

EFFECT OF TEACHERS' MOTIVATION AS CORRELATES OF STUDENTS' MATHEMATICS ACHIEVEMENT IN PUBLIC SECONDARY SCHOOLS IN KAWALI EDUCATION ZONE, FCT-ABUJA, NIGERIA**SULE, Samuel Sardauna & Ibrahim Usman Borko**

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ABSTRACT

Teachers' motivation has become one of the significant factors or phenomenon which must be managed properly because of the role they (teachers) play in realizing educational objectives specifically in mathematics as a compulsory subject within the educational system. The poor achievement of student towards an educational aims and objectives could be ascribed to lack of motivation of teachers specifically in mathematics. The main purpose of this study was to investigate the effect of teachers' motivation as correlates of students' mathematics achievement. The research designs used in the study was descriptive research design. The target population of the study comprised 100 teachers in three public schools in Kwali Education Zone, FCT-Abuja, Nigeria. The three schools used were selected by using purposive sampling technique. The sample size of the study consisted of 45 teachers randomly selected from the target population. A self-constructed questionnaire was the instrument for data collection. The compressive analysis was carried out on the data sourced via the frequency and simple percentages for the analysis. The results of the study revealed that; teachers' condition of service, financial incentive (Fringe benefit payment) and teachers' improper use of motivational techniques have a direct effect on the students' mathematics achievement. The study recommended among others that; Government at all levels should provide good condition for learning to student and should look into the teachers' condition of service and other benefits to be accrued. This will go a long way to increase the standard of living of teachers; make the job lucrative and professional which in turn enhances students' achievement in mathematics generally.

KEYWORDS: Teachers, Motivation, Achievement, Students, Effect**INTRODUCTION**

The teaching profession previously was accorded with respect, honour and dignity. This enviable profession was a sort of motivation to many teachers. Also not afford life career and permanent membership but also renders services to the public. It has code of ethics; the ethics for teachers is contained in the handbook of the Nigeria union of teachers. They were revealed and given pride or place in the study. But recently, the Government and all its organs neglect teachers and the educational sector, while motivation can be brought about by adequate remuneration, fringe benefits and recognition .They can also made to occupy high social status in the society.

Moreover, inspire of the facts that this motivation was not really there, teachers still did their work conscientiously producing desired result. There is no doubt before 1980 teachers started to recognize their own worth and demand for their right when these was not forth coming their attitude to their work began to change and this was the beginning of industrial actions by teacher's nationwide.

From 1980 till date, the country had witnessed countless number of strikes and counters strikes as the many other establishments, strikes is a common action embarked upon by workers over the years. There have been wide spread concern on what teachers can do effectively and how this condition of services could be achieved, the resultant effect was a further determination of students performance in Mathematics. This has been the major concern of the researcher who has decided to find out.

According to Nwanchukwu (1994), it is a fact that from both the layman and expert point of view the level of performance in a way organization are remunerated and other monetary incentives, there is no other saying that the primary motive of investing is to meet the organization goals therefore, there are certain factors which need to be considered in order to attain the above is the realization of objectives. However, it is crucial to note that motivation is very important if the desired level of students' performance in mathematics is to be attained. So the employers should be aware that old methods of persuading society to produce the desired result. The issue of teacher's motivation and quality assurance has become a matter of debate and concern in educational systems and standards. In most developing countries of the world including Nigeria, there has been a growing awareness about teachers' motivation which is a key to quality assurance, quality outcome/delivery and high standards in the educational system. It is acknowledged that any nation that is aspiring to maintain high and quality standards or achieve quality assurance in its educational system must take teachers and their motivational needs with utmost high level of seriousness. Teachers are important instrument in education. They are also the pivot on which the educational process hang. Teachers play a major role in the whims and caprices of the educational system. They can influence the teacher-learning outcomes either positively or negatively because they determine the quality of instructional delivery and also influence quality education when it comes to implementation of the curriculum and educational policies. They are to be considered when addressing issues such as: quality assurance, quality delivery, (teaching) quality context and quality learning outcomes (Onucha, 2002). However, they are the custodians of the educational and school system. Since teaching can be regarded as a systematic, rational and organized process of transmitting knowledge, skills, attitudes, values and what is worthwhile (education) in accordance with certain professional principles; there is need for the services of efficient teachers (whose knowledge is bonded with innovations) in order to achieve the educational objectives. Without teachers in the school system, there will definitely be no learning. Teaching makes learning take place and the teacher determines the quality of learning/instructions that will be given to learners. This is the more reason why they should be motivated properly for effectiveness and efficiency in the educational and school system. An understanding of what motivates individual is necessary to reveal and potential released.

According to Cobb (2008), the learning environment and teachers` motivation upon knowledge development relatively need attention in the field of mathematics teaching and learning. What happens in the classroom between psychological implication of teachers concerning their motivation and the student ability to study well has an effect on students' opportunity to learn. The activities in the classroom, the repeated actions in which students and teachers engage as they learn are important because they constitute the knowledge that is produced. Availability of teaching/learning resources and teachers` motivation enhances the effectiveness of schools as these are basic things that can bring about good academic performance in the students. The educational effort that will be helpful in developing human resources needed is not given much attention. In particular, low quality education in mathematics is an urgent issue to be addressed. Maicibi (2003) opined that all institutions or organization are made up of human beings (workers) and other non-human resources. He further states that when the right quantity and quality of human resources is brought together, it can manipulate other resources towards realizing institutional goals and objectives. Therefore, every institution should struggle to attract and retain the best of human resource. The consequence of these opinions is that well trained and motivated teachers in mathematics if well deployed to the secondary schools will bring about well grounded students who will perform academically well in mathematics. Most teachers are trained and have clear goals to guide their teaching, but good motivations for the teachers and teaching/learning materials seem to be inadequate. For this reason, there has been a public outcry about poor achievement by students in Mathematics at secondary school level.

To this end, this study is designed to assist measure and explain the effect of teachers' motivation as correlates of students' achievement in mathematics in some selected secondary schools in Kwali Education Zone, Nigeria. Teachers therefore need to be lightly motivated for successful take off of this performance, which will in turn enhance the students` mathematics achievement.

PURPOSE OF THE STUDY

The main purpose of this study is to investigate the effect of teachers' motivation as correlates of students` mathematics achievement in public secondary schools in Kwali Education Zone, Fct- Abuja. Specifically, the study is set out to:

1. Investigate the effect the teachers' condition of service on students' mathematics achievement.
2. Investigate the effect of teachers` financial incentive (fringe benefit payment) on students' mathematics achievement.
3. Investigate the effect of teachers` proper use of motivational techniques on students` mathematics achievement.

RESEARCH QUESTIONS

This study is based on the following questions derived from the purpose of the study which are meant to serve as a guide to the study:

1. Does the teachers' condition of service affect students' mathematics achievement?
2. Does teachers` financial incentive (fringe benefit payment) have effect on students' mathematics achievement?
3. Does the teachers` proper use of motivational techniques affect students` mathematics achievement?

SIGNIFICANCE OF THE STUDY

This study is significant in the following dimensions:

1. It will enable those concerned to know how to develop teaching profession in Nigeria and the world at large and how to secure greater satisfaction in them.
2. It will help both the public and private schools management towards understanding the impact of teachers' motivation on students' achievement specifically in mathematics.
3. It will serve as a way of clarifying issues as to whether teachers' motivation has any impact on students' achievement in mathematics.
4. It will help the Government at all level to know the weaknesses of not motivating teachers and also try to look for proper solutions to the matter.
5. Finally, it will serve as a stock of reference on how teachers can engage in productive means to ensure significant achievement.

MATERIALS AND METHODS:

RESEARCH DESIGN

This study adopted descriptive and ex- post factor research designs. This is a field survey type because it assists in evaluating the effect of teachers' motivation as correlates of students` mathematics achievement.

POPULATION OF THE STUDY

The target population of this study comprised all the teachers in three Public Secondary Schools in Kwali Education Zone, F.C.T, Abuja-Nigeria. These three schools were selected through the use of purposive sampling technique. The rationale for the choice of purposive sampling technique is because the researcher will seek for schools with well experienced and certificated teachers with cognate teaching experience and well equipped Laboratories. Teachers were selected based on the fact that they are directly concerned with the academic achievement/ performance of students and they know very well the extent at which they have been motivated by the employer or the government. Therefore, the target population of this study was 100 teachers.

SAMPLE AND SAMPLING TECHNIQUE

Sampling is a process of selecting a small representative part of a population with the aim of generating required data, the conclusion of which is generalized about the whole / target population.

The sample size of this study consisted of 45 teachers which were selected by the use of "hat and draw" simple random sampling technique. Simple random sampling was used because the study intended to select a representative without bias from the target population. This ensured that each member or element had an equal and independent chance of being included in the sample from the target population.

INSTRUMENT FOR DATA COLLECTION

A self - constructed questionnaire was the instrument used for data collection. The questionnaire consists of items to measure the effect of teachers' motivation on students' mathematics achievement. The questionnaire was then administered on a one on one basis. The researcher distributed the questionnaire to the teachers and they were collected from them after been filled.

VALIDITY OF THE INSTRUMENT

The researcher employed internal consistency method of validation. This is done by giving the drafted plan of the data collection instrument to the experts in the fields of specialization for assessment and necessary corrections. The comments and suggestions of the independent experts (validators) were useful in modifying the instrument and assured that the instrument was précis and comprehensive enough to capture the anticipated type of data to investigate the objectives of this study.

RELIABILITY OF THE INSTRUMENT

The truthfulness of the instrument used in data collection cannot be defined. This is because analysis relied on future researchers. Reliability of the instrument is based on the statistical roll employed and used for data analysis. Questionnaire was tested by the researcher and found it reliable in achieving the aims and objective of the research questions were also answered.

PROCEDURE FOR DATA ANALYSIS

There are several techniques of data analysis, but for the purpose of this study. The following technique was employed. The descriptive statistical techniques such as frequency and simple percentage distributions were used to summarize respondents' responses on effect of teachers' motivation.

RESULTS AND DISCUSSION:

The results and discussion of data analysis were carried out based on the research questions as tabulated in the table below:

Table 1: Showing Distribution Analysis of Respondents' Responses on the Teachers' Motivation

Variables	Yes	%	No	%	Total	
Teachers' condition of service	4	26.7	11	73.3		100%
Financial incentive (fringe payment)	6	40.0	9	60.0		100%
Teachers` proper use of motivational Techniques	3	20.0	12	80.0		100%

Source: Field Survey, 2019

From table 1, when asked the question on the teachers' condition of service 11 respondents said no to the question which carries 73.3 % while the remaining 4 said yes to the question which carries only 26.7%. This indicated that the condition of service has influence on students' mathematics achievement this simply means that, for students' mathematics achievement to be better, teachers therefore need to be lightly motivated, satisfied, efficient and effective. This result is in line with that of Oyedele (1998) who found that teachers needs and morale are very important which influences individuals and group to perform in order to achieve the school objectives. Then for the question on the financial incentive (fringe benefit payment), out of the fifteen (15) respondents, nine (9) said no to the question which carries 60.0% while the remaining 6 said yes to the question which carries only 40.0 %. This is an indication that financial incentives have effects on students' mathematics achievement. Oyedele (1998) said that the productivity may increase when needs of the teachers are met which in another way can enhance excellence achievement of students. It is obvious fact that for teachers to be motivated, their fringe benefits and take home pay must be increased. Also, for the question on teachers' proper use of motivational techniques, out of fifteen (15) respondents, twelve said no to the question which carries 80% while the remaining three (3) said yes which carries only 20% respectively. These responses have shown that proper use of motivational technique has influence on students' mathematics achievement. Nakpodice (2001) hinted that the quality of any educational system depends to a great extent on the quality of the teachers in terms of academic and professional qualification and experience gathered as well as the level of competence and dedication to their primary roles. This could be achieved when seminar, course and in-service training are guaranteed to improve their quality.

Finally, motivation related factors in the secondary schools must be provided or put in place to generate job satisfaction among teachers and good environment for students' achievement in mathematics generally.

CONCLUSION:

The purpose of this study is to investigate the effect of teachers' motivation as correlates of students' mathematics achievement. Hence, the following conclusions were drawn by the researcher based on the data analyzed:

1. Teachers' condition of service has a thru influence on students' mathematics achievement.
2. Teachers` financial incentive (fringe benefit payment) has influence on students' mathematics achievement.
3. The teachers` proper use of motivational technique has a direct influence on students' achievement in mathematics.

RECOMMENDATIONS

In view of the findings, the following recommendations were made with firm belief that if implemented and monitored, would result in overall improvement in the teachers and students' level of achievement.

1. Similar investigation should be carried out in primary schools
2. Concept of motivation among teachers should be carried out in secondary schools specifically in public schools in other states of the country to create consistency in the system of education.
3. Research that involves teachers and students in response to the questionnaire and to increase more variables should be conducted.
4. In contrast, similar investigation should be conducted in private schools since this present study is conducted in public schools.
5. Finally, Government at all levels should provide good condition for learning to student and should look into the condition of service of teachers and other benefits to be accrued. This will go a long way to increase the standard of living of teachers; make the job lucrative and professional which in turn enhances students' achievement in mathematics generally.

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