

## **Motivation and self-control; the key players in enhancing academic achievement in Economics in Orlu Education Zone one Imo State Nigeria**

**Okere, Ikechukwu Justice<sup>1</sup>, Ugwuanyi, Christian Sunday<sup>2</sup>, Ezeokoye, Chidiebube Precious<sup>3</sup>**

<sup>1</sup>Department of Science Education University of Nigeria Nsukka, Enugu State Nigeria.

<sup>2</sup>Faculty of Education, University of the free state, South Africa.

<sup>3</sup>Department of Statistics University of Nigeria Nsukka, Enugu State Nigeria.

**Correspondence Author:** ikechukwujustice46@gmail.com

### **Abstract**

This study was conducted on motivation and students' self-control as predictors of secondary school students' academic achievement in Economics. The study was guided by three research questions and three hypotheses. The study was carried out in Orlu Education Zone 1 of Imo State. A correlation research design was adopted for the study. The population of the study comprised of 1797 senior secondary school II Economics students for 2023/2024 academic session, with sample of 278 Economics students from 8 secondary schools in four local government area, this was drawn using multi-stage sampling technique. The study adopted three instruments for data collection; motivation questionnaire (MQ), Self-Control Questionnaire (SQ) and Economics Achievement Test (EAT). The internal consistency reliability indices of MQ and SQ were determined to be 0.81 and 0.74 using Cronbach alpha while the internal consistency reliability of (EAT) was 0.78 using KR-20. Multiple regression and Regression ANOVA t-test were adopted to answer the research questions and test the hypotheses at 0.05 level of significance. The result indicates that motivation and self-control significantly predict students' academic achievement in Economics. From these findings, it was recommended among others that, the management and staff of schools should ensure they create room for students to be motivated as this will help improve students' academic achievement.

**Keywords:** Achievement, Economics, Motivation, self-control

### **Introduction**

Students' poor academic achievement in Economics has attracted researchers' interest, making researchers to seek for solutions to the poor academic achievement of students in Economics. According to Chappelow (2019) defines Economics as a social science subject which is geared towards the consumption, production and distribution of goods or services. Economics could be considered as the study that deals with human behaviour in relation to scarce resources which is capable of addressing alternative needs. The important of introducing Economics in senior secondary school is to enable students to be critical minded individuals, to create objectivity among students, to enable the students understand basic economic changes and reforms in the society, Nigerian Educational Research and Development Council (NERDC, 2013). For these stated objectives to be ascertain, there is need for students to understand

the concept economics very well and do well in both internal and their external examination which could be called academic achievement. Džinović, Đević and Đerić (2023), pointed out that academic achievement is the grades such as A, B, C, D, E, F. used by teachers, schools and examination bodies to explain the level of students' learning outcomes based on the outlined objectives.

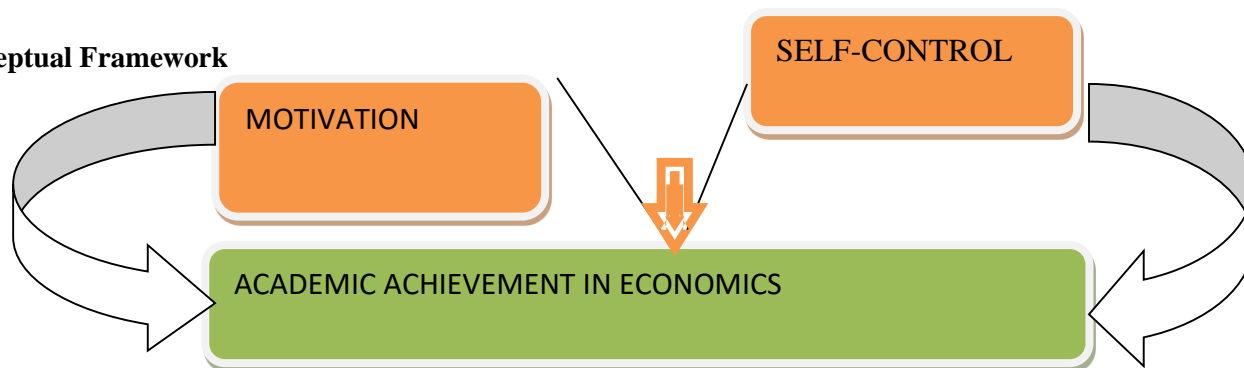
Unfortunately, students' academic achievement in Economics in Nigeria has been very poor in recent years. This is evidence in West African examination council (WAEC) chief examiners report, 2018, 2019, 2020 and 2021 Okere, (2023). The proportion of students that obtained a pass mark in each of these years has never been up to 45%. As a result of this poor academic achievement, more qualified Economics teachers were employed yet academic achievement in Orlu Education Zone

continued (Unamma, 2021). According to Okoro, Nwagbo, Ugwuanyi and Ugwu (2022) factors that could influence students' academic achievement are students' engagement, location, task persistence and self-efficacy, self-control and motivation.

Motivation could be seen as the inner drive that compels an individual into action. Tokan and Imakulata (2019) addressed that motivation can be defined as the incentive and desire of an individual to engage in a specific activity. It could be seen as the main reason that compels people in carrying out certain tasks. Such compelling factors are responsible for students' continuous actions on certain learning activities. Also, Nwankwo (2023) defined motivation as an effort made by an individual to accomplish a given task and duties by dedicating the required effort and abiding on it. Tokan and Imakulata (2019), pointed out that motivation influence students choice of academic assignments, motivation also influence the level of time and effort students devote to different assignment, motivation affect how long students stick with a subject, and how well students overcome obstacle while Ugwuanyi, Okeke and Ageda (2020) were of the view that motivation enhances performance of students'. Motivation could be performance drive. Consequently, a study conducted by Nwankwo (2023). On teachers' competence, motivation as correlates of senior secondary school students' academic achievement in Economics in Imo State The result shows that there is a highly significant relationship between teachers' competence, motivation, and students' academic achievement in Economics. Again, another study conducted by Ugwuanyi, Okeke and Ageda (2020) to determine the relationship between motivation and self efficacy, and learner performance, in Physics, the results showed that motivation and self-efficacy had significant positive relationships with learner performance in Physics. This implies that Economics students that are highly motivated towards a given task, complete the task but those that are low in motivation do not complete tasks. This could explain fairly the reason why some Economics students complete their assignments while others do not. Conceptually, motivation is defined as the drive that keeps Economics

students unrelenting in carrying out their academic activities. Motivation promotes self-control among students. According to Marliyah and Novera (2019) self-control is the ability of an individual to control and regulate his or her own behaviors, thought and emotions. Duckworth, Taxer, Eskreis-Winkler, Galla and Gross (2019) defined self-control as the self-initiated ability to refuse to accept immediate impulses with the view to maintain personal value and achieve long-lasting goals. Bai, Wang, Huo and Huo (2023) explained that Self-control plays an essential role in academic achievement of students in Economics. Bai, Wang, Huo and Huo (2023) further asserted a few ways in which self-control can influence students' performance in some subjects like physics, chemistry and economics among others which include time management, study habits, test preparation, tackling challenges and avoiding procrastination. This implies that if the students cannot form good study habits and manage their time appropriately but procrastinate, the students' academic achievement will remain poor. But if students can form good study habits, manage their time very well, address challenges while avoiding procrastination, the students' academic achievement will improve. According to Marliyah, and Novera (2019), self-control is a factor that could influence students' academic achievement. The authors, therefore, found that self-control has a significant relationship with students' academic achievement. Moreover, Achziger and Bayer (2022) found that there is a significant relationship between self-control and academic achievement. Again, Haghbin, Shaterian, Hosseinzadeh, and Griffith (2019) carried out a study on a brief report on the relationship between self-control, video game addiction and academic achievement in normal and ADHD students, the study shows that there is a significant relationship self-control and students academic achievement. These emphases among these authors on the importance of self-control, motivation and poor students' academic achievement in Economics compelled the researcher to investigate more on motivation and self-control as key players in enhancing academic achievement in Economics in Orlu Education Zone in Imo State Nigeria.

### Conceptual Framework



### The schema for variables under investigation by Okere Ikechukwu Justice.

The Schema above shows the relationship that exists between the independent variables (motivation and self-control) and the criterion variable (achievement in Economics). The schema shows the relationship between motivation and achievement in Economic, the relationship between self-control and achievement in Economics. Finally, the above schema explains the joint relationship between motivation and self-control on achievement in Economics.

### Research questions

1. What is the relationship between achievement in Economics and motivation?
2. What is the relationship between achievement in Economics and self-control?
3. What is the amount of variation in achievement in Economics that is attributed to motivation and self-control?

### Hypotheses

**Ho<sub>1</sub>:** There is no significant relationship between achievement in Economics and motivation

**Ho<sub>2</sub>:** There is no significant relationship between achievement in Economics and self-control

**Ho<sub>3</sub>:** Motivation and self-control are not significant predictors of teachers' job satisfaction.

### Methodology

#### Design of the study

The study made use of correlation research design. This design was used because it allows a researcher to found relationship between two or more

variables (Nworgu, 2015). Hence, considered suitable in this study because the study sought to establish the relationship that exists between motivation, self-control and academic achievement of Secondary School Students in Economics in Owerri Education zone one of Imo State.

#### Population of the Study

The population of this study comprised of 1797 from Ideato North LGA; 386 students in 9 schools, Ideato South LGA; 350 students in 9 schools, Isu LGA; 246 students in 6 schools, Njaba LGA; 337 students in 7 schools, Nkwere LGA; 275 students in 6, Nwangele LGA; 203 students in 6 schools making total of 1797 Economics students in 43 public secondary schools in Orlu Educational zone one of Imo State. (Source: Secondary Education Management Board Owerri, 2023).

#### Sample and Sampling Technique

The sample size of 278 was used for the study. This was selected using multistage sampling technique. At the first stage, simple random sampling technique was used to select all the four (4) Local Government Areas; Ideato North LGA, Ideato South LGA, Njaba LGA and Nwangele LGA. At the second stage, base on the differences in number of schools in these four local government areas, Proportionate stratified random sampling technique was used to sample 8 schools; (Ideato North L.G.A. proportion is 2.3 schools, Ideato South L.G.A proportion 2.3 schools while Njaba LGA. proportion is 1.8 schools and Nwangele LGA; 1.5. Thereafter, 2 schools each was sampled from the four L.G.A. Making a total of 8 schools sampled for the study.

### ***Instruments for Data Collection***

Three instruments; Motivation Questionnaire (MQ), Self-control Questionnaire (SCQ) and Economics Achievement Test (EAT). MQ and SQ were developed by the researchers. MQ and SQ contain, 20 items each related on a four-point scale. 4-Strongly Agree, 3 -Agree, 2 -Disagree and 1 – Strongly Disagree. MQ and SQ were used to measure students' motivation and self-control. Economics Achievement Test (EAT) which contains 20 items, was also constructed by the researchers with the use of table of specification. EAT contains instruction and options letter A-D with one as the right option. EAT was developed from 4 topics in SS1 Economics scheme of work. The topics were selected because they are the major topics in Economics among others that appeared in SS1 scheme of work. However, these topics were pointed out as four among the areas where students are having failure in senior school certificate examination organized by the West African Examination Council in Economics based on chief examiner's report. Each correct item in EAT was assigned one mark. The instrument was constructed to measure the students' academic achievement in Economics.

### ***Reliability of the Instruments***

To establish reliability of the instruments, trial testing was conducted using the instruments. This was done by administering the instruments on 20 SS1 Economics students in one school in Orlu L.G.A of Imo State which was not part of the schools sampled. The school was used because the school is close to the sampled schools. Therefore, may have similar characteristics with the sampled schools. The internal consistency reliability of MQ and SQ was established using Cronbach-alpha. The Cronbach-alpha approach was applied because the instruments were polytomously scored; implying instruments with no right or wrong answer. Hence, the reliability co-efficient of 0.81 and 0.74 were obtained for MQ and SQ respectively. Moreover, reliability of EAT was established using Kuder-Richardson 20 (KR-20). This method was applied because it is appropriate for

establishing internal consistency reliability of instruments that are dichotomously scored. Though, the reliability co-efficient of 0.78 was obtained.

### ***Method of Data Collection***

At first, the researchers created good relationship with the Economics teachers and submitted a letter of permission to conduct a research in those sampled schools. Additionally, the researchers requested they should be assisted by Economics teachers in each of the schools sampled. The request was granted by all the sampled schools. Afterward, the research assistants were concise on the system and modalities for data administration and collections. Subsequently, the research assistants and the researchers made use of face-to-face method of data collection and administered the instruments to the respondents. This approach was applied to ensure maximum return of the instrument as well as to enable the researchers attend to respondents' questions at the point of addressing the instruments. However, the research assistants played a significant role by helping the researchers to score the instrument immediately the respondents finished responding to the instruments. The instruments; motivation questionnaire and self-control questionnaire were scored thus; 4 = Strongly Agree, 3 = Agree, 2 = Disagree and 1 = Strongly Disagree although the achievement test was scored 0 for wrong answer while 1 was scored for each correct answer. Hence, Minimum score obtainable was 0 while the maximum score was 20.

### ***Method of Data Analysis***

The t-test ANOVA was applied to answer research question 1 and 2 while 3 was answered using multiple regression. Again, t-test ANOVA was used to test hypotheses 1 and 2 while regression ANOVA was used to test the null hypothesis at 0.05 alpha level. Based on (Nworgu, 2015) propositions, a correlation co-efficient of 0.00 to 0.20 was considered very low, 0.2 to 0.40 deemed low, 0.4 to 0.60 moderate, 0.60 to 0.80 was deemed high but 0.80 and above was considered very high.

## Results

**Table 1: Regression analysis for the amount of variation in students' academic achievement in Economics that is attributed to motivation**

Model	n	r	R <sup>2</sup>
<b>Motivation and Academic Achievement</b>			
	278	.21 <sup>a</sup>	.047

Considering table 1 above, the result shows the regression analysis for the amount of variation in students' academic achievement in Economics that is attributed to students' Motivation. The result indicated a correlation coefficient (r) of 0.21, which indicates a positive low relationship between students' motivation and students' academic achievement in Economics. The

coefficient of determination (R<sup>2</sup>) associated with the correlation coefficient of it was 0.047. This simply means that 4% of variation in students' academic achievement in Economics is attributed to students' motivation. This result implies that, 96% of variation in students' academic achievement in Economics is attributed to other factors but not students' motivation.

**Table 2: Regression t-test result of students' motivation predicting academic achievement in Economics**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	96.978	12.292		7.890	0.000
	Students' motivation	.753	.204	.217	2.691	.027

a. Dependent Variable: achievement

Result shown in Table 2 reviewed that students' motivation is a significant predictor of students' academic achievement in Economics,  $t = 2.691$ ,  $p = 0.027$ . Considering the fact that p-value of 0.027 is less than 0.05 level of significance pointed out in this study,

the null hypothesis is rejected. Therefore, the researchers inferred that students' motivation is a significant predictor of students' academic achievement in Economics.

**Table 3: Regression analysis for the amount of variation in students' academic achievement in economics that is attributed to self-control**

Model	n	r	R <sup>2</sup>
<b>School Climate and Academic Achievement</b>			
	278	.112 <sup>a</sup>	.013

Result in Table 3 explains the regression analysis for the amount of variation in students' academic achievement in Economics that is attributed to school climate. The result revealed a correlation coefficient (r) of 0.112. This implies a positive low relationship between school climate and academic achievement in Economics. However, coefficient of

determination, (R<sup>2</sup>) associated with the correlation coefficient of it was 0.013. This means that 1% of the variation in students' academic achievement in Economics is attributed to self-control. The result indicates that 99% of variation in students' academic achievement in Economics is attributed to other factors order than self-control.



**Table 4: Regression t-test result of self-control predicting academic achievement in Economics**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	62.839	5.988		10.495	.000
	Self-control	.371	.198	.218	3.878	.021

a. Dependent Variable: achievement

Result in Table 4 shows that self-control significantly predict students' academic achievement in Economics,  $t = 3.878$ ,  $p = 0.021$ . Since the probability value of 0.021 is less than the alpha level of 0.05, the null hypothesis

is rejected. As a result, the researchers concluded that self-control is a significant predictor of students' academic achievement in Economics.

**Table 5: Regression analysis for the amount of variation in students' academic achievement in Economics that is attributed to motivation and self-control**

Model	n	r	R <sup>2</sup>
Motivation, self-control and Academic Achievement	278	.234 <sup>a</sup>	.055

Result in Table 5 above shows the regression analysis for the amount of variation in students' academic achievement in economics that is attributed to motivation and self-control. The result shows a correlation coefficient (r) of 0.234, which implies a positive low relationship between students' motivation and self-control and students' academic achievement in Economics. The coefficient of determination (R<sup>2</sup>)

associated with the correlation coefficient of it was 0.055. This implies that 5% of variation in students' academic achievement in Economics is attributed to motivation and self-control. The result indicates that, 95% of variation in students' academic achievement in Economics is attributed to other factors not motivation and self-control.

**Table 6: ANOVA result of the predictive power of motivation and self-control on academic achievement in economics**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	5931.708	2	2965.854	7.985	.000
Residual	102138.55	275	371.413		
Total	108070.273	277			

a. Dependent Variable: achievement

b. Predictors: (Constant), motivation and self-control.

Result in Table 6 reviewed that motivation and self-control are significant predictors of students' academic achievement in Economics,  $F(2,275) = 7.985$ ,

$p < 0.050$ . Given that the p-value of 0.00 is less than 0.05 level of significance pointed out in this study, the null hypothesis is rejected. Therefore, the researchers

infer that motivation and self-control are significant predictors of students' academic achievement in Economics.

### Discussion of Findings

The findings of the study explained that motivation significantly predicts students' academic achievement in Economics. This means that there is a significant relationship between motivation and students' academic achievement in Economics. The finding is not quite outrageous because when students are always motivated to study extensively students' academic achievement will improve but if the students are not always motivated their achievement may appear very poor.

The result from this study is in line with the findings of Ugwuanyi, Okeke and Ageda (2020) that pointed out that there is a significant relationship between motivation, self efficacy and students' academic achievement. The finding is also in consonant with Nwankwo (2023) that students' motivation significantly predicts students' academic achievement in Physics. As a result of the important of student' motivation, no findings from the studies reviewed contradicted the finding of the present study that there is a significant relationship between students' motivation and academic achievement.

Additionally, the result shows that 4% of variation in students' academic achievement in Economics is attributed to motivation. This result implies that motivation of the students has a relationship with students' academic achievement in Economics. More also, analysis revealed that self-control predict students' academic achievement in Economics significantly. It could be that this result was shown because of the fact that students' who are self-control easily cope with challenging situations, have reduction in stress and anxiety thereby making learning easy and fast for those students.

The finding of this study is in agreement with the findings of Marliyah, and Novera (2019), that there is a significant positive relationship between self-control and student academic achievement. The finding is also in consonant with the finding of Achtziger and Bayer (2022), that there is a significant relationship between self-control and student achievement. This means that if students can regulate themselves very well, those students' academic achievement will be improved. However, if those students cannot regulate themselves very well, their academic achievement will not improve.

### Conclusion of the Study

The findings of the study show that students' motivation and self-control are predictors of secondary school students' academic achievement in Economics. Considering the findings, the following conclusion were made; since students' motivation and self-control significantly predict the academic achievement of students' in Economics, school counselors researchers, stakeholders and parents among others can conclude that students' regulation, procrastination and an individuals' behaviour affect students' academic achievement in Economics.

### Recommendations

1. Teachers should teach students the importance of self-regulations as this will enable the students to avoid procrastination and remain focused in their studies.
2. The management and staff of schools should ensure they create room for students to motivated as this will help improve students' academic achievement.
3. Education stakeholders alongside federal government should give scholarship to students that merit it so as to improve their academic achievement.

### References

- Oparaji, C. I.& Ugwu, I. (2019). Self- regulated learning as correlates of academic achievement of students of economics in secondary schools in Imo State. *South Eastern Journal of Research and Sustainable Development (SEJRSD)*, 2(2).20-25.
- Chappelow, J. (2019). Economics: Overview, types, and economic indicators. *Economics*. Retrieved from <https://www.investopedia.com/jim-chappelow-4684367>.
- Nigerian Council Educational Research and Develeopment. (2013). National Curriculum on Mathem atics for senior secondary school. *NERDC*. Retrieved from <https://nerdc.org.ng/eCurriculum/aboutNERDC.aspx>
- Nwankwo, C. A. (2023). Teachers' competence, motivation as correlates of senior secondary school students' academic achievement in economics in Imo State. *Journal of Educational Research on Children, Parents & Teachers*, 2(1) 158-168



- Okere, I. J. (2023). School climate, students' engagement and learning strategies as predictors of students academic achievement in Owerri Education Zone Two of Imo State. (master project), University of Nigeria, Nsukka.
- Džinović, V., Đević, R., & Đerić, I. (2019). The role of self-control, self-efficacy, metacognition, and motivation in predicting school achievement. *Psihologija*, 52(1), 35-52.
- Anum, O. A., Suleman, B. D., Abdulrahman, M. O., & Modupe, O. B. (2021). Managing Sustainable Education for Social Studies and Economics Reactive Students in Post Covid 19 Era: A Case Study of Public Schools in Orlu Senatorial Zone, Imo State, Nigeria. *Education*, 4(2), 130-138.
- Unamma, D. I. (2021). Effects of group and individual laboratory activities on senior secondary school students' achievement and retention in practical. Physics In Orlu Education Zone I, Imo State.
- Okoro, A. U., Nwagbo, C. R., Ugwuanyi, C. S., & Ugwu, B. E. (2022). Evaluating The Impact Of Teachers' Self-Efficacy On Students' Academic Achievement In Biology In Enugu State, Nigeria. *Webology*, 19(3).
- Tokan. M.K., Imakulata, M.M., (2019). The effect of motivation and learning behaviour on student achievement. *South African Journal of Education*, 39(1), 1-8.
- Ugwuanyi, C. S., Okeke C I.O., Ageda T. A.(2020) Motivation and Self-efficacy as Predictors of Learners'Academic Achievement. *Journal of Sociology and Social Anthropology*, 11(3-4), 215-222. DOI:10.31901/24566764.2020/11.3-4.351
- Marliyah, L., & Novera, D. A. (2019). The role of self control to mediate the influence of achievement motivation towards academic procrastination. *Unnes Science Education Journal*, 8(3).
- Duckworth, A. L., Taxer, J. L., Eskreis-Winkler, L., Galla, B. M., & Gross, J. J. (2019). Self-control and academic achievement. *Annual review of psychology*, 70(1), 373-399.
- Bai, Y., Wang, J., Huo, Y., & Huo, J. (2023). The desire for self-control and academic achievement: the mediating roles of self-efficacy and learning engagement of sixth-grade Chinese students. *Current Psychology*, 42(25), 21945-21953.
- Achtziger, A., & Bayer, U. C. (2020). Self-control mediates the link between gender and academic achievement in sex-stereotyped school subjects in elementary and in higher secondary schools. *Current Psychology*, 39(5), 1683-1695.
- Hagbin, M., Shaterian, F., Hosseinzadeh, D. & Griffith, D. M. (2019). A brief report on the relationship between self-control, video game addiction and academic achievement in normal and ADHD students'. *Journal of Behavioral Addictions* 2(4), pp. 239–243 (2013)