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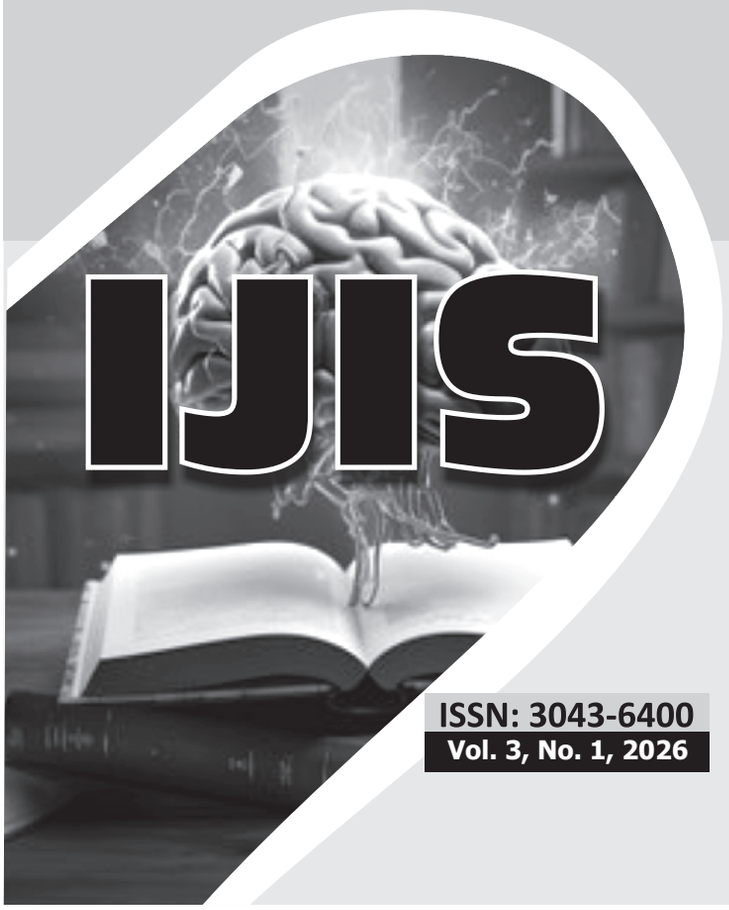

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INTERNAL AND EXTERNAL LOCUS OF CONTROL AS DETERMINANTS OF SENIOR SECONDARY SCHOOL STUDENTS' ACADEMIC ACHIEVEMENT IN ECONOMICS IN OSUN STATE, NIGERIA

TAYO OLALEKAN AROYEHUN

INTERNAL AND EXTERNAL LOCUS OF CONTROL AS DETERMINANTS OF SENIOR SECONDARY SCHOOL STUDENTS' ACADEMIC ACHIEVEMENT IN ECONOMICS IN OSUN STATE, NIGERIA

TAYO OLALEKAN AROYEHUN
Department of Arts and Social Science Education,
Obafemi Awolowo University, Ile-Ife, Nigeria
E-mail: tyolalekan@gmail.com
Telephone Number: 08064641986

Abstract
The study determined the relationship between internal locus of control and students' academic achievement in Economics in senior secondary school in Osun State. It also examined the relationship between external locus of control and students' academic achievement in Economics in senior secondary school in the study area. These were with a view to providing empirical information on internal and external locus of control as determinants of senior secondary school students' achievement in Economics in Osun State, Nigeria. The study adopted a descriptive survey research design of correlational type. The population of the study comprised all Economics students in senior secondary schools in Osun State. The sample consisted of 500 senior secondary school students selected using multistage sampling procedure. Two research instruments used for data collection are:"Academic Locus of Control Scale" (ALCS) and "Economics Achievement Test" (EAT). The data collected were analysed using Pearson Product Moment Correlation analysis. The result showed a significant relationship between students' internal Locus of control and students' academic achievement in Economics in senior secondary school in Osun State ($r = 0.104$, $p < 0.05$). Finally, the result showed there is significant relationship between students' external Locus of control and students' academic achievement in Economics in senior secondary school in Osun State ($r = 0.111$, $p < 0.05$).The study concluded that there exists a relationship between students' internal locus of control, external locus of control and students' academic achievement in Economics in senior secondary schools in Osun State.

Keywords: Internal and External Locus of Control, Economics, Academic Performance

Introduction

Economics education in the 21st century is about acquiring knowledge, higher order skills, such as critical thinking, creative problem solving, teamwork, and communication. As information and facts proliferate, the ability to navigate across a wide range of issues in Economics to critically evaluate, extract and communicate meaning have become essential attributes for success in modern society. Increasingly, the most important element of modern pedagogy in economics education is not simply the teachers' transmission of information and the students' retention of facts but for students to apply the knowledge to solve their needs and society needs. Lundberg (2018), viewed Economics education as the study of scarcity, the study of how people use resources and respond to incentives, or the study of decision-making. Economics is a broad discipline that helps us understand historical trends, interpret headlines, and make predictions about the coming years (American Economic Association, 2018). In the same vein, Investopedia (2018) found out that individuals, businesses owners, governments and nations make choices on allocating resources to satisfy their wants and needs, and tries to determine how these groups should organize and coordinate to achieve maximum output. While education is an aggregate of the process, skills, dispositions, and belief systems which a learner acquires/achieve for his/her positive development and meaningful contribution to the society in which he/she lives (Akarowhe, 2017).

According to Gotip, Ede and Oleabhiele (2020) the importance of Economics education to any nation, is very clear. It enables both leaders and citizens to understand basic Economics principles and concepts, as well as to understand, appreciate and seek to improve the economic situation for their own social good. The understanding of Economics is a pre-requisite for good citizenship. The principal objective for teaching Economics should be "to provide Economic understanding necessary for responsible citizenship". Being a responsible citizen involves the ability to take rational decision on

important economic issues with a good basis for doing so.

Furthermore, Gotip, Ede and Oleabhiele (2020) stated that the position of Economics in secondary school curriculum has been strengthened because it has been accepted that it has some civil values because of some topics as "the element and determinants of national income, the structure and activities of labour unions, the working and influence of financial institution". These prepared one adequately for life in modern society. It gives us facts and shows us what may be expected to be the outcome of certain lines of conduct; it helps us to decide which of several alternatives to choose. It charged its recipient to make wise choice that will satisfy their needs in the presence of unlimited wants and resources.

The Economics of Education has revived due to a growing awareness of how non-cognitive qualities affect academic and economic success (Duckworth et al., 2015). Tenacity, social skills, and drive are intangibles. Thus, more research in Economics of Education is examining how non-cognitive qualities affect academic and economic success and the factors that foster them. There are several factors that affect the academic achievement of these students. Some experts mention that among the aspects that play a very important role are internal and external locus of control (Kulik & Kulik, 2016; Lefcourt, 2022). Students with internal locus of control believe that their success or failure is a result of the effort and hard work they invested in their learning while students with external locus of control believe that their success or failure is as a result of external factors beyond their control such as luck, fate, injustice and spiritual beings amongst others (Okeke, Okorie, Idioha&Oramadike, 2021). This means that while students with internal locus of control blame their poor/high academic performance on their study habit, dedication, hard work and perseverance; students with external locus of control blame theirs on teachers, society and negative forces.

Furthermore, internal locus of control (LOC) is the belief that one's actions affect their outcomes. Internal LOC people are more likely to credit their achievements to their own efforts and skills (Rotter, 2000). Moreover, they are more robust and persistent in difficult

situations (Zhang & Chen, 2017). In contrast, persons with an external LOC believe that luck or chance determine their situations. People tend to give up in the face of challenges and credit their successes to luck (Ogunyomi & Ogunyomi, 2020). Empirical evidence supported the link between locus of control (LOC) and increased academic achievement, as assessed by test scores and graduation rates. In a meta-analysis by Chen and Furnham (2019), internal locus of control (LOC) was shown to positively correlate with academic achievement in numerous areas. Teng (2017) found comparable outcomes when studying Chinese college students' internal locus of control (LOC) and academic achievement. Research also showed that locus of control (LOC) mediates numerous determinants and academic success. Using an internal locus of control, Liu and Chen (2015) found that students who could self-regulate their learning were more likely to succeed. Zhang and Chen (2017) found a favourable association between parental involvement and academic success, particularly in the internal locus of control. The researchers define parental engagement as parental involvement in their children's schooling. Numerous empirical investigations (Kulik & Kulik, 2016; Lefcourt, 2022) have consistently shown that individuals who possess an internal line of communication (LOC) exhibit superior academic performance compared to their counterparts who possess an external LOC.

Therefore, whichever aspect of locus of control a student chooses to be influenced on, determines his/her academic motivation, persistence and level of hard work. This is because internals are considered more likely to work hard in order to learn, make progress and succeed regardless of failure while externals are likely to believe that working hard is pointless because someone or something else is in charge of their life. Internal or external locus of control plays an important role for students to sustain the efficacy and usefulness of learning performance. The knowledge and experiences gained by students by means of organizational learning are vital factors in improving their academic achievements. In this context, it is necessary for schools to fulfil learning function in an arrangement and to use this function oriented to the improvement of the learners.

Statement of the Research Problem

Although previous studies have sought to improve students'

academic achievement in Economics by focusing on variables such as teaching methods, instructional resources, and classroom environment, evidence suggests that these are not the only factors influencing learning outcomes. Several scholars have identified psychological constructs particularly internal and external locus of control as critical determinants of students' academic performance (Barroso et al., 2021). However, there remains a dearth of empirical studies examining how internal and external locus of control relate specifically to students' achievement in Economics within the context of Osun State. This gap in the literature underscores the need for the present study, which investigates the extent to which students' locus of control influences their academic performance in Economics in senior secondary schools in Osun State.

Purpose of the Study

The study aims at examining the relationship between internal and external locus of control on students' academic achievement in Economics in senior secondary schools in Osun State. Specifically, the objectives of the study are to:

(a) determine the relationship between internal locus of control and students' academic achievement in Economics in senior secondary schools in Osun State; and

(b) examine the relationship between external locus of control and students' academic achievement in Economics in senior secondary schools in the study area.

Hypotheses

Two hypotheses were formulated and tested at 0.05 level of significant.

$H_0$1: There is no significant relationship between students' internal locus of control and students' academic achievement in Economics in senior secondary school in Osun State.

$H_0$2: There is no significant relationship between students' external locus of control and students' academic achievement in Economics in senior secondary school in Osun State.

Methodology

The study adopted a descriptive survey research design of

correlational type. The population for the study comprised all Senior Secondary School Two (SS II) students of Economics in Osun State. The sample size for the study contained 500 students that were selected using multi-stage sampling procedure. Out of the three senatorial districts in the State, one senatorial district was selected using simple random sampling technique, from the selected Senatorial District, five Local Government Areas (LGAs) were selected using simple random sampling technique. From each of the selected LGA, five public senior secondary schools were selected using simple random technique, making a total of 25 public senior secondary schools. From each school, 20 SS II Economics students were selected using simple random sampling technique. Two research instruments were used to collect data for the study namely; "Academic Locus of Control Scale" (ALCS), and "Economics Achievement Test" (EAT).

Economics Achievement Test (EAT)
Economics Achievement Test (EAT) it is a self-designed instrument that was used to measure students' knowledge in Economics. EAT has section A and section B. The section A contain student's demographic information, Section B comprise 25 items 4-option structured conceptual multiple-choice questions drawn from the Economics concepts of Economics System, Labour Market, Price Determination, Market structure and Utility Theory. The detail of item specification for EAT based on topics selected is presented in Table 3.1.

Table 1
EAT Specification Table Based on Bloom's Taxonomy Revised

Contents	Remember (48%)	Understand (40%)	Apply (12%)	Total (100%)
Economic System (28%)	3,6,7	2,5	4	6
Labour Market (24%)	8,9	1,10		4
Price Determination (16%)	20	18,19,21	-	4
Market Structure (16%)	22,23	24	25	4
Utility Theory (16%)	11,12,13,14	15,16	17	7
Total (100%)	12	10	3	25

Source: Field-work, 2024

Item Analysis (Economics Achievement Test)
The EAT were trial tested on a group of Economic students in a school outside of the study area. Items analysis was carried out on the data obtained from the pilot study to determine the Facility Index (F.I) and Difficulty Index (D.I) of each of the item in the EAT.

Facility Index: The facility index gives the degree of difficulty or ease of answering an item. The facility index (FI) according to Wood (1990) is the percentage of students that gets an item right, it is determined by using formula

$$F.I. = \frac{R}{T} \times 100;$$

Source: Wood (1990)
Where;
F.I = Facility index
R= Number of correct responses.
T = Total Number of students.

Mahjabeen, Alam, Hassan, Zafar, Butt, Konain; and Rizvi (2018) recommended values within the range of 30% to 70% for good test items in assessing students' performance. From the calculation, the test item with the facility indices $\leq$ 30% was consider as too difficult and was rejected. Test item with facility indices between 30% to 70% was consider as moderate and accepted for use but the test item with facility indices of $\geq$ 70% was consider as too simple and it was also discarded.

Discrimination Index: Discrimination index indicates the discriminating power of each of the test items or the ability to sort between high- and low-ranking students or proficient from weak learners in the whole test. The score was done using the scores of the top 27% and bottom score (27%) of the total respondents. This was calculated using formula given by (Mahjabeen, et al, 2018).

$$D.I = 2\times[(H-L)/N] \times 100$$

Where;
D.I. = Discriminating index
H = Number of students who gave correct responses in high score group

L = Number of students who gave correct responses in low score group
N = Total Number of students in both groups

Mahjabeen, et al. (2018) recommended values above 0.21 for acceptable test items in assessing students' performance. From the calculation, the test item with the D.I. ≤ 0.2 was consider as poor and was rejected. Test item with D.I. between 0.21-0.24 was consider as moderate and accepted. Test item with D.I. between 0.25-0.35 was consider as good and accepted. Test item with D.I. ≥ 0.36 was consider as excellent and accepted. At the end of the item analysis 25 items were considered appropriate from 40 initial items.

Academic Locus of Control Scale (ALCS)
Academic Locus of Control Scale (ALCS) adapted from Nicholas and Ashton (2013), was modified and was used to assess the students' locus of control in Economics. **ALCS** was divided into two sections: section A contained demographic data, and section B had a 20-items questionnaire in which students were asked to imagine themselves in various scenarios and score themself. Each item was rated on 4-degree Likert scale: Strongly Agree (SA) = 4; Agree (A) = 3; Disagree (D) = 2; and Strongly Disagree (DS) = 1.

The reliability research of the instruments was done by administering the instrument on some selected students outside the scope of the study but having the same similar characteristics with the students used for the study. Trial - testing was done on certain SSII students from an intact class of a co-educational secondary school. For the EAT, the data was analyzed using Kuder Richardson formula 20 in SPSS Statistics, with a reliability coefficient of 0.88. For the ALCS, adapted from (Nicholas & Ashton, 2013), the instrument was administered on thirty (30) students selected outside the scope of the study but have related future with the students used for the study. The reliability of the instrument was determined using Cronbach's Alpha in SPSS Statistics and a reliability coefficient of 0.86 was obtained. This determine the internal consistence of the instruments that were used for the study. The data collected were analysed using inferential statistics of correlation analysis. All the hypotheses were tested at Alpha level of 0.05 significance.

Results

Hypothesis One: There is no significant relationship between students' internal locus of control and students' academic achievement in Economics in senior secondary school in Osun State.

Table 2
Pearson Correlation of the Relationship between Students' Internal Locus of Control and Students' Academic Achievement in Economics in Osun State

Variable	N	Mean	S.D	r	Sig.(2-tailed)
Students' Academic Achievement	500	8.53	3.34	0.104*	.020
Students' Internal Locus of Control	500	31.22	5.71		

($r = 0.104^* \; p < 0.05$)

Results in Table 2 showed the significant relationship between students' internal locus of control and students' academic achievement in Economics in senior secondary schools in Osun State. There was a positive correlation between students' internal locus of control and students' academic achievement in Economics. The correlation was statistically significant ($r = 0.104$, $p < 0.05$). Thus, the null hypothesis that states that there is no significant relationship between students' internal locus of control and students' academic achievement in Economics was hereby rejected.

Hypothesis Two: There is no significant relationship between students' external locus of control and students' academic achievement in Economics in senior secondary school in Osun State.

Table 3
Pearson Correlation of the Relationship between Students' External Locus of Control and Students' Academic Achievement in Economics in the only area

Variable	N	Mean	S.D	r	Sig.(2-tailed)
Students' Academic	500	8.53	3.34	0.111*	.013
Achievement	500	31.67	5.76		
Students' External Locus of Control					

($r = 0.111^* \; p < 0.05$)

Results in Table 3 showed the significant relationship between students' External Locus of control and students' academic achievement in Economics in senior secondary schools in Osun State. There was a positive correlation between students' External locus of control and students' academic achievement in Economics. The correlation was statistically significant ($r = 0.111$, $p < 0.05$). Thus, the null hypothesis that states that there is no significant relationship between students' external locus of control and students' academic achievement in Economics was hereby rejected.

Discussion of Findings

Findings of the study showed that there was correlation between students' internal locus of control and students' academic achievement in Economics in Osun State. Empirical evidence supports the link between locus of control (LOC) and increased academic achievement, as assessed by test scores and graduation rates. In a meta-analysis by Chen and Furnham (2019), internal locus of control (LOC) was shown to positively correlate with academic achievement in numerous areas. Teng (2017) found comparable outcomes when studying Chinese college students' internal locus of control (LOC) and academic achievement. Research also shows that locus of control (LOC) mediates numerous determinants and academic success. Using an internal locus of control, Liu and Chen (2015) found that students who could self-regulate their learning were more likely to succeed. Zhang and Chen (2017) found a favourable association between parental involvement and academic success, particularly in the internal locus of control. The researchers define parental engagement as parental involvement in their children's schooling.

Lastly, the result showed that there was correlation between students' external locus of control and students' academic achievement in Economics in Osun State. This result is supported by Zhang and Chen (2017) who reported that students had high academic performance when they have more robust and persistent in difficult situations. Also, Ogunyomi and Ogunyomi(2020) opined that persons with an external LOC believe that luck or chance determine their situations.

People tend to give up in the face of challenges and credit their successes to luck. Furthermore**,** Bajracharya and Shrestha (2021) stated that locus control efforts were a strong predictor of academic performance. The research also found that students' Locus control engagement affected their academic performance. Gurung and Shrestha (2021) examined if students' Locus eradication activities affected their academic achievement in Nepal. The research found that Locus control efforts improved student academic performance in Time 1 and Time 2. Locus control actions correlated with student academic achievement. The statistics indicated that Locus control efforts regularly affect pupils' academic success. Conversely, Kulik and Kulik, (2016) and Lefcourt (2022) had consistently shown that individuals who possess an internal line of communication (LOC) exhibit superior academic performance compared to their counterparts who possess an external LOC.

Conclusion

The study concluded that internal and external locus of control are major determining factor of students' academic achievement in Economics in senior secondary schools in Osun State. Similarly, the study revealed that students with internal locus of control believes that their success depends on their personal inputs, effort and discipline and thereby tends to achieve academics excellence better than their classmates who relied on external factors like lucks, fate or influence of others.

Recommendations

Based on the findings of this study, it is hereby recommended that;

1 Economics teachers should have good content knowledge of the subject matter and be ready be to learn different strategies in teaching of Economics concepts effectively and efficiently to enhance the students' locus of control in Economics.

2. Economics teachers should be exposed to various instructional strategies in social science to boost students' performance and their Locus of control in learning Economics. Because the subject of Economics, by its nature, blends abstract theories with real-life social and human experiences

3. Workshops, seminars and conferences should be organized for teachers on the need to improve their technological, pedagogical and content knowledge so as to deliver the Economics concepts of the subject to the learners meaningfully.

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