

Teachers' Motivation as Correlates of Pupils' Academic Performance in Basic Science in Ilorin West Local Government Area of Kwara State

Yahaya OLAREWAJU

Department of Early Childhood and Primary Education, Kwara State University, Malete

Correspondence: childrenmustgrow@gmail.com

+2348032449774

Abstract: *The study examined teachers' motivation as correlates of pupils' academic performance in basic science. One research question and three hypotheses were raised and formulated to guide the study. The population comprised all primary school teachers and pupils 293 teachers' participated in the study with all primary five pupils' of 32 schools were used. The instrument Teachers' Motivation Question (TMQ), (r=.80) achievement Test was obtained to examine the performance in basic science. Eight experts validated the instrument while frequency count, mean and percentage was used to analyze the research question while independent sample t-test and PPMC were used to test the null hypotheses at 0.05 level of significance. Findings revealed that there was no significant relationship between teachers' motivation and pupils' academic performance in Basic Science. Recommendation, the government body in charge of teacher welfares' should ensure that teachers are motivated so that it will promote teaching and learning of basic science*

Keywords: Teachers' Motivation, Pupils Academic Performance and Basic Science

Introduction

In the contemporary nations, there has been an increasing emphasis on industrial, scientific and technological advancements because of the obvious effects of science on today's world and the future. It is observed that scientific method influence all human interaction and has a fundamental role in all countries' national growth and economic and scientific development. Thus, science education has been regarded as being central for knowledge economy and intellectual development especially in emerging societies.

Science is the knowledge obtained from the systematic study of the structure and behaviour of the physical world, especially by observing, measuring and experimenting and the development of theories to describe the results of these activities (Ajayi & Ogbeba, 2017). Ada and Okwu (2009) also view science as a systematic and practical investigation of natural phenomena aimed at discovering more knowledge. It also involves the use of many practical processes of investigation and discovery.

Besides, it is thought that one of the greatest challenges of this century is to motivate teachers/students for maintaining their learning and success in science education. However, as mentioned by the studies of Tella, (2007) and Ochonogor, (2011), students' performance in science classes in primary and secondary school education was not found adequate and couldn't improve in the last decade. In previous researches, various background indices and a set of complex variables have been referred to impacting students' achievement in science subjects in schools at all levels. The students' performance and interest in science subjects have been related to several contextual, emotional and motivational factors, including volume of the subjects, workload, students' task orientation and personal abilities, instructional design and materials for effective teaching, teacher's efficacy and teaching skills. Esther (2014) defined low ability students as those students whose scores fall below 40% in a given standardized test of cognitive ability in which students in this category may not be expected to achievement or recall stored information within a reasonable amount of time, such students can be considered as low ability students.

Motivation is defined as "some kind of internal drive which pushes someone to do things in order to achieve something" (Harmer 2001). Bietenbeck (2011) who stated that "teachers matter" and characteristics of the teacher establish the learning motivation of the science students. 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. The moderating variables which considered as pivotal to the study are gender and school type.

According to Mari (2001), found out that learning outcomes through scientific means are more effective in promoting the acquisition of the skills in females than in their male counterparts. Also the findings of Mari (2001), revealed the existence of superiority in performance of female students over their male counterparts in learning outcomes. Study of school type has demonstrated school type as either government, catholic or independent school. Ajayi (2005) in his own study revealed that school type makes a difference in pre-school cognitive development. However, Keeves (2007) acceded that type of school did not make contribution to pre-school education social and cognitive development.

Statement of the Problem

The problem of pupils' marginal achievement in secondary schools in National Exams has been recurrent for almost a decade now. This has posed a serious challenge to scholars and therefore the need to carry out an investigative study on the ways of improving performance.

This study rested on the premise that in every student there is potential which must be realized by teachers, hence the need for teacher motivation. Discovering what matters to teachers and how best to motivate for sustained and improved performance is a complicated challenge. Extrinsic rewards that have been tried in the past have generally not produced the desired results. Research and experience show that teachers are most likely to value intrinsic rewards such as self-respect, responsibility and a sense of accomplishment.

Lack of motivation may cause teachers to be less successful in teaching. Unreasonable demands of administrators, discouraging team spirit, neglecting rewards, financial problems are the factors related to the motivation. It should not be forgotten that every teacher is not motivated entirely by the same demands and needs. Job satisfaction of each employee is different from the other. Without having intrinsic motivation, lack of success is inevitable. If there are not any other factors motivating teachers, the productivity will decrease dramatically. It is obvious that intrinsic rewards outweigh extrinsic ones in educator motivation and job satisfaction.

Handling the challenging situation in the class and outside makes teachers exhausted, which hinders the success of teachers. Being intrinsically and extrinsically motivated increase job satisfaction. So motivation has an important role in the job of teaching hence the desire of the researcher to investigate teachers' motivation as correlates of pupils' academic performance in basic science in Ilorin West Local Government Area of Kwara state.

Research question

1. What is the level of teachers' motivation in primary school in Ilorin West Local Government Area of Kwara state?

Research Hypotheses

The following research hypotheses will be formulated and tested at 0.05 level of significance

1. There is no significant relationship between teachers' motivation and pupils' academic performance in Basic Science in Ilorin West Local Government Area of Kwara state
2. There is no significant difference in teachers' motivation on academic performance in Ilorin West Local Government Area of Kwara State based on school type.
3. There is no significant difference in teachers' motivation on pupils' academic performance in basic science in Ilorin West Local Government Area of Kwara state based on gender

Methodology

The research adopted correlational survey design, as it was examined the teachers' motivation as correlates of pupils' academic performance in Basic Science. The population for this study are all primary school teachers and pupils in Ilorin West LGA of Kwara State, there were fifty nine (59) public primary schools and two hundred and forty three (243) private primary schools in Ilorin West Local Government area of Kwara State and 5,871 teachers in both private and public primary schools (annual school census report, Kwara State ministry of education and human capital development 2020/2021).

Simple random sampling techniques was used to select 8 public Primary schools out of sixty 63 and 24 private primary schools out of 261 and 293 teachers were randomly selected. Primary five pupils results were used (Pro Forma). The researcher developed a questionnaire items consisted of series of items that were answered by the target respondents who are teachers of primary school. The questionnaire is four Likert scale, where respondents specify their teachers' motivation, this contains four responses options: Strongly agree, Agree, disagree, Strongly disagree. The questionnaire comprised two sections: section A contains the demographic data of the respondents while section B contains items to assess Teachers' Motivation Question (TMQ). The items listed in the questionnaire was 10 questions that was drafted based on teachers' motivation and Achievement Test was obtained from the selected schools to examine the performance in basic science.

The instrument was given to some experts in the department (lecturer) to help make necessary corrections while test re-test method was used to test for the reliability of the instrument. The instrument was administered and re-administered within the interval of two weeks to the same set of respondents. Pearson Product Moment Correlation of Co-efficiency (PPMC) was used to obtain reliability index which was ($r=0.80$). To test for the reliability the researcher selected a school that was not participating in this study. The instrument was administered to the primary schools teachers in the sampled schools personally by the researcher and trained research assistants. The filled questionnaire was collected back and the achievement test was obtained from selected schools to examine the

performance in Basic science. The data collected were analyzed using descriptive statistics of frequency counts, percentage and mean for demographic data and research question while inferential statistics of (PPMC) was used to answer hypothesis one and t-test was used to test the hypotheses two and three at 0.05 level of significance.

Result

Research question one: What is the level of teachers' motivation in primary school in Ilorin West Local Government Area of kwara state?

Table 1: table showing the level of teachers' motivation in primary school

S/N	ITEMS	SA	A	D	SD	MEAN
1	Salary Payment Comes in Regularly		100(34.1)	154(52.6)	39(13.3)	2.21
2	Arrears payment facilitates the teachers' activeness	42(14.3)	202(68.9)	43(14.7)	6(2.0)	2.96
3	Being the teachers always motivate me		41(14.0)	74(25.3)	178(60.8)	1.53
4	Frequent professional training		91(31.1)	172(58.7)	30(10.2)	2.21
5	The government used to pay for seminal allowance		69(23.5)	125(42.7)	99(33.8)	1.90
6	The work shop training is enticing that we do not want to miss it	2(0.7)	86(29.4)	172(58.7)	33(11.3)	2.19
7	There is motivating retirement package	6(2.0)	217(74.1)	68(23.2)	2(0.7)	2.77
8	The arrears are often paid		95(32.4)	130(44.4)	68(23.2)	2.09
9	Salaries are used to pay before end of the month		67(22.9)	189(64.5)	37(12.6)	2.10
10	Training and training allowances are meant for everybody		43(14.7)	151(51.5)	99(33.8)	1.81
Weighted Average						2.17

Decision: Low: 0.00 – 2.49

High: 2.50 – 4.00

Table 3 showed the level of teachers' motivation in primary school in Ilorin West Local Government Area of kwara state. The detailed analysis is as follows: Salary Payment Comes in Regularly ($X=2.21$), Arrears payment facilitates the teachers' activeness ($X=2.96$), Being the teachers always motivate me ($X=1.53$), Frequent professional training ($X=2.21$), The government used to pay for seminal allowance ($X=1.90$), The work shop training is enticing that we do not want to miss it ($X=2.19$), There is motivating retirement package ($X=2.77$), The arrears are often paid ($X=2.09$), Salaries are used to pay before end of the month ($X=2.10$), Training and training allowances are meant for everybody ($X=1.81$). The weighted average is 2.17 which is a numeric indicator that the level of teachers' motivation in primary school in Ilorin West Local Government Area of kwara state was low.

Research hypothesis One: There is no significant relationship between teachers' motivation and pupils' academic performance in Basic Science

Table 2: Summary of PPMC Showing the Relationship between teachers' motivation and pupils' academic performance in Basic Science

Variable	n	Mean	Std.d	r	df	Sig.	Remark
Teachers' Motivation	293	21.78	1.453	.013	291	.823	Not Significant
Academic Performance		17.69	11.691				

Table 2 there is no significant relationship between teacher teachers' motivation and pupils' academic performance in Basic Science. It was revealed that the mean and standard deviation of teachers' motivation were 21.78 and 1.45 respectively, while the mean and standard deviation of academic performance were 17.69 and 11.691 respectively. The calculated value of real was .013 and degree of freedom was 291, the observed P-value ($p > 0.05$). Therefore, the null hypothesis that states that there is no significant relationship between teacher motivation and pupils' academic performance in Basic Science was not rejected. This implies that teachers' motivation does not determine pupils' academic performance in Basic Science.

Research Hypothesis Two: There is no significant difference in teachers' motivation on pupils' academic performance in basic science based on school type.

Table 3: summary of t-test analysis showing the difference in teachers' motivation on pupils' academic performance in basic science based on school type.

School Type	n	Mean	Std. Deviation	t	df	Sig	Remark
Public	107	19.99	7.418	1.593	291	.112	Not Significant
Private	186	18.63	6.773				

Table 3 shows the different in teachers' motivation on pupils' academic performance in basic science based on school type. ($t = 1.593$, $df = 291$, $p > 0,05$). The hypothesis is therefore not rejected in the light of the result since the significant level is greater than 0.05. This implies that school type had no significant difference in teachers' motivation on pupils' academic performance in basic science

Research Hypothesis Three: There is no significant difference in teachers' motivation on pupils' pupils' academic performance in basic science based on gender

Table 4: summary of t-test analysis showing the difference in teachers' motivation on pupils' academic performance in basic science based on gender

Gender	n	Mean	Std.	t	df	Sig	Remark
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Deviation							
Male	139	19.42	6.62	.664	291	.507	Not Significant
Female	154	18.87	7.39				

Table 4 shows the difference in teachers’ motivation on pupils’ academic performance in basic science on gender ($t = .664$, $df = 291$, $p > 0,05$). The hypothesis is therefore not rejected in the light of the result since the significant level is greater than 0.05. This implies that there is no significant difference in teachers’ motivation on pupils’ academic performance in basic science in Ilorin West Local Government Area of kwara state based on gender

Summary of Findings

1. The level of teachers’ motivation in primary school in Ilorin West Local Government Area of kwara state was low
2. There was no significant relationship between teachers’ motivation and pupils’ academic performance in Basic Science
3. There was no significant difference in teachers’ motivation on pupils’ academic performance in basic science based on school type
4. There was no significant difference in teachers’ motivation on pupils’ academic performance in basic science based on gender

Discussion

The findings of the study revealed that the level of teachers’ motivation in primary school in Ilorin West Local Government Area of kwara state was low. This is an indication that both the private and public primary school teachers in Ilorin West Local Government Area of Kwara state are not motivated, the study was not in agreement with the study of Christian (2021) his study revealed that there is a highly significant relationship between teachers’ motivation and students’ academic achievement in Economics.

Finding of the study also revealed that there is no significant relationship between teachers’ motivation and pupils’ academic performance in Basic Science in Ilorin West Local Government Area of kwara state. The study was not in line with the viewed 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) noted 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. The findings also revealed that gender and school type had no significant difference in teachers’ motivation on pupils academic performance in basic science.

Conclusion

Based on the findings of the study, it can be stated that the level of teachers’ motivation in Ilorin West Local Government Area of Kwara State was low. More so, there was no significant relationship between teachers’ motivation on pupils’ academic performance. The findings of the study revealed that gender, school type have no significant difference in the teachers’ motivation on pupils’ academic performance in Basic science.

Recommendation

Based on the finding of this study, it was recommended that; the government body in charge of teacher welfares’ should ensure that teachers are motivated so that it will promote teaching and learning of basic science., rregular workshops, seminars, and conferences should be organized by government and professional bodies for serving teachers and 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 basic science.

References

- Ajayi A. (2005) The Influence of School Type and Location on Resources Availability and pupils Learning outcome in Primary school in Ekiti State, Nigerian. *Educational Thoughts*. 5(1): 170-176.
- Ani, N.P. (2010). An examination of motivational strategy, interest and academic performance: A case study of Abu Dhabi District, United Arab Emirates. *Journal of Educational Research on Children, Parents & teachers*, Volume 2, Number 1, April 2021, 158-168 ISSN: 2664-3812, <https://ercptjournal.org/>
- Adu. J. O. (2002). *Trends in students' achievement in Senior School Certificate Examination in Physics in Ondo State*. Unpublished B.Sc.(Ed) Research Project: Department of Curriculum Studies, Faculty of Education, University of Ado-Ekiti, Ekiti State, Nigeria.
- Adu, E. T. (2005). Relationship between Motivation and Job Performance of Teachers. *Journal of Mathematics Education (JOMAED)*, College of Education, Ikere – Ekiti, 1(1), 144-150. Publisher: Sof-Way (Nig) Ltd, Adebayo, Ado – Ekiti, Nigeria.
- Arif, M.H. (2003). *Human Development and Learning*. Lahore, Pakistan: Mejeed Book Publisher.
- Gina, D.A. (2011). *Motivational opportunities and obstacles associated with social responsibility and caring behaviour in school contexts*. New York: Cambridge University Press.
- Ajayi, V.O., & Ogbaba, J. (2017). Effect of gender on senior secondary chemistry students' achievement in stoichiometry using hands-on activities. *American Journal of Educational Research*, 5(8), 839-842.
- Esther, E. (2014), Influence of Cognitive Ability on Junior Secondary Two Students'. *Journal of Research in Science Teaching* 36 (3). 387-403
- Ofoegbu, F. I. (2004). Teacher Motivation: a factor for classroom effectiveness and school Improvement in Nigeria. *College Student Journal*. Find Articles. <http://dx.doi.org/10138/6073200>
- Christian, A. N.(2015) Teachers' competence, motivation as correlates of senior secondary school students' academic achievement in economics in Imo State, *Journal of Educational Research on Children, Department of Social Science Education University of Nigeria, Nsukka, Nigeria*. Parents & teachers, Volume 2, Number 1, April 2021, 158-168
- Bietenbeck, J. C. (2011). *Teaching practices and student achievement: evidence from TIMSS* (Unpublished Master Thesis). Madrid: Economics and Finance at the Centro de Estudios Monetarios Financieros.
- Harris, D. N., & Sass, T. R. (2008). *Teacher Training, Teacher Quality and Student Achievement*. Washington: Center for the Analysis of Longitudinal Data in Education Research.
- Henson, R. K. (2001). The effects of participation in teacher research on teacher efficacy. *Teaching and Teacher Education*, 17, 819–836. [https://doi.org/10.1016/S0742-051X\(01\)00033-6](https://doi.org/10.1016/S0742-051X(01)00033-6)
- Yager, R., & DeVreese, P. (2003). *Increasing the relevance of science education*. Paper presented at The NARST 2003 Annual International Conference. Philadelphia, USA.
- Ochonogor, C. E. (2011). Performance Analysis of Science Education Undergraduates: A Case Study of Biology Education Students. *US-China Education Review*, 5, 682-690.
- Odogwu, H. N. (1994). Primary Secondary Teachers and the Teaching of time Concept in Schools. *Education Today*, 7(2), 1-19.
- Tella, A. (2007). The Impact of Motivation on Student's Academic Achievement and Learning Outcomes in Mathematics among Secondary School Students in Nigeria. *Eurasia Journal of Mathematics, Science & Technology Education*, 3(2), 149-156. <https://doi.org/10.12973/ejmste/75390>