

The Predictive Effect of Extrinsic and Intrinsic Motivation on Students' Academic Performance in Vocational/Industrial Education Department of the Niger Delta University, Wilberforce Island

Obiyai, K.K. PhD

Department of Vocational and Technology Education
Niger Delta University Yenagoa, Nigeria
08081518282 or 08105551122
osemenees@gmail.com

Abstract: *The study was conducted to examine the effect of extrinsic motivation and intrinsic motivation on the academic performance of students in the Department of Vocational and Industrial Education in Niger Delta University. The study adopted a survey design and sample of 82 students was used as respondents. The sampling technique was convenience sampling. Data were collected using a structured questionnaire and were analyzed using regression analyses. It was observed that extrinsic motivation and intrinsic motivation had statistically significant effect on academic performance among vocational education students in the Niger Delta University. It was recommended the school authority should formulate a reward policy that promote justice and also provide the reward items and incentives to the teachers who would administer them. Lecturers should also be trained on motivational approaches and management of reward system for just practice that keep students motivated for academic performance.*

Keywords: *Academic Performance, Extrinsic Motivation, Intrinsic Motivation, Vocational/Industrial education.*

INTRODUCTION

One of the issues that have gained serious attention and discussion among scholars and educationists is the effect of motivation on academic performance among students. The term motivation is a positive behavioural intention, action or force that propels one to work toward the achievement of life goals. Ayub (2010) posits that motivation helps children and young people to focus their attention on a key goal or outcome, which is usually the determination to perform academic tasks satisfactorily. It helps students to resist distractions, and doing tasks for a longer period. Ayu (2010) stated further that when students are motivated, they display goal-oriented behaviours. They take initiatives, show resilience, and increase their curiosity to do work. Motivation have been classified into two: extrinsic and intrinsic. Deci and Ryan (1985) defined intrinsic motivation as behavioural intentions that stems from innate psychological needs; need for competence and self-determination. On the contrary, extrinsic motivation is behavior toward achievement that are influenced by rewards and incentives or to avoid been punished. Hezekiah et al (2020) and Sam, et al (2021) identified some ergonomic conditions that could serve as motivators, including desks, and classroom space, availability of current books, providing accessible internet. However, Akin-Little & Little, (2004) argue that extrinsic rewards or incentives could be detrimental to a student's intrinsic motivation, resulting in decreased motivation to perform a task once the reinforcement is removed.

The major objective of schooling is to be able to acquire skills, knowledge and competence that offers one the capacity to be self-reliant in a competitive global society. Usually, in the process of acquiring skills, knowledge and competences, one is subjected to various tests by his teacher(s) to perform certain subject-related tasks. This is required to confirm ones academic performance and competence level. Olajide and Aladejana, (2019) defined academic performance as the outcome of or output measure that a learner has achieved or acquired in the course of training and experience in school environment, while Isah (2015) is of the opinion that academic performance is a measurement of success or how well students' meet standards set by the institution itself. Academic performance therefore refers to the way students deal with their studies and how they cope with or accomplish different tasks given to them by their teachers. This means that that academic performance could be influence by motivation, but as to how well external or intrinsic motivation affects performance have produced divided results as disciplines differ in content and practices. Vocational and industrial education is one of such disciplines.

Vocational/Industrial education is an education that was mounted to produce technical-oriented youths to serve in the agricultural industry for sustainable food production as well as to impart knowledge and skill to others on the techniques of agricultural production. Okoye (2013) confirmed that vocational and technology education is multi-dimensional and pragmatic field of study that is geared towards equipping individuals with necessary skills, which enhances their participation and relevance in the world of work. Agricultural production is becoming more sophisticated on the emergence of state-owned commercial farms, which apply much of technology to increase production and attain sustainable food security. Vocational and technology education is both

practical and academic-oriented. Thus, for one to be judged as having performed, he must have the attributes of hard-work in practical and aptitude or cognitive skills.

Statement of the Problem

The debate on extrinsic and intrinsic motivation as being responsible for students' academic performance have not been laid to rest. Farm work presents drudgery, which has caused many youths to avoid agriculture as a profession. Practical to be done in the farm is a demotivator. Additionally, parents and the society perceive vocational and technology education as a course for the less-privileged or those who are desperately in need of admission into higher institution of learning. The mounting of vocational/technology education has changed the narrative that academic performance is determined by intelligence alone. It remains a fact that an unmotivated student would not do well at school even if he is intelligent because he lacks the zeal and force necessary to propel him to succeed. The society also gives the impression that vocational/technology education students only need to pass practical in the farm to be graduated. This gives a negative psychological input that is quite demotivating. To this end, it becomes pertinent to carefully examine what actually motivate students who are studying vocational/technology education to succeed in academics.

Purpose of the Study

The general purpose of the study was to establish the effect of motivation on academic performance among Vocational/Industrial Education Students in Niger Delta University, Wilberforce Island, Yenagoa. Specifically, the study intends to:

1. Determine the effects of intrinsic motivation on academic performance of vocational/industrial education students in Niger Delta University.
2. Determine the effect of extrinsic motivation on academic performance of vocational/industrial Education students of Niger Delta University.
3. Determine the joint effect of extrinsic and intrinsic motivation on academic performance.

Research Questions

The following research questions were formulated to guide the study:

1. Does intrinsic motivation affect academic performance of vocational /industrial education students of Niger Delta University?
2. Does extrinsic motivation affect academic performance of vocational/Industrial education students of Niger Delta University?
3. What is the joint effect of extrinsic motivation and intrinsic motivation on student's academic performance?

METHOD

Study design: The study adopts a descriptive survey design.

Population: The population of the study is the entire year three students of the Department of Vocational Industrial Education of the Niger Delta University; Wilberforce Island, Yenagoa, Bayelsa State. The population is 82 students.

Sample and Sampling Technique: The study adopts convenience sampling because of the relatively small size of the population under study. The sample consists of – 56 males and 26 females.

Research Instrument: A structured questionnaire was used to elicit information from the respondents. The questionnaire was evaluated for construct and content validity by experts of in the measurement and Evaluation Department of the same CronbachAlpha to ascertain its reliability. It was observed to have a reliability index of 0.79

Method of Data Analysis: The method of data analysis of this research is multiple regression analysis. This deemed appropriate as it can reveal both the descriptive statistics such mean and standard deviation as well as the inferential statistics. The beta and t-statistics would be used in determining the level of statistical relationship and significance. The level of statistical significance in testing the hypotheses is set at 0.05 alpha level.

RESULT AND DISCUSSION

Table 1: Relative Effect of Intrinsic Motivation on Academic Performance:

Variable	Descriptive Stat			Unstandardized Coefficient		Standard Coeff.	T-statistics	
	N	Mean	Sd.	B	Std Error	Beta	t	Sig.2-tailed
Constant	82	2.0635	0.7375	-0.084	0.298		-0.281	0.779
Extrinsic	82	2.7082	0.79353	0.340	0.086	0.366	3.958	0.000
Intrinsic	82	2.3437	0.58042	0.523	0.117	0.412	4.450	0.000

The result on table 1, indicates that intrinsic motivation has a significant effect on academic performance at 0.05 level of significance. This is consistent with the study conducted by Ching (2012) that intrinsic motivation is positively related to higher grades. The principal reasons for this could be the relatively open space for employment in a state that is just struggling to break free from educational backwardness and discrimination from employment in the industrial sector. Employers also believe that performance is positively related to his aptitude and competence. Therefore, to meet the employment requirements in competitive labour markets, every student tends to show commitment to learning and task.

In support of this Williams, and Stockdale (2004) posits that intrinsic motivation is not dependent on the teacher's presence and prodding to keep the student productively engaged. Cheng and Yeh (2009) also posits that intrinsic motivation is important in education because students learn more about subjects that they are interested in and they achieve a deeper understanding of the subject they study.

Relative Effect of Extrinsic Motivation on Academic Performance: From table 1, it was also observed that extrinsic motivation has a significant effect on academic performance. This confirms the position of Wilson and Corpus (2013) who states that extrinsic motivation can spur an individual's determination if the good is worth the effort. Furthermore, Kelsey (2011) states that extrinsic motivation promotes successful learning and productive behaviour. He further asserts that extrinsically motivated learners may exert minimal effort to perform a task and may stop an activity when the reinforcement discontinues. This may not be entirely true for adult but rather reinforce intrinsic motivation in adults.

Table 2: Joint of Effect of Extrinsic and Intrinsic Motivation on Academic Performance

R = 0.64					
R ² = 0.41					
AdjR ² = 0.395					
Std Error = 57368					
Model	Sum of squares	Df	Mean sq.	F	Sig
Regression	18.059	2	9.030	27.437	0.000
Residual	25.999	79	0.329		
Total	44.058	81			

Source: Field Survey 2023

Joint Effects of intrinsic and Motivation on Academic Performance: The result on table 2 indicates that extrinsic motivation and intrinsic motivation have significant joint effect on academic performance. This is consistent with the study of Wilson and Corpus (2013) who demonstrates that a student's internal or intrinsic sense of self and belief in working hard to achieve a goal are the determining factors in whether or not he will succeed. Deci and Ryan (1992) used the concepts of intrinsic and internalized extrinsic motivation and found that high quality learning is associated with intrinsic motivation and fully internalized extrinsic motivation. They found that the school contexts that allow this combination include optional challenge, feedback, and interpersonal involvement and acknowledge.

Variant to the result is the submission of Cameron (2010) who opines that the use of reward and incentives may destroy student's intrinsic motivation to perform activities. The result holds the fact that teachers have made considerable investment of time and

energy in determining an optimum level of combination of extrinsic rewards and intrinsic motivation. This explains why extrinsic rewards did not reduce intrinsic motivation to learn when the required or appropriate feedback is given.

CONCLUSION

From the results, it was discovered that both extrinsic and intrinsic motivation have statistically significant effect on academic performance. It reveals that both extrinsic and intrinsic motivation are necessary for academic performance. Rewards should be given skillfully, justifiably and to be consistent with various tasks to maintain the zeal for academic success. Motivation is required to enhance academic performance.

RECOMMENDATIONS

To enhance academic performance through motivation, the following suggestions are made for stakeholders in education.

1. The school authority should formulate a reward policy that promote justice and also provide the reward items and incentives to teachers who would administer the rewards.
2. Lecturers should be trained on motivational approaches and management of reward system for just practice that keep students motivated for academic performance.

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