PREDICTING STUDENTS' ACHIEVEMENT IN ECONOMICS THROUGH THEIR STUDY HABITS AND ACADEMIC ENGAGEMENT: A CASE STUDY OF JOS METROPOLIS, PLATEAU STATE, NIGERIA

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Abstract

The study sought to determine the variation in students' academic achievement in Economics that can be attributed to study habits and academic engagement in Jos Metropolis, Plateau State. The study was guided by two research questions and two null hypotheses and correlational survey design was adopted. Population of the study comprised 2,698 (1,341 males and 1,357 females) senior secondary school II (SS 2) Economics students in forty-two (42) public secondary schools in Jos Metropolis of Plateau state. A sample of 400 SS 2 Economics students were selected using Taro Yamane sampling formula and multistage sampling procedure. Instruments for data collection were Economics Achievement test, Study Habit Scale and Academic Engagement Scale. Reliability indices of 0.77, 0.81 and 0.83 were obtained for the EAT (using KR-20), SHS (using Cronbach alpha) and AES (using Cronbach alpha) respectively. Data collected were coded into SPSS and analysed using regression analysis. Findings of the study showed that: 81.1% and 89.1% of variation in students' achievement in Economics can be attributed to their academic engagement and study habits respectively. The study recommended that teachers should adopt interactive and student-centered teaching methods—including group discussions, project-based learning, and collaborative tasks—to enhance students' academic engagement in Economics.

Key words: Economics, Achievement, Study habits, Academic Engagement, Plateau State.

Introduction

Economics is a fundamental field of study that examines how individuals and societies allocate scarce resources to satisfy unlimited wants. According to Mankiw (2021), Economics is the study of how society manages its scarce resources, encompassing decisions made by individuals, households, firms, and governments. In the context of this study, Economics refers to the senior secondary school subject that equips students with knowledge and skills to understand Economic principles, make informed financial decisions, and analyze socio-Economic issues affecting their immediate and broader environment. The relevance of Economics to individuals and society is multifaceted; it enhances critical thinking, promotes financial literacy, informs policy-making, and provides a framework for understanding and solving real-world problems such as inflation, unemployment, and resource distribution (Todaro & Smith, 2020). As both a theoretical and practical discipline, Economics contributes to human development by guiding Economic behavior, promoting efficient use of resources, and fostering informed citizenship.

Despite the importance of Economics as a discipline of study, students' achievement in the subject has been poor over the years. Several factors have been identified as contributors

to students' poor achievement in Economics. One major factor is ineffective study habits, such as procrastination and lack of regular revision, which hinder students' ability to grasp Economic concepts (Okoye & Ofojebe, 2021). Poor instructional methods, including teacher-centered approaches that limit student engagement, have also been linked to underachievement in the subject (Akinola & Salami, 2019; Ibrahim & Yusuf, 2020). Inadequate teaching and learning resources, such as textbooks, visual aids, and access to current Economic information, further exacerbate the problem (Eze & Eya, 2020). Furthermore, large class sizes and overcrowded classrooms often reduce individual attention and interaction, which are crucial for meaningful learning in Economics (Onuka & Olatoye, 2018). This study focused on study habits and academic engagement.

Study habit is a crucial academic behavior that influences how effectively students learn and retain knowledge. According to Oluwatimilehin and Owoyele (2019), study habit refers to the consistent practice of allocating time and employing specific techniques for studying in order to achieve academic goals. Similarly, Okoye and Ofojebe (2021) describe study habit as the regular and purposeful manner in which a student approaches learning tasks, including reading, note-taking, time management, and concentration. Several factors shape students' study habits, including parental involvement (Hill & Tyson, 2019), availability of a conducive learning environment (Tamis-LeMonda, et. al., 2017), peer influence (Singh, 2016), personal motivation (Gottfried, Gottfried & Guerin, 1994), and access to learning materials (Tamis-LeMonda, et. al., 2017). For example, students who have structured schedules and quiet study spaces are more likely to develop effective study routines, while those experiencing distractions or poor time management may struggle to establish productive study patterns.

Effective study habits have been found to be a strong predictor of academic achievement, as they influence how well students understand, internalize, and apply subject matter. Studies such as that of Adamu and Adedigba (2020) have shown a significant positive relationship between good study habits and academic performance among secondary school students. Similarly, Eze and Eya (2020) observed that students with consistent and organized study routines performed better in core subjects compared to those with poor study practices. However, most of these studies have been conducted in broader or different educational contexts, with limited focus on Economics as a subject and even fewer within the specific locale of Jos metropolis. As such, there is a notable gap in empirical research regarding the extent to which study habits predict academic achievement in Economics in Jos Metropolis. This study seeks to fill that gap by determining the amount of variation in students' achievement in Economics in Jos metropolis that can be attributed to their study habits, as well as academic engagement.

Academic engagement is a multidimensional construct that reflects the degree of attention, curiosity, interest, and effort that students invest in their learning process. According to Fredricks, Wang, and Schall Linn (2021), academic engagement encompasses behavioral, emotional, and cognitive involvement in academic tasks, which together influence students' capacity to learn effectively. Similarly, Akinola and Salami (2019) define academic engagement as the active participation of students in educational activities that promote learning, such as attending classes, contributing to discussions, and completing

assignments. Several factors shape students' academic engagement, including teacher-student relationships, classroom environment, peer influence, availability of learning resources, and the relevance of the subject content to students' real-life experiences. When students perceive their learning environment as supportive and stimulating, they are more likely to demonstrate higher levels of engagement, while negative classroom dynamics or perceived irrelevance of content can lead to disengagement.

Academic engagement has been identified as a significant predictor of students' academic achievement, as engaged students tend to demonstrate better comprehension, persistence, and academic outcomes. Study by Ezenwosu and Nwabudike (2020), found that students who were more engaged academically performed better in core subjects including Economics. Likewise, Olatoye and Adekoya (2021) observed a strong correlation between students' emotional and cognitive engagement and their academic success. However, much of the existing research has focused on general academic performance or broader subject areas without focusing specifically on Economics as a specific discipline. Furthermore, studies on academic engagement are scarce in the context of Jos metropolis, making it unclear the extent to which students' engagement levels actually influence achievement in Economics in Jos Metropolis. To bridge this gap, the study therefore determined the amount of variation in students' achievement in Economics in Jos metropolis that can be attributed to their academic engagement, and study habits.

Research Questions

The following questions were answered:

1. What Is the correlation between students' achievement in Economics and study habits?
2. What Is the correlation between students' achievement in Economics and academic engagement?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

1. The proportion of students' achievement in Economics that can be attributed to study habits is not significant.
2. The proportion of students' achievement in Economics that can be attributed to academic engagement is not significant.

Research Method

The study adopted correlational survey research design. The study was carried out in Jos Metropolis of Plateau State, Nigeria. The population of the study rise 2,698 (1,341 males and 1,357 females) senior secondary school II (SS 2) Economics students in forty-two (42) public secondary schools in Jos Metropolis of Plateau state. This comprises of 22 schools under Jos North LGA and 20 schools under Jos South LGA. The sample size for the study consists of 400 SS 2 Economics students in Jos Metropolis. The sample size was determined using Taro Yamane sampling formula and selected through multistage sampling procedure. In stage one, 20 public secondary schools were sampled from Jos Metropolis using purposive sampling technique; 10 schools from Jos North and 10 schools from Jos South LGA. Purposive sampling technique was adopted to ensure that male and female students are part of the study. In stage 2, simple random sampling technique was used to sample 20 students each from each of the sampled schools to make up the sample for the study.

The instruments for data collection are Economics Achievement Test (EAT), Study Habits Scale (SHS) and Academic Engagement Scale (AES). The Economics Achievement Test was developed by the researcher following a 30-item test blue print. The instrument consists of 30 multiple choice items with options lettered A – D. The items were drawn from the content "demand and supply". Each correctly answered question was scored 1 point and a maximum of 30 marks is obtainable on the instrument. The SHS was adapted from the Study habits Inventory developed by Kuku, and Alade (2017). The instrument is structured into two sections: A, and B. Section A is designed to elicit respondents' demographic information like gender and school ID. Section B consists of 24 items designed to measure students' habits towards studying Economics. The items are structured such that respondents can indicate their level of agreement or otherwise using the four point Likert response options of Always, Most Times, Sometimes, and Never. Numerical points are also assigned to each response thus: always = 4; most times = 3; sometimes = 2, and never = 1. The AES was adapted from the student course engagement questionnaire developed by Stephen, Alex, Sue and Nicola (2017). The instrument is structured into two sections: A and B. Section A was used to elicit respondent demographic information like student gender and School ID. Section B consists of 23 items which the researcher modified by fixing Economics in the instrument because the instrument was not on the current subject matter. The items were rated on a four-point scale of 4-Strongly Agree, 3 -Agree, 2 -Disagree and 1 – Strongly Disagree.

The instruments was validated by three experts at the University of Nigeria, Nsukka and were trial-tested on 20 Economics students outside Jos Metropolis. The reliability indices of 0.77, 0.81 and 0.83 were obtained for the EAT (using KR-20), SHS (using Cronbach alpha) and AES (using Cronbach alpha) respectively. The instruments were administered to the students on the spot and retrieved immediately. Collected data were coded into SPSS, converted to 100% and analysed using regression analysis. The analysis was interpreted using the correlation r, r-squared and p-value in the regression ANOVA.

Results/Findings

Table 1

Linear regression analysis of the amount of students' achievement in Economics that can be attributed to study habits.

Model	N	R	R Square	Adjusted R Square	Standard Error
1	400	0.944	0.891	0.891	3.088

Table 1 shows that a correlation coefficient (r) of 0.944 was obtained for the relationship between students' study habits and academic achievement in Economics. This indicates that there is a strong positive relationship between students' study habits and their academic achievement in Economics. A coefficient of determination (r^2) of 0.891 was also obtained and this indicates that 89.1% of variation in students' achievement in Economics can be attributed to their study habits.

Table 2

Regression ANOVA of the amount of students' achievement in Economics that can be attributed to study habits.

Model	Sum of	Df	Mean	F	Sig.

		Squares		Square		
1	Regression	30981.671	1	30981.671	3249.121	.000
	Residual	3795.089	398	9.535		
	Total	34776.760	399			

Table 2 shows that an F-ratio of 3249.121, with an associated p-value of 0.000 was obtained. Since the probability value of 0.000 is less than 0.05 level of significance, the null hypothesis is rejected. Therefore, the proportion of students' achievement in Economics that can be attributed to study habits is significant.

Table 3

Linear regression analysis of the amount of students' achievement in Economics that can be attributed to study habits.

Model	N	R	R Square	Adjusted R Square	Standard Error
1	400	0.900	0.811	0.810	4.068

Table 3 shows that a correlation coefficient (r) of 0.900 was obtained for the relationship between students' academic engagement and academic achievement in Economics. This indicates that there is a strong positive relationship between students' academic engagement and their academic achievement in Economics. A coefficient of determination (r^2) of 0.811 was also obtained and this indicates that 81.1% of variation in students' achievement in Economics can be attributed to their academic engagement.

Table 4

Regression ANOVA of the amount of students' achievement in Economics that can be attributed to study habits.

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	28189.386	1	28189.386	1703.164	.000
	Residual	6587.374	398	16.551		
	Total	34776.760	399			

Table 4 shows that an F-ratio of 1703.164, with an associated p-value of 0.000 was obtained. Since the probability value of 0.000 is less than 0.05 level of significance, the null hypothesis is rejected. Therefore, the proportion of students' achievement in Economics that can be attributed to academic engagement is significant.

Discussion of Findings

The findings revealed that students' academic achievement in Economics is heavily influenced by their study habits. This implies that the way students plan, organize, and approach their studies—such as time management, note-taking, regular revision, and avoidance of procrastination—plays a major role in how well they perform academically. A large proportion of the variation in achievement attributed to study habits, the implication is that educational interventions aimed at improving students' academic outcomes in Economics should prioritize the development and reinforcement of effective study habits. This also suggests that even students with average or low academic achievement may perform better if they adopt strong and consistent study strategies. This finding is in line with study of Yusuf (2020) found that effective study habits significantly enhanced academic performance among

secondary school students in social science subjects, including Economics. Similarly, the study by Olatunde and Ayodele (2019) showed that students who adopted goal-oriented and consistent study routines performed better in examinations than those who studied sporadically. On the contrary, however, a study by Nwoke (2018) found no significant relationship between study habits and students' achievement in Economics, suggesting that other factors such as teaching methods and classroom environment may play a more dominant role in certain contexts.

The findings suggest that when students are actively involved in their learning process, their academic achievement in Economics improves significantly. Academic engagement—which includes participation in class, attentiveness, homework completion, and independent study—is a powerful contributor to students' academic achievement. The fact that a large portion of the variation in academic achievement can be attributed to academic engagement implies that how students involve themselves in academic activities plays a major role in determining their success in Economics. This emphasizes the need for teaching strategies and school policies that actively encourage and support student engagement in order to improve academic achievement. This conclusion aligns with the findings of Wang and Holcombe (2018), who reported that academic engagement strongly predicted students' academic achievement in various subjects, including Economics. Likewise, Fredricks, Blumenfeld, and Paris (2019) found that students who demonstrated high levels of behavioral and emotional engagement had higher academic achievement. However, Kpolovie, Joe, and Okoto (2018) presented a different perspective; their study revealed no significant relationship between academic engagement and academic achievement, suggesting that in some settings, other factors may influence academic achievement more than engagement.

Conclusion

In conclusion, students' academic achievement in Economics is strongly influenced by both their academic engagement and study habits, with study habits exerting a slightly greater impact. This suggests that while classroom participation, attentiveness, and involvement in academic tasks are crucial, the way students manage their learning outside the classroom plays an even more significant role in determining their academic achievement. The strong relationship between these variables and academic achievement highlights the importance of equipping students with the tools and motivation to take responsibility for their learning. It also reflects the need for a balanced approach to teaching—one that not only fosters active participation during lessons but also cultivates effective personal study practices. Educators, school administrators, and policymakers must recognize that academic engagement and study habits are not isolated behaviors but interconnected aspects of a student's learning experience. Strengthening both areas can therefore lead to meaningful improvements in students' academic achievement, especially in subjects like Economics.

Recommendations

The study recommends that:

1. School administrators should implement study skills training programs to help students develop effective study habits such as time management, note-taking, and regular revision techniques.

2. Teachers should adopt interactive and student-centered teaching methods—including group discussions, project-based learning, and collaborative tasks—to enhance students' academic engagement in Economics.
3. Guidance counsellors should provide regular academic monitoring and support, helping students stay accountable to both classroom participation and consistent personal study routines.
4. Education policymakers should design school schedules and policies that allocate dedicated time for supervised study sessions, academic support programs, and enrichment activities that reinforce learning.
5. Students should take personal responsibility for improving their academic habits by actively engaging in lessons, seeking help when needed, and committing to structured and consistent study practices outside the classroom.

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