

# RELATIONSHIP BETWEEN SCHOOL VARIABLES AND ACADEMIC PERFORMANCE OF STUDENTS IN PUBLIC SECONDARY SCHOOLS, KWARA STATE, NIGERIA

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## Abstract

*This study examined relationship between school variables and academic performance of students in public secondary schools, Kwara State, Nigeria. All the 6,902 teachers in the whole 317 public secondary schools in the State constituted the population. Random sampling technique was used to select six Local Governments. Through randomisation, five schools were selected from each of the Local Governments and 10 teachers from each of the sampled schools. School Variables Questionnaire (SVQ) and Proforma for Academic Performance of Students (PAPS) were used to gather data. The SVQ was validated and tested for reliability. The reliability coefficient realised was 0.73. Hypotheses were tested at 0.05 level of significance. It was revealed in the findings that school variables and academic performances of students are significantly related. It was recommended that efforts should always be made by both the Kwara State government and the school principals to ensure that school variables such as population, leadership and facilities are consistently supportive to facilitating effective operations in schools to achieve outstanding academic performance in students.*

**Keywords:** School variables: Population, Facilities, Leadership; Students' academic performance

## Introduction

Secondary education is very significant in the sense that it serves as the gateway to the tertiary institutions where students are processed or refined; to become finished products capable of positively impacting on their immediate communities, Nigeria in entirety and the globe at large. Secondary school education is significant in the sense that it prepares students for successful living in the society as well as furtherance in education (Osagie & Momoh, 2016). In Nigeria, among other things, there is an expectation from the stakeholders in education such as government, teachers, parents and community members that final year students in secondary schools outstandingly perform in Senior School Certificate Examinations (S. S. C. E) and consequently pursue their respective dream careers in tertiary institutions within or outside the country. However, for this dream to be well achieved there is need for all the school variables to always be in good condition. School variables are those components which make learning centres work as a system. An error in a, some or all the school variables could hinder actualisation of the stated goals. The school variables include facilities (classrooms, laboratories, libraries, workshops, toilets, sick bay and playground), instructional resources (textbooks, teaching aids, internet services and computers), location, leadership, population, teaching and non-teaching staff. According to Nsa, Offiong, Udo and Ikot (2014) the role which school variables play in determining students' academic performance cannot be over-emphasised. These school variables consist of classrooms and their facilities, libraries and facilities, workshops and their facilities and laboratories and their facilities, textbooks and other instructional resources, location to mention but a few. Nsa, Akpan and Williams (2012) believed that the condition or school variables determine the effectiveness. Adeyemo (2011) opined that students' academic performance means the achievement which a student makes in school; that is his scores in a particular examination. Ekundayo (2013) believed that, various determinants affect performance of students. They include the student-staff, school leadership, qualification of teachers and school population. In this study, the aspects of school variables which the paper focused on were school population, leadership and facilities

Population in education connotes the aggregate number of learners enrolled in a school at a given academic session. Population size could determine the number of students in each of the classes in a school, effectiveness of teachers' job performance and performance of the students academically. Oduwaiye, Sofoluwe, Paul and Ibrahim (2013) elucidated school population as all students admitted into an educational institution in a particular academic session. The size of school population could influence teachers' job performance and consequently the students' academic performance. Teachers are likely to be more effective in classrooms that are not over populated than those ones with thick population. Leithwood and Jantzi (2009) argued that when the population of students in a school is very large, there could be high level of disorderliness and poor attitudes to studies among students, inability of teachers to effectively manage the classrooms; hence, poor students' academic performance. Contrarily, teachers in a school with small or average population size could find it easier to handle students effectively.

Leadership is very essential at every level of education; secondary schools are in no exemption. It is the process or avenue via which both students and staff get influenced, directed, coordinated and motivated towards ensuring the school success. In secondary schools in Nigeria, leadership which would always support effective teachers' job

performance to facilitate proactive students' knowledge acquisition is highly important, to actualise the stated goals. In the opinion of Ogunsayin (2006) leadership is a status of recognition and respect occupied by a school manager and attached with the opportunity to influence both staff and students to actualise the stated goals. Uyanga (2008) asserted that the role which school leadership (principals) play in improving the quality of secondary schools cannot be over-emphasised. Since secondary schools are expected to achieve appreciable students' academic performance, the principals' role is very pivotal. Osagie and Momoh (2016) maintained that principals as school leaders are expected to design strategies to make schools good enough to effectively refine students' morals as well as support them to academically succeed. In supporting this, the finding of the study conducted by Quin, Deris, Bischoff and Johnson (2015) showed that school leadership directly impacts students' achievements. Ani (2007) stated that facilities are structures, material resources and other equipment made available in schools for the goals to be actualised. They consist of classrooms, furniture, laboratories, libraries, toilets, games and recreational resources, machines, textbooks and the likes. Onwurah (2004) opined that school facilities contribute significantly to the development of the three domains of learning viz; cognitive (skill, knowledge and abilities), affective (values and positive emotions) and psychomotor (use of hands and muscles to manipulate learning tools). Osuji (2016) stated that at present in Nigeria, the required facilities are inadequate in schools and it might lead to poor performance of students. It is against this background that this study was set out to assess the relationship between school variables and academic performance of students in public secondary schools, Kwara State, Nigeria.

### **Statement of the Problem**

In Nigeria, secondary school students' performance in academics seems discouraging since years back and this ought to be giving stakeholders in education such as government, teachers and parents serious concern. This statement is supported by the West African Senior School Certificate Examinations results which showed that 38.68%, 52.97%, 26.01%, 49.98% and 17.13% candidates got five credits comprising General Mathematics and English language in the years 2015, 2016, 2017, 2018 and 2019. Adesulu (2014) posited that in the last six years, of more than a million candidates who wrote WASSCE, below 30 percent got credits in five subjects including General Mathematics and English Language. However, poor attitudes of students towards learning, poor parenting, poor teachers' job performance, ineffective motivation of teachers, societal influence and the likes had been advanced by members of the public and stakeholders in education as the factors which could be responsible for this poor students' academic performance. By and large, the condition of school variables such as over population, ineffective leadership and inadequate or poor situation of facilities bedeviling some secondary schools might also be the cause of the disheartening results derived from WASSCE over the years. Hence this study assessed school variables in relation to academic performance of students in public secondary schools, Kwara State, Nigeria.

### **Objectives of the Study**

The study objectives were to examine the relationship:

1. between school variables and academic performance of students in public secondary schools, Kwara State, Nigeria;

## 2. between school population and academic performance of students;

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### Research Hypotheses

Four hypotheses were generated in the study.

**Ho<sub>1</sub>:** School variables do not significantly relate with academic performance of students in public secondary schools, Kwara State, Nigeria.

**Ho<sub>2</sub>:** School population and academic performance of students are not significantly related.

**Ho<sub>3</sub>:** School leadership does not significantly contribute to performance of students.

**Ho<sub>3</sub>:** School facilities do not significantly relate with academic performance of students.

### Research Method

The study examined the relationship between school variables academic performance of students in public secondary schools, Kwara State, Nigeria. The study used descriptive research design of survey type. All the 6,902 teachers in the 317 Kwara State public secondary schools constituted the study population. There are three Senatorial Districts (Kwara Central, North & South) in the State. Random sampling technique was used to select Ilorin East and West LGAs in Kwara Central; Oyunand Isin in Kwara South; and Patigi and Moro in Kwara North. Five schools from each of the sampled LGAs and 10 teachers from each school were also randomly selected.

The researchers used personally designed instrument captioned School Variables Questionnaire (SVQ) to collect data from respondents, while Proforma for Students' Academic Performance (PSAP) was utilized for gathering data from school principals on the total number of WASSCE candidates in their respective schools from 2017 to 2019 and the figure of those who got five credits upward consisting of English language and Mathematics. The validity of the instruments was established. Twenty copies of the instruments were administered to some teachers who were not part of the study respondents. Cronbach's Alpha was used to analyse the data gathered and reliability coefficient of 0.73 was realised. This confirmed the reliability of the instrument.

### Analysis and Results

Out of 300, a large number of 285 responded. Likert rating scale of Strongly Agree (SA) = 4 points, Agree (A) = 3 points, Disagree (D) = 2 points and Strongly Disagree (SD) = 1 point was used for scoring responses for each of the items on the questionnaire. Pearson Product-Moment Correlation was used to test all the hypotheses at 0.05 level of significance

**Table 1**

*Relationship between School Variables and Academic Performance of Students*

Variable	N	$\bar{X}$	SD	Cal. r-value	p-value	Decision
School variables	285	3.15	1.09	0.662	0.014	Ho <sub>1</sub> Not accepted

Students' 28 2.89 0.76

Table 1 shows the calculated r-value (0.662) while the p-value (0.014) is less than the (0.05) which is the significance level. Therefore, hypothesis one (Ho<sub>1</sub>) was not accepted. This shows that school variables significantly relate with academic performance of students.

**Table 2**

*Relationship between School Population and Academic Performance of Students*

Variable	N	$\bar{X}$	SD	Cal. r-value	p-value	Decision
School population	28	3.01	1.34			
	5			0.694	0.022	Ho <sub>2</sub> Not accepted
Students' academic performance	28	2.89	0.76			
	5					

Table 2 shows the calculated r-value (0.694) while the p-value (0.022) is less than the significance level (0.05). Hence, hypothesis two (Ho<sub>2</sub>) was not accepted. This means that school population and academic performance of students are significantly related.

**Table 3**

*School Leadership and Academic Performance of Students*

Variable	N	$\bar{X}$	SD	Cal. r-value	p-value	Decision
School leadership	28	3.49	1.26			
	5			0.687	0.015	Ho <sub>3</sub> Not accepted
Students' academic performance	28	2.89	0.76			
	5					

From the Table 3, with the cal. r-value (0.687) and level of significance of (0.05) which is higher than the p-value (0.015), hypothesis three (Ho<sub>3</sub>) was not accepted. This signifies that school leadership does not significantly contribute to performance of students.

**Table 4**  
*School Facilities and Academic Performance of Students*

Variable	N	$\bar{X}$	SD	Cal. r-value	p-value	Decision
School facilities	285	2.95	0.68			
				0.651	0.003	Ho <sub>4</sub> Not accepted
Students' academic performance	285	2.89	0.76			

As shown in Table 4, the cal. r-value stands at (0.651) while the p-value of (0.003) is less than (0.05) which is the significance level. Hence, hypothesis four (Ho<sub>4</sub>) was not accepted. This shows that school facilities significantly relate with academic performance of students.

**Discussion of Findings**

The finding of the tested hypothesis one revealed that school variables significantly relate with academic performance of students in public secondary schools, Kwara State, Nigeria. This means that if the variables such as school population, leadership and school facilities are favourable to schools, it would significantly aid performance of students. This finding supports the finding of Henry (2015) that school variables contribute significantly to performance of students in secondary schools, Osun State, Nigeria. This finding also supports the view of Olufemi, Adediran and Oyediran (2018) that academic performance of students is influenced by many school variables such as school facilities, population, teachers' quality, school leadership and the likes.

The finding of the tested hypothesis two showed that school population significantly relates with academic performance of students. This means that if a school is not thickly populated, classrooms would be easily managed by teachers and goals would be well achieved. This finding corroborates the finding of Dada (2019) that school population and students' academic performance are significantly related. The finding of Oduwaiye, Sofoluwe, Paul and Ibrahim (2013) that school population influences performance of basic school students in Kwara State, Nigeria also supported this finding.

The finding of the tested hypothesis three revealed that school leadership significantly relate with academic performance of students. This signifies that if school leadership (principals) key into effective management of schools, it would facilitate effective teachers' job performance and students' seriousness to learning and consequently boost their performance academically. This finding agrees with the finding of Quin, Deris, Bischoff and Johnson (2015) which showed that school leadership directly impacts students' achievements. This finding corroborates the view of Ngeripaka, Nkporbu and Acheya (2019) that academic performance of students could be enhanced when the leadership which the

principals provides is very effective in all the school ramifications. The finding is also in support of the view of Opakunle (2016) that leadership plays significant roles in the school

The finding of the tested hypothesis four showed that school facilities significantly relate with academic performance of students. This depicts that if thorough supervision of facilities is keyed into, it would facilitate effective teaching and learning thereby assisting students to outstandingly perform in their academics. This finding agrees with the finding of Alarape (2019) that school facilities and students' academic performance are significantly related. The view of Dada (2019) also corroborated this finding that, facilities are very vital in schools. These are what students need to interact with to acquire knowledge and perform well academically. Without facilities, the goals of education cannot be achieved.

### **Conclusions**

The study concluded that:

1. school variables play significant role in enhancing students' academic performance in Kwara State public secondary schools, Nigeria;
2. academic performance of students would be influenced by school population;
3. school leadership is a significant factor which contributes to how students perform academically; and
4. school facilities significantly contribute to the students' academic performance.

### **Recommendations**

The following recommendations were made:

1. efforts should always be made by both the Kwara State government and the school principals to ensure that school variables such as population, leadership and facilities are consistently supportive to promoting effective operations to boost students' performance in academics;
2. government should make sure that highly populated schools are decongested by constructing more classrooms and schools and properly implement the policy of 1:40 students per teacher in order to facilitate effective teachers' job performance and consequently enhance students' academic performance;
3. school principals should always provide effective leadership by properly supervising teachers' instructional delivery, maintaining smooth interpersonal relationship and providing professional support to them where necessary to achieve their effective services delivery which would boost students' academic performance; and
4. government should always provide adequate school facilities and school management should ensure effective management of those facilities to facilitate effective school operation and consequently assist students to perform very well in their academics.

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