

RELATIONSHIP BETWEEN PRINCIPALS' PHYSICAL AND HUMAN RESOURCES UTILIZATION AND INTERNAL EFFICIENCY IN PUBLIC SECONDARY SCHOOLS IN ANAMBRA STATE, NIGERIA

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Abstract

The study investigated the relationship between principals' physical and human resources utilization and internal efficiency in public secondary schools in Anambra State, Nigeria. The study was guided by two research questions and two hypotheses were tested at 0.05 level of significance. Correlation research design was adopted for the study. The population of the study comprised all the 262 secondary school principals in the 262 public secondary schools in Anambra State. All the 262 principals were used for the study due to the relatively manageable size of the population. Two researcher-developed instruments titled "Principals' Physical and Human Resources Utilization in Public Secondary Schools (PPHRUPSS) which had two parts, 1 and 2. and Internal Efficiency Inventory (IEI)" were used for data collection. The internal consistency of the instruments was ascertained using Cronbach alpha which yielded coefficients of 0.82 and 0.80 for parts 1 and 2 of PRUPSS respectively with an overall coefficient of 0.81, while the value obtained for IEI was 0.86. The researchers together with five research assistants collected data for the study using direct administration. Out of 262 copies administered, 253 copies representing 97% were successfully completed, retrieved and were used for data analysis. Pearson Product Moment Correlation coefficient was used to analyze the data relating to the research questions, while t-test of correlation was used to test the hypotheses. The results of the study revealed among others that there was high positive relationship between principals' physical and human resource utilization and internal efficiency in public secondary schools in Anambra State. It was also reported that there was significant relationship between principals' physical and human resource utilization and internal efficiency in public secondary schools in Anambra State. Based on the findings, it was recommended among others that the Post Primary School Service Commission should annually organize workshops and in-service training for all school principals to enable them acquire skills and knowledge of utilizing financial resource to improve the internal efficiency of schools in the state.

Keywords: Resource Utilization, Physical Resource, Human Resource, Internal Efficiency

1. Introduction

Secondary education plays a pivotal role in laying the foundation for the further education of students. It represents a critical stage of the system that links primary education to higher education. It also provides opportunity for students to acquire fundamental knowledge required for higher education and useful living in the society. In Nigeria, secondary schools are the formal educational institutions meant for children between the ages of 11 and 16 years. These

schools are of two categories namely: public and private schools. The public secondary schools are the focus of this study.

Public secondary schools are schools whose management and financing are provided by the government. Public schools are therefore those schools owned, financed and managed by government through its agencies. The evolution of public secondary schools in Nigeria is part of government effort to make education affordable and qualitative at that level. To this end, Omiyale and Fadokun (2018) asserted that the success or the failure of any system of education especially public secondary school depends largely on the quality and quantity of resources made available to it

Resources are inputs that facilitate the attainment of educational goals and objectives. According to Kolawole and Ogbiye (2020), resources can also be referred to as the sum total of everything employed directly or indirectly to support the acquisition of knowledge, skill and competence. It is a productive factor required to accomplish an activity. These factors include land, labour and capital. Other factors are environment, management, time and energy, among others. Ajala and Ojo (2018) defined resources as those materials used by instructors and learners to create conducive learning environment and concretize instructional contents. Based on the above definitions, resource are the inputs or assets of the educational production process which foster smooth administration of the school to attain stated objectives. The smooth operation of the school to attain the objectives of secondary schools to a large extent depends on resource utilization.

Resource utilization is the act of putting into effective use the available resources in the school. Omiyale and Fadokun (2018) defined resource utilization as the total amount of resources optimally used in attaining set objectives. It is the judicious use of available resources for proper functioning of the school. Okeze and Ngerem (2021) defined resource utilization as the ability to make practical and effective use of resources in order to achieve an objective. In the same vein, Kolawole and Ogbiye (2020) asserted that resource utilization is the level of use of the resource in an attempt to accomplish a specified goal or objective. Continuing, Kolawole and Ogbiye averred that it refers to the percentage of time that a component is actually used as compared with the total time that the component is available for use. Operationally, resource utilization is the actual act of practically using the available assets to achieve end results or a purpose. Dike and Agabi (2021) noted that the educational resources which an administrator must plan for their effective utilization include; physical resource and human resource. The interest of the paper is on physical and human resources.

Physical resources are materials use by staff in carrying out the daily activities of an organization. According to Lawal and Kaegon (2021), physical resources are often man made and this is done for the purpose of simplifying man's day-to-day activities in any organization such as the school system. The physical resources in school include furniture, building, stationeries, machines, sporting equipment and other learning facilities. Similar to this, Okeze and Ngerem (2021) outlined physical resources to include: buildings, classroom laboratories, libraries hotels, administration staff offices, technical equipment, and other physical plant like machines vehicles, computer sets, typewriters, duplicating and photocopying machines. The

utilization of the physical resources is necessary for the attainment of educational objectives. Lawal and Kaegon (2021) maintained that the utilization of available physical resources in the school makes it easy for motivation, experimentation, investigation, creativity and evaluation of school activities to be possible. The physical resources are utilized by conducting practical classes in the laboratories, staff and students undertaking regular exercise using available sport facilities and visiting the library for regular academic research or studying among others. The utilization of the available physical resources creates meaningful and attractive teaching and learning that can improve internal efficiency by reducing truancy, repetition and drop-outs in school. Wakoli, Maiyo and Limo (2019) stressed that physical resources such as classrooms, laboratories, libraries, workshops, and furniture and fittings are required by human resource for their daily operation.

Human resources are the personnel who constitute the workforce in the schools. Human resource in the school include: students, non-teaching and teaching staff. The utilization of human resource determines the attainment of the school objectives, since members of staff control other resources in the production processes in the school. Iwowari (2013) asserted that human resource utilization comprises all the activities geared toward personnel's well-being and performance from when they are recruited to when they retire or withdraw from services. Human resource utilization could entail delegating duties to them based on their area of specialization, supervising their activities, providing opportunities for their professional development among others. According to Edemenang, Adam, Salisu and Audu (2021), human resource utilization is a strategic and coherent approach to the deployment of an organization's most valued assets (the people who work individually and collectively toward contributing to the achievement of its objective). Continuing, Edemenang et al asserted that the overall purpose of human resource utilization is to ensure that the organization can achieve success through people. Human resource can be utilized through motivation, distribution of fair workload and supervising of their activities to enhance internal efficiency in the school.

Internal efficiency refers to the achievement of stated education objectives at the lowest possible cost. Souck and Nji (2017) defined internal efficiency as the ability of the school system to produce the expected results using least available resources. According to Mearg (2015), internal efficiency refers to the extent to which the educational expenditures are properly utilized for immediate objectives like producing graduates and preventing dropouts, wastage and stagnation. Continuing, Mearg asserted that the internal efficiency of education is improved when more education outputs are produced at given education resources or fewer education resources are used in producing the same amount of education outputs. Operationally, internal efficiency is the ability of educational system to attain desirable result of producing high school completion rates at stipulated time using minimal resources.

There are many ways to determine the internal efficiency of the school. Ileuma (2017) noted that the internal efficiency of education can be measured by using cohort analysis of educational system which will show the students' flow pattern through the educational cycle as it will show the promotion rate, repetition rate and drop-out rate. Dufitumukiza, Ntakirutimana, Niyibizi and Mukanziza (2020) noted that at the school level, dropouts represent a menace for

school internal efficiency by reducing the number of graduates compared to the overall number of enrolled learners and repetitions delay students in the school system and bring unexpected and unplanned investments. Furthermore, Dufitumukiza et al. stressed that for dropouts, resources invested before they leave school become a wastage because the goal to turn them into knowledgeable and skilled citizens is not achieved. High rate of repetitions can hinder new enrollment as those who repeat classes are likely to continue to occupy places of newcomers.

Some secondary school students spend more than six years to complete their secondary education in Anambra State probably due to drop out and repetition rates. Amaonye and Anaekee (2020) revealed that between 2012/2013-2017/2018 Academic Sessions, 47,211 students enrolled in secondary schools in Anambra State and 1,657 students which represents 22.93% dropped out before the completion of the programme. In a similar study, Amaonye, Unachukwu and Anachuna (2020) reported that between 2012/2013-2017/2018 Academic Sessions, 47,211 students enrolled in secondary schools in Anambra State and 162 students which represented 2.02% repeated classes before the completion of the programme. Some of the students who repeated classes or drop out of secondary schools seem to be roaming around the streets hawking during school hours. To buttress this, Amaonye and Anaekee (2020) reported that many children of school age are seen engaging in economic activities during school hours in the streets and highways in Anambra State. Furthermore, Amaonye and Anaekee asserted that interviews with some of the children, who engage in these economic activities, showed that some of them, after long absence from school which culminate into repeated failures, eventually drop out from secondary schools in the state.

Some students repeat classes or drop out of school probably due to under-utilization of the available resources to create favourable learning environment. Ikediugwu and Obiora (2021) observed that some teachers exhibit undesirable behaviours such as absenteeism, lateness to school and truancy like engaging in other activities such as selling items in secondary schools in Anambra State. Some of these undesirable behaviours among teachers seem to be induced by improper utilization of human resources by the secondary school principals in Anambra State. In agreement, Okoye and Okorji (2021) reported that many secondary school principals have been accused of managing funds in their custody which may be connected to poor state of infrastructural facilities, inadequate teaching and learning materials for use in instructional process. Some of the students who repeated classes or drop out of secondary schools in Anambra State seem to roam the street to hawk and also engage in criminal activities which hinder development of Anambra State. This problem informed the researchers urge to carry out a study which sought to answer to the: What is the relationship between principals' utilization of human and physical resources and internal efficiency in public secondary schools in Anambra State?

The purpose of the study is to investigate the relationship between principals' physical and human resource utilization and internal efficiency in public secondary schools in Anambra State.

1.1 Research Questions

The following research questions guided the study:

1. What is the relationship between principals' physical resource utilization and internal efficiency in public secondary schools in Anambra State?
2. What is the relationship between principals' human resource utilization and internal efficiency in public secondary schools in Anambra State?

1.3 Hypotheses

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

1. There is no significant relationship between principals' physical resource utilization and internal efficiency in public secondary schools in Anambra State.
2. There is no significant relationship between principals' human resource utilization and internal efficiency in public secondary schools in Anambra State.

2. Method

The study was carried out in Anambra State which is one of states in south-eastern Nigeria. Correlational research design was adopted for the study. The population of the study comprised all the 262 secondary school principals in the 262 public secondary schools in Anambra State. All the 262 principals were used because the size is small and manageable. Thus, there was no sampling.

Two sets of instruments namely: Principals' Physical and Human Resources Utilization in Public Secondary Schools (PPHRUPSS) and Internal Efficiency Inventory (IEI) were used for data collection. The first is researcher-constructed. It contains 29 items and is divided into two clusters, namely clusters one and two. Cluster one which sought information on principals' physical resource utilization contained 14 items, while cluster two which elicited information on principals' human resource utilization contained 15 items. The response format ranges from Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2 to Strongly Disagree (SD) = 1. The Internal Efficiency Inventory (IEI) also developed by the researcher was a checklist used for collecting data on enrolment, dropout, repetition and completion rates from the three sessions 2016/2017 to 2018/2019 of the cohort. It was completed by examining promotion, drop-out and repetition in various grades and performance in public examination at the end of secondary schooling.

The face validity of the instruments were ascertained by three experts who are lecturers, two in the Department of Educational Management and Policy and the other, an expert in Measurement and Evaluation in the Department of Educational Foundations all in the Faculty of Education, Nnamdi Azikiwe University, Awka. Their corrections were effected in the final draft of the instrument. The reliability of each of the instrument was established using Cronbach alpha method which yielded of 0.82 and 0.80 for Clusters one and two of PPHRUPSS respectively with an overall coefficient of 0.81. The coefficient value obtained for IEI was 0.86.

The researchers personally visited the sampled public secondary schools and administered the instruments on the respondents with the help of five research assistants who are postgraduate students. A total of 262 copies of the questionnaire were distributed, and 253 copies

of instruments representing 97% return rate were successfully completed and retrieved. Pearson Product Moment Correlation coefficient was used to analyze the data relating to the research questions, and t-test of correlation was used to test the hypotheses. In taking decisions relating to research questions, the view of Nwana (2007) was used. Thus, the correlation coefficient (r) scores were interpreted as follows:

0.00 – 0.20 = Very low relationship

0.20 – 0.40 = Low relationship

0.40 – 0.60 = Moderate relationship

0.60 – 0.80 = High relationship

0.80 – 1.00 = Very high relationship.

In taking decisions on the null hypotheses, where the p-value is equal to or greater than the level of significance of 0.05, the null hypothesis was rejected and the difference taken to be statistically significant, but if otherwise, the null hypotheses was not rejected and the difference taken to be statistically not significant.

3. Results

Research Question 1: What is the relationship between principals' physical resource utilization and internal efficiency in public secondary schools in Anambra State?

Table 1: Pearson r on Physical Resource Utilization and Internal Efficiency

Variables	N	Physical Resource Utilization	Internal Efficiency	Remarks
Physical Resource Utilization	253	1.00	0.701	High Positive
Internal Efficiency	253	0.701	1.00	

Results on Table 1 showed a Pearson's correlation coefficient (r) of 0.701. This shows that there was high positive relationship between principals' physical resource utilization and internal efficiency in public secondary schools in Anambra State.

Research Question 2: What is the relationship between principals' human resource utilization and internal efficiency in public secondary schools in Anambra State?

Table 2: Pearson r on Human Resource Utilization and Internal Efficiency

Variables	N	Human Resource Utilization	Internal Efficiency	Remarks
Human Resource Utilization	253	1.00	0.657	High Positive
Internal Efficiency	253	0.657	1.00	

Data analysis presented on Table 2 showed a Pearson's correlation coefficient (r) of 0.657. This shows that there was high positive relationship between principals' human resource utilization and internal efficiency in public secondary schools in Anambra State

Hypothesis One: There is no significant relationship between principals' physical resource utilization and internal efficiency in public secondary schools in Anambra State.

Table 3: The Summary of t-test of correlation of no Significant Relationship between Physical Resource Utilization and Internal Efficiency

	N	Physical Resource Utilization	Internal Efficiency	p-value	α	Remark
Physical Resource Utilization	253	1	0.701	0.00	0.05	Rejected
Internal Efficiency	253	0.701	1			

As shown by data presented on Table 3, the p-value of 0.00 is less than the stipulated 0.05 level of significance. Thus, the null hypothesis is rejected. This implies that there is significant relationship between principals' physical resource utilization and internal efficiency in public secondary schools in Anambra State.

Hypothesis Two: There is no significant relationship between principals' human resource utilization and internal efficiency in public secondary schools in Anambra State

Table 4: The Summary of t-test of correlation of no Significant Relationship between Human Resource Utilization and Internal Efficiency

	N	Human Resource Utilization	Internal Efficiency	p-value	α	Remark
Human Resource Utilization	253	1	0.657	0.00	0.05	Rejected
Internal Efficiency	253	0.657	1			

As shown by data presented on Table 4, the p-value of 0.00 is less than the stipulated 0.05 level of significance. Thus, the null hypothesis is rejected. This shows that there is significant relationship between principals' human resource utilization and internal efficiency in public secondary schools in Anambra State

Discussion of the Findings

The findings of the study revealed that there was a high positive relationship between principals' physical resource utilization and internal efficiency in public secondary schools in Anambra State. This refuted the finding of Wakoli, Maiyo and Limo (2019) who reported that there exists moderate positive relationship between physical resource mobilisation and internal efficiency of public technical training institutions in Bungoma County, Kenya. This is also in disagreement with the finding of Wakoli and Kitainge (2019) which revealed that there was a weak positive relationship between instructional resource mobilisation and internal efficiency of public technical training institutions in Kenya. The geographical location with different environment characteristics and participants in which the studies were conducted may account for the disagreement in the findings. The possible explanation for the finding is that principals' utilization of physical resource by enforcing the use of library by students, supervising practical classes in laboratories and mandating Information and Communication Technology teachers to use computer make learning to be meaningful to promote students' understanding and retention of lesson which minimize repetition and improve internal efficiency. The emotional and physical needs of students and staff that are satisfied by physical resources play crucial roles in promoting internal efficiency in secondary schools in Anambra State.

It was also found out that the relationship between principals' physical resource utilization and internal efficiency in public secondary schools in Anambra State was significant. This affirmed the finding of Akinnubi and Oladimeji (2021) who reported that a significant relationship existed between physical resource utilization and internal efficiency. The finding

also supported Afolabi and Sofoluwe (2021) whose findings indicated that there was significant relationship between school physical facilities and internal efficiency of public secondary schools in Oyo State, Nigeria. The possible explanation for the agreement is that the two studies were conducted in the same country within the same period, where physical resource are utilized in similar ways to create learning environment that promote internal efficiency. The utilization of physical resource helps principals and teachers to perform their daily duties much quicker and easier to attain significant internal efficiency in secondary schools in Anambra State.

The relationship between principals' human resource utilization and internal efficiency in public secondary schools in Anambra State was positively high. This supported the finding of Pitan (2012) which revealed that there was a highly positive relationship between human resource utilization and internal efficiency of the school system in Oyo State, Nigeria. This agreement in the findings may be due to the fact that the studies were conducted in public secondary schools in Nigeria which are guided by the same educational policy in human resource utilization to create learning environment require for attainment of internal efficiency. The utilization of human resource by the principals creates desirable working relationship in the school and this is likely to improve the dedication and commitment of staff in instructional delivery. The utilization of human resource stimulates their zeal and expertise in performing their duties to improve the internal efficiency of the school. This may account for the reason why secondary school teachers in Anambra State have been observed by the researcher to be committed to their duties of teaching the learners which is evident in their persistent academic achievement in both internal and external examinations.

Further result indicated that there was significant relationship between principals' human resource utilization and internal efficiency in public secondary schools in Anambra State. This agreed with the finding of Abdulkareem, Akinnubi and Fasasi (2011) which indicated that there was a significant relationship between human resource utilization and internal efficiency. The possible reason for the finding is that the utilization of human resource whose knowledge, skills and abilities serve as a source of innovation help in operating other resources fosters internal efficiency. The human resource utilization provides opportunity for them to acquire necessary knowledge and skills through working experiences which enable them to perform their duties effectively and efficiently and thereafter make the school improve on their quest for internal efficiency.

4. Conclusion

Based on the findings, it is concluded that there was positive and significant relationship between principals' physical and human resources utilization and internal efficiency in public secondary schools in Anambra State, Nigeria. The utilization of physical and human resources by the principals contribute to internal efficiency in secondary schools. The operation and use of school resources for purposes that which that they meant for result in internal efficiency in secondary schools in Anambra State, Nigeria.

5. Recommendations

Based on the findings, it was recommended that:

1. The Ministry of Education should intensify efforts in supervising or inspecting the use of the available physical resources for improving the internal efficiency of secondary school.
2. Ministry of Education should organize annual interactive sessions for principals and teachers to exchange ideas and gain information to improve their collaboration in ensuring human resource utilization for actualization of internal efficiency in the school.
3. Principals should create quality time for collaborative goal-oriented and knowledge driven discussions with education stakeholder to get their inputs on ways to improve on the utilization of the available physical and human resources to promote internal efficiency in secondary schools.

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