

Effects Of Principals' Motivational Strategies On Science Teachers' Job Performance In Mission Secondary Schools In Delta State, Nigeria

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Abstract: This study investigated the effect of principals' motivational strategies on science teachers' job performance in mission secondary schools in Delta State, Nigeria. Four research questions were answered and one hypothesis was tested. The population of the study consists of all the mission secondary schools in Delta State. A sample of 20 principals and 80 science teachers was selected using a simple random sampling technique. The instrument for data collection was questionnaire that comprised of two parts titled 'Principals Motivational Strategies Questionnaire, PMSQ' and Science Teachers Job Performance Questionnaire, STJPQ'. The data collected were analyzed using mean and standard deviation to answer the research questions. The finding shows a high level of principals' motivational strategies in the three areas includes principals' leadership style, provision of professional development and instructional supervision. Leadership style motivational strategy include principals' delegation of duties to science teachers, praise them for outstanding performance and encouraging teamwork for better performance of their jobs. Professional development motivational strategies that boost science teachers' job performance include referring science teachers to additional sources of information in science education, provision of current science textbooks, and sponsoring science teachers to attend conferences. Instructional supervision motivational strategies of science teachers included monitoring the teachers' lesson plans, checkmating teachers marking of assignments given to students, and ensuring that they conduct practical sessions. Principals' transformational leadership style through providing learning opportunities for science teachers enhanced their competence in the daily preparation of lesson plans, lesson presentations, and classroom management, and changed their attitude by being punctual to school and to the class to teach students, actively participating in school activities, and decision making. The study recommends continued motivation of science teachers for improvement of science teachers' job performance in mission secondary schools.

I. INTRODUCTION

All over the world science and technology are well recognized because of the roles played in ensuring development of nations. Nations' economic, scientific, social, and industrial growth and progress have been largely attributed to science and technology advancements. In Nigeria government advocates for students to study science-related courses than the arts. Consequently, the recommended ratio is 60:40 for science and arts in terms of admission of students into schools. This is because of the importance attached to science education as fundamental for knowledge and

intellectual building of the citizens who would pilot national development in the future. In secondary education in Nigeria, science subjects cover biology, chemistry, physics, and mathematics. Students who study these subjects are regarded as pure science students.

Teachers are the most potent factors in the educational system. They are the foremost architect and the hub of any educational system. Nwosu (2017) noted that teachers are arguably the most important professionals for nation building since without them education will be crippled. They can influence the teaching and learning outcomes either positively or negatively. They implement the education curriculum and

thus determine the quality of education in any country. Hence the Nigerian National Policy on Education (NPE), the Federal Government of Nigeria (2013) recognized teacher quality as critical for effecting national development as it economic, social, political, and technological. This is because teachers are pacesetters in implementing changes that could transform the quality of lives of citizens through education and training. Teachers can only commit themselves to quality teaching when they are adequately motivated. Jensen & Bro (2018) aver that what teachers and non-teachers do and how committed they are towards the mission and vision of the school is dependent on the motivation they receive. Maintaining and improving educational standards is only possible through teachers. Teachers, therefore, are the most indispensable entity in the school. They are the greatest aid to learning. Williamson and Blackburn (2017) noted that extrinsic rewards often yield temporary results, but to achieve a long-term impact, principals must help teachers activate their intrinsic motivation in other to serve students effectively. This is because teachers who are intrinsically motivated appreciate teaching and make a difference in terms of student learning. The lack of motivation of teachers reduces the extent to which the curriculum can be delivered effectively. It should be noted that the improvement of student learning outcomes and attainment of an excellent school is premised on the effectiveness of the teachers who facilitate learning for self-actualization and national development.

Motivation is the urge that pushes, directs or influences the efforts an individual puts into performing a task (Asiyai, 2011). Motivation is the urge that energizes or propels people to act and direct their actions toward goal accomplishment (Nuku, 2007). Principals are in the best position to motivate teachers to ensure the attainment of the goals and objectives of education and grow professionally (Khumalo, 2021; Nuku, 2007). With enough motivation of teachers, they are likely to put in their maximum efforts towards the realization of school goals and objectives and improve students' learning outcomes. Teacher motivation refers to factors within the school system that if provided to teachers will help improve their teaching effectiveness and thus improve the quality output of students (Asiyai, 2011). The motivational factors will help to channel, energize, influence, sustain and propel the teachers' behaviour toward striving for excellence.

STATEMENT OF THE PROBLEM

Over the years the performance of science students in external examinations like WASSCE and NECO has not been encouraging as only a few percentages of students who enrol and participate in these examinations are able to get five credits in one sitting and get admitted into tertiary institutions in the country. Parents and guidance attribute students' poor performance to teachers and teachers lay the blame on the principals. Many factors could be responsible for this poor performance. Although researchers have attempted to identify some of these factors, in science education, little or no studies have been conducted especially in mission schools which examined the effect of motivation provided to science teachers on their job performance. This study attempts to fill the gap by exploring the effect of principals' motivation on science

teachers' job performance in mission secondary schools in Delta State.

RESEARCH QUESTIONS

- This study was guided by three questions as follows:
- ✓ What is the level of principals' motivational strategies for science teachers' job performance in mission secondary schools in Delta State, Nigeria?
 - ✓ How does principals' leadership style motivational strategy influence science teachers' job performance in mission secondary schools in Delta State, Nigeria?
 - ✓ How does principals' professional development motivational strategy influence science teachers' job performance in mission secondary schools in Delta State, Nigeria?
 - ✓ In what ways does principals' supervision of instruction motivational strategies influence science teachers' job performance in mission secondary schools in Delta State, Nigeria?

HYPOTHESIS

One hypothesis was formulated and tested a 0.05 level of significance:

- ✓ There is no significant relationship between principals' motivation strategies and science teachers' job performance in mission secondary schools in Delta State, Nigeria.

II. LITERATURE REVIEW

Job Performance is conceptualized as actions and behaviours of workers that are under their control that contribute to the goals of the organization (Ramos-Villagrasa, Barrada, Fernandez-del-Rio, & Koopmans, 2019; Campbell & Wiernik, 2015). Job performance is an observed set of human behavior which can be measured to assess the achievement level of an individual. It is an essential factor for the work effectiveness of an individual. Job performance is a set of individual behaviors influenced by motivational factors like wages and favourable service conditions which not only effects positively but also enhance the productivity of staff (Anietie & Ogundele, 2014). Fundamental skills of teachers like ability to teach, teaching quality, literacy and research ability show positive correlation and impact positively on teachers' job performance (Xu & Ye, 2015). Teacher performance is one of the important factors that must be considered to improve the quality of education (Wenno, 2017). According to Mcford (2017), a teacher's job performance is evaluated in his or her ability to make a deliberate effort to enhance students' academic performance. Teachers can only perform their job effectively when they possess adequate content and pedagogical knowledge (Asiyai, 2018, Asiyai, 2021). Possession and display of in-depth knowledge of subject matters, presentation of a lesson in a well-organized manner, effective classroom organization and control, participation in the school curricular activities, regularity and punctuality in the school, maintenance of good

interpersonal relationships with subordinates and superiors, discipline, motivation, and counseling of students and compliance to teachers professional code all constitute teachers' job performance (Asiyai, 2018; Akinfolarin & Rufai 2017). Ekere (2012) asserted that no matter how automated an organization may be, high productivity or performance depends on the level of motivation as well as empowerment. Demir & Budak (2016) stated that motivation is a triggering power for learning. The lack of motivation means that there is no action and therefore difficulty in reaching the desired goal (Demir & Budak, 2016). Oragui (2011) conducted a study on staff motivation in Anambra State, Nigeria. The findings revealed that rural and urban teachers in secondary schools were aware of the strategies that would enhance the motivation of teachers towards better performance. These strategies include regular payment of salaries, an opportunity for advancement in the teaching profession, etc. Ndukwu and Edo (2020) investigated the influence of motivation on teachers' job performance in secondary schools in Rivers State, Nigeria. Findings indicated that motivation influences teachers' job performance in respect of building positive attitudes and beliefs toward teaching and learning.

III. METHODOLOGY

This is a descriptive survey study research that employed a co-relational design. The population of the study comprised all the forty mission secondary schools in Delta State having 1093 teachers. The sample of the study comprised 20 principals and 80 science teachers selected using simple random sampling technique. The instrument for data collection was questionnaire which comprised of two parts titled 'Principals Motivational Strategies Questionnaire, PMSQ' and Science Teachers Job Performance Questionnaire, STJPQ'. The PMSQ contained 18 items while the STJPQ contained 22 items. It was structured along a 4-point rating scale of Strongly Agree=4 points, Agree=3-points, Disagree=2-points, strongly Disagree=1point. The instrument was validated by two experts in educational management who scrutinized and corrected the items and their suggestions were used to modify the final draft. The instrument was pilot tested on 20 teachers and 10 principals who were not part of the original study to ascertain the reliability. The split-half technique was used and a reliability coefficients Of 0.86 and 0.88 were computed for PMSQ and TJPQ respectively, using the Cronbach Alpha formula. This was considered high enough to justify the internal consistency and use of the instrument. The instrument was administered to the respondents by the researchers and two assistants. All the copies administered were retrieved and used for data analysis.

The mean was used to answer the research questions. The decision rule was 2.50. Any item with a mean rating score of 2.50 and above was regarded as accepted while items below 2.50 were regarded as rejected. The hypotheses were tested using Pearson Product Moment Correlation (r) statistics, and the level of significance was 0.05.

IV. RESULTS

S/N	Items on the level of motivational strategies of principals	N	Mean	SD	Remark
A	Leadership style motivational strategies				
1	Setting goals for teachers	80	2.77	0.62	Accepted
2	Provision of a residential apartments to science teachers	80	2.90	0.67	Accepted
3	Involvement of teachers in decision making	80	2.66	0.87	Accepted
4	Being open-minded	80	2.40	1.12	Rejected
5	Provision of intellectual stimulation	80	2.68	0.88	Accepted
6	Provision of inspirational motivation	80	2.78	0.84	Accepted
7	Encourage teamwork among teachers	80	2.94	0.70	Accepted
8	Listening to teachers' ideas	80	2.88	0.74	Accepted
9	Praising teachers for outstanding performance	80	3.10	0.80	Accepted
10	Paying attention to teachers' welfare needs	80	2.58	0.77	Accepted
11	delegation of duties to science teachers	80	3.20	0.54	Accepted
12	Listening to challenges faced by science teachers	80	2.60	0.80	Accepted
B	Professional development				
13	Recommending science teachers for workshops attendance	80	2.80	0.74	Accepted
14	Sponsoring science teachers to attend conferences	80	2.86	0.82	Accepted
15	Ensuring regular professional development of teachers	80	2.78	0.66	Accepted
16	Referring teachers to sources of additional information	80	2.88	0.61	Accepted
17	Ensuring that current scientific Journals are stocked in the library	80	2.35	1.12	Rejected
18	Ensuring the provision of current science textbooks in the library	80	2.88	1.21	Accepted
C	Supervision of Instruction				
19	Regular classroom visitation to ensure that science teachers	80	2.62	0.55	Accepted

20	teach their lessons Monitoring science teachers lesson note plan	80	3.20	0.49	Accepted	
21	Ensuring that science teachers conduct practical sessions	80	2.80	0.76	Accepted	
22	Ensuring that science teachers give a relevant assignments to students	80	2.70	0.89	Accepted	
23	Checkmating teachers marking of students' assignments	80	2.80	0.92	Accepted	
24	Providing feedback on classroom visitation to teachers	80	2.76	1.00	Accepted	
Weighted Mean			2.73	0.71		

Table 1: Mean and standard deviation scores on principals' motivational strategies provided to science teachers in mission schools in Delta State, Nigeria

Data in Table 1 indicates that all the items except items 4 (being open minded) and 17 (ensuring provision of current science journals in the library) have mean score above the benchmark score of 2.50. Hence items 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23 and 24 are areas of principals motivational strategies provided science teachers in mission secondary schools in Delta State, Nigeria. The weighted mean score of 2.73 suggests that the level of principals' motivational strategies for mission secondary school science teachers is high.

	Items	N	Mean	SD	Remark
1	My principals' leadership style motivational strategies; Improved my knowledge and competence in daily lesson plan preparation	80	3.08	0.55	Accepted
2	Focusing on school goals	80	2.99	0.59	Accepted
3	Improved my interest in writing topics taught in the dairy	80	2.94	0.57	Accepted
4	Participating actively in school activities	80	2.92	0.62	Accepted
5	Enhanced my lesson presentation	80	2.88	0.66	Accepted
6	Helped me to improve my teaching effectiveness	80	2.80	0.80	Accepted
7	Encouraged my being punctual to class to teach students	80	2.96	0.60	Accepted
8	Active participation in school decision making	80	2.76	0.45	Accepted
Weighted Mean			3.29	0.71	

Table 2: Mean and standard deviation scores on ways principals' leadership style motivational strategies influence science teachers' job performance

Table 2 shows that the mean score for all the items exceeded 2.50 the benchmark. Therefore all the items in Table 2 represent ways principals leadership style motivational

strategies enhanced science teachers job performance in mission secondary schools in Delta State, Nigeria.

	Items	N	Mean	SD	Remark
	My principals professional development motivational strategies;				
1	Helped me in updating my subject matter knowledge	80	2.75	1.01	Accepted
2	Fostered my remaining more focused on school goals	80	2.88	0.92	Accepted
3	Enhanced my being current on new knowledge in science education	80	3.02	0.71	Accepted
4	Improved my knowledge of pedagogy	80	2.80	0.85	Accepted
5	Enhanced my development of teaching skills	80	3.33	1.00	Accepted
6	Improved my development of pedagogical content knowledge	80	2.85	0.43	Accepted
7	Improved my teaching effectiveness	80	2.79	0.39	Accepted
8	Added positive values to my competence in teaching science	80	2.78	0.52	Accepted
Weighted Mean			2.90	0.73	

Table 3: Mean and standard deviation scores on ways principals' professional development motivational strategies influence science teachers' job performance

Table 3 shows that the mean score for all the items are greater than 2.50 the benchmark. Therefore all the items in Table 3 represent ways principals' professional development motivational strategies enhanced science teachers' job performance in mission secondary schools in Delta State, Nigeria.

	Items	N	Mean	SD	Remark
	My principals instructional supervision motivational strategies;				
1	Helped me to be more regular in school	80	2.92	0.44	Accepted
2	Increased my being punctual to class to teach students	80	2.88	0.53	Accepted
3	Enhanced my commitment to pursuing school mission and vision	80	3.00	0.59	Accepted
4	Improved my commitment to ensuring school	80	2.68	0.62	Accepted

	discipline				
5	Enhanced my classroom management and control during lesson	80	2.88	0.77	Accepted
6	Motivated me to positively participate in extra curricula activities	80	2.74	0.60	Accepted
7	Increased my intrinsic motivation to stay connected with my colleagues in solving school problems	80	2.92	0.68	Accepted
8	Encouraged my participation in school community relations	80	2.70	0.57	Accepted
	Weighted Mean		2.84	0.60	

Table 4: Mean and standard deviation scores on ways principals' instructional supervision motivational strategies influence science teachers' job performance

From Table 4, it is clear that all the items have mean scores above 2.50 the benchmark. Hence all the items in Table 4 are ways principals instructional supervision motivational strategies enhance science teachers' job performance in mission secondary schools in Delta State, Nigeria.

Motivational Variables	N	Mean	SD	R	Sign (2-tailed)	Remark
Leadership Style Variable	80	3.29	0.71	0.722	0.006	Significant
Professional Development	80	2.90	0.73	0.681	0.001	Significant
Instructional Supervision	80	2.84	0.60	0.622	0.022	Significant
Science Teachers Job Performance	80	2.88	0.59	0.643	0.001	

Table 5: Pearson Product Moment Correlation Coefficient showing the Relationship between Principals' Motivation and Science Teachers' Job Performance

Data in Table 5 shows that for each of the independent variable r value is significant at a degree of freedom 78, $r = 0.722, 0.681, 0.622$, and the dependent variable is significant at 0.05 alpha level. Thus, there is a significant relationship between principals' motivational strategies and teachers' job performance in mission secondary schools.

V. DISCUSSION

LEVEL OF PRINCIPALS' MOTIVATIONAL STRATEGIES IN MISSION SECONDARY SCHOOLS

The finding shows a high level of principals' motivational strategies in the three areas including leadership style, provision of professional development, and instructional supervision. In terms of leadership style motivational strategy, the finding indicates that principals delegation of duties to science teachers (3.20), praise teachers for outstanding performance (2.90), encouraging teamwork among science

teachers (2.94), provision of a residential apartments to science teachers (2.90), listening to teachers ideas (2.7), provision of inspirational motivation (2.78), intellectual stimulation of teachers (2.68, listening to challenges faced by science teachers (2.60) and attending to teachers welfare needs (2.58). These aspects reflect the transformational leadership of mission secondary school principals in Delta State. This finding lends credence to Okorie (2010) who found principals' motivational strategies rank highest among other leadership strategies adopted in the attainment of school goals. When teachers have delegated some duties, it acts as a buffer to them and thus makes them feel important and strive to do better in their performance of assigned tasks. The finding of this study is also supported by Asiyai (2018) who found that principals' provision of motivation to staff in terms of intellectual stimulation and recognition for work well done propels further positive actions leading to increased productivity of staff.

In terms of professional development motivational strategies of mission secondary school principals, the finding indicates that referring science teachers to additional sources of information in science education (2.88), provision of current science textbooks (2.88), sponsoring science teachers to attend a conferences (2.86), recommending science teachers to attend a workshop (2.86), and ensuring the regular professional development of science teachers promoted their professional growth and job performance. This finding has the support of Asiyai (2016) who reported that teachers' job performance improved in lesson preparation, and classroom management after attending in-service training programmes.

In the aspect of instructional supervision motivational strategies of mission secondary school principals, the findings shows that monitoring the teachers' lesson plan (3.20), checkmating teachers' marking of assignments given to students (2.80), ensuring that science teachers conduct practical sessions (2.80), principals provision of classroom visitation feedback to teachers (2.76) and ensuring that they give a relevant assignment to students (2.70) are the motivational strategies of principals that enhanced science teachers job performance in mission secondary school. This finding agrees with Dos and Savas (2015) who found that principals' activities that foster productivity among teachers in schools include adequate knowledge of the environment to provide the necessary support, efficient use of motivational factors for optimum result, promoting a forward looking and broad vision. The findings also agrees with Bello, (2016) who revealed that the school administrator has been identified as one who play an important role which includes providing effective managerial skills and styles in the act of administering the school, which in turn fosters better job performance among teachers that could translate into better academic performance among students.

This finding agrees with Nwosu (2015) who contended that teacher motivation plays an important role in the promotion of teaching and learning excellence. That motivated teachers are more likely to motivate students to learn in the classroom, to ensure the implementation of educational reforms and feelings of satisfaction and fulfillment. This finding also agrees with Nawaz & Yasim (2015) whose finding showed that there is a correlation between motivation, mostly intrinsic motivation, and the performance of teachers in

public and private secondary school in Tabora Municipality. This finding is also in tandem with Musta & Othman (2010) who found that there is a positive correlation between teachers' motivation and their job performance. That as the motivation increases their job performance increased.

WAYS PRINCIPALS' LEADERSHIP STYLE MOTIVATIONAL STRATEGIES INFLUENCE SCIENCE TEACHERS' JOB PERFORMANCE IN MISSION SECONDARY SCHOOLS

The findings for research question two showed that principals' transformational leadership style through providing learning opportunities for science teachers enhanced their competence in the daily preparation of lesson plan, lesson presentation, classroom management, and changed their attitude by being punctual to school and to the class to teach students, actively participating in school activities, and decision making. Earlier studies by Sultana (2020) proved that the transformational leadership of principals greatly influenced quality of work of teachers and thus their job performance. Sinden and Hoy (2008) found that adequate motivation of the staff in schools triggered the achievement of educational goals. In addition, Williamson and Blackburn (2017) averred that motivated teachers demonstrate enthusiasm and more interest in their job and strive to do it better. Also, Ekere (2010) found high productivity or performance of the staff of any organization depended on the level of motivation as well as empowerment.

VI. CONCLUSION

The study examined principals' motivational strategies for science teachers in mission secondary schools in Delta State, Nigeria. The findings showed that science teachers in mission secondary schools in the state are well motivated by their principals. The level of motivation provided for science teachers is high. Consequently, science teachers in the school perform their jobs creditable. The study showed significant relationships between principals' leadership style motivational strategy and teachers' job performance. In addition, the finding indicated a significant relationship between principals' professional development and instructional supervision motivational strategies and mission secondary school science teachers job performance.

VII. RECOMMENDATIONS

The study recommends the following based on the findings and conclusion;

- ✓ Mission secondary school principals in Delta State should continue to uphold their motivational strategies for continued science teachers' improvement in teaching and learning of science.
- ✓ Principals should ensure that they provide current science journals in the school library for teachers and students to use for improved practice.

- ✓ Mission secondary school science teachers should continue to perform their job better for improved student learning outcomes.
- ✓ Other secondary school principals in Delta State should emulate mission school principals by providing adequate motivation for teachers through their leadership styles, professional development, and instructional supervision for better teachers' job performance.

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