



## Correlation between Facilities Maintenance and Administrative Effectiveness in Federal Universities in North-West, Nigeria

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### Abstract

*This study examined facilities maintenance and administrative effectiveness in federal universities in North-West, Nigeria. The study adopted correlational Research Design. Three objectives and three research questions were raised to guide the study. Three null hypotheses were tested at  $\alpha \leq 0.05$  levels of significance. Two instruments: Facilities Maintenance Questionnaire (FMQ) and Administrative Effectiveness Questionnaire (AEQ) were adapted. The instruments were validated by experts from the Department of Educational Foundations and Faculty of Education and Extension Services. The instruments exhibited reliability coefficients of 0.75 and 0.79. Population of the study comprised of 15,700 staff of Federal Universities in North-West, Nigeria with a sample size of 390 respondents proportionately drawn for the study. Null hypotheses were tested using Pearson Product Moment Correlation Coefficient. The findings of the study revealed high level of facilities maintenance, a significant and positive relationship between Facilities Maintenance and Administrative Effectiveness among the Federal Universities in North-West, Nigeria. Based on these findings, the study recommended regular and systematic cleaning schedules for all academic and administrative facilities, establishment of proactive maintenance and repair system and promotion of optimal and efficient use of available facilities to ensure administrative effectiveness among federal universities in North –West, Nigeria.*

**Key Words:** Facilities Maintenance, Administrative Effectiveness, Facilities Cleanliness and Facilities Repair

### Introduction

Ensuring the quality of education and services in federal universities is paramount for the reputation and the overall development of students and staff. Educated individuals are essential for formulating effective policies in areas such as healthcare, education, environment, and technology, leading to overall societal development. Higher education can promote social cohesion and reduce inequality. Universities provide opportunities for individuals from diverse backgrounds to interact, fostering understanding and tolerance among different social, ethnic, and religious groups. This interaction can lead to a more harmonious society, contributing to peace and stability. Facilities play a vital role in shaping the overall university experience. A positive and inclusive campus environment directly translates into higher productivity through administrative effectiveness, both in and out of the classroom.

Facility maintenance is essential to creating a positive learning atmosphere, promoting students' general well-being, and increasing administrators' output. It is depressing to see university facilities in such horrible shape because of the nonchalant attitude of both those in charge and people who utilize them. Facilities, ranging from classrooms and laboratories to administrative buildings and recreational spaces, form the backbone of any educational institution (Manga, 2011). Nations today depend increasingly on knowledge, ideas, and skills which are produced through researchers in the universities. Nations invest in university education because society expects it to contribute in producing highly skilled personnel in technology, engineering, management and other professions (Muogbo & Akpunonu, 2017). Fadipe, (2010) defined material resources as facilities provided for staff and students to upgrade their effectiveness in teaching and learning. Material resources include the building (classrooms, libraries, laboratories, offices), machines, workbenches, equipment, tools, consumable items, and other support physical resources for teaching and research which the instructor or teacher manipulates in order to cause learning to occur. Administrative efficiency is a yardstick for the smooth functioning of educational institutions. This aspect includes leadership effectiveness, resource allocation, decision-making processes, and overall institutional governance. Investigating the effectiveness of administrators in federal universities in the North West sheds light on the challenges and opportunities in managing academic and administrative affairs. Analyzing leadership styles, training programmes, and decision-making structures becomes essential for optimizing the administrative



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machinery. Effectiveness in the university depends on adequate human and material resources put in place. Human resources are the most important resource out of the resources required for the sustainable development of university which is brought by productivity in the educational system. Human resources in the university's educational system is classified into teaching and non-teaching staff (Ekundayo & Alonge, 2013). Onah, (2012) stated that human resources are the solution to a fast socio-economic growth and resourceful service delivery. Every educational system at every level depends greatly on human resources for carrying out of its programme. Arising from the above, this study seeks to investigate facilities maintenance and administrative effectiveness in federal universities in north-west zone, Nigeria

### **Statement of the Problem**

Many federal universities in the North-West suffer from substandard maintenance of their facilities, including classrooms, laboratories, libraries, and infrastructure. This inadequacy poses a threat to the overall learning environment and hampers the institutions' ability to meet the evolving needs of students and staff. Administrators in these universities face challenges in maintaining optimal efficiency levels. This could be attributed to factors such as insufficient resources, outdated administrative processes, and lack of professional development opportunities. The declining productivity of administrators has a cascading effect on the overall efficiency and effectiveness of the university's operations. The cumulative effect of these issues is a direct threat to academic excellence. Students may not receive the best possible education, staff may face challenges in conducting impactful research, and the overall reputation of the universities may be compromised. Limited financial resources and inadequate funding by the government and the university management contribute significantly to the aforementioned problems. Addressing these challenges is crucial for the sustained growth and development of federal universities in the North West Zone, ensuring that they can fulfill their mission of providing high-quality education, fostering research, and contributing positively to the academic landscape in Nigeria.

### **Objectives of the study**

The main thrust of this study is to find out:

1. The relationship between facilities cleanliness and administrative effectiveness among federal universities in North-West, Nigeria.
2. The relationship between facilities repair and administrative effectiveness among the federal universities in North-West, Nigeria.
3. The relationship between appropriate utilization of facilities and administrative effectiveness among the federal universities in North-West, Nigeria.

### **Research Questions**

The following research questions guided the study:

1. What is the relationship between facilities cleanliness and administrative effectiveness among the federal university in North-West, Nigeria?
2. What is the relationship between facilities repair and administrative effectiveness among the federal universities North-West, Nigeria?
3. What is the relationship between appropriate utilization of facilities and administrative effectiveness among the federal universities in North-West, Nigeria?

### **Hypotheses**

The following hypotheses were formulated and tested at 0.05 level of significance.

1. There is no significant relationship between facilities cleanliness and administrative effectiveness among the federal universities in North-West, Nigeria.
2. There is no significant relationship between facilities repair and administrative effectiveness among the federal universities in North-West, Nigeria.
3. There is no significant relationship between appropriate utilization of facilities and administrative effectiveness among the federal universities in North-West, Nigeria.

### **Methodology**

This study adopted correlational research design in order to collect data on facilities maintenance and administrative effectiveness among federal universities in North-West, Nigeria. This type of research design explains simple relationship between two or more variables as rightly posited by Creswell (2017) that; a correlation research design is a design in which the researcher is interested in the extent to which two variables or more co-vary, that is where changes in one variable are reflected in changes in the other. The study comprised all the administrative, academic and non-academic staff from seven federal universities in North-west, Nigeria, one from each of the seven states of North-west, Nigeria.



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Thus, the target population of this study was fifteen thousand seven hundred (15,700) respondents, made up of three thousand nine hundred and twelve (3,912) administrative staff, seven thousand five hundred and eighteen (7,518) academic staff and four thousand, two hundred and seventy (4,270) non-academic staff. In this study, four states were selected at random these were: Kaduna State, Kano State, Kebbi State and Sokoto State. The researcher selected only one federal university in each of the four selected states. The sample size of 390 staff was drawn from the population of 15,700 based on Slovin's formula. Random sampling technique was used to determine the number of participants to be drawn from each university. Proportionate sampling technique was used to select the participants within each university. The questionnaire was made up section A which sought information on respondents' bio data, while section B was 30-item questionnaire to determine administrative effectiveness based on facilities maintenance in federal universities in North-West, Nigeria. The study used two structured questionnaires for data collection, these are: (a) Facilities Maintenance Questionnaire (FMQ) (b) Administrative Effectiveness Questionnaire (AEQ). The researcher adopted a modified 5 point Likert-type scale in which each item of the questionnaire was responded to in one of the five response options of Very High (VH) = 5, High (H) = 4, Moderate (M) = 3, Low (L) = 2, or Very Low (VL) = 1. The mean score of 3.0 points and above on the scale of 5.0 was used as the cut-off point for satisfactory level of facilities maintenance while below 3.0 mean is unsatisfactory level of facilities maintenance in federal universities in North-West, Nigeria. The instruments were subjected to face and content validity by experts for their inputs and observation from different areas of specialization in the Department of Educational Foundations. The reliability of the instruments was determined using test-retest method. The computed results produced reliability indices of 0.75 and 0.79. In answering the research questions, the researcher used the descriptive statistics of Mean and Standard Deviation (SD) staff to answer the research questions. The t-test was used to test the null hypotheses at 0.05 level of significance.

## Presentation of Results

**Table 1: The level of Facility Maintenance In The Federal Universities in North-West, Nigeria.**

S/N	Item	VH	H	M	L	VL	Mean	SD	Decision
1.	Facilities Cleanliness	74	322	1,220	1,338	796	3.66	0.949	Moderate
2.	Facilities Repair	60	242	1,197	1,656	645	3.68	0.876	Moderate
3.	Appropriate utilization of Facilities	150	460	1,309	1,186	745	2.60	1.05	Low Level
	Total	284	1,024	3,726	4180	2,186	3.31	0.95	Moderate

Table 1 revealed that a mean score of 3.66 with standard deviation of 0.94 indicating a moderate level of facilities cleanliness in the university community while facilities repair showed a mean score of 3.68 with standard deviation of 0.87 indicating a moderate level of facilities repair in the university community. Appropriate utilization of facilities showed a mean score of 2.60 with standard deviation of 1.05 indicating a low level of appropriate utilization of facilities in the federal universities in North-West, Nigeria. The overall mean score of 3.31 with standard deviation of 0.95 indicating a moderate level of utilization of facilities in federal universities in North-West, Nigeria. The results of the analyses of the null hypotheses are presented below. Here, the responses for facilities cleanliness, facilities repair, and appropriate utilization of facilities as they relate to administrative effectiveness in federal universities in North West, Nigeria.

### Test of Hypotheses

**Null Hypothesis 1:** There is no significant relationship between facilities cleanliness and administrative effectiveness among the federal universities in North-West, Nigeria.

**Table 2: Relationship Between Facilities Cleanliness and Administrative Effectiveness Among the Federal Universities in North-West, Nigeria.**

Variables	N	Mean	SD	df	r-Cal	p-value	Decision
Facilities Cleanliness	385	3.665	.592	383	0.171	0.001	H <sub>01</sub> Rejected





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highlighted that a well-maintained and clean facilities creates a conducive environment for staff and students, which enhanced institutional performance. Equally this study agreed with the findings of Musa and Bello (2021), on factors determining administrative effectiveness in secondary schools in south-west Nigeria. Similarly, Abubakar, Usman, and Suleiman (2022) noted that proper upkeep and cleanliness of university facilities boost staff morale and organizational effectiveness. These studies collectively suggest that facilities cleanliness is not only important for hygiene and comfort but also strengthens managerial and administrative effectiveness in higher educational institutions.

However, this finding disagrees with the declaration of Taiwo and Oladipo (2020), who argued that facilities cleanliness alone does not necessarily improve administrative effectiveness unless in conjunction with adequate funding, staff motivation, and effective leadership. This implies that while cleanliness is a critical determinant of administrative efficiency, other institutional factors are equally necessary to maximize managerial outcomes. This finding also contrasts with the study by Eze and Chukwu (2021), who found that inadequate staffing and poor administrative structures has stronger impact on administrative effectiveness than the state of facilities. This suggests that managerial effectiveness may depend more on human and organizational resources than merely on facility cleanliness. Similarly, the finding disagrees with the findings of Fashiku (2018), who noted that leadership styles and communication patterns of administrators has greater effect on institutional performance than physical facility conditions. While cleanliness ensures a conducive environment, the study emphasized that effective leadership is more critical in enhancing administrative outcomes. The finding also disagrees with the findings of Okoro and Nwankwo (2019), who examined the effect of ICT integration on administrative effectiveness in Nigerian universities and found that access to digital tools and technology significantly improves management efficiency, indicating that technological resources may be more influential than cleanliness in determining administrative effectiveness.

The study revealed that institutions that consistently repairs and maintains their facilities experience fewer operational bottlenecks and higher organizational effectiveness. And also findings of this study aligned with Ojo and Adeyemi (2019), who observed that misuse or underutilization of facilities led to inefficiencies in workflow and administrative coordination. This implies that while utilization is critical, administrative effectiveness also depends on broader organizational factors. This finding also contrasts with Eze and Chukwu (2021), who found that structural and procedural issues within administration had a greater influence on efficiency than resource utilization.

## **Conclusion**

From the study, correlational analyses revealed that facilities maintenance which involves facilities cleanliness, facilities repair and appropriate utilization of facilities have significant and positive relationship with administrative effectiveness among the federal universities in North-West, Nigeria.

## **Recommendations**

Based on the findings of this study, it is recommended that:

1. Federal universities should institutionalize regular and systematic cleaning schedules for all academic and administrative facilities. This should include monitoring mechanisms to ensure compliance and maintaining high standards of hygiene, as clean facilities positively impact administrative effectiveness and the overall learning environment in the North-West, Nigeria.
2. University management should establish a proactive maintenance and repair system, including periodic inspections and prompt repairs of broken or malfunctioning facilities.
3. Administrators should develop policies and training programmes that promote optimal and efficient use of available facilities in federal universities in North –West, Nigeria.

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