

Influence of Teachers' Extrinsic and Intrinsic Motivational Factors on Students' Academic Performance in Enugu State Secondary Schools

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Abstract

The study seek to obtain evidence on the influence of teachers' extrinsic and intrinsic motivational factors on students' academic performance in Enugu state secondary schools. It made use of descriptive survey method and two sampling procedures (ratio and simple random sampling procedures) were employed to select 600 secondary school students and 30 teachers from 278 government – owned secondary schools, and hierarchical multiple regression for the analysis. Data were gathered with Teachers' Extrinsic and Intrinsic Motivation Questionnaire (TEIMQ) and Students' Academic Performance Questionnaire (SAPQ). To carry out the study, 3 research questions and 2 null hypotheses were formulated to guide the study. The reliability of the instrument, using the test re-test method, yielded an index of reliability co-efficient of 0.81 and 0.80 for TEIMQ and SAPQ, respectively. The study found that: (1) Students' as perceived by teachers, are factors in students' academic achievement (2) Extrinsic motivation significantly influence students' academic performance. (3) Intrinsic motivation significantly influence students' academic performance. Based on the findings of this study, it was recommended that extrinsic and intrinsic are factors of motivation should be harmonized or partnered as they would help students achieve more academically.

Keyword: Extrinsic, Intrinsic Motivational, Academic Performance

Background to the Study

Over a period of time, motivation as a variable has caused a lot of controversies among many theorists, with much emphasis on the need to increase the workers (teachers) motivation and the bid to increase productivity. Hawthorne studies have drawn attention on the need to elicit interest on the motivation of scientists in organizational setting. Locke and Latham (2022), observed that when there are new definitions to motivation, they may be “riddled with excess verbiage or nonessentials,” therefore, the inability to proffer a clear definition to the term “stifles cognitive clarity and, therefore, progress in the field of work motivation” (Locke and Latham, 2022).

Motivational theories as a matter of fact, accept the idea of bipolarity assumption, such as, that satisfaction and dissatisfaction are two contrary ideas running from satisfaction through neutral to dissatisfaction. These motivational theories believe that every behavior is ignited by an ungratified need(s) and that satisfaction of those need(s) results in a satisfied or neutral state. In another point of view, Herzberg's two-factor theory adopts a uni-polar assumption, meaning that there is existence of two different opinions, one for satisfaction, which moves from satisfaction through to neutral and one for dissatisfaction, that is, running from dissatisfaction through to neutral (Lawler, 2019).

McClelland's (2019) achievement motivation theory also pointed out the paramount importance of an internal quest to succeed at challenging tasks and look for better means to achieve ones obligations. Similarly, the same understanding was discovered in the writing of Herzberg (2018). Ryan and Deci's (2020) intrinsic motivation refers to performing an activity for its inherent satisfactions rather than for some separable consequence. This form of motivation is animated by personal enjoyment, interest, or pleasure. It energizes and sustains activities

through the spontaneous satisfactions derived in effective volitional action. When intrinsically motivated people engage in activities that interest them, and they do so freely, with a full sense of volition and without the necessity of material rewards or constraints (Deci et al., 2019). However, motivation in essence is seen as 'a matter of self determination hence the purpose of the activity is linked mainly on the person's actual feelings in doing the activity (Noels et al., 2019). Extrinsic motivation therefore is a form of motivation governed by gains/rewards and reinforcement contingencies. Extrinsic motivation, in contrast to intrinsic motivation, requires an instrumentality between the activity and some separable consequences such as tangible or verbal rewards, so satisfaction comes not from the activity itself but rather from the extrinsic consequences to which the activity leads (Deci et al., 2019; Neill, 2021).

However, teacher motivation should be considered extremely important because teachers are fundamental to students' motivation through their teaching quality and the development of the teacher-student relationship (Sikhwari, 2020).

Statement of the Problem

Teachers' motivation is one of the basic factors in realizing high academic performance within the teaching/learning environment. The involvement of students towards performing educational goals and performing qualitative education is paramount in the growth and development of this nation. The negative performance of students towards educational aims and objectives which is the basis for growth and development is linked to the lack of motivation on the side teachers. It is a fact that when teachers are motivated, they will be happy doing their job and the students' academic performance will be on the high side, hence economic growth and development. Teachers have the greatest influence on the success and weakness of students' academic performance because their teaching motivation helps students to learn. Some teachers' can be motivated to teach because they have the passion to impart knowledge to the students while others may depend solely on the expected rewards. Optimal performance on the side of teachers in educational setting will take place when there is strong motivation in terms of remunerations and innovation from the administration, the environment and students willingness to learn. However, this motivation may be stimulated by teachers' extrinsic or intrinsic arousal from the perspective of personality traits and environmental factors (teaching/learning environment).

Purpose of the Study

The purpose of the study is to evaluate the relationship between teachers' intrinsic and extrinsic motivation and students' academic performance in Enugu State Secondary Schools. The specific objectives of the study include the following:

1. To examine the effect of teachers' intrinsic motivation on students' academic performance of students in Enugu State Secondary Schools.
2. To examine the effect of teachers' extrinsic motivation on students' academic performance of students in Enugu

State Secondary Schools

Methods

A total of 600 SSII English Language students were randomly selected from Department, Post-Primary Schools Management Board (PPSMB), Enugu, with the help of Planning, Research and Statistics (PRS). Enugu State is in the Eastern part of Nigeria and consists of six educational zones and they are Awgu, Agbani, Enugu, Obollo Afor, Nsukka and Udi. Secondary Schools English Language students' (males = 318=(53%) (Females = 282(47%) Their ages range from 15-16 with a mean of 16.53 and standard deviation of 8.94. The teachers teaching SS 2 English Language were all selected. If the teachers teaching English Language were not more than one, then one of them will be randomly selected for the study. The teachers were 30 in number. That is once a school is selected for the study, the teacher teaching SS2 English Language in such school automatically

became a research subject.

Instruments for Data Collection

The researcher constructed the instruments used for the study. The instruments are: Teachers', Extrinsic and Intrinsic Motivation Questionnaire (TEIMQ) and Students' Academic Performance Questionnaire (SAPQ)
Construction of Teachers' Extrinsic and Intrinsic Motivation Questionnaire (TEIMQ)

The objective of the TEIMQ was to elicit the opinion of students' on the motivation of their teachers sought. Section A, for students' personal information on such variables as sex, age, number of years in present school. The extrinsic teachers' motivation variables include salary, security, and interpersonal relationship with peer groups, work conditions, interpersonal relationship with subordinates, technical supervision, organization policy and administration (Herzberg, 1959). In generating items on the instrument, the researcher paid much attention to his own personal experience as a teacher and to different motivation theories. In support of this view Millers and Fom (1996) opined that researches have to deal with:

- (1) Intrinsic and extrinsic job satisfaction of teachers
- (2) Involvement of the teachers in the immediate work of the group which constitutes the school
- (3) Identification of the teachers with the organizational and satisfaction from work status

The researcher then grouped motivation to agree with Herzberg (1959) grouping of motivation (intrinsic and extrinsic). Section A was the background information for teachers while Section B covered the study questions. Thus, there are two sections in all. The three major problems encountered at this stage were that few of the items were not clear to the respondents; the uncategorized nature of the sections means that the respondents could not respond accurately to items; the questions were apparently too many: 30 questions in all.

In solving the problems, the researcher combined some of the items in some cases but at the same time maintaining the objectives of the instrument. In this manner, the items were reduced to 22.

The questionnaire was validated by the project supervisor in the Department of Management and Planning, National Open University of Nigeria, Enugu Study Centre, and Test-retest reliability technique was utilized to assess the co-efficient of temporal stability of the questionnaire. Copies of the instrument were given to 25 students in Secondary Schools in Awka Educational Zone, Anambra State. The reason for this was to avoid the contamination of the instrument. After 14 days the same students were re-administered with the questionnaire on the ground that copies of the first administration were misplaced. The data generated from the two administrations of the instrument were then correlated with Pearson Product Moment Correlation. The alpha obtained for the questionnaire stood at 0.81. This was judged high enough for the study.

Academic Performance Questionnaire (SAPQ)

It is possible to either arrive at students' academic achievement by either using questionnaire instrument to elicit responses from the students' themselves or by using performance test to elicit responses from students. Literature in support of arriving at students' academic performance by filling questionnaire instrument are numerous (Cohan, 1981). Literature in support of measuring students' academic performance by administering performance test are many (Silts, 1980). This study used the first option. That is, the teachers' filled the questionnaire instrument.

Construction of the questionnaire on Students' Academic Performance (SAPQ). The instrument was developed by the researcher. The objective of the instrument was to elicit the opinion of SS2 English Language teachers on the performance of their English Language students'. The researcher

The instrument consisted of 2 sections: Section A sought for teachers' personal information such as sex, age,

number of years in present school, present class in present school and subject studied in school. Section B sought from the English Language teachers those variables that affect or encourage students' academic performance in English Language. The questionnaire was validated by the researcher's project supervisor in the Department of Management and Planning, National Open University of Nigeria, Enugu Study Centre and test re-test reliability technique was utilized to provide the co-efficient of temporal stability of the questionnaire. Copies of the instrument were distributed to 25 students in Secondary Schools in Awka Educational Zone, Anambra State. The reason for this was to avoid the contamination of the instrument. After 14 days the same students were re-administered with the questionnaire on the ground that copies of the first administration were misplaced. The data generated from the two ministrations of the instrument were then correlated with Pearson Product Moment Correlation. The alpha obtained for the questionnaire stood at 0.80. This was judged high enough for the study.

Statistics and Design

Data was collected and analyzed, using Hierarchical Multiple Regression for the research questions analysis for the null hypotheses, and design of the study was descriptive design. According to Ibeagha (1983), the descriptive design involves carefully describing verbally the facts, qualities or characteristics of the given population as factually and accurately as possible.

Results

Table 1: Mean and Standard Deviation Influence of Teachers' Extrinsic and Intrinsic ` Motivational Factors of Students' Academic Performance in Enugu State Secondary Schools

	Mean	Std. Deviation	N
Age	16.4467	2.10900	600
Gender	1.6000	.49031	600
Class	1.5000	1.50125	600
Religion	4.4900	.50032	600
ExtrinsicMotiv	21.2217	2.45409	600
IntrinsicMotiv	16.1683	2.07859	600
AcademicPerf	29.2600	5.13969	600

The table one above showed the mean and standard deviation of studied variables, from the demographic variables, (age, gender, class and religion), age obtained the largest mean (16.4) and standard deviation (2.10), followed by religion, mean (4.40) and standard deviation (.50), gender mean (1.60) and standard deviation (.49) and class mean (1.50) and standard deviation (1.5) while the academic performance obtained the highest mean (29.2) and standard deviation (5.1) followed by extrinsic motivational factor mean (21.4) and standard deviation (2.5) and intrinsic motivational factor mean (16.15) and standard deviation (2.08).

Table 2 Correlations among the study variables

Variables	1	2	3	4	5	6	7
Age	1						
Gender	.089*	1					
Class	.055	.449**	1				
Religion	-.110**	-.465**	-.460**	1			
ExtrinsicMotiv	.084*	-.136**	-.205**	.133**	1		
IntrinsicMotiv	.068	-.021	-.014	.102*	.299**	1	
AcademicPerf	-.005	-.054	.074	.017	.368**	-.084*	1

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

The result in table 4 present the descriptive statics and correlations for the study variables. Demographic variables, (age, gender, class and religion) only class and religion were significantly related to academic performance of students. Class was positively related to academic performance (r.449, $p < 0.01$) indicating that the class environment contributes a lot to academic performance of a students. While religion equally negatively related to academic performance (r .460, $p < 0.01$) showed that with prayers all things are possible in academic performance of students. Extrinsic motivational factors was significantly related to academic performance (r .133, $p < 0.01$) and intrinsic motivational factorss was equally significantly related to academic of students performance of students

Table 2 Hierarchical Multiple Regression for Predictor Influence of Teachers' Extrinsic and Intrinsic Motivational Factors of Students' Academic Performance in Enugu State Secondary Schools.

	Step1	Step2
Variables	β	β
Age	.04	.05
Gender	.03	.02
Class	-.04	-.05
Religion	.14*	.12
Predictors		
Extrinsic		.15**
Intrinsic		-.12*
Adjusted R2	.01	.03
ΔR^2	.02	.02
ΔF	3.13*	5.41**

Note: = $p < .05$, = $p < .01$

In the hierarchical multiple regression in table 2, the result showed that among all the control variables added in step 1, it was only religion that predicts academic performance ($\beta = .14$, $p = p < .01$) while age, gender, and class did not made any significant contribution to the prediction of academic performance. The result showed that extrinsic motivational factor positively and significantly predicted academic performance ($\beta = .15$, $p = p < .05$), therefore, the alternate hypothesis was confirmed. That means that extrinsic motivation variables are factors in students' academic performance. Secondly, intrinsic motivational factor was negatively and significantly predicted academic performance, ($\beta = -.12$, $p = p < .05$), Therefore, the null was rejected and the alternate accepted. That means that intrinsic motivation variables are factors in students' academic performance.

Summary of Findings

From the analysis of the study, the following findings become evident:

Student variables, as perceived by teachers, are factors in students' academic performance.

1. Extrinsic motivation variables of teacher's motivation, as perceived by students, are factors in students' academic performance.
2. Intrinsic motivation variables of teachers' motivation, as perceived by students, are factors in students' academic performance.

Discussion

Students' variables, as perceived by teachers, are factors in students' academic performance. Some of the items that make up students' variables, as shown in the questionnaire used for the study, include students' study habits, positive self-concept, students' interest in their subjects, etc, impact positively in their students' academic performance for example, Extrinsic motivation variables teachers' motivation, as perceived by students, are no factors in students' academic achievement. Ibekwe (2014) disagrees with the above result. His observation is not strange. This is because he asserted that the reason why there is teachers' poor classroom task performance in our secondary schools is evidenced by poor salaries, no gratuities and other 'fringe' benefits. His findings appears to agree with Maslow (1965) hierarchy of needs. This might mean that Nigeria is still in their lowest hierarchy of needs: the physiological need.

Intrinsic motivation variables of teachers' motivation, as perceived by students, are factors in students' academic achievement. Many studies support the finding of this study. For example, Schunk (2002) observes that it is intrinsic motivation that makes teachers to continue doing their teaching job leading to students' increased academic achievement, that is, with little or no salary.

Conclusion

The work has been examining the relationship between teachers' intrinsic motivation and students' academic performance. The current study has demonstrated, through data presentation and analysis, that there is significant relationship between intrinsic and extrinsic teachers' motivation and students' academic performance. Similarly, there is insignificant relationship between extrinsic teachers' motivation and students' academic performance. In other words, intrinsic variables of teachers' motivation satisfy the teacher more than the extrinsic variables of teachers' motivation in increasing teachers' motivation. This subsequently leads to increased students' academic performance.

However, while the extrinsic variables wield control of intrinsic and extrinsic motivation in few contents, the intrinsic variables did more in many others. This means that we cannot throw away completely the extrinsic motivation variables but that we need to walk between these variables so as to partner them to achieve greater result.

In all, if the findings from this research and recommendations which are clearly stated and implemented, they would steer up a lot of positive changes in the system as well as in the education sector, at large, with regards to sustainable growth.

Recommendations

In line with the findings in this study, the following recommendations are put forward to improve on the extent of teachers' intrinsic and extrinsic motivation and students' performance as well as fashioning out ways to satisfy the teachers using the nascent discoveries from this research.

1. Since the government is passionate about brightening the future of education through the establishments of the Post Primary Schools Management Board (PPSMB) and other supervisory measures to check against management failures, they should strive to involve teachers in the system in decision making and policy derivation.
2. The Post Primary Schools Management Board, in the State, (PPSMB), should make sure that prudential guideline for the disbursement of fringe benefits, salaries and gratuities are strictly adhered to and there should be constant monitoring and reviews since a majority of these externalities (extrinsic variables) constitute a greater index with regard to teachers' intrinsic and extrinsic motivation.

Suggestions for Further Study

There is need for further research in the following areas, at least, to help contribute more, improve, modify or even discard the existing knowledge in our schools namely:

1. The area of socio-economic status and students' academic performance should be studied. This study will help to ascertain whether students with privileged socio-economic background achieve more academically than their not-so-privileged counterparts.

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