MOTIVATIONAL STRATEGIES AND JOB SATISFACTION OF SCIENCE TEACHERS IN SENIOR SECONDARY SCHOOLS IN IBADAN METROPOLIS, OYO STATE

Ileuma, Senimetu
Department of Educational Management
Lead City University, Ibadan

Abstract
Motivation is one of the greatest challenges facing class-teachers across the globe because it influences teacher's performance as well as satisfaction and thus the extent to which the school management is able to achieve its objectives and justify its existence. The study investigated the extent to which motivational strategies correlates with job satisfaction of science teachers in senior secondary schools in Ibadan metropolis, Oyo state. The study is a descriptive design of the survey. Two hundred 200 class teachers were randomly selected from the public secondary schools in Ibadan Metropolis. The teachers were drawn from 20 public senior secondary schools out of a total of 82secondary schools in Ibadan Metropolis. One research question and four research hypotheses were used for the study. A validated instrument guided the study with reliability coefficient of 0.72 were use. Data were analyzed using Pearson Product moment correlation and multiple regressions. Results indicated a significant relationship between Attending educational seminars and conference and job satisfaction of science teachers in Ibadan metropolis, Oyo State ($r= 0.635$, $N= 194$, $p < 0.05$) ; revealed a significant relationship between attending of Workshop and in-service training programme and Job satisfaction of Science Teachers in public senior secondary schools ($r= 0.643$,$N=194$, $p< 0.05$) : both variables jointly explain 35.4% of the variance observed in Job satisfaction of Science Teachers in public senior secondary school and it was statistically significant at $F (df = 3, 191) =34.394$.There is the need to enhance the quality of science teachers in senior secondary schools. Most schools have qualified and experienced teachers who should be encouraged to engage in in-service training through sandwich programmes currently available in most universities. This must be supported by government and other employers of teachers. Teachers should be encouraged to attend conferences,

workshops and seminars to polished and enhance their skills. Government should provide science equipment in schools and the laboratory should be properly equipped. More funds should be allocated to the education sectors of the country not only to provide training for the teachers, but to also develop facilities that would create a friendly environment

Key Words: Motivational Strategies, Science Teachers, Job Satisfaction, Senior Secondary Schools, Ibadan Metropolis

Introduction

Roles of a teacher in providing quality education cannot be overemphasized; teachers may not perform optimally if they are not motivated, satisfied and rewarded accordingly. For instance, Ofoegbu (2004) focused on the role of teachers in providing good education in primary schools through motivation where it suggested some initiatives to increase the teacher's level of motivation that will improve the education system. It was said that the organizational culture do have influence on the satisfaction of the employees positively or negatively. Motivation is a goal-directed behavior which starts with deficiency which activates behavior aimed at a goal or goals (Luthans, 2005). Motivation of teachers' acts as key to learners' achievement. (Taylor, 1911) was concerned with how to get more work out of workers through the best approach, through their enforced and standardization. Taylor emphasized that to achieve optimum output, adequate provision for teachers selection and training is necessary and that financial benefits should be based on merit.

Ajayi and Okusanya (2010) revealed that teachers that are well encourage and motivated in the learning process will be able to perform very well in their line of duty; in spite the learning environment is not conducive. In other to avoid over expensive compensation programmes, management must carefully think how to compensate their teachers and keep them motivated. Motivation guides people's action and behaviors and increase satisfaction and this tend toward achievement of the goals. To succeed in persuasion, managers should concentrate on motivational needs of their teachers. They should persuade their teachers that it is in their best interest to work the way they have suggested (Onyike, 2003).

Oshionebo(2001) argues that threatening and external control are not the only way to make people to work better to achieve organizational goals but motivational strategies which triggers their morale to work hence improve performance of the employees. Principals of schools need extra-ordinary effort to plan their way of rewarding teachers especially in science classes and put it down as a formal way of doing things. Fagbohungbe and Longe (1994) says that when motivation is structured, it ensures that teachers have competence and conscientious and is an aid to professional development and accountability. This constitutes a continual cyclical process of determining satisfactory expectations, supporting performance, and salary reviews and appraising performance.

Nigeria is characterized by advancement in science and technology (Okebukola, 2009). Every nation is striving to achieve scientific and technological breakthrough within their environment. The teaching of science and technology is becoming more demanding and activity oriented than before. Students are taught science in relation to their environment for the improvement of their conditions of living and for economic growth. Achievement of the development and growth through science and technology requires qualitative science and technology and for Nigeria to realize accelerated development in the 21st century, she needs qualitative science and technology education. It is clear evidence that achieving quality science and technology education depends largely on the effectiveness of the science teachers in the secondary schools (Akinamide, 2012).

Secondary education is planned for human resource development and it is a preparatory ground for human development, where career abilities are groomed and potential and talents were discovered and energized. FRN, (2012) also be described as the education that serves as the link between primary and tertiary education; it gives pupils, the avenue to acquire additional knowledge and other skills beyond that of primary schools (Eliasu,1998). The quality and quantity of science education received by the students gear towards developing scientists, technologies, engineers (Ololube, 2005). The efforts to develop scientific knowledge of our youths, reviewed literatures in the past decades were characterized by poor performance and low enrolment of students in science (Adeyegbe, 2000).

West African Examination Council (WAEC, 2013) reports on students' performance in sciences are clear evidence not only poor performance but also low enrolment. Nigeria cannot hope to make any reasonable headway in technology revolution of the 21st century with their poor performance in the sciences related subjects. Students' performance and low enrolment in science could be solved by experienced science teachers who could lay solid foundation for science in both primary and secondary level. Adeyemo (2001) opines that teachers' job satisfaction is an index for quality assurance in education. Apparently, motivation strategies such as conferences, seminars and workshop and in-service training programme, regular promotions, welfare packages (housing and car loans), prompt payment of salaries and other remunerations improve teachers' proficiency.

Langat (2013) observed that failure to promote teachers encourages apathy in taking up assigned responsibilities among them in most learning institutions. He recommended that the school management should device internal promotion arrangement to motivate teachers, as the teachers' principal employer had let down teachers for far too long. Promotion is believed to assume many dimensions, ranging from salary upgrading, attaining a higher job group or simply moved to a higher institutional administrative hierarchy (**A**delman and Tayol, 2003). Asiyai (2006) observed that teachers who obtained regular promotion were more motivated to increase their level of work performance than those who were ic on their grades. However, the study wishes to look into some motivational strategies which can contribute to improving the quality of teaching and job satisfaction of science teachers in senior secondary schools in Oyo State.

Purpose of the study

This study mainly investigated factors which could contribute to the motivational strategies and job satisfaction of science teachers in public senior secondary schools

The specific objectives were:

(i) To examine the relationship between attending educational seminar and conference and job satisfaction of science teachers in senior secondary schools.

(ii) To establish the relationship between regular promotion and

job satisfaction of science teachers in senior secondary schools

(iii) To ascertain the relationship between attending workshops and in-service training programme and job satisfaction of science teachers in senor secondary schools

Research Question

1. What are the motivational factors hindering Science teachers' job satisfaction in senior secondary schools in Ibadan metropolis, Oyo State?

Research Hypotheses

1. Attending of educational seminars and conference does not have any significant relationship with job satisfaction of science teachers in public senior secondary schools in Ibadan metropolis, Oyo State.
2. Regular Promotion does not have significant relationship with Job satisfaction of Science teachers in Public Senior secondary schools in Ibadan metropolis, Oyo.
3. Attending of Workshop and In-service training programme does not have any significant relationship with job satisfaction of science teachers in public senior secondary school in Ibadan metropolis, Oyo State.
4. There is no significant joint contributions of Motivational Strategies (Attending of Educational Seminars and Conference, Attending of workshop and in-service training programme and Regular Promotion) and job satisfaction of science teachers in senior secondary schools in Ibadan Metropolis, Oyo State.
5. There is no relative significant contributions of the motivational strategies on job satisfaction of science teachers in Ibadan Metropolis, Oyo State

Methodology

The Study adopted descriptive survey research design to carry out the investigation. This is to assess the opinion of the respondents on the motivational strategies and job satisfaction of science teachers in public senior secondary schools in Ibadan metropolis, Oyo state. The subjects of the study consisted of two hundred science teachers selected through multi-stage sampling technique from the population of two thousand one hundred science teachers in public senior secondary

schools in Ibadan Metropolis. The Instrument for data collection was questionnaire titled "Motivational Strategies and Job satisfaction of Science Teachers Questionnaire"(MSJPSTQ). The Questionnaire contains of 40 items. Part A provides information on Demographic data of the respondents; Part B gives information on attending of educational seminars and science teachers job satisfaction; Part C provide information on attending of workshops and In-service training programme and science teacher job satisfaction and Part D gives information on the prompt and regular promotion and job satisfaction of science teachers in Ibadan metropolis, Oyo State. The Instrument was given to some experts in the departments of educational management and evaluation respectively for necessary corrections, suggestions, comments and modifications for a better improvement. A test-retest method was carried out to ascertain the reliability of the instrument. The instrument was administered to about twenty-five science teachers in secondary schools outside the study areas and the Cronbach Alpha Coefficient of 0.72 was obtained. A total of two hundred (200) copies of the Questionnaires were administered to the respondents by two research assistants. The rate of return was high as one hundred and ninety-four (194) questionnaires were retrieved out of two hundred copies and were found usable. The descriptive statistics and the use of percentage and frequency was used for the demographic data, mean and standard deviation was used for the research question. Inferential statistics of Pearson product moment correlation coefficient and multiple regressions was used to analyze the research hypotheses at 0.05 level of significance.

RESULT

Socio- Demographic Characteristics of Respondents

Table 1: Distribution of Respondents According to Gender

Gender	**Frequency**	**Percentage**
Male	**68**	35.1
Female	126	64.9
Total	**194**	100

Field Survey, 2017

Table 4.1 above revealed that there are 68(35.1%) male respondents while female are 126 (64.9%)

Table 2: Distribution of Respondents by year teaching Experience

Year of Teaching Experience	Frequency	Percentage
1- 15years	20	10.3%
16- 25years	88	40.0%
26- 30 years	57	32.5%
31 and above	29	10.8%
Total	194	100%

The above table shows that 10.3% (20) of the respondent have spent between 1-15years while 40% (48) respondents spent between 16- 25 years in the service. Also 32.5% (39) respondents have spent between 26- 30 years of service and 10.8% (13)respondent spent 31 and above.

Table 3: D**istribution of Respondents by Age**

Age	Frequency	Percentage
20- 29 years	27	22.5%
30- 40 years	30	25.1%
41- 50 year	53	44.1%
51 and above	10	8.3%
Total	120	100%

Field Survey, 2017

The above table shows the age of the respondents. 22.5% (27) respondents are between 20- 29 years of age. 25.1% (30) respondents are between the ages of 30-40 years. Also, 44.1% (53) of the respondents are between 41- 50 years while 8.3% (10) respondents were between ages 51 and above.

Answer to Research Question

Research Question 1: What are the motivational factors hindering Science teachers' job satisfaction in senior secondary schools in Ibadan metropolis, Oyo State?

Table 4

Items	Not at all	Very little	Moderately	Very well	Mean	SD
The School Environment is not conducive for learning and teaching	69 (57.5%)	34 (28%)	10 (8.3%)	07 (6.4%)	3.21	1.032
The School do not have enough Laboratory equipment for practical	56 (45%)	48 (40%)	09 (7.5%)	07 (5.7%)	2.36	1.041
The Students are not interested in Science Subjects	50 (41%)	40 (33.2%)	16 (14.1%)	14 (11.7%)	2.39	0.642
The Overcrowded students does not encourage the teachers because of the shortage of classroom	59 (49%)	36 (30%)	12 (10%)	13 (11%)	2.18	0.914
Government regularly supply science equipment and materials to the school	20 (16.7%)	11 (9.1%)	59 (49.2%)	30 (25%)	2.46	0.832
Weighted Average Means =2.64						

Table 4 presents answer to research question 1 on the motivational factors in the selected schools. It was indicated that the responses of the respondents are: The school environment is not conducive for learning and teaching (mean =3.21), the school do not have enough laboratory equipment for practical (mean=2.36), the students are not interested in science subjects (means =2.39); the overcrowded students does not encourage the teachers because of the shortage of classroom (means=2.18); Government regularly supply science equipment to the schools (means = 2.46).

Hypothesis One: Attending of educational seminars and conference does not have any significant relationship on job satisfaction of science teachers in public senior secondary schools in Ibadan metropolis, Oyo State.

Table 5: **Pearson Product Moment Correlation Showing Relationship between Attending Educational Conference and Job Satisfaction of Science teachers**

Variable	N	X	SD	Df	r	P	Remarks
Attending Educational Seminars and Conferences	194	24.61	3.15	191	0.635	0.000	Sig
Job Satisfaction of Science Teachers	194	22.13	3.65				

The above table shows the relationship between attending educational seminars and conferences and Job satisfaction of science teachers. Attending educational seminars and conference correlates with job satisfaction of science teachers in Ibadan metropolis, Oyo State ($r= 0.635$, $N= 194$, $p < 0.05$). Since P Value is less than 0.05 level of significance, we rejected null hypothesis one and accept alternative hypothesis. With the above result, it shows that there exist a significant relationship between attending educational seminar and conference and job satisfaction of science teachers in public senior secondary schools in Ibadan metropolis, Oyo State. Achievement of the

development and growth through science and technology requires qualitative science and technology and for Nigeria to realize accelerated development in the 21st century, she needs qualitative science and technology education. It is clear evidence that achieving quality science and technology education depends largely on the effectiveness efficiency of the science teachers in the secondary schools (Akinamide, 2012)

Hypothesis Two: Attending of Workshop and In-service training programme does not have any significant relationship and job satisfaction of science teachers in public senior secondary school in Ibadan Metropolis, Oyo State.

Table 4.7: Pearson Product Moment Correlation Showing Relationship between Attending of Workshop and In-service Training Programme and Job Satisfaction of Science Teachers

Variables	N	X	SD	Df	r	P	Remarks
Attending of Workshop and inservice Training Programme	194	17.59	4.32	191	0.643	0.05	Sig
Job Satisfaction of Science Teachers	194	12.14	3.41				

Field Survey, 2017

Table 5 shows that there is a significant relationship between attending of workshop and in-service training and job satisfaction of science teachers in public senior secondary schools in Ibadan metropolis, Oyo State. This shows that attending of Workshop and in-service training programme is related to Job satisfaction of Science Teachers in public senior secondary schools ($r= 0.643$, $N=194$, $p< 0.05$). Since p is lesser than 0.05 level of significance, null hypothesis three is rejected while alternative hypothesis was accepted. It was well indicated that there

exist a significant relationship between attending of workshop and in-service training programme and job satisfaction of science teachers in public senior secondary schools in Ibadan metropolis Adeyemo (2001) opines that teachers' job satisfaction is an index for quality assurance in education.

Hypothesis Three: Regular Promotion does not have significant relationship on Job satisfaction of science teachers in Public Senior secondary schools in Ibadan metropolis, Oyo State**.**

Table 6: Pearson Product Moment Correlation Showing Relationships between Regular Promotion and Job Satisfaction of Science Teachers in Public Senior Secondary Schools.

Variables	N	x	SD	Df	r	P	Remark
Regular Promotion	194	19.31	3.21	191	0.531	0.05	Sig
Job Performance of Science Teachers	194	16.46	2.71				

Field Survey, 2017

The above table shows that there is a significant relationship between Regular Promotion and Job satisfaction of Science teachers in public senior secondary schools in Ibadan metropolis, Oyo State. It was indicated that prompt regular promotion is related to Job satisfaction of science teachers in public senior secondary schools ($r= 0.531$, $N= 194$, $p< 0.05$). Since P is lesser than 0.05 level of significance, null hypothesis four is rejected while alternative hypothesis accepted. It shows that there exist a significant relationship between regular promotion and job satisfaction of science teachers in public senior secondary schools in Ibadan metropolis, Oyo State. With the above result, Asiyai (2006) observed that teachers who obtained regular promotion were more motivated to increase their level of work performance than those who were static on their grades. Promotion is believed to assume many dimensions, ranging from salary upgrading, attaining a higher job group or simply moved to a higher institutional administratively.

Hypothesis four: There is no significant joint contributions of Motivational Strategies (Attending of Educational Seminars and Conference, Attending of workshop and in-service training programme and Regular Promotion) and job satisfaction of science teachers in senior secondary schools in Ibadan Metropolis.

Table 6: ANOVA Analyze Showing Joint Contribution of Motivational Strategies on the job satisfaction of science teachers

R = 0.485
Rsquare = 0.354
Adjusted Rsquare = 0.241

Model	Sum of Square	Df	Mean Square	F	Sig	Remarks
Regression	87.670	3	0.4312	34.394	0.004	Sig
Residual	76.26	191	0.3414			
Total	163.930	194				

Dependent Variable : Job satisfaction of Science Teachers
Predictor : Motivational Strategies

The Analysis of Variance test was carried out using multiple linear regression analysis to assess the joint contribution of the motivational strategies (attending of educational seminar and Conferences, attending of workshop and in-service training programme and regular Promotion) and job satisfaction of science teachers in public senior secondary schools. The result reveals combined contribution of the independent variables on the dependent variable (R = 0.485; Rsquare =0.354: F =34.394). This shows that the motivational strategies and job satisfaction of the science teachers accounted for 35.4% of the variance. The remaining 64.6% might be captured by other exogenous variables that were not captured by the study. Based on this, the combined contribution is shown to be significant (F(3=191) = 34.394; P = 0.05), therefore the hypothesis is rejected. This implies that motivational Strategies have combined influence on job satisfaction of science teachers in Ibadan Metropolis, Oyo State. Ofoegbu (2004) focused on the role of teachers in providing good quality education in primary schools through motivation and he further suggested that

some initiatives to increase the teacher's level of motivation which will improve the education system

Hypothesis five: There is no relative significant contribution of the motivational strategies on job satisfaction of science teachers in Ibadan Metropolis, Oyo State

Table 7: Multiple Regression Table Showing Relative Contribution of Motivational Strategies on the job satisfaction of science teachers

Model	Unstandardized Coefficient		Stand. Coefficient	T	F value	Sig
	B	Std Error	Beta Contribution			
(Constant)	3.65	0.373		2.143	0.000	Sig
Attending educational	0.343	0.093	0.1687	3.425	0.005	Sig
Seminar and	0.412	0.323	0.3215	3.121	0.005	Sig
Conference	0.324	0.362	0.2341	3.312	0.000	Sig
Regular Promotion						
Attending workshop and in-service training programme						

Dependent Variable: Job Satisfaction of Science Teacher

Table 7 reveals the relative contributions of the two independent variables to the dependent variable, expressed as beta weight, viz : Attending educational seminar and conference (B =0.1687, $p < 0.05$), Regular Promotion b =0.3215, $p< 0.00$), and Attending workshop and in-service training programme b =0.2341, $p< 0.000$). The result from the table shows that all the independent variables have significant contribution on job satisfaction of science teachers.

Conclusion

Teachers are the most critical elements in the school system because they source and manage other resources. Human beings are however complex and unpredictable. The Key challenge facing the science teachers and indeed the school management is to ensure that their teaching staffs are willing and able to contribute commensurately to the achievement of the school objectives. In trying to motivate science teachers to work, the school system should do all it takes that teachers satisfy their different and varying needs as they work for the school system.

Recommendations

- There is the need to enhance the quality of science teachers in public senior secondary schools.
- Most schools without qualified and experienced teachers should encourage the teachers to engage in in-service training through sandwich programmes currently available in most universities. This must be supported by government and other employers of teachers.
- Teachers should be encouraged to attend conferences, workshops and seminars to polished and enhance their skills.
- Government should provide science equipment in schools and the laboratory should be properly equipped
- There is need for improved teaching and learning quality, support of innovation and moderation of teaching and learning activities with the aims of improving and relevance of adequate and motivate qualified science teachers.
- The School management should create conditions such that science teachers can achieve their own goals best by directing their efforts towards the success of the school.
- More funds should be allocated to the education sectors of the country not only to provide training for the teachers, but to also develop facilities that would create a friendly environment.

References

Adelman, H. S & Tayol, L. (2003). Intrinsic motivation and school misbehavior: Some intervention implications. *Journal of Learning Motivation. 42 (2), 512-523*

Adeyegbe, S. O. (2000), Enrolment, performance and equity in science, technology and mathematics (STM) at the secondary school level in Nigeria. A lead paper presented at the 4th Annual Conference of Lagos State University at the University of Lagos 19th – 21st July.

Adeyemo D. A. (2001). Teachers' job satisfaction, job involvement, career and organizational commitments as correlates of students- academic performance *Nigeria Journal of Applied Psychology 6(2), 12*6-135

Ajayi, K. O. & Okusanya, O.A. (2010). Effects of leadership styles on task performance and job satisfaction on university management in Nigeria Issues In: M .A. Ogundipe; B. O. Olanisimi and O. Mabekoje (eds.), University management and administration in Nigeria, Ibadan, Suflo Publications Ltd.

Akinamide, J. O. (2012), Factors influencing success in an introductory college Chemistry. *Journal of Research in science teaching, 42(9), 987-1012*

Anyike, O. A. (2003). Importance of science and need of natural re-arrangement. Ibadan, Evans Publishers Limited

Asiyai, R. I. (2006). An appraisal of the adequacy of physical resources availability for teaching Chemistry in secondary schools in Delta State. Science Teachers Association of Nigeria: Proceeding of 47th Annual Conference. Ibadan, Heinemann Educational Book (Nig.) Plc

Eliasu, Y. (1998). The establishment and development of western education in Ilorin Township, 1900-1960, Unilorin: *Unpublished M. A. Thesis*

Fagbohungbe, B. O. & Longe, S.O. (1994). Industry psychology: X-ray of behaviour in Nigerian organizations. Lagos, Kotleb Consults, pg 69

Federal Republic of Nigeria (2012), National Policy on Education (4th Edition) Lagos: NERDC Press.

Luthans, F. (2005). Organizational behaviour (10thed), Boston, McGraw-Hill

Oshionebo, B. O. (2001),'Enhancing productivity in the Nigerian economy through effective manpower training and development' In O. Obadan, M. I., B. O. Oshionebo and E. O. Uga (eds.), *Improving Productivity in the Nigerian Economy through Effective Planning and Research*, Proceedings of the seventh Annual DPRS Directors Conference, held at Ibadan from 26 – 30 June,

Ofoegbu, F.I.(2004),Teacher motivation: A factor for classroom effectiveness and School Improvement in Nigeria. Gale Group. Retrieved August 15 2005, from http://www. Find articles. Com

Okebukola, P. (2009). Review national policy on education to embrace computer learning: Vanguard. http/www. vanguard ngr. com 2009/081 review national policy on education.

Ololube, N.P.(2005). Benchmarking the motivational competencies of academically qualified teachers and professionally qualified teachers in Nigerian secondary schools. *The African symposium, 5(3)17-37*

WAEC, (2013). Annual report, Yaba, West African Examination Council