Teachers' competence, motivation as correlates of senior secondary school students' academic achievement in economics in Imo State

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Abstract

The study examined teachers' competence, motivation as correlates of senior secondary school students' academic achievement in economics in Imo State. The study adopted a linear correlation design. The population of the study was 94,963 Senior Secondary School Students (SS1-SS3) from 275 public secondary schools in Imo State. A sample of 500 SS2 Economics students was involved in the study. Purposive and random sampling techniques were used. The research instruments for this study are the Teachers' Competence Scale (TCS), Teachers' Motivation Scale (TMS), and Economics Achievement Test (EAT). The reliabilities of scales were established using Cronbach alpha, while that of the achievement test was done with Kuder-Richardson (K-R20) statistics, with internal consistency indices of 0.83, 0.86, and 0.78 for TCS, TMS, and EAT, respectively. The data were analyzed using the Pearson "r" statistic for research questions 1 and 2, while multiple linear regression statistics were used for research question 3. Hypotheses 1 and 2 were tested using t-test significance of correlation and One-way Analysis of Variance (ANOVA) was used to test hypothesis 3 at 5% level of significance. The result shows that there is a highly significant relationship between teachers' competence, motivation, and students' academic achievement in Economics. It was therefore recommended that the government body in charge of recruiting teachers should ensure that competent and motivated teachers are employed in the teaching and learning of Economics.

Keywords: Teachers, competence, motivation, academic achievement and Economics.

Introduction

Economics is a broad subject that cuts across many other fields of study. Ogbebor (2013) views Economics as a subject that deals with the principle and practice of undertaking everyday activities that engender the well-being of the individual, society,

and the nation at large. This implies that Economics is a practical subject that enables an individual to survive within society. Amaechi (2014) views Economics as social science subject that studies the economic aspect of human behaviour to allocate scarce resources efficiently and effectively, to minimize cost. In the same vein, Obafemi, Ovat, Udo, Udah, and Oguagbu (2013) perceive Economics as a discipline that focuses on the behaviour and interactions of economic agents and how economies work. In this study, Economics is seen as a non-vocational social science subject made optional to students, which is concerned with the theoretical, mathematical, and graphical concepts taught in senior secondary school, to expose students to the developmental principles and skills needed for decision making in their everyday life.

According to the Federal Republic of Nigeria (2012), Economics exposes students to basic economic problems of the society and a better understanding of man's economic activities and how to solve them for better living in the society. The major goal of the teaching and learning of Economics, as stipulated in the Economics curriculum, according to the Federal Ministry of Education (2012), is to equip senior secondary school graduands with basic knowledge and skills to appreciate the nature of Economic problems in any society and adequately prepare them for the challenges in the Nigerian Economy. To buttress that, Obafemi, Ovat, Udo, Udah, and Oguagbu (2013:7) outlined some aspects of the importance of Economics to include;

"it helps individuals to make rational economic decisions, it helps to improve the living standards of the people by offering useful economic policies that make the society a better place, it helps in improving the efficiency of an economy, it helps the country to determine what to produce, how to produce and for whom to produce, and it helps to inspire entrepreneurship, innovation and prepare the citizens to successfully adapt to a dynamic market place (p.7)".

In the same vein, World Bank (2007) states that the importance of Economics to any nation is very clear; as it enables both leaders and citizens to understand basic economic concepts, principles as well as to understand, appreciate and seek to improve the economic situation for their social good. However, since the understanding of Economics is a prerequisite for good citizenship, it, therefore, requires that teachers' competence and motivation should not be an oversight in the teaching and learning of Economics for the academic achievement of students.

A teacher, according to Agharuwhe (2013), is someone who teaches guides, directs, counsels manages, and diagnoses the need of the students for the improvement of their learning. Ogubune (2010) conceives a teacher to be a person trained and employed to help to learn in a classroom so that the set educational goals could be achieved. In support of this, Orji (2014) describes a teacher as a person who teaches, usually as a job at a school or similar institution. This means that teachers are specially

trained persons who work in schools to provide education for pupils and students in educational institutions. A teacher is a specialized person in a particular area of education, who helps students to acquire knowledge, competence, skills, aspirations, norms, and values to be an agent of development to society. However, Crespo and Nicol (2006) stress that teachers' competence in subject matter and motivation continue to draw increasing attention from policy makers in recent years all over the world.

According to Akiri and Ugborugbo (2009), a teacher's competence is regarded as a multidimensional construct, which encompasses numerous interconnected elements towards the transformation of knowledge to learners. Meziobi and Meziobi (2012) describe teachers' competence as demonstrable, professionally acquired, specified requisite teaching skills, abilities, and attitudes essential for effective teaching. The authors further stress that the possession of a repertoire of these prerequisite teaching skills and attitudes spans beyond the three domains of learning and, therefore, may not be restricted only to them. Thus, a teacher can be competent in the cognitive, psychomotor, and affective areas of the instructional process. In line with this, Uchefuna (2010) notes that teaching and learning depend on teachers' competence, consequently, a competent teacher could be conceptualized as one who produces desired results in psychomotor, cognitive, and affective domains of education. Teachers' competence involves all aspects of teachers' abilities that could influence the teaching and learning process being geared towards attaining the desirable set objectives of Economics in secondary schools. That includes how well the teacher masters the subject matter, lesson preparation and presentation, punctuality and attendance to class, clear communication efficacy in students' evaluation, and engendering effectiveness concerning the outcome. Teachers of Economics need not just be competent but require motivation for effective teaching and learning of the subject.

Motivation is a set of forces that changes behavior and determines its form, direction, and intensity. Psychologically, teacher motivation, as perceived by Ani (2010), is regarded as a process of organizing a functional behaviour and focusing on such behaviour into a particular goal. According to Gina (2011), teacher motivation is that energizing force that induces or compels and maintains behavior. Arif (2003) notes that teacher motivation is an extremely complex concept and motivating students is a critical task of teaching that will positively influence students' performance in Economics. Afe (2011) stresses that, over the years, teachers have been known to have an important influence on students' academic achievement and they also play a crucial role in educational attainment, because teachers are ultimately responsible for translating educational policies and principles into actions based on practice during interaction with the students. In this study, Economics teachers' motivation is any strategic means or factors used by the teacher to influence students' academic achievement in the teaching and learning of Economics concepts.

Academic achievement is regarded as excellence in all academic disciplines, in class as well as in co-curricular activities. According to Choi and Tang (2009), the academic achievement of a child is the learning outcomes of the child, which includes the knowledge, skills, and ideas acquired and retained through their course of study within and outside the classroom situations. Annie (2006) perceives achievement as students' ability in computation and problem solving, which can normally be measured by a written test. Mehta (2009) conceives academic achievement as a performance by students in both curricular and co-curricular activities.

The assessment of the results released by the West African Examination Council (WAEC) from 2015-2019 revealed that the academic achievement of students in Economics in Imo State is not encouraging. The percentage of credit passes from A1-C6 ranges from 41.79% in 2015, 37.51% in 2016, 39.81% in 2017, 25.95% in 2018 and 42.98% in 2019 (WAEC statistics office Owerri, 2019). Against this background, Ofoegbu (2004) notes that the poor academic performance of students in Nigeria has been linked to poor teachers' competence in terms of accomplishing the teaching task, negative attitude to work, and poor teaching habits, which has resultant effects on poor motivation. It is quite surprising that not much attention has been paid to teacher's competence and motivation in teaching and learning in Nigeria. Hence, a radical appraisal of its influence on students' achievement in Economics is fundamental to this study.

Previous studies conducted by Schacter and Thum (2004) and Adediwura and Tayo (2007) reveal that different elements of teachers' competence, which include knowledge of the subject matter, teaching skills, teacher's qualification, teacher's attitude, teacher's motivation, and teacher's attendance were found to be significant. Arema (2004) found that the competence of the teacher, availability and use of relevant textbooks in Economics, students' interest in the subject, examination malpractice, and low enlightenment about the benefits of studying Economics were found to be significant. A similar study by Alexander (2013) revealed that the knowledge of the subject, teaching skills, teacher's attendance, and teacher's attitude have a significant positive influence on students' academic performance. Contrary to this, Agharuwhe (2013) notes that effective teachers produced better-performing students. Consequently, it was then concluded that teachers' competence plays a major role but is not the only determinant of students' academic performance. Gina (2011) found that motivation is that energizing force that induces or compels and maintains behaviour. Gina also added that a teacher's motivation plays a very significant role in students' choice and performance in any subject. including Economics. In the same line, Arif (2003) revealed that motivation is an extremely complex concept, and motivating students is a critical task of teaching that will positively influence students' performance in Economics. Afe also (2011) indicates that teachers have been known to have an important influence on students' academic performance. They also play a crucial role in educational attainment because teachers are ultimately

responsible for translating educational policies and principles into actions, based on practice during interaction with the students. Ofoegbu (2004) found out that poor academic performance of students in Nigeria has been linked to poor teachers' performance in terms of accomplishing the teaching task, negative attitude to work, and poor teaching habits, which have been attributed to poor motivation. However, the above studies, which were conducted outside Imo State, failed to consider factors associated with teachers' characteristics, students' composition, predominant teaching, and learning method, as well as the population used in the study; it, therefore, becomes imperative to locate this study in Imo State.

The current analysis of Economics students' poor performance in external examinations such as in West African Examination Council (WAEC, 2015-2019), has raised a great concern to the nation. The Chief examiner's report (2019) states that the persistent decrease in the performance of Economics students in senior secondary certificate examination leaves no doubt about the competency and motivation of Economics teachers in schools. However, one may ask "Could the poor performance of the Economics students in external examinations, as stated above, be as a result of teachers' incompetence and poor motivation in the teaching and learning of Economics?" Thus, the problem that necessities this study posed as a question is: what is the correlation between teachers' competence and motivation on senior secondary school students' academic achievement in economics in Imo State?

The general purpose of this study was to examine: the teachers' competence, motivation as correlates of senior secondary school students' academic achievement in economics in Imo State. Specifically, the study sought to establish the relationship:

- 1. between teachers' competence and students' academic achievement in Economics.
- 2. between teachers' motivation and students' academic achievement in Economics, and
- 3. between teachers' competence and motivation and students' academic achievement in Economics.

The following research questions were posed to guide the study:

- 1. What is the relationship between teachers' competence and students' academic achievement in Economics?
- 2. What is the relationship between teachers' motivation and students' academic achievement in Economics?
- 3. What is the relationship among teachers' competence, motivation, and students' academic achievement in Economics?

The following null hypotheses were stated and tested at 0.05 level of significance.

Ho₁: There is no significant relationship between teachers' competence and students' academic achievement in Economics.

Ho2: There is no significant relationship between teachers' motivation and students' academic achievement in Economics.

Ho₃: There is no significant relationship among teachers' competence, motivation, and students' academic achievement in Economics.

Method

The study was conducted using a linear correlation research design. The population of the study is 94,963. This is made up of 94963 Senior Secondary School Students (SS1-SS3) from 275 public secondary schools in Imo State. 500 SS2 Economics students were sampled using purposive and random sampling techniques. The researchers purposively chose SS2 classes from the streams of classes at the SS level. This is because they are not in the examination class like the SS3 class or the SS1 class that is new to senior classes. The above reasons justified the sample size. For data collection, the study made use of two rating scales titled Teachers' Competence Scale (TCS) and Teachers' Motivation Scale (TMS) and an achievement test titled Economics Achievement Test (EAT). The rating scales have 10 items each, which were used to elicit information on teachers' competence and motivation. The scale was prepared in terms of four response options of strongly agree=4points, agree=3points, disagree=2points, and strongly disagree=1point. The achievement test has 40 item questions in 4 multiple choice forms adapted from 4 subtopics in the Economics Syllabus to get information on the academic achievement of the students. Draft copies of the scales were given to three specialists from the field of Educational Measurement and Evaluation and Economics for face validation, but the achievement test was subjected to content, validity using a table of specifications.

Cronbach alpha statistic was used to determine the reliability of TCS and TMS with indices of 0.83 and 0.86, the while Kuder Richardson K-20 statistic was used for EAT with an index of 0.78, which were adjudged to be good enough for the research work. Data collected were analyzed as follows: the research question 1 and 2 were answered with Pearson "r" statistic, while multiple linear regression statistic was used to answer research question 3. This was used to establish the significant relationship between the dependent and independent variables in the study. The bases for the decision for the research questions' conclusion were as follows: 0.00-0.20=very low relationship, 0.21-0.40=low relationship, 0.41-0.60=moderate relationship, 0.61-0.80=high relationship and 0.81-1.00=very high relationship. Hypotheses 1 and 2 were tested using t-test significance of correlation and one-way Analysis of Variance (ANOVA) was used to test hypothesis 3 at a p < 0.05 level of significance.

Results

Table 1:Summary of analyses concerning research question 1 and hypothesis 1

Variables	}		n	Σ	$\overline{\overline{\mathbf{X}}}$	S	R
Teachers' competence		500	16802	33.60	3.268		
Students' academic achievement		500	16838	33.68	3.264	0.63	
∞	df	t cal		t tab	Decision		
0.05	498	18.014	•	1.96	High Relationship: Reject H₀		

It was shown in Table 1 that, with a sample size of 500, the index relationship of 0.63 was obtained. This implies that there is a high relationship between teachers' competence and students' academic achievement in Economics. The table also indicated that using an alpha level of 0.05, the degree of freedom is 498, and the t-cal of 18.014 is significantly greater than the t-tab of 1.96. This led to the rejection of the null hypothesis and the acceptance of the alternative hypothesis, implying that there is a highly significant relationship between teachers' competence and students' academic achievement in Economics.

It was revealed in this study that there is a very significant relationship between teachers' competence and students' academic achievement in Economics. This implies that the competencies of Economics teachers have a strong impact on students' academic performance, thus leading to the inference that the level of relationship is significant. The finding is in line with that of Allexander (2013), which states that the knowledge of the subject, teaching skills, teacher's attendance, and teacher's attitude have a significant positive influence on students' academic performance. The similarities in the findings could be attributed to the nature of the study.

Table 2:Summary of analyses concerning research question 2 and hypothesis 2

Variables	3		n	Σ	$\overline{\mathbf{X}}$	S	R	
Teachers' motivation			500	16826	33.65	3.274		
Students' academic achievement		500	16838	33.68	3.264	0.88		
∞	df	t _{cal}		t _{tab}	Decision			
0.05	498	14.828	•	1.96	Very High Relationship: Reject			
					_	H₀		

It was shown in Table 2 that, with a sample size of 500, the index relationship of 0.63 was obtained. This implies that there is a very high relationship between teachers' motivation and students' academic achievement in Economics. The table also indicated that using an alpha level of 0.05, the degree of freedom is 498, and the t-cal of 41.828 is significantly greater than the t-tab of 1.96. This led to the rejection of the null hypothesis and the acceptance of the alternative hypothesis, implying that there is a highly significant relationship between teachers' motivation and students' academic achievement in Economics.

The study also revealed that there is a highly significant relationship between teachers' motivation and students' academic achievement in Economics. This corroborates the views of Gina (2011), who observed that motivation is that energizing force that induces or compels and maintains behaviour. Gina also added that teachers' motivation plays a very significant role in students' choice and performance in any subject, including Economics. In the same line, Arif (2003) notes that motivation is an extremely complex concept, and motivating students is a critical task of teaching that will positively influence students' performance in Economics. Afe (2011) also agreed that teachers have been known to have an important influence on students' academic performance and they also play a crucial role in educational attainment, because teachers are ultimately

responsible for translating educational policies and principles into actions based on practice during interaction with the students. Ofoegbu (2004) found out that poor academic performance of students in Nigeria has been linked to poor teachers' performance in terms of accomplishing the teaching task, negative attitude to work, and poor teaching habits, which have been attributed to poor motivation.

Table 3:Summary of analyses concerning research question 5 and hypothesis 5

N		R	Decision				
500	0.	.88	Very High Relationship				
ANOVA	Sum of Squares	Degree of Freedom	Mean Squares	F _{calc}	F _{tab}	Decision	
Regression	4149.464	2	2074.732				
Residual	1168.048	497	2.350	882.790	3.00	Reject Ho	
Total	5317.512	499					

Table 3 above shows that the regression index is 0.88, which indicates a very high relationship. This implies that there is a very high relationship among teachers' competence, motivation, and students' academic achievement in Economics. In the test of the hypothesis, it was shown that the F-calculated of 882.790 is greater than the F-tabulated of 3.00. This led to the rejection of the null hypothesis, hence the conclusion that there is a very high significant relationship between teachers' competence, motivation, and students' academic achievement in Economics.

More so, it was revealed in this study that there is a very high significant relationship between teachers' competence, motivation, and students' academic achievement in Economics. This implies that the teachers' competence and motivation have a strong impact on students' academic performance, thus leading to the inference that the level of relationship is significant. This finding was in agreement with Schacter and Thum (2004), and Adediwura and Tayo (2007) who revealed that different elements of teachers' competence, which include knowledge of the subject matter, teaching skills, teachers qualification, teachers attitude, teachers motivation, and teachers attendance were found to be significant. Also, Arema (2004) found that competence of the teacher, availability and use of relevant textbooks in Economics, students' interest in the subject, examination malpractice, and low enlightenment about the benefits of studying Economics were found to be significant.

Conclusion

Based on the findings of the study, it was concluded that teachers' competence, motivation, and senior secondary school students' academic achievement in economics in Imo State are correlated variables, thus implying that the variables associate together.

Recommendations

Based on the finding of this study, it was recommended that;

- 1. The government body in charge of recruiting teachers should ensure that competent and qualified teachers are employed in the teaching and learning of Economics.
- Regular workshops, seminars, and conferences should be organized by government and professional bodies for serving teachers on contemporary issues in Economics. This will expose them to the teaching trends, especially in the area of knowing-content, methodology, instructional, materials, classroom management, and evaluation of Economics instruction for enhanced academic performance.
- Government and school administrators should encourage teachers' motivation and incentives like awards, promotions, and gifts as well as other forms of teachers' motivation to encourage them to work hard towards promoting students' academic performance in Economics.

References

- Adediwura, A. A., & Tayo, B. (2007). Perception of teachers' knowledge attitude and teaching skills as predictor of academic performance in Nigerian secondary schools. *Journal of Educational Research and Review*, 2(7): 165-171.
- Afe, J.O. (2011). Reflections on becoming a teacher and the challenges of teacher education inaugural lecture series 64. Benin city, University of Benin Nigeria.
- Agharuwhe, A.A. (2013). Effect of teacher's effectiveness on students' academic performance in public secondary school. *Journal of Education and social Research*, 3(3), 22-29.
- Akiri, A. A. & Ugborugbo, N. M. (2009). Teachers' Effectiveness and Students' Performance in Public Secondary Schools in Delta State. *Nigerian Journal of Studies in Education*, *3*(2), *107-113*.
- Allexander, M. (2013). Effect of lecturers' competence on students' academic performance among higher Education. *Journal of humanities and social science invention*, 2(2), 2319-7722.
- Amaechi, C.E. (2014). Complex areas in learning economics courses and its clarification measures to improve functional literacy in Imo State University, Owerri. *African Journal of Higher Education Studies and Development (AJHESD)*, 2(3), 96-103.
- Ani, N.P. (2010). An examination of motivational strategy, interest and academic

- performance: A case study of Abu Dhabi District, United Arab Emirates. Unpublished Ph.d thesis, University of Melbourne, Victoria Australia. Retrieved August 19 2019, http://www.findarticles.com.
- Annie, W. (2006). Achievement and Ability test definition of the domain, Educational Measurement. Atlanta: University Press of America.
- Arema B.I (2004) Determinants of students' academic performance in economics in Selected secondary schools in Kaduna state. Unpublished M.Ed thesis, Ahmadu Bello University Zaria.
- Arif, M.H. (2003). *Human Development and Learning*. Lahore, Pakistan: Mejeed Book Publisher.
- Choi, P. L. & Tang, S.F. (2009). Teachers' commitment trends: Case of Hong Kong Teachers 1997 to 2007. *Teaching and Teacher Education Journal*, 25 (5), 762-777.
- Crepo&Nilcon, (2006). Students' Alternative Conception in Mathematics, Cognition and Knowledge. *Hil Rowan and Ball journal 3 (5), 112-117.*
- Federal Ministry of Education (2012). Senior Secondary Education Curriculum. Lagos: NERDC Press.
- Federal Republic of Nigeria (2012). *National policy on education*. Revised Federal ministry of Education 7th Edition. Lagos: NERDC Press.
- Gina, D.A. (2011). *Motivational opportunities and obstacles associated with social responsibility and caring behaviour in school contexts.* New York: Cambridge University Press.
- Mehta, H. N. (2009). Achievement: *Transforming School Cultures*. Boulder Co: West vi Press.
- Meziobi K.A. & Meziobi K.C. (2012). *A handbook of Social Studies Competences*. Owerri: Priscilla Omama Publishers.
- Obafemi, F.N., Ovato. O., Udoh, E., Udah, E. &Oguagbu, R. (2013). *Principles of Economics*. Calabar: Concept Publishers.
- Ofoegbu F. I (2004). Teacher Motivation: a factor for classroom Effectiveness and school Improvement in Nigeria. Gale Group. Retrieved August 15 2016, http://www.findarticles.com.
- Ogbebor, U.C (2013). Differential item functioning Economics question paper of national council in Delta State Nigeria. Unpublished M.Ed. project. University of

Journal of Educational Research on Children, Parents & teachers, Volume 2, Number 1, April 2021, 158-168 ISSN: 2664-3812, https://ercptjournal.org/

- Ibadan. Retrieved August 15 2016, http://www.findarticles.com.
- Ogubune, J.C. (2010). The teaching profession in Nigeria: Curriculum development and Education Technology. Markurdi: Pacific Press.
- Orji F.O. (2014). Impact of teacher motivation on academic performance of students. *Journal of Educational studies 15, (1) 29-35.*
- Schacter, J. & Thum, Y.M. (2004). Paying for High and Low Quality Teaching. *Economics Journal of Education Review, 23: 411-430.*
- Uchefuna, M. C. (2010). "A study of clinical Supervision and Teachers, effectiveness in Umuahia and Abia Educational Zones of Abia State". Unpublished M.Ed. Dissertation. Port Harcourt, University of Port Harcourt, Nigeria.
- West African Examination Council (2016). West African Examination Council. May/June Chief Examiner's report. Owerri.
- World Bank (2007). Economics Education. New York: World Bank.