; Revision Accepted 21, April 2022)

ABSTRACT

The article aims to discuss teaching effectiveness in relation to teacher demographic factors like teachers' age and teachers' gender among Secondary School teachers in Calabar Education Zone of Cross River State, Nigeria. To achieve this aim, two hypotheses were stated and tested. These variables have important role to evaluate teachers' effectiveness as scholarly proven through literatures. The descriptive survey design was adopted for use. The sample consist of one hundred and sixty-four (164) teachers and three hundred and twenty-eight (328) student from the Calabar Education Zone. Teachers' Demographic Factors Questionnaire (TDFQ) and Teaching Effectiveness Questionnaire (TEQ) were developed by the researcher and validated by experts in Sociology of Education and Test/Measurement. The descriptive statistics, one-way analysis of variance, a post-hoc scheffe & independent t-test were used.

The result revealed that teachers' age and gender significantly influence teaching effectiveness. Based on the findings, it is recommended among others that Government should see teachers age as an asset thereby put in more resources to train them so that they will be of benefit to the students and the society at large.

KEYWORDS: Demographic, Factors, Teacher, Teachers' age, Teaching effectiveness, Teachers gender

INTRODUCTION

Teachers are persons (male or female) who are responsible for the interpretation of the curriculum in the way the individual learners should understand and apply it for a positive behavioural change and academic outcome. This is done in a way that will make it interesting and motivating to the learner. He/ she is expected to help the student to acquire knowledge, competence and virtue formally.

These persons have some attributes that one may think can enhance their effectiveness and they include categorical variables like gender, race, marital status, psychiatric diagnosis, or continuous variables like teachers age, family size, experience, qualification and income level, these are all independent variables because they cannot be manipulated. Therefore, it is possible to generalize teachers' effectiveness through demographic factors mentioned above as most studies have proven so. A typical example is

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Shilpa and Usha (2018), looking at gender, that most students prefer ladies as teachers, their reasons attributed to their sincerity, hard work effort taken in preparing lectures, politeness, high pitch, audible voice quality, empathic listening, better understanding and view of concern shown by them. Amalu, (2021) also opine that teacher is said to be effective beyond imparting knowledge, because teaching effectiveness is the degree to which the teacher not only facilitates the accomplishment of educational goals but also facilitate positive social change in a learner. Chauhan, (2016) defines teaching effectiveness as teachers' competence and performance with the accomplishment of educational goals. Therefore, teaching effectiveness is referred to the execution of the objectives of education in general and teaching in particular, as an effective teacher is one who can accomplish the planned goals and assigned task in accordance with school goals as well as developing a good social behavior in an individual learner (Amalu, 2012). With these knowledge, effectiveness of secondary school teachers can be influenced by the already mentioned demographical attributes, though it is the wish of the researcher to only investigate the influence of teachers' age and gender on teaching effectiveness.

Teachers' age is an asset, and an attribute of a teacher that determines how old that teacher maybe (Dien, 2019), though it is a conflicting indicator when it has to do with teaching effectiveness. Shilpa & Usha, (2018) posit that the more advanced a teacher is in age, the more he becomes more experienced and knows were to tap the potential of the students and how to make them understand this worth. Ekanem, (2015) has it that, teachers' in age bracket 20-30years has greater tendency to withdraw from the teaching profession than teachers between the ages of 30-40years and above. This could mean that older teachers have fewer tendencies to withdraw from the profession than younger ones as withdrawal cognition is tied to dissatisfaction. Dien, (2019) agrees that younger teachers are likely to be more dissatisfied with teaching profession due to poor pay package and so look for other jobs as a dissatisfied teacher may be an ineffective one which may throw the system unbalance. It is important to note that an effective teacher contributes significantly on students' achievement in schools, (Alufohai & Ibhafidon, 2015). They conducted an empirical study on the influence of teachers' age on the academic achievement of students in Edo state, Nigeria. Using proportionate sampling technique

on selected public Senior Secondary Schools teachers, the study revealed that middle-aged teachers of between the ages of 36-48years old were more effective to produce higher students' score than younger and older teachers. Their findings also revealed that the younger teachers of between the ages of 21 and 34 years old were more effective and produced higher student scores than the older ones of between the age of 49years and above.

Ismali, Arshad and Abas (2018) study on "can teachers' age and experience influence teacher effectiveness in higher order thinking skills"? Samples consist of 410 teachers, data analyzed using inferential statistics- independent t- and ANOVA. The finding showed that there is a significant difference between age, experience and teacher effectiveness. Nyagah & Gathumbi, (2017) in their cross-sectional survey in Kenya found that older teachers were more likely to increase students' learning compared to their middle age and younger teachers' who often end up in making more risky decision.

In terms of gender factor, this continuous demographic variable is defined socially and culturally as either of the two sexes (male and female). Amalu, (2021), defines gender as the cultural differences expected of men and women according to sex. This factor seems to be controversial as it influences teachers' effectiveness because some scholars are on the opinion that indeed teachers' gender influence teachers' effectiveness while others argue that it does not have any significant influence. In all, it is believed that gender roles are patterns of behavior, attitude and expectations. According to Shilpa & Usha (2018), many students prefer ladies as teachers, their reasons attributed to their sincerity, hard work effort taken in preparing lectures, politeness, high pitch, audible voice quality, empathic listening, better understanding and view of concern shown by them. This corroborate Dien, (2019) that gender is of paramount interest to the student populace because females are gradually taking over and dominating the teaching profession at all level of education. Akinmusire, (2012), discovered that female teachers tend to be more effective in the profession than their male counterparts. Igberadja (2016) in a study on effects of teachers' gender and qualification on students' performance in vocational technical education, found out that students preferred to be taught by female teachers as results revealed that twenty-four (24) students out of thirty-one (31) had mean score of 60.33 in performance higher than those

taught by male teachers. Those under the tutelage of the female teachers out performed others under male tutelage in industrial safety courses reason being not female teachers usually know the methods to use and they apply them. Series of studies proof that teachers' gender has its role on the effectiveness of teachers. Effectiveness is more driven when it is able to solve the problems of the students, a characteristic in female teachers thus teachers' gender variable is one of the major factor that influences teachers' productivity Akiri & Ugborugbo (2008). In a study by Ahiatrogah (2017), titled gender dimension in the development of effective teaching skills among University of Cape Coast (UCC) distance education students. A longitudinal development research design was used for the study. A sample of 376 distance education (DE) students made up of 173(46.01%) female and 203(53.99%) male was purposively selected and used to ascertain teaching effectiveness as it has to do with teachers' gender. The results of the study revealed that the teaching skills acquired by both male and female distance education students during on-Centre teaching practice (OCTP) and school-based teaching practice (SBTP) were good, though statistically significant difference exist between the teaching skills of male and female, as it affects the acquisition of effective teaching skills in favour of female. Study revealed that female teachers are more satisfied and efficient in their teaching profession than their male counterparts because the males believe their take home is not reasonable enough resulting to them not giving their best hence breeding ineffectiveness in their job.

Statement of the problem

Teacher effectiveness is an issue that has received increased attention in recent time. An effective teacher, is one who should make the most significant impact in the lives of the students, translate educational objectives and run an effective classroom as well as the most successful in helping the students to learn. This profession has made him/her believe that every child can be successful as the child is seen as an active participants and not passive in educational matters. Hence it is not possible to guarantee a successful and meaningful learning without effective teachers who are the main agents of translating laudable educational objectives through a well-organized school curriculum, putting it into practice in the classroom and miniature society of the school in particular for the betterment of the larger society in general.

But some teachers are seen exhibiting some form of no commitment to their job as manifest in students' queried poor academic outcome thus exposing the aspect of ineffectiveness from the teachers, a thing of concern to the researcher. Government in this area of study in recent times have taken it upon themselves to see that school environment in this zone are fit for teaching-learning process, Non-Governmental Organizations too, have provided useful facilities to see that the issue of no facilities are a thing of the past, parents and stakeholders are not left out yet the problem of ineffectiveness still lingers in this zone. The question is can teachers' demographic factors like teachers' age and gender influence teaching effectiveness in among Secondary School teachers' in Calabar Education Zone, Cross River State. Nigeria?

Purpose of the study

The main purpose of this study was to examine the influence of teachers' variables on teaching effectiveness of secondary school teachers in Calabar Education Zone in Cross River State, Nigeria. Specifically, the study investigated the influence of:

1. Teachers age on teaching effectiveness among secondary school teachers' in Calabar Education Zone
2. Teachers' gender on teaching effectiveness among secondary school teachers' in Calabar Education Zone.

Hypothesis

Below are the following null hypotheses formulated to direct the study.

1. There is no significant influence of teachers' age on teaching effectiveness of secondary school teachers in Calabar Education Zone in Cross River State.
2. There is no significant influence of teachers' gender on teaching effectiveness of secondary school teachers in Calabar educational zone in Cross River State.

METHODOLOGY

The descriptive survey research design was used with population of the study being one hundred and sixty-four (164) teachers and thirteen thousand, six hundred and five 13,605 (jss1-2) to measure their teacher effectiveness (because JSS3 students had finished their BECE as at the time of research) all from the 84 Secondary Schools in Calabar Education Zone. The sample that responded to the questionnaire are made up of all one hundred and sixty-four (164) teachers because of its manageable size and three

hundred and twenty-eight (328) students. The obtained data through well-structured questionnaire with part A (for teachers) and B (for students) titled "Teachers' Demographic Factors and Teaching Effectiveness Questionnaire (TDFTEQ)" was coded and scored using a four point Likert rating scale. These instrumentations as content validated and were subjected to reliability test by experts from Sociology of Education and Measurement/Evaluation from the Faculty of Educational Foundation Studies of the University of Calabar, Calabar using the split half reliability with one hundred (100) students from Ogoja education zone which was outside the study area. The reliability co-efficient ranged between 0.75 and 0.92 gotten from two sets of scores (odd and even, using the Pearson Product Moment Correlation Statistics). Questionnaires were administered by the researcher with the permission of the school management and concession of the respondents in the various schools. Data generated were analyzed using descriptive statistics, one-way analysis of variance (ANOVA) and a post-hoc Scheffé as a follow up test due to the unequal group in teachers' age to determine the actual direction of

significance and independent t test as statistical tool for teachers' gender. To test the hypothesis formulated for the study, Alpha level of significance was set at 0.05 level of significance.

RESULTS:

Hypothesis one

There is no significant influence of teachers' age on teaching effectiveness among secondary school teachers in Calabar educational zone. The independent variable in this hypothesis is teachers' age and categorized into 20-29 years (early age), 30-39 years (middle age) and 40-above (older age) while the dependent variable is teaching effectiveness categorized in five dimensions which are knowledge of subject matter, classroom management, instructional delivery, disciplinary activities and communication skills all measured continuously. The descriptive statistics, ANOVA and the post-hoc test were used to test the hypothesis at 0.05 level of significance and results presented in table 1, 2 and 3.

Table 1: Descriptive statistics of the variable of teachers' age on effective teaching

Dependent variables	Teachers age	N	Mean	Std. Deviation
Knowledge of subject matter	20-29yrs	71	9.9155	2.78130
	30-39yrs	48	9.4792	2.23121
	40-above	45	14.1556	3.51591
	Total	164	10.9512	3.46907
Classroom management	20-29yrs	71	12.4366	2.34662
	30-39yrs	48	10.7083	1.21967
	40-above	45	13.1333	3.33439
	Total	164	12.1220	2.59017
Instructional delivery	20-29yrs	71	11.7606	1.62538
	30-39yrs	48	12.0000	3.66699
	40-above	45	14.0000	3.04512
	Total	164	12.4451	2.90600
Disciplinary measures	20-29yrs	71	14.2535	3.04123
	30-39yrs	48	12.6458	3.20564
	40-above	45	12.5556	2.10579
	Total	164	13.3171	2.96763
Communication skills	20-29yrs	71	10.8310	3.16221
	30-39yrs	48	12.0417	3.91374
	40-above	45	10.8000	3.40855
	Total	164	11.1768	3.48694

Table 2: One-way analysis of variance result of the influence of teachers' age on effective teaching

Dependent variable	source of variation	SS	Df	MS	F	Sig.
Knowledge of subject matter	Between Groups	642.227	2	321.113	39.184	.000
	Within Groups	1319.383	161	8.195		
	Total	1961.610	163			
Classroom management	Between Groups	148.980	2	74.490	12.696	.000
	Within Groups	944.581	161	5.867		
	Total	1093.561	163			
Instructional delivery	Between Groups	151.577	2	75.788	9.961	.000
	Within Groups	1224.930	161	7.608		
	Total	1376.506	163			
Disciplinary measures	Between Groups	109.985	2	54.993	6.679	.002
	Within Groups	1325.527	161	8.233		
	Total	1435.512	163			
Communication skills	Between Groups	50.783	2	25.392	2.117	.124
	Within Groups	1931.088	161	11.994		
	Total	1981.872	163			

*significance at .05, df=2 and 161

To test this hypothesis, ANOVA was used and the result as presented in table 2 showing teachers' age and classroom management ($F=12.696$, $P<0.5$), Teachers' age and instructional delivery ($F=9.961$, $P<.05$), Teachers' age and disciplinary measures ($F=6.679$, $P<.05$) age and teacher- students relationship ($F=1.281$, $p>.05$) and teachers' age and teachers communication skills ($F=2.117$, $p>.05$). Since p (.000) is less than p (.05) for age on knowledge of subject matter, classroom management, instructional delivery and disciplinary measures.

This implies that there is a significant influence of teacher's age on teaching effectiveness in terms of knowledge of subject matter, classroom management, instructional delivery and disciplinary measures. Thus, the hypothesis was rejected for age on teaching effectiveness in terms of knowledge of subject matter, classroom management, instructional delivery and disciplinary measures but retained for teachers' age on communication skill. A post hoc analysis was carried out using scheffes test after that of one-way analysis of variance (ANOVA).

Table 3: Scheffe's post-hoc comparison result of the influence of teachers' age on effective teaching

Dependent Variable	(I) age of teachers	(J) age of teachers	Mean Difference (I-J)	Sig.
Knowledge of subject matter	20-29yrs	30-39yrs	.43633	.718
		40-above	-4.24006*	.000
	30-39yrs	20-29yrs	-.43633	.718
		40-above	-4.67639*	.000
	40-above	20-29yrs	4.24006*	.000
		30-39yrs	4.67639*	.000
Classroom management	20-29yrs	30-39yrs	1.72829*	.001
		40-above	-.69671	.323
	30-39yrs	20-29yrs	-1.72829*	.001
		40-above	-2.42500*	.000
	40-above	20-29yrs	.69671	.323
		30-39yrs	2.42500*	.000
Instructional delivery	20-29yrs	30-39yrs	-.23944	.898
		40-above	-2.23944*	.000
	30-39yrs	20-29yrs	.23944	.898
		40-above	-2.00000*	.003
	40-above	20-29yrs	2.23944*	.000
		30-39yrs	2.00000*	.003
Disciplinary measures	20-29yrs	30-39yrs	1.60769*	.013
		40-above	1.69797*	.009
	30-39yrs	20-29yrs	-1.60769*	.013
		40-above	.09028	.989
	40-above	20-29yrs	-1.69797*	.009
		30-39yrs	-.09028	.989

*Significance at .05

The result as presented in Table 2 and 3 showed that teachers who are from 30-40yrs (middle age) and above (older age) are effective in terms of classroom management, instructional delivery and disciplinary measures compared to those who are 20-29yrs of age (early age).

HYPOTHESIS TWO

There is no significant influence of teachers' gender on teaching effectiveness of secondary school teachers in Calabar Education Zone.

The independent variable here, is teachers' gender categorized as (male and female) while

the independent variable is teaching effectiveness categorized in five dimension which are classroom management, instructional delivery, communication skills, disciplinary activities and knowledge of subject matter all measured continuously. The independent t test was used and the result as presented in table 4 result showed that for teachers' gender and classroom management ($t=1.211$, $P>.05$), gender and instructional delivery ($t=3.201$, $p<.05$), gender and disciplinary measures ($t=2.78$, $p<.05$), gender and communication skills ($t=3.52$, $p<.05$).

Table 4: Independent t-test analysis of the influence of teachers' gender on teaching effectiveness

variables	Teachers gender	N	Mean	Std. Dev	df	t-cal	p-val
Knowledge of subject matter	Male	96	12.7604	2.76727	162	1.562	.078
	Female	68	12.6324	2.67689			
Classroom management	Male	96	12.7604	2.16549	162	1.211	.121
	Female	68	12.6324	2.03661			
Instructional delivery	Male	96	13.3854	2.00195	162	3.201*	.001
	Female	68	12.9412	3.31384			
Disciplinary measures	Male	96	13.7083	3.31795	162	2.781*	.008
	Female	68	12.7647	2.29937			
Communication skills	Male	96	10.7292	3.32290	162	3.521*	.000
	Female	68	12.8088	3.63752			

*df=162

Since p (.001) for teachers' gender and instructional delivery, disciplinary measures, and communication skills is less than p (.05), this implies that there is a significant influence of gender on teaching effectiveness in terms of instructional delivery, disciplinary measures, and communication skills. Hence the null hypothesis is rejected for gender and teaching effectiveness in terms of instructional delivery, disciplinary measures, and communication skills but retained for knowledge of subject matter and classroom management.

DISCUSSION OF FINDING

Hypothesis one stated that, there is no significant influence of teachers' age on teaching effectiveness and was rejected for teachers' age on teaching effectiveness in terms of knowledge of subject matter, classroom management, instructional delivery and disciplining measures but retained on teachers' age on communication skill. This is in line with Shilpa & Usha, (2018), who opined that as teacher advances in age he becomes experienced and knows where to tap the potential of the students and how to make him understand his worth. Alufohai & Ibhafidon, (2015), also showed that teachers' variables such as age and teaching experience has certain impact on teachers' effectiveness. This implies that the age of a teacher as an asset influences their job performance in terms of knowledge of subject matter, classroom management, instructional delivery and disciplinary measures.

This study finding therefore revealed that middle aged teachers and older between age i.e. 30-39years and 40-above years respectively are more effective than teachers within young age bracket as shown in table 1. This finding is in line with Ekanem, (2005) who penned, that teachers' age has greater impact on teachers' effectiveness as older teachers 40-above years tend to stick to the teaching profession because they are satisfied with their job unlike the young one (20-21years) whose withdrawal cognition is tied to financial dissatisfaction. The result of the findings in terms of teachers' gender also showed that female teachers are more effective than their male counterparts. Though gender differences on teachers' effectiveness seem controversial and in this paper identified as possible variable accounting for individual differences in teacher practice. Amalu, (2021), opines that gender influences teachers' effectiveness in terms of instructional delivery, disciplinary measures and communication skill with reason given to be that female teachers are good orators when it has to do with utilization of words and patience in organizing their classes. personality traits necessary to become an effective teacher compared to their male counterparts who may be well equipped and sophisticated in terms of knowledge of subject matter but yet not sympathetic like the female. As effectiveness is more driven when it is able to solve the problems of the students, a characteristic in female teachers thus teachers' gender variable is one of

the major factor that influences teachers' productivity Akiri and Ugborugbo (2008). This corroborate Dien, (2019) that gender is of paramount interest to the student populace because females are gradually taking over and dominating the teaching profession at all level of education. These findings contradict Amalu 2021, who mentioned that male teachers are more effective than the female teachers.

Conclusion

The findings of this study has revealed that there is significant influence of teachers' variables and teaching effectiveness. Teachers as lamps in the dark world, should aid the learners through the unknown to the known in order to become relevant in the society since the role they play may contribute to the betterment or failure of the society at large. Effort should also be made to keep the school system as quality education of a nation makes that nation. Stakeholders too, should see the need to encourage the secondary school teachers to do his/her best in their job in school in general and in the classroom in particular while preparing students for the University

RECOMMENDATION

Policy makers in the study area should be gender sensitive in assigning particular subjects for effective teaching among teachers. The government should see teachers age as an asset thereby putting more resources to train and retain them, so that they will be of benefit to the sector. And Male teachers should not see the teaching job as a place to take advantage of opposite sex rather they should display their fatherly role to students under their care.

REFERENCES

- Ahiatrogah, P. D., 2017. Gender Dimension in the Development of E. T. Skills among University of Cape Coast (UCC) Distance Education Students. *World Journal of Education*. 7(4). Pp.1212 Doi:10/5430/wje.v7n4p12. Retrieved from <http://wje.sciediepress.com>.
- Akinmusire, P. A., 2012. Teachers' Effectiveness and Gender as Correlates of Students Academic Achievement in English Language in Ondo State, Nigeria.
- Akiri, A. A. and Ugborugbo, N. M., 2008. An examination of gender's influence on teachers' productivity in secondary schools. *Journal of social sciences*. DOI: 10.1080/09718923.2008.11892650
- Alufoha, P. J. and Ibhafidon, H. E., 2015. Influence of Teachers' Age, Marital Status and Gender on Students Academic Achievement. *Asian Journal of Educational Research*, 3(4), 60-66.
- Amalu, M. N., Ajake, U. E and Ihejiamazu C. C., 2012. Stress from role conflict: Consequences for professional effectiveness of Secondary School Teachers in Cross River State. *Global Journal of Educational Research* 11 (1), 37-47.
- Amalu, M. N., 2021. Some demographic variables and teaching effectiveness of Secondary School Teachers in Cross River State, Nigeria *Global Journal of Educational Research* 11 (2), 1-10.
- Chauhan, A., 2016. A study of teacher effectiveness in relation to gender, Locale and Academic Stream. *International Journal of Advanced Research in Education and Technology (IJARET)* 3(4) ISSN: 2394-2975 (online).
- Dien, C. A., 2014. Teacher motivation and teachers' teaching effectiveness in Government Technical Colleges in Calabar Metropolis in Cross River State, Nigeria. Unpublished post graduate diploma in education project presented in University of Calabar, Calabar, Cross River State.
- Dien, C. A., 2019. Teacher characteristics, school social environment and effective teaching among social studies teachers in Calabar Educational Zone in Cross River State Nigeria. Unpublished Master's Thesis presented in University of Calabar Cross River State.
- Ekanem, G. D., 2005. Teachers' effectiveness, job attitude and teaching effectiveness among secondary school teachers in Ikot Ekpene educational zone of Akwa Ibom State, Nigeria. (Unpublished M.Ed. thesis). University of Calabar, Calabar

- Igberadja, S., 2016. Effects of teachers' gender and qualification on students' performance in vocational teaching education. *Journal of teaching education and training* 8(ii) 34-24.
- Ismali, R. A. M, Arshad, R. and Abas, Z. A., 2018. Can teachers' age and experience influence teacher effectiveness in HOTS? *International Journal of Advanced Studies in Social Science and Innovation (IJASS)* elssn: 2600-7746, 2(1) 1-15. Doi.org/10.30690/IJASS.21.11.
- Nyagah, G. and Gathumbi, A., 2017. Influence of teacher characteristics on the implementation of non-formal basic education curriculum at the non-formal education centres in Nairobi, Mombassa and Ikisumu Cities Kenya, *International Journal of Education and Research*. 9(28). ISSN: 1857-7881 e-ISSN1857-7431.
- Shilpa R. S. and Usha S. U., 2018. Influence of gender and age of teachers on teaching: students' perspective. *International Journal of Current Microbiology and Applied Sciences*. ISSN: 2319-7706 7(1), 2436-2441. Dio:org/10.20536/ucmas.2018.