

SCHOOL PLANT MAINTENANCE AS A PREDICTOR OF SCHOOL ADMINISTRATION IN SECONDARY SCHOOLS IN RIVERS STATE

**Dr. Umezor, Uzonna Juliana, Eziuzo Gloria Olachukwu Ph.D
& Ogbo, Rosita Nwaribeaku, Ph.D**

Educational Management and Policy Department,
Faculty of Education, Nnamdi Azikiwe University Awka,
julzyiana@yahoo.com

Abstract

The study investigated school plant maintenance as a predictor of school administration in secondary schools in Rivers state. Two research questions were answered while two corresponding hypotheses were tested. The study adopted a correlation research design. The population of the study is 286 principals from 286 secondary schools in Rivers State. The sample size 143 principals was drawn from 143 public schools in Rivers state. The simple random sampling technique was used to arrive at the sample size representing 50% of the population. Two instruments, School Plant Maintenance Scale (SPMS) and School Administration Scale (SAS) were used for data collection. The instruments were face validated by three lecturers. The internal consistency reliability coefficient of School Plant Maintenance Scale (SPMS) and School Administration Scale (SAS) determined through Cronbach are 0.77 and 0.87 respectively. Linear regression was used to answer the research questions while t-test associated with linear regression was used to test the hypotheses at 0.05 level of significance. The findings revealed that maintenance of residential and instructional school plant significantly predicted school administration in secondary schools in Rivers state to a high extent. Based on the findings of this study, it was recommended the school principals should insist on routine maintenance of school residential facilities by closely supervising the activities of the teachers in the quarters. More so, the school principals should regulate the use of instructional facilities according to need and also assign each of the facilities to a teacher for proper management.

Keywords: School Plant (Residential and Instructional), Maintenance and School Administration

Introduction

School administration over the years can be situated as one of the serious challenges befalling secondary schools in Nigeria. School administration in the case of secondary schools in Rivers state may not be exempted. School administration involves the management of all school operations, from creating a safe learning environment to managing the school budget (Workplace Technology, 2023). Workplace Technology further stressed that school administration involves management of human and material resources towards the achievement of specific goals. It also includes the management of processes within a school system to ensure the achievement of particular outcomes (Isa, 2023). The school administrator is one in the secondary school qualified and saddled with responsibility of administrative functions. They ensure that the organization runs smoothly and they also manage facilities and staff. The school administrators manage budgets, handle logistics and act as a point of reference for everyone in the school (Ejiro, 2023). School Administrators are school planners, leaders, and one of the competencies as well as competencies to maintain school community relation (Workplace Technology, 2023). The school administrators are saddled with responsibilities of human and material resource management (Ozioko, 2023). This implies that principals can employ maintenance of school facilities as one of their statutory functions.

Schools require extensive maintenance and care to keep them running smoothly. Maintenance can be seen as the art of securing the standard of a person or thing (Grove, 2023). Grove further stated that maintenance is the process of sustaining the condition of an object or human beings. School maintenance refers can be seen as all the activities necessary for upkeep of equipment and

infrastructure available in the school environment. Maintenance can be seen as the measures applicable in the determination of continuous operation especially in keeping the school building, furniture, human and equipment in the best form for normal use. Maintenance is necessary in the school system because it can prevent any form breakdown of the system, emergency and hazardous events. Maintenance can be applied in the health facility, residential facility and instructional facilities. This study will focus on the residential and instructional facilities.

Residential facilities are those facilities that are made available in the building that accommodate personnel in the school system. Residential facilities in the school system include the hostels for students and quarters for teaching and non-teaching staff. They are the facilities that students and staff are housed especially for boarding schools (Agu, 2022). Agu further reported that the insistence on hygiene, security, and furniture provision and practices are necessary for harmonious leaving in the school. Proper painting, clearing of grasses, elimination of wastes, good pipe born water and electricity can lead to job satisfaction among the teachers in residential quarters (Ejiofor, 2023).

Another educational facility that is important to discuss is the instructional facilities. Instructional facilities are defined as classrooms, seminar rooms, on-campus clinics, computer laboratories, instructional laboratories, cybraries and other spaces used principally for the purpose of delivering formal instruction to our university students (Kelly, 2023). Recent study by Kelly revealed that proper maintenance of available instructional facilities are instrumental in the effective instructional delivery process. More so, it was found that poor attitude to maintenance culture of school staff to instructional facilities are detrimental to the achievement of its goals and objectives (Adekunle, 2023).

Aim and Objectives

The study investigated school plant maintenance as a predictor of school administration in secondary schools in Rivers state. Specifically, the study sought to:

1. find out the extent maintenance of residential school plant can predict school administration in secondary schools in Rivers state.
2. Ascertain the extent instructional school plant can predict school administration in secondary schools in Rivers state.

Research questions

The following research were answered in this study

1. To what extent can maintenance of residential school plant predict school administration in secondary schools in Rivers state?
2. To what extent can instructional school plant predict school administration in secondary schools in Rivers state?

Hypotheses

The following null hypotheses will be tested at 0.05 level of significance.

1. Maintenance of residential school plant cannot significantly predict school administration in secondary schools in Rivers state.
2. Maintenance of instructional school plant cannot significantly predict school administration in secondary schools in Rivers state.

Method

The study adopted a correlation research design. The population of the study is 286 principals from 286 secondary schools in Rivers State. The sample size 143 principals was drawn from 143 public schools in Rivers state. The simple random sampling technique was used to arrive at the sample size representing 50% of the population. Two instruments, School Plant Maintenance Scale (SPMS) and School Administration Scale (SAS) were used for data collection. The School Plant Maintenance Scale has two sections of A and B. Section A is the demographic information of the respondents such as designation and school type. Section B has two clusters of residential facilities maintenance and instructional facilities maintenance with ten items respectively. The SPMS was designed in line with four response format of Very High Extent (4), High Extent (3), Low Extent (2) and Very Low Extent (1) respectively. The second instrument, School Administration Scale (SAS) has ten items with the same demographic information and response option format as the SPMS. The instruments were face validated by three lecturers, one from Measurement and Evaluation and Two from Educational Management and Planning, Faculty of Education, University of Port Harcourt. The internal consistency reliability coefficient of School Plant Maintenance Scale (SPMS) and School

Administration Scale (SAS) determined through Cronbach are 0.77 and 0.87 respectively. Linear regression was used to answer the research questions while t-test associated with linear regression was used to test the hypotheses at 0.05 level of significance.

Results

Research question 1: To what extent can maintenance of residential school plant predict school administration in secondary schools in Rivers state?

Table 1: linear regression on the extent maintenance of residential school plant can predict school administration

Model	R	R Square	Adjusted R Square	Decision
1	.864 ^a	.746	.763	High extent

Data on table 1 revealed that the regression and regression square coefficients are 0.864 and 0.746 respectively. The predictive power is determined by the coefficient of determinism. The coefficient of determinism of 74.6% reveals that maintenance of residential school plant predicts school administration in secondary schools in Rivers state to a high extent.

Hypothesis 1: Maintenance of residential school plant cannot significantly predict school administration in secondary schools in Rivers state.

Table 2: t-test associated with linear regression on the extent maintenance of residential school plant can predict school administration

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	36.650	.404		2.00	.000
Maintenance of residential school plant	.812	.216	.864	1.930	.004

Data on table 2 reveals that the t-test value of 1.930 associated with simple regression was not rejected because the significant value of 0.004 is less than the alpha value of 0.05. Therefore, Maintenance of residential school plant significantly predicts school administration in secondary schools in Rivers state.

Research question 2: To what extent can instructional school plant predict school administration in secondary schools in Rivers state?

Table 3: linear regression on the extent can maintenance of instructional school plant predicts school administration

Model	R	R Square	Adjusted R Square	Decision
1	.769 ^a	.591	.500	High extent

Data on table 3 revealed that the regression and regression square coefficients are 0.769 and 0.591 respectively. The predictive power is determined by the coefficient of determinism. The coefficient of determinism of 59.1% reveals that maintenance of instructional school plant predicts school administration in secondary schools in Rivers state to a high extent.

Hypothesis 2: Maintenance of instructional school plant cannot significantly predict school administration in secondary schools in Rivers state.

Table 4: t-test associated with linear regression on the extent maintenance of instructional school plant can predict school administration

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6.433	.213		3.67	.000
Maintenance of instructional school plant	.771	.302	.769	4.442	.000

Data on table 4 reveals that the t-test value of 4.442 associated with simple regression was not rejected because the significant value of 0.000 is less than the alpha value of 0.05. Therefore, maintenance of instructional school plant significantly predicts school administration in secondary schools in Rivers state.

Summary of Findings

Based on the findings of this study are summarized as shown below:

1. Maintenance of residential school plant significantly predicts school administration in secondary schools in Rivers state to a high extent.
2. Maintenance of instructional school plant significantly predicts school administration in secondary schools in Rivers state to a high extent.

Discussion of Findings

The study revealed that maintenance of residential school plant significantly predicts school administration in secondary schools in Rivers state to a high extent. The findings of this study is consistent with that of Agu (2022) reported that the insistence on hygiene, security, and furniture provision and practices are necessary for harmonious leaving in the school. In agreement with this study was Ejiofor (2023). This finding implied that residential facilities are indispensable in the school organization.

The study also revealed that maintenance of instructional school plant significantly predicts school administration in secondary schools in Rivers state to a high extent. The finding of this study is buttressed by that of Kelly (2023) who revealed that proper maintenance of available instructional facilities are instrumental in the effective instructional delivery process. More so, that of Adekunle, (2023) corroborated this study in the report that attitude to maintenance culture of school staff to instructional facilities are important in the achievement of schools' goals and objectives. The crux of this finding is that educational facility are important to especially instructional facilities in the management of human and material resources.

Conclusion

Based on the findings of this study, it was concluded that school plants maintenance can significantly predict school administration to a high extent in secondary schools in Rivers State. Specifically, maintenance of residential and instructional school plant significantly predict school administration in secondary schools in Rivers state to a high extent.

Recommendations

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

1. The school principals should insist on routine maintenance of school residential facilities by closely supervising the activities of the teachers in the quarters.
2. The school principals should regulate the use of instructional facilities according to need and also assign each of the facilities to a teacher for proper management.

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