# Influence of Rural and Urban Environmental Factors on the Performance of Business Education Students in External Examination

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#### **Abstract**

The study was carried out to determine the influence of rural and urban environmental factors on the performance of junior secondary school students' certificate examination in business education in Isiala Ngwa North L.G.A, Abia state. The study adopted a comparative survey. The population of the study comprised of 1, 300 junior secondary school students in the eight (8) secondary schools in Isiala Ngwa North Local Government Area. Simple random sampling technique was adopted while 394 students made up of 213 rural and 181 urban represent the sample size. Questionnaire titled: Influence of Rural and Urban Environmental Factors on the Performance of Junior Secondary School Students' Certificate Examination in Business Education (IRUEFPJSSSCEBE). Data were analysed using mean and standard deviation while t-test was used to test the hypotheses of 0.05 level of significance. Findings of the study reviewed that availability of adequate library facilities, class size and school location to a high extent enhance academic performance of Junior Secondary School Business Education Students in external examination as against environmental noise. The study concluded that availability of library facilities and others mentioned enhances the academic performance of Junior Secondary School Business Education Students in external examination to a high extent. Based on the findings, the study recommended that the government should ensure that adequate funding is provided to the schools to ensure adequate library facilities, school authorities should ensure that schools are located in strategic positions that will help to enhance students' academic performances amongst other recommendations.

Keywords: Rural, Urban, Environment, Education, Secondary

### Introduction

Education is the instrument for transformation of the society at the national level (Ajeyalemi 2009). Education is a process through which the intellectual, moral capacities, proper conduct, and technical competency of individuals are developed to make them cultural members of their societies (Dorleku, 2013). Education also according to Eya (2004) consists of two components; inputs and outputs, the inputs component of education consist of human and material resources while the outputs

are the goals and outcomes of the educational process. Therefore, teaching and learning should be enjoyable, fun and conducive. And the tendency of making teaching and learning conducive is dependent on the level of environmental factors. The relationship between rural and urban environmental factors and academic performances of students' in secondary schools today cannot be overemphasized as environmental factors have tremendous effect in determining the quality of teaching students' receive and the extent of attention they pay to lesson in school. This implies, that rural and urban environmental factors pose a threat to the performance of students as it has the tendency of promoting or deteriorating the level of performance which is measurable from their grades. In view of the above, Armstrong (2009) confirms that a proper and adequate environment is very much necessary for a fruitful learning of the students.

The quality of education not only depends on the teachers as reflected in the performance of their duties, but also in the effective coordination of the school environmental factors (Anthonia, 2014). Fleishchman and Osher (2005), maintains that the rural and urban environmental factors play a vital role in determining how students perform or respond to circumstances and situations around them. The environmental factors a student finds his/herself determines to a large extent how a student will behave and interact, that is to say that the environment in which we find ourselves tend to mould our behaviour so as to meet the demands of life whether negatively or positively (Ekanem, 2008). Mzokwana (2008) simply describes rural areas as deprived, lacking so many government developmental interventions such as potable water, electricity, good roads, and school infrastructure to improve upon the lives of the people. Although rural cultures can exist in urban areas but differences exist between rural environment and urban environment because large rural towns that are not far from urban centers often have more in common with the urban area than they do with remote and isolated small towns. Academic performance refers to the capacity to achieve when one is tested on what one has been taught (Otoo, 2007), which relates to curriculum content, the learner's intellect, and hence depends on the learner's competence. Academic performance is measured in terms of examination marks, the grading of which concerns the ability of individuals to use the knowledge and skills acquired.

Vidya and Nageswara (2006) defined business education as that aspect of vocational education, which emphasizes job competency, career preparation and work adjustments while Njoku (2006) saw it as an educational programme that equips individuals with functional and sustainable skills, knowledge, attitude and value that would enable the individuals operate in the environment such individuals find themselves. Moreover, although all students will encounter the world of business, whether they work in urban or rural areas. And so must be prepared to engage in business activity with confidence and competence. Therefore, this study is carried out to ascertain the influence of rural and urban environmental factors on student's performance in Junior Secondary Certificate Examination in Business Education in Abia State.

#### **Statement of the Problem**

The learning environment dramatically affects the learning outcomes of students. The issue of poor academic performance of student in external examinations such as the National Examination Council (NECO) and the West African Examinations Council (WAEC) has being a contemporary issue. The problem of environment factors has made education difficult in this area. These environmental factors are open space and noise, inappropriate temperature, insufficient light, overcrowded classes, misplaced boards and inappropriate classroom layout, inadequate facilities, proximity and environmental noise has left an indelible mark on the educational achievement of students as there exist an increase in the economy and population others include: low intellectual ability and development, poor teaching and learning processes, poor psychological development, poor ethical development, high rate of social decadence, poor socio-economic development, poor political growth, and poor economic development among others. Environmental factors are ecological factor or eco factor, abiotic or biotic, that influences living organisms. Abiotic factors include ambient temperature, amount of sunlight, pH of the water soil in which an organism lives. Biotic factors would include the availability of food organisms and the presence of biological specificity, competitors, predators and parasites. The researcher found out that schools found in Isiala-Ngwa North Local Government Area of Abia State have limited conducive environment for learning and teaching of business education, poor learning facilities, building, poor library and library facilities with few or no suitable books for learning, poor administrative management, poorly equipped teachers, poor laboratory equipment as well as poor location, other factors include, urban environmental factors such as home background, inadequate school facilities, availability of technology, misuse of technology such as internet and school climate, resources, population loss and quality of teachers, the geographic location plays a very important role in the grooming, motivation and academic performance of the students. Another, vital urban environmental factor population contributes to the educational trend of school consolidation, larger schools do not necessarily improve student performance. Given this situation, the problem of the study therefore, the need to ascertain the influence of rural and urban environmental factors on students' performance in Junior Secondary School Certificate Examination in Business education in Isiala-Ngwa Local Government Area of Abia State.

### **Purpose of the Study**

The main objective of the study is to determine the influence of rural and urban environmental factors on students' performance in Junior Secondary School Certificate Examination in Business Education in Abia State. The specific objectives were to:

i) examine the extent to which rural and urban library facilities enhances academic performance.

- ii) ascertain the extent to which rural and urban class size/layout contributes to the academic performance.
- iii) examine the extent to which rural and urban school location contributes to the academic performance.
- iv) Examine the extent to which rural and urban environmental noise hinder the academic performance.

# **Research Questions**

The following research questions were raised to guide the study

- i) To what extent do rural and urban library facilities affect the academic performance of Junior Secondary School Business Education Students in external examination?
- ii) To what extent does rural and urban class size/layout affect academic performance of Junior Secondary School Business Education Students in external examination?
- iii) To what extent does rural and urban school location affect the academic performance of Junior Secondary School Business Education Students in external examination?
- iv) To what extent does rural and urban environmental noise affect the academic performance of Junior Secondary School Business Education Students in external examination?

## **Hypotheses**

The following null hypothesis were formulated to guide the findings.

- **Ho**<sub>1</sub>: There is no significant relationship in the mean rating of availability of library acilities in urban and rural areas and academic performance in external examinations.
- **Ho<sub>2</sub>:** There is no significant relationship in the mean rating of availability of class size/layout in urban and rural areas and academic performance in external examinations.
- **Ho**<sub>3</sub>: There is no significant relationship in the mean rating of availability of school location in urban and rural areas and academic performance in external examination.
- **Ho<sub>4</sub>:** There is no significant relationship in the mean rating of availability of environmental noise in urban and rural areas and academic performance in external examination.

### Methodology

The study adopted a comparative design. The population comprised of one thousand and three hundred (1,300) Junior Secondary School students (SBMC, 2018). The researcher adopted simple random sampling techniques. To determine the sample

size for this study Taro Yamen's formula was used to select 394 which comprised 213 from the Rural and 181 from Urban as the sample size. The instrument used for data collection was the researcher-developed questionnaire containing 30 question items titled: "Influence of Rural and Urban Environmental Factors on the Performance of Junior Secondary School Students' Certificate Examination in Business Education in  $Isiala\,Ngwa\,North\,L.G.A\,(IRUEFPJSSSCEBE)".\,It\,was\,divided\,into\,five\,(2)\,sections$ of A and B. The instrument was structured using the four (4) point's scale of VHE (Very High Extent), HE (High Extent), VLE (Very Low Extent), LE (Low Extent) to measure the degree of extent. The validity of the instrument was determined by three experts. The internal consistency of the instrument was determined using Cronbach's Alpha statistics with reliability co-efficient of .82.Ten (10) copies of the questionnaire were administered to 10 respondents from a secondary school in a neighbouring local government Isiala Ngwa South LGA. The questionnaires were distributed to the respondents by the help of a research assistant who was duly trained on the distribution and retrieval of the questionnaire. Mean and standard deviation was used to analyze the research questions while t-test was used to test the hypotheses of 0.05 level of significance.

#### Results

# **Research Question One**

To what extent does availability of library facilities affect the academic performance of Junior Secondary School Business Education Students in external examination?

**Table 1:** Mean and standard deviation rating of the respondents on the extent availability of rural and urban library facilities affect the academic performance of Junior Secondary School Business Education Students in external examination.

CALO	TOP 3 CO		
S/NO	ITEMS	<u>U</u> rban	Rural
		X S.D Rema	rks X S.D Remarks
1.	Facilities such as books, textbook, electronic materials etc enhance effective teaching and academic improvement of students	2.98 0.64 H.E	2.85 0.78 H.E
2.	Library facilitate teaching-learning process and higher attainment of academic performance.	2.92 0.87 H.E	2.81 0.93 H.E
3.	Library facilities are very vital to the development of an ideal teaching -learning environment and promotion of academic performance.	3.11 0.73 H.E	3.04 0.67 H.E
4.	Library facilities stimulate the interest of students in reading, learning and facilitation of teaching-learning process for effective academic performance.	3.17 0.80 H.E	3.10 0.78 H.E
5.	Library facilities stimulate understanding of subject matters of thereby leading to higher academic performance of students.	3.21 0.76 H.E	3.15 0.54 H.E
6.	Library facilities promotes sharing of knowledge which directly enhances academic performance.	3.19 0.73 H.E	3.08 0.79 H.E
7.	Promotes research and study development of concepts thereby enhancing academic performance.	3.21 0.56 H.E	3.42 0.57 H.E
8.	Provides instructional materials in order to enrich curriculum and give unlimited opportunities for students to learn concepts of business education with the aim of making excellent grades.	2.78 0.81 H.E	2.91 0.83 H.E
	Grand Mean	3.07 0.74	3.13 0.65

The data on table 1 showed that all the 8 items had their mean scores ranged from 2.78 to 3.45 for both the respondents from Urban and Rural Area. Thus this shows that both the respondents from Urban and Rural Area to a high extent agreed to all items since their respective mean scores were within the real limit of 2.50-3.49.

# **Research Question Two**

To what extent does class size affect academic performance of Junior Secondary School Business Education Students in external examination?

**Table 2:** Mean and standard deviation rating of the respondents on the extent class size/layout affect academic performance of Junior Secondary School Business Education Students in external examination.

S/NO	ITEMS	Urban Rural
		X S.D Remarks X S.D Remarks
1.	Class size promotes students spirit of striving for high academic performance among students thereby enhancing academic performance.	2.91 0.84 High Extent 3.03 0.57 High Extent
2.	Influences students' understanding during instructional delivery which directly influences academic performances.	2.98 0.91 High Extent 3.01 0.64 High Extent
3.	Shapes cognitive development, psycho - motor and general behaviour of students during instructional delivery thereby influencing higher academic performances.	2.84 0.72 High Extent 2.97 0.85 High Extent
4.	Determines conducive learning activities thereby leading to enhanced academic performance.	2.77 0.96 High Extent 2.86 0.62 High Extent
5.	Influences higher level of intellectual development and academic performances.	2.93 0.81 High Extent 2.86 0.71 High Extent
6.	Determinant factor to educational curriculum goal attainment and academic performances.	2.82 0.87 High extent 2.78 0.73 High Extent
7.	Determines co -ordination and management of students' behaviour during business education instruction delivery and academic performance.	2.81 0.99 High Extent 2.98 0.62 High Extent
8.	Promotes students' participative contribution during interactive classes thereby promoting higher academic performance.	<b>2.85 1.08</b> High Extent 2.79 0.87 High Extent
	Grand Mean	2.86 0.89 2.78 0.88

The data on Table 2 showed that all the 8 items had their mean scores ranged from 2.81 to 2.98 for both the students and teachers. Thus this shows that the respondents agreed to all 8 items since their respective mean scores were the real limits of 2.50-3.49. **Research Question Three** 

To what extent does school location affect the academic performance of Junior Secondary School Business Education Students in external examination?

**Table 3:** mean and standard deviation rating of the respondents on the impact of rural and urban school location on students' academic performance in junior secondary schools of Isiala Ngwa North Local Government Area.

		Urban	Rural			
S/NO	ITEMS	X S.D Rem	arks X S.D Remarks	8		
1.	School location serves as a hindrance to the motivation of students to learning due its associated stress factors	2.99 0.68 High	extent 3.04 0.69 High ex	tent		
2.	Related stress negativ ely influence the cognitive development of students thereby hindering high academic performance.	2.96 0.81 High	n extent 3.00 0.75 High ex	tent		
3.	The stress factors of school location destroy the intelligence and accumulation of student's knowledge in and academic performance of students.	2.94 0.87 High	n extent 2.89 0.89 High ex	tent		
4.	Problem of late ness to school caused by school location hinders comprehension and missing of classes thereby affecting comprehension and academic performance.	2.93 0.86 High	n extent 2.98 0.72 High ext	ent		
5.	School location reduces the quality and standard of education due to its associated stress factors and lowers ac ademic performance of students.	2.96 1.02 High	n extent 3.09 0.84 High ex	tent		
	Grand Mean	2.95 0.85	3.02 0.72			

The analysed data on Table 3 showed that all the 5 items had their mean scores ranged from 2.93 to 2.99 for both the teachers and students. Thus this shows that the respondents agreed to all 5 items since their respective mean scores were the real limits of 2.50-3.49.

### **Research Ouestion Four:**

To what extent does environmental noise affect the academic performance of Junior Secondary School Business Education Students in external examination?

**Table 4:** mean and standard deviation rating of the respondents on the extent rural and urban environmental noise affect the academic performance of Junior Secondary School Business Education Students in external examination

		Urban Rural
S/NO	ITEMS	X S.D Remarks X S.D Remarks
1.	Disrupt and interfere with teaching -learning of thereby leading to poor performance of students.	3.45 0.60 High extent 3.13 0.67 High extent
2.	Affects studen t's behaviour during thereby leading to higher levels of frustration among teachers and poor learning attitude among students.	3.18 0.94 High extent 3.05 0.55 High extent
3.	Impacts on students level of concentration during classes and create an uncomfortable and uninviting problems thereby hindering attainment of good academic performance.	3.41 0.87 High extent 3.48 0.89 High extent
4.	Influence memorization and reading inability of skills and academic performance.	2.93 0.81 High extent 3.09 0.61 High extent
5.	Causes several disorder in students learning during studies with effects on academic performance.	2.81 0.89 High Extent 3.05 0.83 High extent
6.	Hinders effective communication be tween teachers and students creating poor teacher - students' relationship which affects comprehension and academic performance.	2.94 0.84 High Extent 3.00 0.71 High extent
7.	Cause interference and work stress during instruction delivery with reduced academic performance.	2.86 1.04 High extent 2.85 0.74 High extent
8.	Hinders development and improvement of talents with negative influences on academic performance.	2.97 0.76 High extent 2.93 0.87 High extent
9.	Leaves students with poor cognitive development which affects their moods and poor academic performance.	3.00 0.77 High extent 3.12 0.63 High extent
	Grand Mean	3.06 0.74 3.21

The data on Table 4 showed that all the 9 items had their mean scores ranged from 2.97 to 3.45 for both the students and teachers. Thus this shows that the respondents agreed to all 9 items since their respective mean scores were above the mean cut-off of 2.50.

## **Hypothesis One**

There is no significant difference between the mean responses of the teachers and students on the extent availability of library facilities affect the academic performance of Junior Secondary School Business Education Students in external examination.

**Table 5:** t-test analysis of the difference between the mean responses of the teachers and students on the extent availability of library facilities affect the academic performance of Junior Secondary School Business Education Students in external examination.

Groups	Number	Mean	S.D	D.F	T.cal	P.value	Decision
Urban	181	3.01	0.56	392	-1.11	0.26	Not
							Significant
Rural	213	3.14	0.62				

The data on table 5 showed a t-calculated value of -1.11 with a P. value of 0.26 which is greater than 0.05 at 0.05 level of significance. This implies that the null hypothesis, which states there is no significant difference between the mean responses of the teachers and students on the extent availability of library facilities affect the academic performance of Junior Secondary School Business Education Students in external examination was retained.

### **Hypothesis Two**

There is no significant difference between the mean responses of the teachers and students on the extent class size/layout affect academic performance of Junior Secondary School Business Education Students in external examination

**Table 6:** t-test analysis of the difference between the mean responses of the teachers and students on the extent class size/layout affect academic performance of Junior Secondary School Business Education Students in external examination.

Groups	Number	Mean	S.D	D.F	T.cal	P.value	Decision
Urban	181	2.91	0.76	392	0.47	0.64	Not
							Significant
Rural	213	2.83	0.91				

The data on table 4.6 showed a t-calculated value of 0.47 with a P. value of 0.64 which is greater than 0.05 at 0.05 level of significance. This implies that the null hypothesis, which states there is no significant difference between the mean responses of teachers and students on the extent class size affect academic performance of Junior Secondary School Business Education Students in external examination retained.

### **Hypothesis Three**

There is no significant difference between the mean responses of teachers and students on the extent school location affect the academic performance of Junior Secondary School Business Education Students in external examination.

**Table 7:** t-test analysis of the difference between the mean responses of business studies male and female teachers on the impact of strike actions on students' academic performance in junior secondary schools of Isiala North Local Government Area.

Groups	Number	Mean	S.D	D.F	T.Cal	P.Value	Decision
Urban	181	2.92	0.76	392	0.17	0.86	Not
							Significant
Rural	213	2.89	0.64				

The data on table 7 showed a t-calculated value of 0.17 with a P. value of 0.86 which is greater than 0.05 at 0.05 level of significance. This implies that the null hypothesis, which states there is no significant difference between the mean response of teachers and students on the extent school location affect the academic performance of Junior Secondary School Business Education Students in external examination was retained.

### **Hypothesis Four**

There is no significant difference between the mean responses of teachers and students on the extent environmental noise affect the academic performance of Junior Secondary School Business Education Students in external examination.

**Table 8:** t-test analysis of the difference between the mean responses of teachers and students on the extent environmental noise affect the academic performance of Junior Secondary School Business Education Students in external examination

Groups	Number	Mean	S.D	D.F	T.cal	P.value	Decision
Urban	181	3.14	0.81	392	0.99	0.32	Not Significant
Rural	213	3.03	0.56				_

The data on table 4.8 showed a t-calculated value of 0.99 with a P. value of 0.32 which is greater than 0.05 at 0.05 level of significance. This implies that the null hypothesis, which states there is no significant difference between the mean responses of teachers and students on the extent environmental noise affect the academic performance of Junior Secondary School Business Education Students in external examination was retained.

### **Discussions of Findings**

Research question one revealed that the availability of library facilities enhances the academic performances and null hypothesis one revealed that there is no significant difference between the mean responses of the teachers and students on the extent availability of library facilities affect the academic performance also. This findings is in agreement with the findings of Abdolreza, (2016) whose finding revealed that the availability of library facilities enhances the academic performance of Junior Secondary School Business Education Students in external examination to a high extent.

Research question two revealed that to a high extent the class size enhances their academic performances and the null hypothesis revealed that there is no significant difference between the mean responses of the teachers and students on the extent class size affect academic performance of Junior Secondary School Business Education Students in external examination. This findings is in agreement with the findings of Alokan, (2013) whose finding revealed that the class size enhances the academic performance of Junior Secondary School Business Education Students in external examination.

Research question three revealed that to a high extent school location enhances students' academic performance and there is no significant difference between the mean responses of teachers and students on the extent school location affect the academic performance of Junior Secondary School Business Education Students in external examination. This findings is in agreement with the findings of Armah (2013) whose finding revealed to a high extent school location enhances the academic performance of Junior Secondary School Business Education Students in external examination.

And research question four revealed to a high extent that environmental noise enhances students' academic performance and the corresponding null hypothesis revealed that there is no significant difference between the mean responses of teachers and students on the extent environmental noise affect the academic performance of Junior Secondary School Business Education Students in external examination. This findings is in agreement with the findings of Abdolreza, (2016) whose finding revealed to a high extent environmental noise enhances the academic performance of Junior Secondary School Business Education Students in external examination.

### Conclusion

Based on the findings of the study it was concluded that the availability of library facilities enhances the academic performance of Junior Secondary School Business

Education Students in external examination to a high extent. To a high extent the class size enhances the academic performance of Junior Secondary School Business Education Students in external examination. To a high extent school location enhances the academic performance of Junior Secondary School Business Education Students in external examination. Lastly, to a high extent environmental noise leads to poor academic performance of Junior Secondary School Business Education Students in external examination.

### Recommendations

Based on the findings of the study, the following recommended were made:

- 1. The Government should ensure that adequate funding is provided to the schools to ensure that library facilities are provided to the schools.
- 2. The government should provide and build adequate class room blocks for the schools since it enhances academic performances.
- 3. The school authorities should ensure that schools are located in strategic positions that will help to enhance students' academic performances.
- 4. The Government should ensure that schools are located in areas devoid of environmental noise

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