

Motivation of Teachers as It Affects Teaching of Mathematics in Government Secondary Schools in Federal Capital Territory Abuja

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Abstract

Towards achieving scientific and technological advancement, we need nothing but good performance in mathematics at all levels of education. The negative performance of students towards an educational aims and objectives could be associated to the low motivation of teachers most especially in the area of mathematics. In order to achieve this, this study investigates motivation of teachers as it affects teaching of mathematics in government secondary schools in F.C.T Abuja. This study adopted both descriptive research design, the research design in this study used an ex post factor research design. The study population comprised of mathematics teachers in government schools in F.C.T Abuja. The study used a self-administered questionnaire to collect data from 100 mathematics teachers who were selected by the use of simple random sampling while the selected schools were chosen through purposive sampling. The study results revealed that majority of the teachers (68.0%) under study are not satisfied with their condition of service. Three quarter of teachers (81.0%) under study are not satisfied with the incentives attached to their salaries while majority of the respondents (65.0%) are frown at irregular promotion of teachers. It was observed that the condition of service of teachers, teachers' incentives, and teachers' promotion of in-service training have a great effect on the students' performance in mathematics.

Keywords: Motivation; Teachers; Teaching; Mathematics.

Introduction

No nation can develop without teaching profession because every other profession, in one way or the other, will pass through teaching process before they can be certified as professional in their various fields. Teaching profession is like a yolk that is being surrounded by other profession. In the light of this, this study sees teaching as an engine room of other profession. Because of this, motivation of teachers cannot be overlooked most especially mathematics teachers.

In Nigeria, teachers' has not been given adequate priority as stipulated in the national policy of education (2004) revised (Imo, 2013). Imo (2013) cited Etuk (2002) said that teachers are expected to earn both intrinsic and extrinsic reward from work. It is believed that if teachers' pay, working conditions and fringe benefits given to teachers are judged to be good by the teachers, they will put in more effort at work.

Money (1999) as cited by Imo (2013) highlighted that success or failure of any educational system depends mainly on the teachers. This is where effective motivation of teachers' comes to play. It is a well-known fact that a well-motivated teacher, who is provided with working incentives, good working conditions and adequate remuneration is bound to be dedicated to his/ her teaching so as to bring about the needed learning on the part of students.

Adeyemo (2013) affirmed that mathematics is a compulsory subject up to secondary school level. During the last couple of years, performance in Mathematics in National examination has dropped significantly and this has been a major concern for the society. The West Africa Examination Council has continued to raise concerns over the poor performance in Senior Secondary Certificate Examination. Many teachers have left teaching in public schools for greener pastures in better paying private schools as a result of lack of motivation and incentives needed. Students in most public schools are disadvantaged in that the classes are overcrowded and they do not have adequate learning facilities. In some instances, they lack adequate textbooks and laboratory equipments. As a result, the students may lose hope in performing well in academic work. This is in sharp contrast to private schools where the numbers of students are few as there are adequate facilities and the teachers are willing to go an extra mile to ensure that the students perform well in examination but the willingness to go an extra mile to ensure good students performance may be frustrated when there is motivation and encouragement to the side of the teachers. Although, it is believed that the reward for the teachers is in heaven, but there is no doubt about the fact that if the limited or no motivation for the teachers in terms of incentives and innovation may drastically reduce their morale which may in turn have a negative impact on student performance in mathematics. The few teachers on the government payroll are poorly remunerated as a result most of them take up part time employment or private business enterprise in order to make ends means. This

greatly reduces their commitment to the teaching of Mathematics (which demands for sacrifice). However, lack of motivations for the teachers may influence their dedication to their work. Poor performance of student in mathematics may also be as a result of teachers not being dedicated to their duties which may in turn have effects on student academic goal setting which apace affect individual who has set lower goals for themselves.

Usman (2015) asserts that every educational system at every level depends heavily on teachers for the execution of its programmes.

In this regard, Obadara (2005) viewed teachers to be highly essential for a successful operation of the educational system and as a key to the educational development. Without teachers with relevant behavioural traits, educational facilities cannot be used to facilitate academic performance of students. Undoubtedly the success and quality of any educational system depend on the quality of teachers input into the system.

In this study, teaching of mathematics at all level of education should be given adequate attention so as to yield positive result on the part of the students. Most especially secondary school level where students need mathematics at credit level irrespective of the course they intend to study in tertiary institutions. In the light of this, motivation of mathematics teachers should be taken serious by government of Nigeria so as to enhance their productivities in teaching.

Statement of the Problem

Nigerian educational system is suffering setback because of poor funding in educational sector. This resulted to teachers' low levels of commitment to their work because of unsatisfactory reward in terms of salary, incentive for mathematics teachers in rural areas and other benefits. In the light of this, Adeyemo (2013) submits that one of the important factors in realizing educational aims and objectives in mathematics as a subject is the role of the teachers' motivation within the educational set up. The performance of the students towards achieving educational goals is said to be very important in most society today. The negative performance of students towards an educational aims and objectives could be associated to the low motivation of teachers most especially in the area of mathematics. It is generally believed that children from high and middle socio-economic status parent are better exposed to a learning environment at home because of provision and availability for extra learning facilities and attended a private school while children from a very low socio-economic status family will attend a public school and may not have any opportunity to expose to a better learning environment where teachers are highly motivated. Teachers have the biggest impact on the success and flaws of students' academic performance because their teaching motivations are instrumental in helping them learn and one approach is likely to produce different results from another.

Purpose of the Study

The main purpose of this study is to look into motivation of teachers as it affects teaching of mathematics in government secondary schools in F.C.T Abuja and for government to find lasting solution to the problems. This will also boost our teachers' morale towards their job.

Significance of Study

This study will help government to take motivation of teachers as a serious priority as this will gear the teachers up to put more effort on their performance. It will also help private schools owner to give their staff what they deserve in terms of salary, incentive and other benefits so that teachers too will reciprocate the kind gesture by putting in their best for the students to achieve their aims.

Research Question

This study seeks to find solution to the following questions:

1. Does the condition of service of teachers have effect on academic performance of the students in mathematics?
2. What effect has the teachers' incentives has on students' academic performance in mathematics?
3. What is time to time teachers' promotion has to do with students' performance in mathematics?

Research Hypotheses

1. There is no significance relationship between the condition of service of teachers and students academic performance in mathematics.
2. There is no significance effect on teachers' incentives and academic performance of students in mathematics.
3. There is no significance effect on time to time teachers' promotion and academic performance in mathematics.

Methodology

Research design adopted in this study is descriptive survey design using ex-post facto type. It was chosen because the researcher does not have control of the independent variables, their manifestation have already occurred or because it involves empirical research in the data required for the study without actually manipulating the sample to test the research question already. Survey design is therefore, taking a sample of population being studied or put under investigation, that is, selection of a group from a larger group of population for the purpose of examination with a view of making generalization about the population as a whole and this should be representative of a population.

Population and Sample size

The population of this study comprises of all secondary school mathematics teachers in F.C.T Abuja estimated about 876. However, twenty (20) secondary schools were selected randomly from the six (6) Area Councils of F.C.T Abuja. One hundred (100) teachers were selected from these schools using simple random sampling.

Method of data collection

Data were collected from teachers through questionnaires given to them for administration. And this was made possible with the help of the schools management.

Method of data analysis

The researcher employed descriptive statistics like frequency and percentage distributions to summarize demographic information of the respondents and respondents' response on teachers' motivation while Analysis of Variance (ANOVA) was used for inferential statistics.

Finding and Discussion of Teachers' Motivation as it affects Teaching of Mathematics

Table 1: Frequency Distribution of Respondents by Sex

Sex	Frequency	Percentage (%)
Male Teachers	69	69.0
Female Teachers	31	31.0
Total	100	100.0

Table 1 above shows that 69% of the respondents were male, while 31% of them were their female counterparts.

Table 2: Frequency Distribution of Respondents by Age

Age	Frequency	Percentage (%)
30-39	52	52.0
40-49	45	45.0
50 and above	3	3.0
Total	100	100.0

Table 2 above shows that 52% of the respondents fall within the age of 30 and 39 years, 45% respondents fall within 40 and 49 years of age and only 3% respondents were above 50 years of age.

Table 3: Percentage Distribution of Respondents on Teachers' Motivation

Variables	Frequency	Percentage
Condition of Service		
Agree	32	32.0
Disagree	68	68.0
Total	100	100.0
Incentives		
Agree	19	19.0
Disagree	81	81.0
Total	100	100.0
Timely Teachers' Promotion		
Agree	35	35.0
Disagree	65	65.0
Total	100	100.0

Table 3 above reveals that 68% of the respondents were not satisfied with their condition of service in terms of salary payment, time of payment, system at which the salaries were paid and host of others. This shows that teachers are not satisfy with their condition of service.

The table also reveals that majority of the respondents (81%) disagreed on the allowances attached to their salaries, that is they were not satisfied with other benefits payment attached to their salaries.

Lastly, the table reveals that majority of the respondents (65%) were not satisfied with the way their promotion is being conducted simply because it was not conducted regularly and those that were promoted are not effective from the official date written on their promotion letters.

HYPOTHESIS I: There is no significance relationship between the condition of service of teachers and students academic performance in mathematics.

TABLE 4: ANOVA showing the relationship between the conditions of service of teachers and students academic performance in mathematics.

	Sum of Squares	Df	Mean Square	F-statistics	Sig.
Between Groups	210.885	1	210.885	11.291	0.002
Within Groups	2035.253	98	18.678		
Total	2246.138	99			

*sig-value < 0.005

source: field work 2016

From table 4 above, F-statistics is 11.291 and significant value is 0.002. Since F-statistics (11.291) is greater than significant value (0.002), therefore the null hypothesis is rejected and accepts the alternate hypothesis which stated that there is significance relationship between the conditions of service of teachers and students academic performance in mathematics.

HYPOTHESIS II: There is no significance effect on teachers' incentives and academic performance of students in mathematics.

TABLE 5: ANOVA showing the effect of teachers' incentive on academic performance of students in mathematics.

	Sum of Squares	Df	Mean Square	F-statistics	Sig.
Between Groups	223.249	1	223.249	11.909	0.001
Within Groups	2025.100	98	18.746		
Total	2248.349	99			

*sig. value < 0.005

source: field work 2016

The table 5 above revealed that F-statistics is 11.909 which are greater than significant value of 0.001. Therefore, null hypothesis is rejected and alternate hypothesis is accepted which stated that there is significance effect on teachers' incentives and academic performance of students in mathematics.

HYPOTHESIS III: There is no significance effect on time to time teachers' promotion and academic performance of students in mathematics.

TABLE 6: ANOVA showing the effect of teachers' time to time promotion on academic performance of students in mathematics.

	Sum of Squares	Df	Mean Square	F-statistics	Sig.
Between Groups	135.607	1	135.607	6.603	0.012
Within Groups	2011.542	98	20.536		
Total	2147.149	99			

*sig. value < 0.005

source: field work 2016

From table 6 above, F-statistics (6.603) is greater than significant value (0.012). Therefore null hypothesis is rejected and alternate hypothesis is accepted which stated that there is significance effect on time to time teachers' promotion and academic performance of students in mathematics.

DISCUSSION OF FINDINGS

The findings revealed that for effective teaching of mathematics in secondary schools, teachers have to be motivated because motivation brings about effective teaching.

The findings also revealed that regular promotion of teachers enhance their performance in teaching as promotion increases responsibilities and enhance status.

Lastly, teachers' incentives also have effect on students' academic performance in mathematics according to the findings. The purpose of given incentives to workers is to among other things, increase the economic security of employees, motivate them to improve productivity and cushion the effect of hardship. There are various ways of rewarding employees other than their salary, in the sense that different motivating elements in the likes of promotion and bonuses and suitable payment compensation have significant connection with higher performance.

RECOMMENDATIONS

Based on the outcome of the findings, the following recommendations will go a long way in improving mathematics teachers' performance in the secondary schools in FCT Abuja and Nigeria in general.

Salary of teachers should be paid promptly to enable them concentrate on their job for effective delivery. Government and school management should ensure regular promotion of teachers promptly.

Government and school management should motivate teachers by surprise packages such as soft loans, free medical care, free accommodation etc which will spur them to enhance their performance.

Regular staff development is an energizer for effective job performance. Government and school management staff should ensure regular training and re-training of teachers through in-service training, seminars, conferences and workshops towards enhancing job performance.

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