

## SCHOOL SAFETY-HEALTH PRACTICES AS CORRELATE OF ECONOMICS STUDENTS' LEARNING OUTCOME IN SECONDARY SCHOOLS IN IMO STATE

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### **Abstract**

*This study examined school safety-health practices as correlate of economics students' learning outcome in secondary schools in Imo State. This study was conducted using correlational research design. The population of the study is made up of 47,201 senior secondary school students offering Economics as a subject in the 268 public secondary schools in Imo State. A total of 472 SS2 students were sampled using multi-stage sampling technique. The sample size comprised 10% of the population. Two instruments were used for data collection: "School Safety-Health Practice Scale" (SSHPS) and "Economics Academic Achievement Test" (EAAT). Cronbach alpha statistic was used to determine the reliability of SSHPS with an index of 0.82 while Kuder Richardson K-21 was used for EAAT with an index of 0.78. The research questions were answered with Pearson "r" statistic while the hypotheses were tested using t-test significance of correlation at a 0.05 level of significance. It was found among others that: there is a high positive relationship between the extent of school physical environment/objects as well as school hygiene safety & health practice and students' academic achievement in Economics. It was also indicated that the relationships were significant. It was recommended among others that: the school authorities should always ensure that they inspect and supervise school physical environment by ensuring that there is safety and healthy interaction with them in the school. They should as well promote good health hygiene among the staff and students by ensuring cleanliness of the school environment.*

**Keywords:** Safety and Health, Economics, Learning Outcome, Academic Achievement

### **Introduction**

One of the major yardsticks for ascertaining students' learning outcome or the extent students have learnt what they are expected to learn in cognitive, affective

and psychomotor traits is their academic achievement. Academic achievement is defined by Mehta (2009) as knowledge attaining ability or degree of competence in school tasks usually measured by standardized tests and expressed in a grade or units based on pupils' performance. Maguire (2007) refers to academic achievement as the knowledge obtained or skills developed in the school subjects usually designed by test scores or marks assigned by the teacher. In relation to the present study, learning outcome and academic achievement are used interchangeably. It can be regarded as the observable and measurable behaviour of a student in the cognitive, affective and psychomotor domain in a particular assessment situation. For example, the learning outcome of a student in economics includes observable and measurable behaviour of a student at any point in time using economics subject content and appropriate assessment technique(s).

Economics is one of the subjects that are offered in the senior secondary schools. Economics is a social science subject which studies human behaviour as a relationship between ends and scarce means which have alternative uses (Robbins cited in Aderinto & Abdullahi 2009). Supporting the above, Amaechi (2014), saw Economics as a social science that studies human behaviours in his effort to allocate his scarce resources efficiently and effectively in order to minimize cost. In order for the teaching of economics to be more participatory and interactive, and also to encourage long-lasting retentive memory which can improve students' academic achievement in Economics, there is a need for the school environment to be safe and healthy.

Safety-health practice can be explained to mean the process of averting danger and at the same time being biologically fit. Ensuring safe and healthy practices in school is seen as those practical or pro-active obligatory duties which every education stakeholder is expected to carry out so as to provide a serene environment where students can learn with ease in a good state of mind, and teachers deliver their academic tasks diligently and consciously. In this study, the safety and health practices are categorized into two: safety and health of school physical environment/objects and safety and health of school hygiene. The safety and health practices of school physical environment/objects has to do with actions like provision of first aid box, maintenance of classroom blocks, provision of school security personnel etc while that of the safety and health practices of school hygiene include personal cleanliness, school environment cleanliness, provision of school pharmacy, fumigation, good toilet system etc (Amanchukwu, 2012). Generally, in providing the serene environment suitable for learning, it is expected that the education stakeholders and administrators inspect the overall school buildings, blocks and physical environment by ensuring that there is adequate provision of security personnel, cutting down of sharp trees, provision of first aid kit, having a school pharmacy, maintenance of classroom roofs, inspection by sanitary prefect, ensure that sharp objects are not seen around the classrooms, ensure adequate exercise for the students and staff, clear bushes around the learning environment, sanitize the play ground, fumigate the school premises, good transportation system, clean water utility, lightening and cleaning of the pathways.

Where a school is located can determine to a large extent the stability of the student's mind for academic readiness (Obong, Okey, Aniah & Okaba, 2010). A school located along air-traffic route, roadside (especially without a fence), in neighbourhood of industrial activities, markets, and so on will constitute a nuisance and interference with the students' learning process and outcome. It will generate noise enough to badly affect the study endeavours. Regular painting and maintaining the quality of buildings, channelling of sewage, well planned landscape and trimming of flowers, clearing of grasses, proper disposal of refuse, sweeping and removing cub-webs among others provides a relaxed atmosphere for the moulding of minds. It is therefore expected that there is adequate provision of first aid kit, inspection by sanitary prefect, maintenance of classroom roofs, well ventilated classrooms, schools are free from hazards (absence of edible fruits, position of electric poles), clean of pathways, clear bushes around the learning environment and sharp objects are not seen around the classrooms.

The level of influence school safety and health practices has on students' learning outcome or academic achievement in Economics in Imo State is not quite certain. Empirically, one of the hypotheses of Obong, Okey, Aniah and Okaba (2010), study statistically proved that management of school environment has significant effect on students' study/reading habit. They further concluded that how a school environment is managed in aesthetics, recreation, waste, drainage pattern, and other physical outlook of the environment has telling effect in the quality of learning environment of children. Even Amanchukwu (2012), study indicated that perceptions of unsafe and unhealthy school environment affect learners' school attendance, affect the general wellbeing of learners and causes poor school performance among the students. On the issue of poor performance of the students, Amanchukwu (2010), reports that less than 70.07% of the May/June 2009 WASSCE candidates obtained less than grade six in Economics. Therefore, school insecurity, including fear of being attacked by senior students, may have affected student performances on these examinations. Could the above situation be applicable to Imo State secondary schools?

The importance of safety measure in every activity of individual cannot be over emphasized. It forms an integral part of individual and school understanding. Adams and Salome (2014), maintained that most school hazards can be reduced by good value judgment, careful manipulation adequate supervision, and most of all the knowledge of how to use the safety material or device present in the school. It is obvious that anyone who is not alert and safety conscious stand the greater risk of turning a minor hazard into an accident which might be fatal. To ensure safety in schools, students and teachers should be well-informed of the safety practice and how to operate simple safety gadgets during emergency. Also there is the need that these safety gadgets be constantly checked to ensure proper functioning during emergency. Conclusively, many lives can be saved if necessary safety and health measures are considered or taken appropriate in secondary schools.

The deplorable conditions of Nigerian school environments have become a serious worry in recent times. A personal visit of the researchers to some public

schools in Nigeria revealed that some schools have become sites for refuse disposal. Solid waste materials like papers, pack from wrappings, tins, sticks, etc litter the school environment and classrooms. Where attempts are made to sweep, heaps of refuse are uncontrollably dumped haphazardly and muddled up together unsorted with both degradable and non-degradable materials which mix up and cause mind-blighting stench; harbouring mosquitoes and pests such as rats, cockroaches which is an eyesore. Consequently, most school building are dilapidated and often in a shamble which make schools dull and unattractive; this tantamount to creating a very hostile study environment not congenial to students which can affect their academic achievement in school. One begins to wonder if safety and health practices of school physical environment/objects and school hygiene can affect students' academic achievement, especially in economics as a subject. The problem of this study therefore posed as a question is what is the relationship between safety and health practices and economics students' academic achievement in secondary schools in Imo State?

The general purpose of this study is to examine safety and health practices as correlate of economics students' learning outcome in secondary schools in Imo State. Specifically, the study sought to:

1. ascertain the correlation coefficient between school physical environment practice and students' academic achievement in Economics, and
2. examine the correlation coefficient between school hygiene safety-health practice and students' academic achievement in economics.

The following research questions were posed to guide the study:

- 1) What is the correlation coefficient between school physical environment practice and students' academic achievement in Economics?
- 2) What is the correlation coefficient between the extent of school hygiene safety-health practice and students' academic achievement in Economics?

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

**H<sub>01</sub>:** There is no significant relationship between school physical environment practice and students' academic achievement in Economics.

**H<sub>02</sub>:** There is no significant relationship between school hygiene safety-health practice and students' academic achievement in Economics.

### **Method**

This study was conducted using the correlational research design. The population of the study is made up of 47,201 (SS2) senior secondary school students offering Economics as a subject in the 268 public secondary schools in Imo State. 472 SS2 students were sampled using multi-stage sampling technique. The sample size comprised 10% of the population. For the purpose of data collection, the study made use of a researcher made rating scale and economics academic achievement test (Proforma). The rating scale is titled "School Safety and Health Practice Scale" (SSHPS) with 20 items, used to collect information from the students on the

independent variable and the Proforma is titled “Economics Academic Achievement Test” (EAAT) with 20 multiple choice questions from the Economics Syllabus to get information on the academic achievement of the students. Draft copies of the scale were given to three experts from the field of Education Measurement and Evaluation, Imo State University, Owerri for Validation.

Cronbach alpha statistic was used to determine the reliability of SHPS with an index of 0.82 while Kuder Richardson K-21 was used for EAAT with an index of 0.78 which were adjudged to be good enough for the research work. The researchers visited the schools involved to collect data for the study and also administered the instrument to the respondents and patiently waited for them to fill their responses and collected it giving a 100% return rate. The research questions were answered with Pearson “r” statistic. This was used to establish the significant relationship between the dependent and independent variables in the study. The bases for the decision for the research questions’ conclusion were as follows: 0.00-0.20=very low relationship, 0.21-0.40=low relationship, 0.41-0.60=moderate relationship, 0.61-0.80=high relationship and 0.81-1.00=very high relationship. The hypotheses were tested using t-test significance of correlation at a  $p < 0.05$  level of significance.

**Results**

**Table 1:** Correlation coefficient between school physical environment practice and students’ academic achievement in Economics.

<b>n</b>	<b>r</b>	<b>r<sup>2</sup></b>	<b>Decision</b>
472	0.79	0.62 (62%)	High Positive Relationship

Table 1 shows the correlation coefficient between school physical environment practice and students’ academic achievement in Economics. The result of the analysis indicated that n is 472 while the correlation coefficient is 0.79, the coefficient of determination is 0.62. This implies that 62% of the total variation in students’ academic achievement in Economics could be attributed to school physical environment practice. Nevertheless, the fact that the correlation was positive it also means that, as school physical environment/objects safety-health practice increases, students’ academic achievement increases as well by 62%. The table shows that there is a high positive relationship between school physical environment practice and students’ academic achievement in Economics.

**Table 2:** Correlation coefficient between school hygiene safety-health practice and students’ academic achievement in Economics.

<b>n</b>	<b>r</b>	<b>r<sup>2</sup></b>	<b>Decision</b>
472	0.62	0.39 (39%)	High Positive Relationship

Table 2 shows the correlation coefficient between school hygiene safety-health practice and students’ academic achievement in Economics. The result of the analysis indicated that n is 472 while the correlation coefficient is 0.62, the

coefficient of determination is 0.39. This implies that 39% of the variation in students' academic achievement in Economics could be attributed to school hygiene safety-health practice. Nevertheless, the fact that the correlation was positive it also means that, as school hygiene safety-health practice increases, students' academic achievement increases as well by 39%. The table shows that there is a high positive relationship between school hygiene safety-health practice and students' academic achievement in Economics.

**Table 3:** Summary of t-test significance of correlation coefficient between school physical environment practice and students' academic achievement in Economics.

<b>n</b>	<b>r</b>	<b><math>\alpha</math></b>	<b>df</b>	<b>t<sub>cal</sub></b>	<b>t<sub>tab</sub></b>	<b>Decision</b>
472	0.79	0.05	470	27.43	1.96	Reject H <sub>0</sub>

Table 3 shows that summary of t-test significance of correlation coefficient between school physical environment practice and students' academic achievement in Economics. The table indicated that the hypothesis is rejected. This is because, with the degree of freedom of 470, Pearson r of 0.79, the t-cal of 27.43 is greater than the t-tab of 1.96 at 0.05 level of significance. This implies that there is a high positive significant relationship between school physical environment practice and students' academic achievement in Economics.

**Table 4:** Summary of t-test significance of correlation coefficient between school hygiene safety-health practice and students' academic achievement in Economics

<b>n</b>	<b>r</b>	<b><math>\alpha</math></b>	<b>df</b>	<b>t<sub>cal</sub></b>	<b>t<sub>tab</sub></b>	<b>Decision</b>
472	0.62	0.05	470	17.28	1.96	Reject H <sub>0</sub>

Table 4 shows that summary of t-test significance of correlation coefficient between school hygiene safety-health practice and students' academic achievement in Economics. The table indicated that the hypothesis is rejected. This is because, with the degree of freedom of 470, Pearson r of 0.62, the t-cal of 17.28 is greater than the t-tab of 1.96 at 0.05 level of significance. This implies that there is a high positive significant relationship between school hygiene safety-health practice and students' academic achievement in Economics.

### **Discussion of Findings**

This study revealed that there is a high positive relationship between school physical environment practice and students' academic achievement in Economics. This finding led to the inference that there is a high positive significant relationship between school physical environment practice and students' academic achievement in Economics. This finding implies that actually, school physical environment practice affects students' academic achievement in Economics. This finding is in line with that of Obong, Okey, Aniah and Okaba (2010), which showed that management of school environment, has significant effect on students' study/reading habit. They further

inferred that how a school environment is managed in aesthetics, recreation, waste, drainage pattern, and other physical outlook of the environment has very serious negative effect in the quality of learning environment of children. The similarities in the above finding could be attributed to the fact that the areas of the studies could be similar in terms of characteristics of the learning environment.

It was equally revealed in this study that there is a high positive significant relationship between school hygiene safety-health practice and students' academic achievement in Economics. In line with this finding, it was concluded and inferred that there is a high positive significant relationship between school hygiene safety-health practice and students' academic achievement in Economics. Invariably, the finding stated that school hygiene safety-health practice has a significant and high influence on students' academic achievement in Economics. In line with this finding, Amanchukwu (2012), study indicated that perceptions of unsafe and unhealthy school environment affect learners' school attendance, cause poor school performance, and affect the general wellbeing of learners. Conclusively, school insecurity, including fear of being attacked by senior students, may have affected student performances in examinations in these areas.

### **Recommendations**

Based on the findings of this study, the following recommendations were proffered:

1. The school authorities should always ensure that they inspect and supervise school physical environment by ensuring that there is safety and healthy interaction with them in the school.
2. They should as well promote good health hygiene among his staff and students by ensuring cleanliness of the school environment.

### **Conclusion**

It is concluded in this study that there is a high positive association between school physical environment practice and students' academic achievement in Economics. This implies that school physical environment/ objects safety-health practice affects students' academic achievement in Economics. These findings led to the inference that there is a significant relationship between school hygiene practice and students' academic achievement in Economics.

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