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# SCHOOL ENVIRONMENT AND ACADEMIC PERFORMANCE: EMPIRICAL STUDY FROM SECONDARY SCHOOLS IN MOGADISHU-SOMALIA

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### **ABSTRACT**

The main thrust of this study was to investigate the influence of school environment on academic performance from secondary schools in Mogadishu-Somalia. The study has three objectives which are: To examine the influence of school climate on academic performance at some selected secondary schools in Mogadishu-Somalia. To identify the effect discipline of teachers on academic performance at some selected secondary schools in Mogadishu-Somalia to investigate the relationship between school physical facilities and academic performance at some selected secondary schools in Mogadishu-Somalia. The researcher utilized convenient sampling to collect 80 questionnaires from secondary school teachers in Mogadishu, Somalia. These respondents were provided a questionnaire with four main construct which measuring school climate, discipline of teachers, school physical facilities as well as academic performance, the study found that academic performance (Dependent variable) had significant positive influence with three dimensions of independent variable. The result of regression analysis found that two constructs had statistically significant, positive, and straight effects with academic performance.

Keywords: School environment and academic performance

### INTRODUCTION

Environmental influence before now have not been considered as one of the factors that affect academic performance in secondary schools hence it has little or no attention in educational discourse and consideration. But over the past decade remarkable studies have indicated a correlation between the environment and academic performance of students. Environment plays major role in the life of every individual whether a students, teachers, employer or employee. Though some people are yet to believe that environment brings about better performance. Udoh (1980) in his article "The Environmental Health Problems in Nigeria Schools", Identified some unhealthy practices in our schools. These include sitting of schools, inadequate facilities, poor ventilation etc.

One of the factors that influence academic performance is school location/site of the school. This is so because in a situation whereby the school is sited in a noisy area like airport or in the heart of a city like Port Harcourt city, where activities disrupt the teaching/learning of the students. One will not expert such students in this area to be doing well academically. Onukwo (2004) in his note says that a conducive environment enhances a child's growth and development. Children feel happy in a peaceful and friendly environment where as schools sited in noisy urban streets are associated with deficits in mental concentration leading to student's poor performance.

According to (Chukwuemeka, 2013) environments play major roles in the life of every individual whether a student, teacher, employer or employee. The challenge of education today is to offer experiences that provide students with opportunities to develop the understanding, skills, and attitudes necessary to become lifelong learners, capable of identifying and solving problems and dealing with change.

Students' academic success is greatly influenced by the type of school they attend. School factors include school structure, school composition and school climate. The school that one attends is the institutional environment that sets the parameters

of a students' learning experience. As schools are faced with more public accountability for student academic performance, school level characteristics are being studied to discover methods of improving achievement for all students. Considerable research has been conducted on teaching skills, climate, socioeconomic conditions, and student achievement (Hoy, Kottkamp & Rafferty, 2003). Depending on the environment, schools can either open or close the doors that lead to academic performance (Barry, 2005).

According to Nwangwu (1990) gave the characteristics of school environment to include school buildings, classrooms, furniture's, playgrounds, sporting facilities, laboratories, libraries and equipments which aid the teachers in effective delivery of lesson. According to State of Maine (2002) school environment includes the physical and aesthetic surroundings and the psychological climate and culture of the school.

According to Gagne (1997) states that environment for the child includes a host of structures such as buildings, furniture's, equipment, instructional materials, the teachers, the peer group and other people involved in the development of a child. Booth and Okely (2005) looked at school environment as the physical environment (e.g. facilities and equipment), school policies (e.g. time allocated for physical and Health Educational Sport) and school practices regulating PE and Sport, banners to participation and strategies to promote participation). This definition encapsulates components of the Health Promoting School Model (NHMRC, 1996) and also how school staff tends to contextualized health, particularly physical activity.

According to Mick Zais (2011), School Environment means the extent to which school settings promote student safety and student health, which may include topics such as the physical plant, the academic environment, available physical and mental health supports and services, and the fairness and adequacy of disciplinary procedures, as supported by relevant research and an assessment of validity.

Academic performance generally refers to how well a student is accomplishing his or her task and studies, but there are quite a number of factors that determine the level and quality of students' academic performance included grades, attendance, standardized test, extracurricular activities, Behavior, Individual differences in academic performance have been linked to difference in intelligence and personality. (Von Stumm, Sophie Hell, Benedikt, Chamorro premuzic, Tomas 2011)

### SPECIFIC OBJECTIVE OF THE STUDY

- 1. To examine the influence of school climate on academic performance at some selected secondary schools in Mogadishu-Somalia.
- 2. To identify the effect discipline of teachers on academic performance at some selected secondary schools in Mogadishu-Somalia
- 3. To investigate the relationship between school physical facilities and academic performance at some selected secondary schools in Mogadishu-Somalia

### LITERATURE REVIEW

The purpose of the study was to determine the influence of learning environment on students' academic Achievement in mathematics at senior secondary school level. Thus the study investigated some components of learning environment and their possible influence on students' academic achievement in mathematics. A sample of 337 randomly selected SS II students was taken from a population of 1682 students in Potiskum LGA, Yobe state. Data analysis was done using descriptive statistics as well as the t-test. The result shown that, there is Significance difference between the mean performance of students taught in an ideal learning environment and that of students taught in a dull learning environment al 0.05 level of significance. The findings were discussed with a view to improving both the quality of learning environment and academic achievement in mathematics. In view of that therefore, recommendations were made for the improvement of the learning environment (SHAMAKI, & Ado, 2015)

The main thrust of this paper is to investigate the influence of school environment on academic achievement of students in secondary schools in Zone "A" Senatorial District of Benue State, Nigeria. Three research questions and three hypotheses guided the study. A descriptive survey design was adopted for the study. The population of the study comprised 1636 teachers from 119 secondary schools in Zone 'A' Senatorial District of Benue State. A sample of 250 teachers was used for the study. A 15-item structured questionnaire developed by the researchers titled "Influence of School Environment Questionnaire (ICTQ)" was used for data collection. Mean and standard deviations were used to answer the research questions, while chi-square (x2) was used to test the hypotheses at 0.05 level of significance. The results of the study indicated that school climate, discipline and physical facilities has significant influence on academic achievement of

secondary school students in Zone 'A' Senatorial District of Benue State. Based on the findings of this study, the researchers recommended among others that appropriate school authorities should enable to provide a conducive school environment that has good climate for effective teaching and learning. Such environment should be safe, students treated fairly by teachers and happy to be in school as well as feel they are a part of the school. (C., Angelina, & Dondo, 2015)

This study examined the influence of environmental factors on the academic performance of students in Port Harcourt local government area of Rivers State. Four research questions guided this study. The population of the Study consists of six hundred teachers and students. Whereas the sample was two hundred and fifty (250), Teachers and students. An instrument titled "Environmental influence on Academic Performance of Secondary School Students Questionnaire" was utilized to elicit information from the respondents. Data was analyzed; Percentages were used to find solutions to the research questions. The major findings of the study were; Performance is affected by environment That improper maintenance of fixtures led to lower than average student's performance. Home background has effect on the academic performance of students. (Chukwuemeka, 2013)

The main thrust of this study was to investigate empirically the extent to physical school environment influence students' academic performance in secondary schools in Bayelsa State. In order to accomplish this, four hypotheses were formulated to guide and direct the study. The hypotheses were meant to assess the influence of aesthetic beauty of the school, infrastructural facilities, school equipment and instructional materials and school location on students' academic performance. Ex-post facto research design was adopted for the study. The sample used for this research was one thousand, six hundred and twenty (1,620) JS3 students carefully selected through the use of multiple stages sampling techniques in secondary schools in Bayelsa State. Two research instruments an achievement test to measure student's academic achievement and a set of questionnaire to measure the sub independent variables of the study. The data obtained from the administration of the questionnaires were duly coded and subjected to statistical analysis using simple percentage and Independent t- test (t). Findings revealed that: aesthetic beauty of the school and infrastructural facilities significantly influence students' academic performance. Also, there is a significant influence of school equipment and instructional materials and school location on students' academic performance. It was recommended that adequate school physical facilities should be provided by the State Government, in all secondary schools in Bayelsa State. This will help to engage the students in meaningful activities. (koroye,, 2016)

The school environment, which includes the classroom, school location, school facility, school climate and technology, etc, is a variable that affects students' academic performance. Hence the school environment remains an important area that should be studied and well managed to enhance students' academic performance. The extent to which students' learning could be enhanced depends on their location within the school compound, the structure of their classroom, availability of instructional facilities and accessories. It is believed that a well-planned school will gear up expected outcome of education that will facilitate good social, political and economic emancipation, effective teaching learning process and academic performance of the students. (Oselumese, Omoike, & Andrew, 2016)

The present study explored the relationship between classroom environment and academic achievement of the subjects. The subjects 11th class students. The sample of 80 students was Selected from various colleges of Aurangabad city. Simple random sampling method was used for selecting subjects. The study was experimental "pre-test post-test equivalent group design" was used for this study. Statistical data was collected from pre-test post-test. Mean, standard deviation and t test were used for statistical procedure. In this study results are significant at 0.05 level. The study showed that there is significant difference between classroom physical environment and academic achievement of subjects. (Kekare, 2015)

The study examined the impact of school environment and peer influence on the students' academic performance. The study assessed school environment factors and peer influences in terms of the level of psychological impact they have on learners. The study was based on Albert Bandura's Social Learning Theory, which considers leaning as an interaction between environment, behavior, and one's psychological processes. The study used a correlation research design where school environment and peer influence constituted the independent variables whereas students' academic performance was the dependent variable. Twenty-one public secondary schools in Sabatia District of Vihiga County were used in the study. The study subjects were selected using simple random sampling technique. Questionnaires were used to collect data on the school environment and the peer influence and school records were used to obtain students' academic performance. Data were analyzed using multiple regression. The study established that school environment and peer influence made significant contribution to the students' academic performance. It is hoped that the findings of this study will be useful to teachers,

principals and parents to gain more insight into the psychosocial factors that affect students' academic performance and therefore help improve their academic performance.(Korir & Kipkemboi, 2014)

The purpose of the paper was to examine the effects of classroom physical environment on the academic achievement scores of secondary school students. All the students studying at secondary school level in Kohat Division, Pakistan constituted the population of the study. The study was delimited to the students of class 09 of Govt. High School Khurram (Karak). Forty students from class 09 of the same school were selected as sample through simple random sampling technique. The study was experimental in nature and therefore "Pre-test-Post-test Equivalent Groups Design" was used. Statistical data was collected through pre-test and post-test technique. Statistical tools i.e., mean, standard deviation and differences of means were calculated for each group. Significance of the difference between the mean scores of the experimental and control groups was tested at 0.05 level of confidence by applying t-test. After analysis, it was concluded that classroom favorable environment has a significant positive effect on the academic achievement scores of secondary school students. The students of experimental group showed better performance as compared to the students of control group. Based on findings, it was recommended that classroom physical environment should be well-organized, equiped and facilitated. (Suleman & Hussain, 2014)

The study was designed to assess the relationship between school environmental variables and students' academic performance in Agricultural Science. The study adopted a correlational survey design. A sample size of 300 students were randomly selected and used for the study. To guide the study, two specific objectives and two null hypotheses were formulated and tested at 0.05 level of significance. Agricultural Academic Performance Test (AAPT) and Agricultural practical check-list were developed and used to gather data for the study. The instruments were validated by three research experts and the reliability coefficients of 0.82 and 0.78 were obtained using PPMC. Data were analysed and null hypotheses tested using PPMC. The findings indicated that there was significant relationship between availability of laboratory facilities and students' performance in Agricultural Science. There was also significant relationship between availability of farming facilities and academic performance of students. It was recommended that secondary schools should create more conducive environments that facilitate students' acquisition and development of cognitive, psychomotor and effective skills in their academic endeavor. (Joseph, Appiagyei, & Fentim, 2014)

The present study School Environment and Academic Achievement of standard IX students was probed to find the relationship between School Environment and Academic Achievement of standard IX students. Data for the study were collected using self-made School Environment Scale (SES). The investigator used stratified random sampling technique for selecting the sample. The sample consists of 400 standard IX students. For analyzing data't' test and Pearson's product moment co-efficient were the statistical techniques used. Finding shows there was no significant relationship between School Environment and Academic Achievement of standard IX students. (Nsa, Offiong, Udo, & Ikot, 2014)

This study investigates the impact of the prior school environment on academic achievement of students at the secondary stage in Punjab (Pakistan). This study used mean of the prior five years results of SSC examination. Population of the study comprised all secondary and higher secondary schools and secondary students in Punjab. Overall, a total of 288 schools, and then 20 students from each school were randomly selected as the sample of the study. The longitudinal data of academic achievement in the form of aggregate marks of the annual examinations of the Classes VI, VII, & VIII as prior achievement and that of the Class X as academic achievement of the same students through "Result Sheet". The data were summarized at school level and then analyzed collectively. Pearson correlation was used to find out the relationship (association) of the prior school environment with academic achievement. The results of the study show that the prior school environment is an important predictor of academic achievement for arts students; however, it has some insignificant positive impact on academic achievement of science students. The insignificant and weak causal relationship for science students may be improved if the indicators of school environment are properly defined and improved up to the higher standards. Prior school environment is very helpful in producing the present school environment. In this way, both the present and the prior school environments are important. The policy implications of the study are that the prior school environment provides the accelerating or the declining trend of academic achievement of students. (Lawrence & Vimala, 2012)

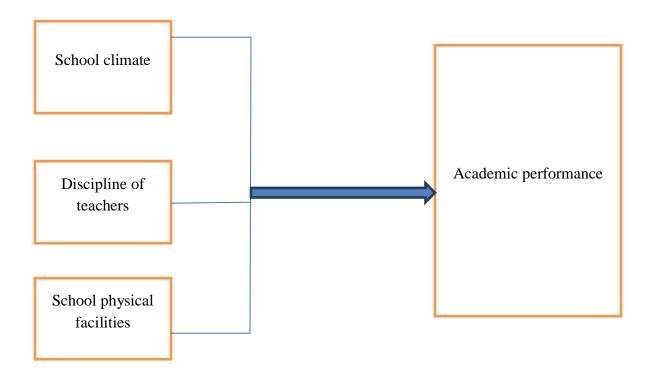
The present research study was design to investigate the factors affecting academic performance of graduate students of Islamia University of Bahawalpur Rahim Yar Khan Campus. The variables under consideration were the academic performance (student's grades/marks) as a dependent variable and the gender, age, faculty of study, schooling, father/guardian social economic status, and residential area, medium of schooling; tuition trend, daily study hours and accommodation trend were independent variables. The data were collected from 100 students through separate structured

questionnaire from different departments of Islamia University of Bahawalpur, Rahim Yar Khan Campus using the simple random sampling technique. For analysis, linear regression model, correlation analysis, and descriptive analysis were used. The findings revealed that age, father/guardian social economic status and daily study hours significantly contribute the academic performance of graduate students. A linear model was also proposed that will be helpful to improve the academic performance of graduate students at University level. (Dahar, 2009)

This study focused on the relationship between classroom climate and student's academic performance. The respondents were the 123 fourth year Bachelor of Secondary Education and Bachelor of Elementary Education students taking the Teaching Profession. The survey method using the Classroom Climate questionnaire adapted from the downloaded instrument was used.

Academic performance was their Final grade in the Teaching Profession. Statistical tools were frequency count, percentage, mean, standard deviation and Pearson's r set at .05 level of significance. There is a Moderately Low Positive Correlation (r= 0.434) between academic performance and classroom climate and only 18.84% of classroom climate explains the variance in the academic Performance. With the p-value=.000 which is lesser than 0.05 level of significance, academic performance is significantly correlated to classroom climate. Classroom climate to a certain extent has some influence on academic performance of students. Teachers could employ the maximum participation of students individually or collaboratively. Teachers could strive to create a conducive classroom climate to help students attain academic success. (Ali, Haider, Munir, Khan, & Ahmed, 2013)

After reviewing the above literature, the researchers generated the following hypothesis:



### METHODOLOGY

This study was conducted through survey study method to examine the influence of school environment on academic performance from some secondary schools in Mogadishu-Somalia. The study utilized correlation and regression analyze to answer the research objectives.

The researchers utilized convenient sampling to collect 80 teachers from some secondary schools in Mogadishu-Somalia. These respondents were provided a questionnaire with four main construct which measuring school climate, discipline of teachers, school physical facilities as well as academic performance. The researchers' utilized Cronbach alpha to investigate

the internal consistency of the questionnaires collected from the respondents. All variables of the study gained high inside reliability as shown in below table 1 this allows as to make further analysis and discussion.

Table 1: Reliability test

Variables	Items	Cronbach Alpha
School climate	5	.814
Discipline of teachers	5	.854
School physical facilities	5	.858
Academic performance	9	.914

### DATA ANALYSIS AND DISCUSSION

### **DEMOGRAPHIC PROFILE**

According to the gender respondents 87.5% were male while 12.5% was female. 33.8% of the respondent's age was between 18-25 years old, 58.8% was between 26-35 years, 3.8% was between 36-45 years while 3.8% were above 46 years. In terms of marital status of the respondents, 42.5% were married while 57.5% were single. In terms of educational background 73.8% of the respondents were bachelor degree, and 11.3% were master degree level while 15.0% was diploma level.

Table 2: Demographic of the respondents

Variables	Frequency	Percentage
Gender		
Male	70	87.5
Female	10	12.5
Total	80	100.0
Age		
18-25Years	27	33.8
26-35 Years	47	58.8
36-45 Years	3	3.8
46 and above	3	3.8
Total	80	100.0
Marital status		
Single	46	57.5
Married	34	42.5
Total	80	100.0
<b>Education Background of the respondents</b>		
Bachelor Degree	59	73.8
Master degree	9	11.3
Diploma	12	15.0
Total	80	100.0

### Correlation between the Variables

Table 3 shows the result of correlation analyzes of the relationships among influence school climate, discipline of teachers, school physical facilities and academic performance in secondary schools in Mogadishu-Somalia. the result showed positive relationship between school climate and academic performance at (r=.419 and p>0.01). the study indicated positive

relationship between discipline of teachers and academic performance at (r=.550 and p>0.01). finally the study found that there is positive relationship between school physical facilities and academic performance at (r=.625 and p>0.01).

**Table3: Correlation Analyzes** 

No	Variables	Mean	SD	1	2	3	4
1	Influence school climate	4.0600	.78234	1			
	Discipline of teachers	4.0100	.85855	.816	1		
2							
	School physical facilities	4.0975	.86038	.824	8.77	1	
3							
4	Academic performance	3.2625	.52243	.419	.550	.625	1

### **Regression Analysis**

This study investigated the influence of school environment on academic performance from secondary schools in Mogadishu-Somalia. Three hypothesis were developed Three hypotheses were developed after reviewing the literature, to test the research hypotheses were employed the linear regression analysis. The researchers checked regression hypothesis before taking place to further analysis. The dependent variable which is academic performance was normally distributed across all independent variable. H1 confirmed that there is positive relationship between school climate and academic performance. H2 did not support. H3 asserted positive relationship between school physical facilities and academic performance.

**Table 4: Regression Analysis** 

Variables	Beta	t-value	Significant	Results
				H1 Accepted
School climate	.344	.2101	.039	
				H2 did not
Discipline of teachers	.149	.776	.440	Accepted
				H3 Accepted
School physical facilities	.777	3.956	.000	
R	.651	<u> </u>		
R Square	.424			
Adjusted R Square	.402			

### **CONCLUSION**

In the light of statistical analysis, it was concluded that there is significant effect of classroom physical environment on the academic achievement scores of secondary school students. Well-equipped classroom with physical facilities has a significant positive effect on the academic achievement scores of secondary school students. The students of experimental group obtained high scores as compared to the students of control group. Retention of the students of experimental group was found significantly better than that of the students of control group. In addition, the students of experimental group were found more motivated, interested and attentive during the treatment. In nut shell, it is concluded that if the students feel comfortable within classroom, then they will have much concentration on the lesson taught to them and that is why they will get more information from the teachers and thus they will obtain high scores.

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