



# THE INFLUENCE OF TEACHERS' MOTIVATION ON CHEMISTRY STUDENTS' PERFORMANCE IN SENIOR SECONDARY SCHOOLS IN ILA LOCAL GOVERNMENT AREA OF OSUN STATE

## ABSTRACT

This study investigates the influence of teacher's motivation on chemistry students' performance in senior secondary schools in Ila local government of Osun State. Four research questions were raised to guide the study, the population for the study consists of all the chemistry teachers in senior secondary schools in Ila local government area of osun state. Questionnaire formulated by the researcher was used to elicit relevant

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## INTRODUCTION

Motivation can be defined as the reasons underlying behaviour. According to Cherry (2015) motivation is that drive which makes an individual set a goal, initiate and maintain behaviours which lead to the attainment of the set goal. Motivation is all about putting effort, staying focused to a certain goal and persisting in the face of difficulty, that is, all aspects of activation and intention. The two types of motivation are intrinsic and extrinsic motivation. Deci and Ryan (2010) give the difference between the two types of motivation. Intrinsic motivation refers to doing an activity which individuals find naturally interesting and enjoyable while extrinsic motivation involves performance of an activity so as to get a separable outcome. As Deci, Koestner and Ryan (2010) points out, an activity done by a person who is intrinsically motivated is energized and sustained by the inherent satisfaction that comes from performing the activity.

Motivation as a desire to perform an action is usually defined as having two parts, directional such as directed towards a positive stimulus or away from a negative one, as well as the activated "seeking phase" and consummator "liking phase". A motivated person works better and works harder. The motivation on the right path leads the individual to success. The



information to generate data for the study. The finding revealed that majority of the respondents agreed that teachers perform better if well motivated. Similarly, respondents agreed that teachers perform better if the stakeholders play their motivating roles, likewise the stakeholders play specific roles in motivating the teachers. Conclusively, the research work showed that with adequate motivational elements such as regular and prompt payment of salaries and allowances, upward review of salaries, implementation of promotions, provision of conducive environments, availability of teaching aids/instructional materials, etc would help to improve the job performances of the teachers and the standard of education. Furthermore, quality assurance in education hinges on teachers' quality and effective curriculum delivery. Based on the above findings, it was recommended that regular and prompt payment of salaries and allowances should be made available to teachers in order to enhance their dedication to duties. Government should look into the allocation or monthly salaries and allowances of teacher with a view to reviewing and increasing it, since the economic situation in the country is not static and favorable, this will help to increase the job performance of the teachers. Promotion exercise should always be conducted annually and as at when due and subsequently implemented without delay so as to reflect on teacher's salaries.

**Keywords:** Influence, Teachers, Motivation, Chemistry Students, Performance.

term motivation is derived from the Latin word 'movere' meaning to move. Motivation is the positive change in mental and physical activities that are targeted towards achievement.

It is clearly seen in behaviours such as play, exploration and challenge-seeking. On the contrary, extrinsic motivation is governed by reinforcement contingencies. Student intrinsic motivation has to do with student desires to participate in the learning process. It also concerns the reasons or goals that underlie their involvement in academic activities. Ryan and Connell (2016) suggest that the learning outcomes of intrinsic motivation are better than those obtained under extrinsic motivation. This is because a student who is intrinsically motivated is going to complete a certain task even when it is challenging such as the difficult topics in chemistry, retain concepts learnt better and confidently handle unfamiliar learning situations.

Teachers have been shown to have an important influence on students' academic achievement and they also play a crucial role in educational attainment because the teacher is ultimately responsible for translating policy into action and principles based on



practice during interaction with the students. Education is the key towards success for every country. It helps to boost the economy and beneficial for the society.

According to the National Policy on Education (2016), Nigerian's primary schools and junior secondary schools should aim at developing the right citizenship as a basis for effective participation and contribution to the life of the society, developing in the child the ability to adapt to his changing environment, inculcating character and moral training and the development of sound mind, develop sense of respect and tolerance of the opinions of others even in disagreement, and develop willingness to accept necessary changes. Considering governments' huge investment in public education, its output in terms of quality of students has been observed to be unequal with government expenditure. Consequent upon the observed deterioration in the academic achievement, attitude and values of secondary school students in public secondary schools, one wonders if the high failure rates and the poor quality of the students is not a reflection of the instructional quality in the schools. In other words the ineffectiveness of teachers in classroom interaction with the students could be responsible for the observed poor performance of students and the widely acclaimed fallen standard of education in Nigeria (Agharuwhe and Ugborugbo, 2009). According to a study at the University of Eastern Finland, a warm and positive atmosphere can help improve children's motivation to learn. An empathetic teacher does not only help protect the student's image of themselves as student, but it also helps prevent social exclusion by classmates. Teacher burnout can lead to a downfall in motivation and the students can be affected by the teacher's anxiety symptoms and job stress (Ormrod, 2014)

Walton et. al. (2011) believe that humans are not motivated solely by wage incentives; however there seems to be a link between poor motivation and low level of job satisfaction among teachers and their performance as the teachers are ultimately responsible for translating the national policy into action. This study therefore seeks to find out the factors that demotivate teachers motivation on students' performance in chemistry in Ila Local Government Area of Osun State.

## **LITERATURE REVIEW**

### **CONCEPT OF TEACHER MOTIVATION**

Teacher motivation refers to those variables, factors that influence teachers to do things. In its more technical usage, teacher motivation is to be seen as a psychological concept. It is regarded as a process of organizing behaviour in progress and channelling behaviours into specific course. It is a process of stimulating, channelling and sustaining behaviour. According to Asemah (2010), teacher motivation is a general term applying to the entire class of drives, desires, needs, wishes and similar forces initiated for teachers, in order to induce them to act in desirable academically productive manner.



Teacher motivation encompasses forces both within and external to the individual. According to Hicks (2011) the internal teacher motivation comprises of the needs, wants and desires which exist within an individual; as such influence the teachers thought which in turn leads to a positive change behaviour toward improving learning. Teacher motivation entails that the teacher is made to satisfy the life supporting elements of his physical body like food, water, shelter etc. The teacher should be able to satisfy needs like insurance, medical allowances, retirement benefits etc. The implication is that school management should be more concerned with providing meaningful and challenging work, feeling of achievement, added responsibility, recognition for accomplishment, opportunities for growth and advancement as all these, among other motivators drive the teacher to be acting in desirable way.

Several studies have been conducted on effect of motivation on academic performance. In all of these studies, it is claimed that motivation is important in learning. Musyoki and Mwanza, (2015) carried out a study to investigate determinants of students' achievement in chemistry and the proposed strategies used to improve its achievement. The researcher used descriptive survey design and also ex-post factor design. A total of 100 respondents were used to derive the findings and conclusion of the study. The researcher adopted stratified sampling to select public schools and students per school were randomly selected while one chemistry teacher and the principal in the sampled school automatically became respondents in the study. Questionnaires for principals, chemistry teachers and students were used to collect data and the results obtained were presented using both descriptive statistics for quantitative data. The findings of the study indicate that the perception of students towards chemistry was negative as observed by 64% of the chemistry teachers and 64% of the principals. Teaching experience was found to be significant in determining students' achievement in chemistry in secondary schools as agreed by 60% of teachers and 72% of the principals but academic qualification was insignificant.

ICT materials and facilities were found to be available but were not used during teaching and learning of chemistry. Failure to use ICT facilities was due to majority of teachers not being trained to use them in addition to many having not attended ICT seminars and workshops. Based on the findings the study concluded that students' perception in chemistry determines its achievement in examinations and that most students do not have positive attitude in chemistry. Also, various teaching and learning resources are not adequate in many schools.

### **RESEARCH METHODOLOGY**

The research design for this study is a descriptive survey research design. It is a survey study because it involves identifying and describing events as they occur in their natural setting. The areas covered by this study are ten senior secondary schools in Ila Local



Government Area of Osun State. The target population for this study consisted of all the chemistry teachers in senior secondary schools (SS I to SS III) in Ila Local Government Area, Osun State. Ten schools were selected to represent the senior secondary schools in Ila Local Government Area, Osun State, simple random sampling technique was used to select those schools. One hundred teachers (both male and female) were randomly picked from the selected schools involved in the study. The instrument used for the study was a set of questionnaire designed by the researcher for the purpose of gathering information. One hundred questionnaires were developed by the researcher for the study. Ten questionnaire for each selected schools in Ila Local Government Area. The questionnaire comprised two sections. Section A consists of personal data which elicits information on Age, Sex, Name, School and Qualification(s) of the respondents while section B consists of 15 item research questions formulated by the researcher to generate relevant and sufficient information for the study.

The instrument was face validated to test the appropriateness of the questionnaire and to ensure the validity of the instrument, it was given to an expert in the field who corrected and amended some areas that needed modifications. Thus the validity of the instrument is ensured. The method adopted to determine the reliability of the instrument was test and re-test method. Within two weeks the instrument was administered on respondent. Pearson product moment co-efficient correlation was used to calculate the two scores. Correlation was found to be 0.73. The researcher visited the selected schools Ila Local Government Area of Osun State. The questionnaires were given to every selected chemistry teachers in each schools and most especially their qualified chemistry the chemistry teachers in the staff room in each of the randomly selected delivered to them when they were met in their various schools and all the questionnaires were also collected back physically from the respondents by the researcher. The data collected through the questionnaire was subjected to descriptive statistical analysis. The response of the respondents was scored based on percentage and frequency counts.

#### **DATA PRESENTATION AND ANALYSIS**

Data collected from the distributed questionnaire was presented and analyzed adequately using frequency distribution table and percentages for comparison of the data and for easy interpretation of findings.

Table 1: Distribution of Respondents by Sex

<b>Sex</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Male</b>	68	68%
<b>Female</b>	32	32%
<b>Total</b>	100	100%

Source: Field Survey 2022



Table 1: shows that majority of the respondents were male, (68%) whereas minority of the respondents were female (32%). It was perceived that higher classes male chemistry teachers are preferred to better discipline the students, while female teachers are the right fit at the primary level. This is line with females are naturally equipped with skills to handle junior kids and better understand their emotional needs.

Table 2: Distribution of the Respondents by Working Experience

Working Experience	Frequency	Percentage
1-5 years	10	10%
6-10 years	40	40%
11 years and above	50	50%

Source: Field Survey 2022

From table 2 above, the followings were observed. Majority of the respondents working experience were within 11years and above represented by 50% while the minimum fall within 1-5years represented by 50%. This suggests that the years of teaching experience of the teachers are key factors which could acts as one of the determinants in employing any individual. According to the researcher, the more experienced teachers seem to perform better. This is in consonance with public opinion and concern.

Table 3: Distribution of Respondents by Educational Qualification  
Distribution of Respondents by Sex

Educational Qualification	Frequency	Percentage
B.Sc/B.Ed	45	45%
NCE	26	26%
HND	19	19%
Others	10	10%

Source: Field Survey 2022

From table 3, the respondents educational qualification distribution are arranged in descending orders: B.Sc. holder (45%), NCE holder (26%), HND holders (19%) while others with higher degree qualification are (10%) in representation. This finding revealed that population of B.Sc/B.Ed holders was much more than that of the NCE, HND holders and those with higher degree qualification.

Research Questions 1: Will teachers perform better if they are well motivated?

Table 4: Analysis of how teacher will perform if they are well motivated

S/N	ITEMS	A	%	D	%	TOTAL
1.	Does the school management prioritize enhancing the students discipline positively towards approaching the respective teachers?	30	30	70	70	100



2.	Do the students know how to relate with their teachers in a politely?	39	39	61	61	100
3.	Does the school management recognizes and compensates the hardworking /industrious teachers?	75	75	25	25	100
4.	Do parents recognize and appreciate the teachers' positive impact on the students	29	29	71	71	100
5	Does teachers receive salary fully as at when due?	43	43	57	57	100

From table 4 above, on analysis of how teachers will perform if well motivated only 75% majority shows support that school management recognizes and compensates the hardworking teachers whereas on all other items that motivate teachers performance such as: teachers receiving salary fully as at when due, students discipline positively towards approaching the respective teachers and parents recognize and appreciate the teachers positive impact on the students, the respondents agree less in the descending order (43%, 39%, 30% and 29%).

Research Questions 2: Will teachers perform better if the stakeholders play their motivating duties?

Table 5: Analysis of how teachers will perform if the stakeholders play their motivating duties

S/N	ITEMS	A	%	D	%	TOTAL
1.	Does the government provides conducive environment for the students such as library, laboratory	63	63	37	37	100
2.	Do the teachers counsel, mentor and teach the students how to use and apply knowledge in their lives	57	57	43	43	100
3.	Do the parents support and encourage their child, such as helping with homework, attending school functions etc	47	47	53	53	100
4.	Do the school alumni stand as great role models for current students and do they offer practical support to students as they start their careers	45	45	55	55	100
5	Do the students carry out their responsibilities, such as attending classes on time and regularly etc	60	60	40	40	100

From Table 5 above, it was found that the government, the teachers and the students carried out their motivating roles, whereas, the parents and the school alumni did not. This implies that the parents should give more support to their children by paying their



school fees, building cordial relationship with the teachers etc and also the school alumni should also support the students such as advising them on how to choose a career, providing them social amenities if needed, placements, and donations or can even fund scholarships.

Research Questions 3: What effect will teacher motivation have on students' performance?

Table 6: Analysis of effect of teacher motivation on students performance

S/N	ITEMS	A	%	D	%	TOTAL
1.	Does a compensated teacher gives a better attention to the students and the students' academic performance?	84	84	16	16	100
2.	Do teachers attitude to work becomes a little more encouraging after receiving salaries?	62	62	38	38	100
3.	Will parent-teacher relationships affect the students' performance	88	88	12	12	100
4.	Will a motivated teacher dedicates attention to the deficient areas of the students	78	78	22	22	100
5	Will a motivated teacher observes when a new edition textbook or laboratory equipment/instrument is needed and will the teacher reports so that the textbook or equipment could be provided?	58	58	42	42	100

Table 6 reveals that majorly all the respondents are of the opinion that if the teachers are well motivated, it will have positive effect on the students performance.

### DISCUSSION OF FINDINGS

In spite of the recent developments, the gender issue remains something of a bottleneck in the development of the 9-3-4 education programme in Nigeria, most people believe that gender (Sex) matters a lot in chemistry teaching. However, the interest of students in chemistry depends on how well the students learn the subject and it's learning depends on how well the subject is being taught. Table 1 reflected that males were preferred to females as chemistry teachers in chemistry teaching. This concurs with Igbokwe (2009) who found that males performed better than females in expository writing. The findings also revealed that it was believed that more of the male chemistry teachers have greater mastery of content than the female teachers. This is also in line with Rajkuma Poddar (2020) who stated that female teachers are also often reluctant to improve their subject knowledge. Males teacher have the austerity and rigidity to handle the students.





On the other hand, the competence of the female teachers can not be over emphasized. According to the researchers primary school experience, females are born with empathy, high emotional quotient etc blessed with these virtues, females are certainly more equipped as against their male counterparts to understand a child's ability to learn quickly, though male teachers are also kind-hearted and affectionate, but it cannot be compared to those of female teachers. Female teachers' empathy is more likely to be felt and could be manipulated effectively and conveniently unlike males. This corroborates with the discovery of Rajeer Kumar Raju (2020). Consequently all the stakeholders of the education sector should opined and establish an opinion of eradicating gender inequalities. This would enable the students to benefit from an unbiased educational system, and also enables the students to motivate the teachers with excellent performance, as supported by Ibobor (2009) who is of the opinion that National gender policy introduced in 2006 cannot be accomplished unless the Nigerian government makes elimination of gender, inequality in education a top priority with social workers involved in the policy implementation gender equality is vital in any academic environment said (Detrant 2009). Therefore, gender inequality should be eradicated, so that, the schools, the students, the teachers, the citizens, and the nation at large can benefit from it.

Table 2 furthermore, teachers' experience has been recognized perceived as one of the crucial factors in teacher effectiveness. A highly experienced teacher for instance, has a form of knowledge that is beyond that possessed by less experienced teachers. It could be observed that the experience of teachers who are employed to teach have a relationship with their teaching abilities, hence, the performance of teachers who are highly experienced could be rated higher than those with low experience of the job. This is in line with Ahly (2000) who remarked that the late Rev. Manson, felt very strongly about teachers experience and qualification. Therefore, as the teacher, gain experience, the students not only learn more, but the teachers are also more likely to do better on other measurers of success. Therefore, the finding of this study indicates that there is a significant relationship between teachers' years experienced and teacher's job performance.

This result is consistent with the finding of Ahly (2000) which showed that a significant difference existed between the performances of medium experienced and short experienced teachers. The reason for this trend may be as a result of the order in terms of the newly sworn-in governor, His Excellency Governor Ademola Nurudeen Adeleke he orders that all appointment after July 17, 2022 in the service of Osun state government are to be reviewed. This may be the factor that has given rise to the decrease in the population of the teachers with less years of teaching experience. It is revealed that teaching years' experience is important, but also, it should be noted that the teachers within in this category (11years and above) should not be too stressed because of fatigue which may result from the ages. This concurs with Mahfooz and Mumta (2013) found that



years of experience can affect teacher effectiveness in engaging student and teaching strategies as the teachers can become less motivated due to many years in service and fatigue. Therefore, the highly experienced teachers should be employed. So as to enlighten the novice, and also the novice should also be employed, so as to cover the school's scheme of work, carryout practical's because the teachers of this category are energetic. Thus, the advantages of employing both can not be neglected. It is best to employ them equally.

From table 3, it was perceived by the school managements and reported to the researcher that this context resulted from the fact that, the B.Sc. holders are much employed because they are often regarded as individuals with higher knowledge who can yield much because of the years of training by seasoned lecturers, professors and doctors in the higher institution of learning, despite the fact that the NCE holders are genuinely trained as educators with much prowess and competence on how to handle the recalcitrance of students. However, it was also sighted that, a key factor that caused this scenario is government directive, as it is believed that NCE holders would not be given higher positions in the school. This corroborates the findings of Oghenetega et. al (2020). However, it was stated by the researcher that the HND holders and others with higher degree of qualification are not purposively trained to become teacher unless a diploma in education is acquired in addition thus, are not actually meant to be a teachers. However, this does not dispute the prowess, competence and efficiency of the HOD holders and holders of higher degree qualification.

From table 4 above it was deduced that the teachers will perform better if they are well motivated. This is in line with Chiku (2009) who posited that the absence of motivation has a negative influence posited that the absence of motivation the standard of education in school as students are being deprived of the need of knowledge because the teachers are less motivated. Also, Gutonga (2012) also indicated that one of the issues affecting academic performance includes lack of motivation for teachers, and so far this has not been dealt with in totality. From table 4 above, the school management of both the government and private senior secondary schools should prioritize developing the students' manner of approaching the teachers. There should be punishments for unyielding and indisciplined students. This would enhance the teachers' boldness and confidence, thus, motivating the teachers to perform excellently. This reflects the statement of Keino (2005) who postulated that employee efficiency is about behaviour or what employees do, and not what employees produce or the outcomes of their work. Achando (2016) who found that one of the teaching environments that demoralized teachers was the lack of respect from the community.

Furthermore, from table 5 above, it was inferred that teachers will perform more than expectations if the stakeholders (government, school management, parent, students) play their motivational roles. The teachers will perform better if the government and



school management provides a well-equipped laboratories as posited by india's National Curriculum Framework (NCF) that schools particularly those in rural areas should be equipped with laboratories of equipment for science and mathematical activities. Moreover, availability of accessible computers with stable internet, library also motivates teachers because it makes carrying out their duties easier and convenient. This is in line with (Ndibalena 2014; Pelgrum 2001) who stated that universities, schools and governments spent large sums of money to build a sufficient infrastructure, to develop multi-media-based learning materials and to equip students with the necessary computers. It should be noted that, the school managements of both the government and private senior secondary schools should provides ICT tools and library to as it enables students to communicate and share ideas at any time and everywhere. Nevertheless, the school managements should also inculcates a good reward system. The teachers should be paid as at when due. This concurs with Glass (2011) who found that teachers are motivated more by economic motivates than altrusion (need to help others).

Nevertheless from table 6 above, it was observed that teacher motivation will significantly affect the students' academic performance. This study revealed among others that teachers motivation could impact on students academic achievements by helping to explore, harness and develop students' cognitive, psychomotor and affective domains for the betterment of our society. This concurs with Orphlins (2002) who is of the view that motivated teachers always look for better ways to do their teaching job and as a result, they are more productive. Therefore, it means that motivated teachers are determined to give their best to achieve the maximum output (qualitative education). Thus, it is for the best to ensure and enhance teachers motivation, so as to enhance the students' academic performance.

Bernes (2014) upheld the findings of the study by asserting that the motivational elements are incentives granted to an individual to enhance his or her performance. These rewards and incentives contribute to strategy for effective implementation of descried goals and shaping of individual's or group's behaviour. When teachers are motivated their performances would be directed towards achieving educational goals. Farel (1993) observed that teachers who fail to get institutional houses had to look for accommodation elsewhere; a situation which results into demotivation of teachers to effectively perform at work. In light of the above situation, an investigation into the effect of extrinsic motivation on the performance of teachers in government senior secondary schools was necessary. Wayne (1998) asserts that a reward in form of pay has a strong impact on the employees' performance. Bratton (2003), agree with Wayne when they state that pay is one of the most powerful motivating tools. Similarly, Armstrong (1996) emphasizes the value of extrinsic motivation when he says that money provides the means to achieve a number of different ends.



Kiseesi (1998), in her study about job satisfaction of workers recommends that salaries of workers should be paid promptly and that promotion of workers should be accompanied by a corresponding increase in the salary they earn. She observes that salary was a strong force that kept teachers at their jobs. The researcher feels that this is recognition of the fact that salary is vital in causing satisfaction among workers and hence likely to influence performance. Gavinda and Varghese (1993) looked at this scenario and affirmed that where teachers are disillusioned and frustrated about conditions of service, the quality of education is likely to deteriorate even with substantial input of equipment and material. However they conclude that if a teaching force is reasonably paid, and well-motivated, they can achieve much for the quality of education even against great odds.

### **CONCLUSION AND RECOMMENDATIONS**

This study focused on the influence of teachers motivation on chemistry students' performance in senior secondary schools. In order to achieve the purpose of the study, ten (10) secondary schools were selected in Ila local government area. Questionnaire were designed distributed administered, collected, analyzed and findings or results interpreted. In the light of the results, the educational implications of the study were pointed out based on the findings. Furthermore, some recommendations were also made and if adequately followed and implemented, would go a long way in ensuring greater job performance of teachers both in Ila local government area in Osun State. In conclusion, this study has shown that with adequate motivational elements such as regular and prompt payment of salaries and allowances, upward review of salaries, implementation of promotions, provision of conducive working environments, availability of teaching aids/instructional materials etc. would help to improve the job performance of teachers and the standard of education.

When teachers are not adequately motivated, they will not be satisfied with their jobs. This would no doubt make them not to be committed as expected of them. Owing to this and many more, low productivity will set in and the adverse effect will be on the students who would irrefutably perform below academic standard Nigeria at large. However, these findings provides possible clue to why the various arms of education have failed to yield fruitful and expected maximum outcomes. Most implementers of educational programmes do not received adequate motivation hence, loss of interest and poor performance sets in.

Based on the findings of this study, the following recommendations were made.

1. Regular and prompt payment of salaries and allowances should be made available to teachers in order to enhance their dedication to duties.
2. Government should look into the allocation or monthly salaries and allowances of teacher with a view to reviewing and increasing it, since the economic situation in the



country is not static and favourable. This will help to increase the job performance of the teachers.

3. Promotion exercise should always be conducted annually and as at when due and subsequently implemented without delay so as to reflect on their salaries.

4. The working environment under which teachers perform their duties should be made conducive enough to boost their interest in the teaching and learning process.

5. Adequate teaching aids and materials should be made available for effective teaching and learning.

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