

TEACHERS' DEMOGRAPHIC VARIABLES AS CORRELATES OF TEACHERS' EFFECTIVENESS IN PUBLIC SECONDARY SCHOOLS IN ANAMBRA STATE

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Abstract

The study determined teachers' demographic variables as correlates of teachers' effectiveness in public secondary schools in Anambra State. Two research questions guided the study and two null hypotheses were tested at 0.05 level of significance. The study was a correlational research design. The population of the study consists of 5,147 teachers in 263 public secondary schools in the six Education Zones in Anambra State. The sample of 258 teachers was used for the study. Proportional stratified and simple random sampling techniques were used to draw the sample. The researcher-structured instruments titled "Teachers' Demographic Variables Scale (TDVS) and Teachers' Effectiveness Questionnaire (TEQ)" were used for the study. The instrument was subjected to face validation by three experts. The reliability of the instrument was done using Cronbach Alpha statistical tool and the coefficient was established at 0.87 for TEQ which was considered highly reliable and adequate for the study. Pearson Product Moment Correlation was used to answer research questions and test the hypotheses at 0.05 level of significance. Findings of the study showed that teachers' qualification and experience has a positive and significant relationship with teachers' effectiveness in public secondary schools in Anambra State. The study concluded that teachers' characteristics such as qualification and experience contribute to a high level of teachers' effectiveness which eventually impact positively on educational attainment of students in public secondary schools in Anambra State. Based on the findings, the study recommended that the Post Primary School Service Commission should employ both experienced and inexperienced teachers since on-the-job experience is most important and positively contribute to teachers' effectiveness in public secondary schools in Anambra State.

Keywords: Teachers' demographic variables, teachers' effectiveness

Introduction

Effective teaching and learning in the school rest squarely on the teachers and their

performance. The success or failure of the educational system depends on their performance. Since teachers are the major

factors in the realization of the educational goals of the state, they are laboured with high expectations and performance by stakeholders. The success and attainment of high educational standard is only possible by the commitment and dedication of the teachers in the schools. Teachers are the bedrock of educational development. Teaching and learning in the schools will be enhanced by the level of performance of the teachers.

Teachers are essential in the entire education system of any nation and are important to the revolving of educational wheels. Teachers' roles include translation of educational policies and principles into actions based on practice, during interaction with the students. Consequentially, students' academic achievement in both internal and external examinations has always been attributed to characteristics of teachers (Ibe et al., 2016). Teachers' characteristics are contested term with multiple meanings which is often used to reflect the perspectives and interest of different writers, researchers and policy-makers. For Ogundare (2014), it is about academic ability. For Commevrass (2016), it is about the quality of classroom practice. For those interested in effectiveness, it relates to raising students' achievement (Nyagah & Gathumbi, 2017). Effectiveness of secondary school teachers may be determined by several factors that influence their job performance. Among these factors include teachers' demographic variables.

Teachers' demographic variables describe the characteristics which comprises the

training and the attributes of teachers. In line with the assertion, Ofem et al. (2015) considered teachers' demographic variables to include the training and continuous professional development of teachers which determine students' outcomes. The working environment in which the teacher operates includes learning resources, and other support the teacher receives such as school management/ leadership and teacher remuneration (Berliner, 2015). While there may be debates about the term teachers' demographic variables, there are some areas of agreement about what constitutes teacher demographic variables as is consequent upon the quality of teaching in secondary schools. From the various views of teachers' demographic variables, teachers' demographic variables in this study include these attributes, knowledge competency, characters and behaviours exhibited by teachers in the classroom and during teaching and learning process. The variables to be specifically examined in this study include teachers' qualifications and teaching experience.

Teachers' qualification as a demographic variable of a teacher is one of a number of academic and professional degrees that enables a person to become a registered teacher in primary or secondary school. Such qualifications include, but are not limited to, the Postgraduate Diploma in Education (PGDE), the Professional Diploma in Education (PDE), Bachelor of Education (B.Ed) and Nigeria Certificate in Education (NCE) (Abe & Adu, 2013), Teachers who are academically qualified and those that are

professionally qualified are engaged to carry out instructional process (Ahiazu & Prince Will, 2011).

Academically qualified teachers refer to those who have academic training as a result of enrolment into educational institutions and obtained qualifications such as HND, B.Sc. B.A and M.A. and so on, while professionally qualified teachers are those who got professional training that gave them professional knowledge, skills, techniques, aptitudes as different from the general education (Edu & Kalu, 2012). They hold degrees like B.Ed., B.Sc.Ed, BA.Ed. and M.Ed and so on. George (2014) noted that teachers' qualification is a major determining factor of teacher teaching effectiveness in schools. In same position, Lussa (2011) argued that no one gives what he/she does not possess. Lussa further said that no matter how good a course curriculum is, if there are no well trained, qualified and motivated teachers, the desired goals would not be achieved.

The success or failure of any educational programme rests majorly on the adequate availability of qualified (professional), competent and dedicated teachers. Seweje and Jegede (2015) noted that the ability of a teacher to teach is not derived only from one's academic background but it is based upon outstanding pedagogical skill acquired. Nkwodimah (2013) submitted that the teacher's quality will inevitably be seen in the citizens tomorrow. With the role teacher qualification plays in teaching effectiveness, it is importance to evaluate the qualification

of teachers in Anambra State as compared to the quality of teaching in the State.

Another important characteristic a teacher must possess that will enhance quality teaching is experience in the teaching profession. The importance of experience of teachers in schools has been highlighted by many researchers. The arguments on teaching experience centered on the fact that experience improves teaching skills (Ijaiya, 2014). In investigating possible differences in teaching strategies, Schuler (2014) grouped teachers into three levels of teaching experience (3-6: 7-10 and more than 10 years). His findings revealed that experienced teachers' perception of their teaching objectives was significantly more subject-oriented than was that of first-year teachers. Hence, effective teaching could be measured by the level of a teacher's subject competence which Mullens (2013) regarded as a prime predictor of students' learning. However, teachers' theories about teaching are being guided by their previous experience as learners and as teachers (Waiching, 2014). The importance of experienced teachers in schools has been argued as being necessary for school effectiveness (Zaku, 2013). The effect of experience cannot be undermined when it comes to teaching most especially when such teaching is geared towards guaranteeing quality teaching.

On the other hand, teachers' effectiveness is the ability and the interaction between the physical, intellectual and psychological interest of the students, content matters, ability of the teachers and the evaluative

procedures (Hallinan, 2017). Teachers have the greatest potential to influence children's education. Students learn more when teachers employ systematic teaching procedures. Effective teachers are those who use systematic feedback with students about their performance. Teachers' effectiveness can be defined as on "act of faith". Teacher effectiveness is influenced by the effective teaching. Effective teaching is one of the criteria by which someone judges teachers' effectiveness. According to Ryan (2016) effective teaching should be relative to three major sets of conditions: i) The social or cultural group in which the teacher operates, involves social values which frequently differ from person to person, community to community, culture to culture and time to time; ii) The grade level and subject matter taught; and iii) Intellectual and personal characteristics of the pupils taught.

The secondary school teacher is expected to be professional whose job requires high intelligence, concentration, dedication and commitment. His job involves teaching his student, evaluating them, maintaining discipline among the students and counselling them. The teacher is equally expected to motivate the students and take part in all school extracurricular activities. Unfortunately, it seems there are some teachers who are non-chalant, less interested and less committed to their duties in the past decades. Parents and education stakeholders are not happy about the situation. In Anambra State, government has done some renovations in the schools, provided some facilities, promptly paid salaries and

allowances, trained and re-training some teachers. Despite the efforts of government, parents and other stakeholders to enhance teachers' welfare and teaching effectiveness, the ineffectiveness of teachers in public secondary schools still persists. In order to partially fill this gap therefore, the study examined the teachers' demographic variables as correlates of teachers' effectiveness in public secondary schools in Anambra State, Nigeria.

Purpose of the Study

The main purpose of this study was to determine teachers' demographic variables as correlates of teachers' effectiveness in public secondary schools in Anambra State. Specifically, the study sought to:

1. ascertain the relationship between teachers' qualification and teachers' effectiveness in public secondary schools in Anambra State.
2. find out the relationship between teachers' experience and teachers' effectiveness in public secondary schools in Anambra State.

Research Questions

The following research questions guided the study.

1. What is the relationship between teachers' qualification and teachers' effectiveness in public secondary schools in Anambra State?
2. What is the relationship between teachers' experience and teachers'

effectiveness in public secondary schools in Anambra State?

Hypotheses

The following null hypotheses were tested at .05 level of significance:

1. There is no significant relationship between teachers' qualification and teachers' effectiveness in public secondary schools in Anambra State.
2. There is no significant relationship between teachers' experience and teachers' effectiveness in public secondary schools in Anambra State.

Methods

The study was carried out in public secondary schools in Anambra State. Two research questions guided the study and two null hypotheses were tested at 0.05 level of significance. The study was a correlational research design. The population of the study

consists of 5,147 teachers in 263 public secondary schools in the six Education Zones in Anambra State. The sample of 258 teachers was used for the study. Proportional stratified and simple random sampling techniques were used to draw the sample. The researcher-structured instruments titled "Teachers' Demographic Variables Scale (TDVS) and Teachers' Effectiveness Questionnaire (TEQ)" were used for the study. The instrument was subjected to face validation by three experts. The reliability of the instrument was done using Cronbach Alpha statistical tool and the coefficient was established at 0.87 for TEQ which was considered highly reliable and adequate for the study. Out of 258 copies of the instrument administered, 248(96%) copies were correctly filled and returned. Pearson Product Moment Correlation was used to answer research questions and test the hypotheses at 0.05 level of significance.

Results

Research Question 1: What is the relationship between teachers' qualification and teachers' effectiveness in public secondary schools in Anambra State?

Table 1: Relationship between teachers' qualification and teachers' effectiveness in public secondary schools in Anambra State

		Teachers' Qualification	Teachers' Effectiveness
Teachers' Qualification	Pearson Correlation (r)	1	.611**
	Sig. (2-tailed)		.000
	N	248	248
Teachers' Effectiveness	Pearson Correlation (r)	.611**	1
	Sig. (2-tailed)	.000	
	N	248	248

**Significant at $p < 0.05$; $r^2 = 0.402396$; % = 40.2

The result of Pearson Product-Moment Correlation Coefficient from the Table 4 above showed the relationship between teachers' qualification and teachers' effectiveness in public secondary schools in Anambra State with: $r = 0.611$, $r^2 = 0.402396$, percentage (%) = 40.2 and $N = 248$. This indicated there is a positive coefficient value of 0.611 which indicated that there is a positive relationship between teachers' qualification and teachers' effectiveness in public secondary schools in Anambra State. This means that the higher the qualifications of the teachers, the more effective they become on the job. Hence, the teachers' qualifications accounted for 40.2% of the variance in their job effectiveness. Furthermore, the more qualifications the teacher acquires the more effective that he/she becomes in the job. Nevertheless, if the teacher does not develop academically by acquiring more qualifications, the less effective he/she becomes in the job.

Research Question 2: What is the relationship between teachers' teaching experience and teachers' effectiveness in public secondary schools in Anambra State?

Table 2: Relationship between teachers' teaching experience and teachers' effectiveness in public secondary schools in Anambra State

		Teachers' Experience	Teachers' Effectiveness
Teachers' Experience	Pearson Correlation (r)	1	.764**
	Sig. (2-tailed)		.000
	N	248	248
Teachers' Effectiveness	Pearson Correlation (r)	.764**	1
	Sig. (2-tailed)	.000	
	N	248	248

**Significant at $p < 0.05$; $r^2 = 0.553128$; % = 55.3

The result of Pearson Product-Moment Correlation Coefficient from the Table 2 above showed the relationship between teachers' teaching experience and teachers' effectiveness in public secondary schools in Anambra State with: $r = 0.764$, $r^2 = 0.553128$, percentage (%) = 55.3 and $N = 248$. This indicated there is a positive coefficient value of 0.764 which indicated that there is a positive relationship between teachers' teaching experience and teachers' effectiveness in public secondary schools in Anambra State. This means that the more years served as teacher, the more effective the teacher on the job. Hence, teachers' experience explained 55.3% of the variance in their job effectiveness. This further indicated that the more the teacher continues in the teaching profession as a teacher, the more effective he/she becomes in the job.

Test of Hypotheses

Hypothesis One

H₀₁: There is no significant relationship between teachers' qualification and teachers' effectiveness in public secondary schools in Anambra State.

Table 3: Significant relationship between teachers' qualification and teachers' effectiveness in public secondary schools in Anambra State

		Teachers' Qualification	Teachers' Effectiveness
Teachers' Qualification	Pearson Correlation (r)	1	.611**
	Sig. (2-tailed)		.000
	N	248	248
Teachers' Effectiveness	Pearson Correlation (r)	.611**	1
	Sig. (2-tailed)	.000	
	N	248	248

**Significant at $p < 0.05$; $r^2 = 0.402396$; % = 40.2

The result of Pearson Product-Moment Correlation Coefficient from the Table 3 above showed the significant relationship between teachers' qualification and teachers' effectiveness in public secondary schools in Anambra State with: p-value = 0.000. Since p-value (0.000) is less than 0.05, the study rejected the null hypothesis and accepted the alternative hypothesis that there is a significant relationship between teachers' qualification and teachers' effectiveness in public secondary schools in Anambra State.

Hypothesis Two

H₀₂: There is no significant relationship between teachers' experience and teachers' effectiveness in public secondary schools in Anambra State.

Table 4: Significant relationship between teachers' experience and teachers' effectiveness in public secondary schools in Anambra State

		Teachers' Experience	Teachers' Effectiveness
Teachers' Experience	Pearson Correlation (r)	1	.764**
	Sig. (2-tailed)		.000
	N	248	248
		Pearson Correlation (r)	.764**
			1

Teachers'	Sig. (2-tailed)	.000	
Effectiveness	N	248	248

**Significant at $p < 0.05$; $r^2 = 0.553128$; % = 55.3

The result of Pearson Product-Moment Correlation Coefficient from the Table 4 above showed the significant relationship between teachers' teaching experience and teachers' effectiveness in public secondary schools in Anambra State with: $p\text{-value} = 0.000$. Since $p\text{-value} (0.000)$ is less than 0.05, the study rejected the null hypothesis and accepted the alternative hypothesis that there is a significant relationship between teachers' teaching experience and teachers' effectiveness in public secondary schools in Anambra State.

Discussion of Findings

Findings on the relationship between teachers' qualification and teachers' effectiveness in public secondary schools in Anambra State upheld that is a positive and significant relationship between teachers' qualification and teachers' effectiveness in public secondary schools in Anambra State. The qualifications of teachers from training expose them to rational thinking for proper analysis of situations before taking decisions. Thus, teachers' professional qualification is a symbol of one's intellectual maturity and experience in decision-making for the best course of action in the teaching profession. The finding of the study is in consonance with the findings of Fehintola (2014) that the performance of students taught by teachers with professional qualifications like B.Ed and M.Ed was better than the students taught by teachers with BA/B.Sc qualifications. Okpe (2016) found that professional qualification, experience and gender significantly influenced job performance of teachers. Yusuf and Dada (2016) results revealed that a significant difference existed

in the performance of English language teachers by professional qualification. Basil's result revealed that teachers' qualification has a significant influence on students' academic performance in Biology. Osegi's (2021) findings showed that teachers' qualification was significant to productivity.

Teachers' Experience as Correlates of Their Job Effectiveness in Schools

Findings on the relationship between teachers' teaching experience and teachers' effectiveness in public secondary schools in Anambra State showed that there is a positive and significant relationship between teachers' teaching experience and teachers' effectiveness in public secondary schools in Anambra State. The finding has proved that teachers do better as they gain experience. Such experience gives them extensive repertoires to effectively relate with students, parents and the principals handling the affairs of the schools. The finding of the study is in line with the discovery of Okpe (2016) findings indicated that experience significantly influenced principals' job

performance. Adeyemi (2018) study reported that teachers' teaching experience was significant with students' learning outcomes as measured by their performance in the senior secondary certificate examinations. Schools having more teachers with five years and above teaching experience achieved better results than schools having more teachers with less than five years teaching experience. Basil's (2021) result revealed that teachers' years of teaching experience inextricably has a significant influence on students' academic performance.

Conclusion

The study concluded that teachers' characteristics such as qualification and experience contribute to a high level of teachers' effectiveness which eventually impact positively on educational attainment of students in public secondary schools in Anambra State.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. The Post Primary School Service Commission should employ both experienced and inexperienced teachers since on-the-job experience is most important and positively contribute to teachers' effectiveness in public secondary schools in Anambra State.
2. School authorities should encourage teachers to attain higher professional qualifications since more professional qualifications significantly contribute to teachers' effectiveness in public secondary schools in Anambra State.

REFERENCES

- Abe, T. O., & Adu, E. I. (2013). Influence of qualification and development and assessment of computer programmed instructional package on energy concept upper basic technology in Ekiti State, April, *Journal of Science Technology*, 3(6), 611-618. <https://doi.org/10.1177153412>.
- Adeyemi, T. O. (2018). Teachers' teaching experience and students' learning outcomes in secondary school in Ondo State, Nigeria. *Educational Research and Review*, 3(6), 204-212. <https://doi.org/10.4395.361220421265>.
- Ahiazu, L. U., & Princewill, C. O. (2011). Standardizing the motivational competencies of academically qualified teachers and professional teachers in Nigeria secondary schools. *Proceedings of 2011 International Conference on*

*Teaching, Learning and Change:
International Association for
Teaching and Learning-(IATPL).*

Berliner, D. C. (2015). The near impossibility of testing for teacher quality. *Journal of Teacher Education*, 56, 205-213.

<https://doi.org/10.4102/jote.v56.2051338>.

Basil, J. (2021). Teachers' characteristics and academic performance of Biology students in secondary schools in Calabar municipality of Cross River State.

<http://dx.doi.org/10.2139/ssrn.3796306>

Commeyras, M. (2016). Promoting a culture of reading. *The Comet*, pp. 32.

Edu, A. D., & Kalu, O. N. (2012). Teachers' qualification and job performance in secondary schools in Enugu State. *Journal of Science Teachers Association of Nigeria*, 26(2), 24-51.

<https://doi.org/10.1108/0885862031>

Fehintola, J. O. (2014). Teachers' characteristics as correlates of students' academic performance among secondary school students in Saki-west Local Government Area of Oyo State. *Journal of Educational and Social Research MCSER Publishing, Rome-Italy*, 4(6), 459-467.

<https://doi.org/10.1177/4064523422318756>.

George, A. II. (2014). *Issues in teacher education in England and Wales*. London: Greenwood Press.

Hallinan, M. T. (2017). Teachers' influences on students' attachment to school. *Sociology of Education*, 81(3), 271-283.

<http://dx.doi.org/10.3481/sed.2017.81s3>.

Ibe, E., Nworgu, L. N., & Anyaegbunam, N. J. (2016). Influence of teachers' characteristics on academic achievement of secondary school Biology students. *British Journal of Science*, 13(2), 33-44.

[http://dx.doi.org/10.4911.586734.13\(2\)](http://dx.doi.org/10.4911.586734.13(2)).

Iyaiya, N. Y. (2014). Failing schools and national development: Time for reappraisal of school effectiveness in Nigeria. *Nigeria Journal of Educational Research and Evaluation*, 2(2), 42-49.

<http://dx.doi.org/10.1180/njere.2014.22425911247>.

Lussa, B. S. (2011). Conflict resolution style and experience in management: Moderating effects of gender. *Management Communication Quarterly*, 12(2), 212 – 220. <http://dx.doi.org/10.1080/macq.12.21108364>.

- Mullens, J. E. (2013). The relationship between teacher qualifications and students' learning: A study of standard one classrooms in Belize, Central America. *Unpublished EDD Thesis*, Harvard University USA.
- Nkwodimah, M. (2013). Teacher education for the 21st century. In A. Enoch. (Eds). *Teachers' Education and USE*. Jos: Saniez Publications.
- Nyagah, G. & Gathumbi, A. (2017). Influence of teacher characteristics on the implementation of non-formal basic education curriculum at the non-formal education centers in Nairobi, Mombasa and Kisumu Cities, Kenya. *International Journal of Education and Research*, 5(1), 207-221.
<http://dx.doi.org/10.3107/485735529461105>.
- Ofem, O. M. E., Iyam, M. A., & Bassey, E. U. (2015). Teachers' demographic variables and students' academic achievement in secondary schools home economics In Calabar educational zone of Cross River State. *International Journal of Education Learning and Development*, 3(6), 36-47.
<https://doi.org/10.1182/0262171041052>.
- Ogundare, S. F. (2014). Purposes and problems of recess in Nigerian primary schools. *International Journal of Public Sector Management*, 31(2), 184-206.
<https://doi.org/10.1108/IJPSM-03-2017-0078>.
- Okpe, P. U. (2016). Influence on demographic factors and school climate on principals Job performance in South-East, Nigeria. *International Journal of Education*, 12(9), 56-63.
<http://dx.doi.org/10.1080/ijoe.2011.012648>.
- Osegi, M. N. (2021). Accessing teachers' productivity using demographic characteristics in public secondary schools in Delta State. *International Journal of Education and Social Science Research*, 4(03), 38-50.
<http://dx.doi.org/10.37500/IJESSR.2021.4304>.
- Ryan, D. G. (2016). *Characteristics of teachers*. Delhi, Sterling Pub (P) Ltd.
- Seweje, R. O., & Jegede. S. A. (2015). *Science education and science teaching methods*. Lagos: Atlantic Association.
- Schuler, G. W. (2014). The effect of teaching experience on teachers' perceptions of their teacher preparation programs. *Unpublished EDD Thesis*, Temple University USA.
- Waiching, E. M. (2014). Reflecting on reflections: A case study of

experienced and inexperienced ESL teachers. *System*, 22(1), 93-98.

<http://www.doi.org/10.12816/0040240>.

Yusuf, M. A., & Dada, A. O. (2016). Impact of teachers' qualification and experience on students' performance in Colleges of Education in Kaduna State, Nigeria. *International Journal of Asian Social Sciences*, 12(3), 118-126.

<https://doi.org/10.1187/00131911.2014.1705247>.

Zaku, A. B. D. (2013). The relationship between some school factors and students' performance in Chemistry in the Gongola State of Nigeria. *Unpublished PhD Thesis*. University of Hull, United Kingdom.