

PRINCIPALS' MANAGEMENT TECHNIQUES AND SCHOOL ENVIRONMENTAL CONDITIONS AS CORRELATES OF TEACHERS' JOB EFFECTIVENESS IN POST BASIC SCHOOLS IN ADAMAWA STATE, NIGERIA

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Abstract

The study examined principals' management techniques and school environmental conditions as correlates of teachers' job effectiveness in Post Basic Schools in Adamawa State, Nigeria. The study had six objectives, five research questions, and six null hypotheses. A correlational survey research design was adopted for the study. The population comprised 7,113 respondents, consisting of 404 principals and 6,709 teachers drawn from public Post Basic Schools across the five education zones of Adamawa State. Using a multi-stage sampling procedure, a total sample of 853 respondents, made up of 182 principals and 671 teachers, was selected. Data were collected using three structured questionnaires developed by the researcher, namely: Principals' Management Techniques Questionnaire (PMTQ), School Environmental Conditions Questionnaire (SECQ), and Teachers' Job Effectiveness Questionnaire (TJEQ). The instruments were validated by experts in Educational Management and Measurement and Evaluation, and their reliability coefficients were established using Cronbach Alpha method, yielding acceptable values. Data collected were analyzed using descriptive statistics of mean and standard deviation to answer the research questions, while inferential statistics of simple and multiple regression analyses were employed to test the null hypotheses at 0.05 level of significance. Findings revealed that principals demonstrated a high level of instructional supervision (grand mean = 3.75, SD = 1.15), communication styles (grand mean = 3.72, SD = 1.14). Each of these management techniques significantly predicted teachers' job effectiveness, with communication styles $F(1,180)=31.688$ showing the strongest individual influence. The study revealed that school environmental conditions were at a moderate level, including physical infrastructure (grand mean = 3.01, SD = 1.14), sanitation (grand mean = 3.03, SD = 1.10). Each of these environmental variables significantly predicted teachers' job effectiveness, with physical infrastructure showing the strongest individual influence, $F(1,180)=38.769$, $p < 0.05$. The study concluded that effective principals' management techniques and a supportive school environment are critical for enhancing teachers' job effectiveness in Post Basic Schools. It was recommended that government and school administrators should strengthen principals' leadership capacities and improve school environmental conditions to promote optimal teachers' job effectiveness.

Keywords: Principals Management Techniques, School Environmental Conditions, Instructional Supervision, Communication, Infrastructural facilities, Sanitation, and Teachers' Job Effectiveness

Introduction

The secondary school system is a critical phase in the global education structure, serving as a bridge between primary education and higher learning. In developed countries, secondary education is well-structured, with

policies and management strategies that enhance teaching effectiveness and student learning outcomes (Organisation for Economic Co-operation and Development (OECD), 2022). In Africa, secondary schools often face challenges such as inadequate infrastructure, poor funding, and ineffective school

management, which impact teachers' job effectiveness and overall student performance (The United Nations Educational, Scientific and Cultural Organization (UNESCO), 2021). In Nigeria, the secondary education system is divided into junior and senior secondary levels, with the latter focusing on preparing students for higher education and vocational skills (Federal Republic of Nigeria (FRN), 2014). However, in North-East Nigeria, public secondary schools are often plagued by issues such as insecurity, inadequate resources, and weak administrative practices, which can hinder effective teaching and learning (Adebayo, 2020).

Teachers' job effectiveness involves instructional planning, classroom management, student engagement, and assessment strategies that facilitate learning (Akinfolarin & Oluwadare, 2017). When teachers are effective, students perform better academically, discipline is maintained, and overall school goals are achieved. Conversely, low job effectiveness among teachers can lead to poor student performance, high dropout rates, and a decline in educational standards (Adeyemi, 2018). Several factors influence teachers' job effectiveness, including motivation, professional development, workload, remuneration, and administrative support (Okoro & Okoro, 2021). High job effectiveness is often linked to teachers receiving adequate training, resources, and support from school management. On the other hand, poor working conditions, lack of incentives, and ineffective leadership can lower teachers' morale and commitment to their duties (Omorie, 2019). Among the critical determinants of teachers' job effectiveness are the management techniques adopted by school principals and the prevailing school environmental conditions (Bello & Yusuf, 2021).

Principals' management techniques refer to the strategic approaches and administrative practices that school leaders employ to ensure the smooth operation of schools and enhance teacher effectiveness. Effective management techniques facilitate communication, collaboration, and professional development,

leading to improved student outcomes and overall school success (Ajayi & Ekundayo, 2019). The role of principals in enhancing teachers' job effectiveness is crucial, as their leadership influences motivation, job satisfaction, and instructional delivery. Principals' management techniques, includes; instructional supervision, communication styles, conflict resolution strategies, disciplinary measures, and motivational techniques. instructional supervision play a critical role in enhancing teacher performance and maintaining a productive school environment (Adewale & Yusuf, 2019; Ibrahim & Mohammed, 2021; Nwachukwu, 2023). Effective principals provide instructional support, ensure proper supervision, and create policies that promote professional development (Odufowokan, 2018). Thus, in the context of this study, instructional supervision and communication styles were studied as variables of principals' management techniques in relation to how they correlate with teachers' job effectiveness in senior secondary schools in Adamawa State, Nigeria. Instructional supervision is a critical management technique used by school principals to oversee, evaluate, and support teachers in delivering quality instruction.

Instructional supervision involves systematic monitoring of teaching and learning processes to ensure that educational objectives are met efficiently (Akinfolarin & Oluwadare, 2017). Effective instructional supervision includes classroom observations, lesson planning reviews, feedback provision, and mentoring programs that enhance teacher performance and student learning outcomes (Ofoegbu, 2019). Through this process, principals identify teachers' strengths and weaknesses, recommend professional development opportunities, and ensure compliance with curricular standards (Ajayi & Ekundayo, 2019). Instructional supervision has both positive and negative effects on teachers' job effectiveness. On the positive side, regular supervision enhances teachers' confidence, fosters professional growth, and improves instructional quality. Moreover, a well-supervised teaching environment promotes collaboration among teachers, leading to

shared best practices and improved student learning outcomes. Effective communication styles helps in building trust, ensuring clarity in school policies, and motivating teachers toward achieving institutional goals (Ajayi & Ekundayo, 2019).

Communication styles generally refer to the manner in which principals convey information, interact with teachers, and foster relationships within the school environment. It encompasses verbal, non-verbal, written, and digital communication approaches such as technology-mediated communication that can influence teacher's engagement and overall school effectiveness. Principals who adopt appropriate communication styles (such as: assertive, aggressive, passive, and passive-aggressive) impacts on communication effectiveness and relationships. Understanding these styles can help individuals improve their communication skills and build stronger connections) can create a positive work environment where teachers feel valued and supported in their professional roles (Ofoegbu, 2019). Effective communication styles of principals positively impacts teachers' job effectiveness by fostering a culture of trust, motivation, and collaboration. When principals use clear and supportive communication, teachers gain a better understanding of their responsibilities, leading to improved instructional delivery (Omoriegie, 2019). Conversely, poor communication styles could negatively impact teachers' job effectiveness. A principal who adopts an autocratic or unclear communication style may create confusion, frustration, and low morale among teachers. Principals' ability to address conflicts professionally and equitably plays a crucial role in fostering a positive work environment.

School environmental conditions refer to the physical, social, and psychological factors within a school setting that influence teaching and learning experiences. School environmental condition encompasses aspects such as infrastructure, safety, hygiene, classroom management, and relationships among school stakeholders (Adeyemi & Uko, 2021). A conducive school environment is

essential for the achievement of educational objectives, as it enhances teachers' job effectiveness and students' academic performance. Principals in senior secondary schools of Adamawa State, Nigeria leverage school environmental conditions to foster quality education by ensuring adequate physical infrastructure, maintaining sanitation, implementing safety measures, and promoting healthy teacher-student relationships (Aliyu & Mohammed, 2020). School environmental conditions significantly impact teachers' job effectiveness in senior secondary schools. Physical infrastructure, sanitation, safety measures, classroom management, and teacher-student relationships either enhance or hinder teachers' effectiveness. School principals play a pivotal role in utilizing these factors to achieve educational goals by ensuring adequate resources, implementing policies, and fostering a supportive school climate (Yusuf & Danjuma, 2018). Thus, in the context of this study, school environmental condition is delimited to physical infrastructure, and sanitation. A well-developed physical infrastructure provides a conducive learning atmosphere, enhances teachers' job satisfaction, and improves students' academic performance (Johnson & Adebayo, 2021).

Physical infrastructure refers to the tangible facilities and resources within a school environment that support teaching and learning. These often include classrooms, libraries, laboratories, staff offices, furniture, electricity, water supply, recreational spaces, and Information and Communication Technology (ICT) facilities. However, inadequate or poorly maintained infrastructure negatively affects both teachers' effectiveness and student learning outcomes, leading to demotivation, absenteeism, and reduced instructional efficiency (Eze & Nwankwo, 2019). Proper management of physical infrastructure has several positive effects on teachers' job effectiveness. Firstly, well-equipped classrooms and offices enhance teachers' comfort and job satisfaction, leading to increased motivation and productivity. Secondly, access to modern teaching aids, such as projectors, laboratory equipment, and

ICT facilities, improves instructional quality and enables teachers to adopt innovative teaching methods. A well-maintained school infrastructure supports effective sanitation systems, including clean water supply, functional toilets, and proper waste disposal mechanisms (Ogunyemi & Alabi, 2021).

Sanitation in schools refer to the measures and facilities put in place to ensure cleanliness, disease prevention, and overall well-being of teachers and students. These include access to clean water, functional toilets, waste disposal systems, handwashing facilities, and general cleanliness of the school environment (World Health Organization (WHO) & United Nations Children's Fund (UNICEF), 2020). Proper management of sanitation positively impacts teachers' job effectiveness in several ways. First, a clean school environment reduces the risk of diseases such as diarrhoea, respiratory infections, and skin infections, leading to improved teachers' health and reduced absenteeism. Second, access to clean toilets and washing facilities enhances teachers' comfort and morale, allowing them to focus on their teaching duties without distractions (Akinpelu & Ojo, 2020). On the other hand, poor sanitation management can have serious negative effects on teachers' job effectiveness. Inadequate toilet facilities and poor waste disposal lead to foul odours and unsanitary conditions, creating discomfort for teachers and reducing their motivation to work (Ibrahim & Suleiman, 2020).

Observation has however shown that the enthusiasm and devotion of teachers to their duty in schools are no longer the traits that characterized the teaching profession. Worried about professional laxity on the part of some teachers, Usman and Fasasi (2023) expressed that principals' management techniques and environmental conditions could be directed towards attitudinal transformation of teachers by instilling positive attitude to work among teachers. The authors maintained that many teachers come early to school and clock in and leave the school to pursue their personal business. Usman and Fasasi (2023) reported constant cases of absenteeism, persistent lateness to

school, irregular and unauthorized movement out of school before close of school and display of truancy towards class attendance among some public secondary school teachers.

Despite Adamawa State government's huge investment (Adamawa Approves N17.1bn for Mega Science Schools, Infrastructure Projects) in public education, parents, including principals of public secondary schools tend to prefer sending their wards to private secondary schools (Daily Trust, 26th August, 2024). This could partly be as a result of Post Basic School principals' incompetence in instructional supervision and leadership which could thus translate into ineffectiveness of teachers in instructional delivery in Senior Secondary Schools. Principals' competence has become a matter of concern to all stakeholders in education because it seems most principals are not competent as shown in their perceived lack of motivation and lackadaisical attitude towards instructional supervision as they are engrossed with administrative duties. Teachers' effectiveness also appears to be in doubt in the present Nigerian educational system as evident in their observed deficient instructional delivery. Given the vital role of effective teaching in achieving academic success, this study therefore explored how principals' management techniques and school environmental conditions correlate with teachers' job effectiveness in Senior Secondary Schools in Adamawa State, Nigeria.

Purpose of the Study

The purpose of the study is to investigate principals' management techniques and school environmental conditions as correlates of teachers' job effectiveness in Senior Secondary Schools in Adamawa State, Nigeria. Specifically, the study sought to determine how:

1. Principals' instructional supervision correlates with teachers' job effectiveness in Senior Secondary Schools in Adamawa State, Nigeria.
2. Principals' communication style correlates with teachers' job

- effectiveness in Senior Secondary Schools in Adamawa State, Nigeria.
3. School physical infrastructure correlates with teachers' job effectiveness in Senior Secondary Schools in Adamawa State, Nigeria.
 4. School sanitation correlates with teachers' job effectiveness in Senior Secondary Schools in Adamawa State, Nigeria.
 5. Principals' management techniques (of instructional supervision, communication styles) correlates with teachers' job effectiveness in Senior Secondary Schools in Adamawa State, Nigeria.
 6. School environmental condition (of physical infrastructure, sanitation) correlates with teachers' job effectiveness in Senior Secondary Schools in Adamawa State, Nigeria.

Research Questions

The following research questions are raised to guide the study:

1. What is the level of principals' instructional supervision in Senior Secondary Schools in Adamawa State, Nigeria?
2. What is the level of principals' communication styles in Senior Secondary Schools in Adamawa State, Nigeria?
3. What is the level of physical infrastructure in Senior Secondary Schools in Adamawa State, Nigeria?
4. What is the level of school sanitation in Senior Secondary Schools in Adamawa State, Nigeria?
5. What is the level of teachers' job effectiveness in Senior Secondary Schools in Adamawa State, Nigeria?

Hypotheses

The following null hypotheses are formulated and will be tested at the 0.05 level of significance:

H0₁: There is no significant correlation between principals' instructional supervision and teachers' job effectiveness in Senior Secondary Schools in Adamawa State, Nigeria.

H0₂: There is no significant correlation between communication styles and teachers' job effectiveness in Senior Secondary Schools in Adamawa State, Nigeria.

H0₃: There is no significant correlation between physical infrastructure and teachers' job effectiveness in Senior Secondary Schools in Adamawa State, Nigeria.

H0₄: There is no significant correlation between sanitation and job effectiveness in Senior Secondary Schools in Adamawa State, Nigeria.

H0₅: There is no significant correlation between principals' management techniques (of instructional supervision, communication styles) and teachers' job effectiveness in Senior Secondary Schools in Adamawa State, Nigeria.

H0₆: There is no significant correlation between school environmental condition (of physical infrastructure, sanitation) and teachers' job effectiveness in Senior Secondary Schools in Adamawa State, Nigeria.

Methodology

The study employed correlational research design. This design which involves the study of relationships between two variables as intended by the researcher to analyse principals' management techniques, environmental conditions (independent variables) and teachers' job effectiveness (dependent variable) in Senior Secondary Schools in Adamawa State, Nigeria. This study was carried out in Adamawa State, Nigeria. The study's population comprises 7,113 teachers and principals from Senior Secondary Schools in Adamawa State (Adamawa State Post Primary School Management Board, 2024). The study's sample consists of 853 respondents. These sample sizes were determined using Creswell and Creswell (2023) who observed that there are certain non-definitive practices among social research workers that the beginner can adopt. One such practice suggests that if the population is a few hundreds, a 40% or more sample will suffice; if many hundreds, a 20%

sample will do; if a few thousands, a 10% sample will do; and if several thousands, a 5% or less sample will be representative of the population. For a population of 6709 teachers, 10% was used; representing 671 teachers. While 45% was used for a population of 404 principals; representing 182 principals. A multi-stage sampling procedure was employed for this research.

Three adapted instruments titled: “Principals’ Management Techniques Questionnaire (PMTQ); School Environmental Condition Questionnaire (SECQ) and Teachers’ Job Effectiveness Questionnaire (TJEQ)” were used for data collection. To ensure the validity of the instruments ““Principals’ Management Techniques Questionnaire (PMTQ); School Environmental Condition Questionnaire (SECQ) and Teachers’ Job Effectiveness Questionnaire (TJEQ)” were validated by four experts from the Department of Education Foundations, Faculty of Education, Modibbo Adama University, Yola. Data were collated and analyzed for reliability using Cronbach Alpha Statistic. Cronbach Alpha (particularly

internal consistency) was used because it helped the researcher to determine the internal consistency of the items of the three instruments “Principals’ Management Techniques Questionnaire (PMTQ) yielded a reliability co-efficient of 0.94; School Environmental Condition Questionnaire (SECQ) yielded a reliability coefficient of 0.95, and Teachers’ Job Effectiveness Questionnaire (TJEQ) yielded a reliability co-efficient of 0.91 respectively”. The data collected from the PMTQ, SECQ and TJEQ were analysed using descriptive and inferential statistics to provide meaningful interpretations of the findings. To answer the research questions, Mean and Standard Deviation were employed. To test the null hypotheses, both simple linear regression analysis and multiple regression analysis were used.

Results

This chapter presents the results of the study. The data collected was analyzed to answer the research questions and test the null hypotheses.

Research Question 1

What is the level of principals’ instructional supervision in Post Basic Schools in Adamawa State, Nigeria?

Table 1: Mean and Standard Deviation of Level of Principals’ Instructional Supervision in Post Basic Schools in Adamawa State, Nigeria

S/N	Item (n = 671)	Mean	S. D	Remark
1	Regular observations of teachers classroom discipline improves lesson delivery	3.75	1.18	HL
2	Monitoring teachers lesson plan implementation ensures adequate curriculum coverage	3.73	1.15	HL
3	Constructive feedback after lesson observations enhance teachers job performance	3.75	1.13	HL
4	Provision of mentoring opportunity to teachers after supervision improves their pedagogical skills	3.76	1.14	HL
5	Encouragement of teachers to use innovative teaching methods facilitate effective teaching-learning activities	3.74	1.17	HL
6	Supervision directed at teachers’ punctuality to teaching duties improves students participation	3.77	1.13	HL

Grand Mean	3.75	1.15	HL
From Table 1, the mean scores for principals' instructional supervision ranged from 3.73 to 3.77, with standard deviations between 1.13 and 1.18. The grand mean of 3.75 (SD = 1.15) indicates a high level of instructional supervision. The relatively moderate SDs suggest that responses were fairly consistent	among participants. This shows that principals consistently observe classrooms, monitor lesson plans, provide feedback, mentor teachers, encourage innovative teaching strategies, and ensure punctuality, all of which contribute to improved teaching and learning outcomes.		

Research Question 2

What is the level of principals' communication styles in Post Basic Schools in Adamawa State, Nigeria?

Table 2: Mean and Standard Deviation of Level of Principals' Communication Styles in Post Basic Schools in Adamawa State, Nigeria

S/N	Item (n = 671)	Mean	S. D	Remark
7	Principals' ability to clearly communicate the school's visions during staff meetings	3.69	1.16	HL
8	Principals' ability to demonstrate confidence through active listening skills	3.72	1.11	HL
9	Ability to write clear messages that are concise (free of jargons) improves administrative services	3.73	1.15	HL
10	Use of digital communication (such as email, and social media channels) improves timely dissemination of information	3.69	1.16	HL
11	Ability to boldly but respectfully communicate required expectations to concerned teachers	3.73	1.14	HL
12	Ability to avoid aggressive words by modelling constructive feedback in open dialogue	3.77	1.12	HL
Grand Mean		3.72	1.14	HL

As indicated in Table 2, item means ranged from 3.69 to 3.77, with SDs from 1.11 to 1.16. The grand mean of 3.72 (SD = 1.14) reflects a high level of effective communication among principals. The standard deviations show moderate variation in responses, suggesting most participants agree on principals' competence. Principals demonstrate clarity in conveying school visions, active listening, concise writing, respectful feedback, and timely use of digital communication tools, which together promote efficient school administration.

Research Question 3

What is the level of physical infrastructure in Post Basic Schools in Adamawa State, Nigeria?

Table 3: Mean and Standard Deviation of Level of Physical Infrastructure in Post Basic Schools in Adamawa State, Nigeria

S/N	Item (n = 671)	Mean	S. D	Remark
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13	Availability of well-furnished staff room for teachers enhance their administrative effectiveness	2.96	1.15	ML
14	Provision of stable electricity/lighting in classrooms aids the use of modern technology during teaching-learning	3.02	1.13	ML
15	Adequate furniture (desks, chairs, boards) in classrooms based on teacher-students ratio	3.07	1.13	ML
16	The presence of a well-stocked library in the school enhance instructional delivery	3.02	1.13	ML
17	Well-maintained science laboratory in the school promotes hand-on-activities during practical sessions	2.99	1.11	ML
18	Availability of functional ICT teaching aids (projectors, whiteboards, and charts) enhance instructions	3.02	1.19	ML

Grand Mean

As shown in Table 3, item means ranged from 2.96 to 3.07, with SDs from 1.11 to 1.19. The grand mean of 3.01 (SD = 1.14) suggests a moderate level of physical infrastructure in

schools. The SDs indicate moderate variability in participants' perceptions. While some facilities like furniture, electricity, libraries, science labs, and ICT teaching aids are available, the overall infrastructure is not fully adequate to optimally support teaching and learning.

Research Question 4

What is the level of school sanitation in Post Basic Schools in Adamawa State, Nigeria?

Table 4: Mean and Standard Deviation of Level of School Sanitation in Post Basic Schools in Adamawa State, Nigeria

S/N	Item (n = 671)	Mean	S. D	Remark
19	Availability of functional toilets in the school	3.01	1.11	ML
20	Proper waste disposal systems in the school reduces bacterial infections	3.00	1.11	ML
21	Regular cleaning of classrooms promotes hygienic instructions	3.11	1.10	ML
22	Access to clean drinking water in the school reduces teachers burnout by ensuring they are adequately hydrated	2.99	1.08	ML
23	Availability of hand washing facilities in the school reduces risk of communicated diseases	3.00	1.11	ML
24	Regular cleaning of school compound enhances teachers job productivity	3.08	1.11	ML
	Grand Mean	3.03	1.10	ML

Table 4 shows item means ranging from 2.99 to 3.11, with SDs from 1.08 to 1.11. The grand mean of 3.03 (SD = 1.10) reflects a moderate level of sanitation in schools. The relatively low SDs indicate that most respondents had similar perceptions. While functional toilets,

handwashing facilities, clean drinking water, regular classroom and compound cleaning, and waste disposal systems exist, sanitation standards are only partially satisfactory and need improvement to ensure a fully hygienic school environment.

Research Question 5

What is the level of teachers' job effectiveness in Post Basic Schools in Adamawa State, Nigeria?

Table 5: Mean and Standard Deviation of Level of Teachers' Job Effectiveness in Post Basic Schools in Adamawa State, Nigeria

S/N	Item (n = 182)	Mean	S. D	Remark
1	Drawing out clear learning objectives for each lesson based on prescribed curriculum contents	3.55	1.05	HL
2	Plan lessons that align with the curriculum	3.40	1.11	ML
3	Teachers use a variety of teaching methods to compliment individual learning needs	3.54	1.11	HL
4	Punctuality in attending staff meetings	3.27	1.16	ML
5	Effective in managing instructional time during lesson delivery	3.45	1.08	HL
6	Integrate real-life examples during lessons	3.35	1.12	ML
7	Regular employment of various teaching aids based on the behavioural objectives of each topic	3.51	1.13	ML
8	Proficiency in coordinating extracurricular activities	3.57	1.10	ML
9	Effectiveness in assessing students based on fairness	3.49	1.12	HL
10	Skills in resolving conflicts among students	3.46	1.06	ML
11	Adherence to school rules by abiding to every regulations guiding the school	3.47	1.17	ML
12	Continuous engagement in professional development	3.48	1.08	HL
13	Collaborate with colleagues on teaching responsibilities	3.42	1.13	ML

14	Incorporating students' feedback to class teaching	3.36	1.15	HL
15	Designing assessments that align with learning objectives	3.52	1.12	ML
Grand Mean		3.45	1.11	ML

Table 5 shows item means ranging from 3.27 to 3.57, with SDs between 1.05 and 1.17. The grand mean of 3.45 (SD = 1.11) suggests a moderate level of teachers' job effectiveness. The standard deviations indicate some variation in perceptions. Teachers are highly effective in drawing clear learning objectives, using varied teaching methods, employing

teaching aids, assessing students fairly, and coordinating extracurricular activities, while areas like lesson planning, punctuality, integrating real-life examples, and collaboration show slightly lower effectiveness, highlighting potential areas for professional development.

H₀₁: There is no significant correlation between principals' instructional supervision and teachers' job effectiveness in Post Basic Schools in Adamawa State, Nigeria.

Table 6a: Summary of ANOVA of Correlation between Principals' Instructional Supervision and Teachers' Job Effectiveness

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.087	1	1.087	15.091	.000 ^a
	Residual	12.960	180	.072		
	Total	14.047	181			

a. Dependent Variable: TEACHERS' JOB EFFECTIVENESS

b. Predictors: (Constant), INSTRUCTIONAL SUPERVISION

Table 6a shows the ANOVA result for the relationship between principals' instructional supervision and teachers' job effectiveness in Post Basic Schools in Adamawa State. The result indicates that the regression model is statistically significant, $F(1, 180) = 15.091$, $p < 0.05$, meaning that principals' instructional supervision significantly predicts teachers' job

effectiveness. This implies that the observed relationship did not occur by chance. Therefore, the null hypothesis (H₀₁), which states that there is no significant correlation between instructional supervision and teachers' job effectiveness, is rejected at the 0.05 level of significance.

Table 6b: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.278 ^a	.077	.072	.26833

a. Predictors: (Constant), INSTRUCTIONAL SUPERVISION

Table 6b presents the model summary for instructional supervision. The correlation coefficient ($R = 0.278$) indicates a positive relationship between principals' instructional supervision and teachers' job effectiveness. The coefficient of determination ($R^2 = 0.077$) reveals that instructional supervision accounts

for approximately 7.7% of the variance in teachers' job effectiveness, while the remaining 92.3% is explained by other factors not included in the model. This suggests that although instructional supervision significantly influences teachers' job effectiveness, its explanatory power is relatively modest.

Table 6c: Coefficients of Beta

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.819	.165		17.087	.000
	INSTRUCTIONAL SUPERVISION	.169	.044	.278	3.885	.000

a. Dependent Variable: TEACHERS' JOB EFFECTIVENESS

Table 6c shows the regression coefficients for instructional supervision. The standardized beta coefficient ($\beta = 0.278$) indicates a positive contribution of instructional supervision to teachers' job effectiveness. The t-value ($t = 3.885$, $p < 0.05$) confirms that instructional

supervision is a statistically significant predictor. This implies that an increase in principals' instructional supervision practices leads to a corresponding increase in teachers' job effectiveness.

H0₂: There is no significant correlation between communication styles and teachers' job effectiveness in Post Basic Schools in Adamawa State, Nigeria.

Table 7a: Summary of ANOVA of Correlation between Principals' Communication Styles and Teachers' Job Effectiveness

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.103	1	2.103	31.688	.000 ^b
	Residual	11.944	180	.066		
	Total	14.047	181			

a. Dependent Variable: TEACHERS' JOB EFFECTIVENESS

b. Predictors: (Constant), COMMUNICATION STYLES

Table 7a presents the ANOVA result for principals' communication styles and teachers' job effectiveness. The regression model is statistically significant, $F(1, 180) = 31.688$, $p < 0.05$, indicating that principals' communication styles significantly predict

teachers' job effectiveness. This result shows a stronger model fit compared to instructional supervision. Consequently, the null hypothesis (H0₂), which states that there is no significant correlation between communication styles and teachers' job effectiveness, is rejected.

Table 7b: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.387 ^a	.150	.145	.25760

a. Predictors: (Constant), COMMUNICATION STYLES

The model summary in Table 7b shows a correlation coefficient of $R = 0.387$, indicating a moderate positive relationship between principals' communication styles and teachers'

job effectiveness. The R^2 value of 0.150 implies that 15.0% of the variance in teachers' job effectiveness is explained by principals' communication styles. This indicates that

communication styles have a stronger influence on teachers' job effectiveness than instructional supervision.

Table 7c: Coefficients of Beta

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.579	.157		16.447	.000
	COMMUNICATION STYLES	.238	.042	.387	5.629	.000

a. Dependent Variable: TEACHERS' JOB EFFECTIVENESS

Table 7c presents the regression coefficients for communication styles. The standardized beta coefficient ($\beta = 0.387$) shows a positive and relatively strong contribution to teachers' job effectiveness. The t-value ($t = 5.629$, $p <$

0.05) indicates that communication styles significantly predict teachers' job effectiveness. This means that effective communication by principals leads to notable improvements in teachers' job effectiveness.

H0₃: There is no significant correlation between physical infrastructure and teachers' job effectiveness in Post Basic Schools in Adamawa State, Nigeria.

Table 8a: Summary of ANOVA of Correlation between Physical Infrastructure and Teachers' Job Effectiveness

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.489	1	2.489	38.769	.000 ^b
	Residual	11.558	180	.064		
	Total	14.047	181			

a. Dependent Variable: TEACHERS' JOB EFFECTIVENESS

b. Predictors: (Constant), PHYSICAL INFRASTRUCTURE

Table 8a presents the ANOVA result for the relationship between physical infrastructure and teachers' job effectiveness. The regression model is statistically significant, $F(1, 180) = 38.769$, $p < 0.05$, indicating that physical infrastructure significantly predicts teachers' job effectiveness. This result demonstrates a

strong influence of physical infrastructure on teachers' job effectiveness. Therefore, the null hypothesis (H0₆), which states that there is no significant correlation between physical infrastructure and teachers' job effectiveness, is rejected.

Table 8b: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.421 ^a	.177	.173	.25340

a. Predictors: (Constant), PHYSICAL INFRASTRUCTURE

Table 8b presents the model summary for physical infrastructure. The correlation coefficient ($R = 0.421$) indicates a moderate and positive relationship between physical infrastructure and teachers' job effectiveness. The R^2 value of 0.177 shows that physical infrastructure explains approximately 17.7%

of the variance in teachers' job effectiveness, representing the highest explanatory power among the variables examined in this set of hypotheses. This suggests that adequate and functional physical infrastructure plays a substantial role in enhancing teachers' job effectiveness.

Table 8c: Coefficients of Beta

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.657	.130		20.508	.000
	PHYSICAL INFRASTRUCTURE	.268	.043	.421	6.226	.000

a. Dependent Variable: TEACHERS' JOB EFFECTIVENESS

Table 8c shows the regression coefficients for physical infrastructure. The standardized beta coefficient ($\beta = 0.421$) indicates a strong positive effect on teachers' job effectiveness. The t-value ($t = 6.226$, $p < 0.05$) confirms that physical infrastructure is a statistically

significant predictor. This implies that improvements in school facilities, classrooms, instructional materials, and other physical resources significantly enhance teachers' job effectiveness.

H0₄: There is no significant correlation between sanitation and job effectiveness in Post Basic Schools in Adamawa State, Nigeria.

Table 9a: Summary of ANOVA of Correlation between School Sanitation and Teachers' Job Effectiveness

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.650	1	.650	8.727	.004 ^b
	Residual	13.397	180	.074		
	Total	14.047	181			

a. Dependent Variable: TEACHERS' JOB EFFECTIVENESS

b. Predictors: (Constant), SANITATION

Table 9a presents the ANOVA result for the relationship between school sanitation and teachers' job effectiveness in Post Basic Schools in Adamawa State. The result shows that the regression model is statistically significant, $F(1, 180) = 8.727$, $p < 0.05$, indicating that school sanitation significantly predicts teachers' job effectiveness. This

implies that variations in teachers' job effectiveness are partly attributable to sanitation conditions within the school environment rather than chance. Consequently, the null hypothesis (H_{04}), which states that there is no significant correlation between sanitation and teachers' job effectiveness, is rejected.

Table 9b: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.215 ^a	.046	.041	.27282

a. Predictors: (Constant), SANITATION

Table 9b presents the model summary for school sanitation. The correlation coefficient ($R = 0.215$) indicates a positive but weak relationship between sanitation and teachers' job effectiveness. The coefficient of determination ($R^2 = 0.046$) shows that sanitation accounts for approximately 4.6% of

the variance in teachers' job effectiveness, while about 95.4% of the variance is explained by other factors not included in the model. This suggests that although sanitation significantly influences teachers' job effectiveness, its contribution is relatively small.

Table 9c: Coefficients of Beta

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	3.057	.136		22.443	.000
	SANITATION	.133	.045	.215	2.954	.004

a. Dependent Variable: TEACHERS' JOB EFFECTIVENESS

Table 9c presents the regression coefficients for school sanitation. The standardized beta coefficient ($\beta = 0.215$) indicates a positive contribution of sanitation to teachers' job effectiveness. The t-value ($t = 2.954$, $p < 0.05$) confirms that sanitation is a statistically significant predictor of teachers' job effectiveness. This implies that improvements in school sanitation, such as cleaner facilities

and better hygiene conditions, are associated with increases in teachers' job effectiveness.

H0₅: There is no significant correlation between school principals management techniques (of instructional supervision, communication styles) and teachers' job effectiveness in Post Basic Schools in Adamawa State, Nigeria.

Table 10a: Summary of ANOVA of Correlation between Principals' Management Techniques and Teachers' Job Effectiveness

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.774	5	.555	8.661	.000 ^b
	Residual	11.273	176	.064		
	Total	14.047	181			

a. Dependent Variable: TEACHERS' JOB EFFECTIVENESS

b. Predictors: (Constant), INSTRUCTIONAL SUPERVISION, COMMUNICATION STYLES

Table 10a shows the ANOVA result for the combined effect of principals' management techniques (instructional supervision, communication styles) on teachers' job effectiveness. The regression model is statistically significant, $F(2, 179) = 8.661$, $p < 0.05$, indicating that principals' management

techniques jointly have a significant influence on teachers' job effectiveness. This result implies that, when considered together, management practices adopted by principals significantly explain variations in teachers' job effectiveness. Therefore, the null hypothesis (**H0₁₁**) is rejected.

Table 10b: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.444 ^a	.197	.175	.25308

a. Predictors: (Constant), INSTRUCTIONAL SUPERVISION, COMMUNICATION STYLES

Table 10b presents the model summary for principals' management techniques. The correlation coefficient ($R = 0.444$) indicates a moderate positive relationship between principals' management techniques and teachers' job effectiveness. The R^2 value of 0.197 shows that approximately 19.7% of the

variance in teachers' job effectiveness is jointly explained by the two management techniques. This suggests that principals' managerial practices, when combined, contribute meaningfully to teachers' job effectiveness.

Table 10c: Coefficients of Beta

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.137	.219		9.768	.000
	INSTRUCTIONAL SUPERVISION	.072	.048	.118	1.499	.136
	COMMUNICATION STYLES	.169	.051	.275	3.321	.001

a. Dependent Variable: TEACHERS' JOB EFFECTIVENESS

Table 10c presents the regression coefficients for the individual contributions of principals' management techniques. Communication styles ($\beta = 0.275$, $t = 3.321$, $p < 0.05$) Instructional supervision does not show

statistically significant contributions ($p > 0.05$). This implies that, within the combined model, communication styles is the most influential management techniques affecting teachers' job effectiveness.

H0₆: There is no significant correlation between school environmental condition (of physical infrastructure, sanitation) and teachers' job effectiveness in Post Basic Schools in Adamawa State, Nigeria.

Table 11a: Summary of ANOVA of Correlation between School Environmental Conditions and Teachers' Job Effectiveness

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.830	5	.766	13.196	.000 ^b
	Residual	10.217	176	.058		
	Total	14.047	181			

a. Dependent Variable: TEACHERS' JOB EFFECTIVENESS

b. Predictors: (Constant), SANITATION, PHYSICAL INFRASTRUCTURE

Table 11a presents the ANOVA result for the combined influence of school environmental conditions (physical infrastructure, sanitation) on teachers' job effectiveness. The regression model is statistically significant, $F(2, 179) = 13.196$, $p < 0.05$, indicating that school

environmental conditions jointly have a significant relationship with teachers' job effectiveness. This result demonstrates that the school environment plays a critical role in shaping teachers' effectiveness. Therefore, the null hypothesis ($H0_6$) is rejected.

Table 11b: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.522 ^a	.273	.252	.24093

a. Predictors: (Constant), SANITATION, PHYSICAL INFRASTRUCTURE

Table 11b presents the model summary for school environmental conditions. The correlation coefficient ($R = 0.522$) indicates a strong positive relationship between school environmental conditions and teachers' job effectiveness. The R^2 value of 0.273 reveals that approximately 27.3% of the variance in

teachers' job effectiveness is explained by the combined school environmental variables. This represents a substantial explanatory power, highlighting the importance of a supportive and conducive school environment for effective teaching.

Table 11c: Coefficients of Beta

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.247	.170		13.242	.000
	PHYSICAL INFRASTRUCTURE	.122	.055	.192	2.238	.027
	SANITATION	-.039	.048	-.064	-.828	.409

a. Dependent Variable: TEACHERS' JOB EFFECTIVENESS

Table 11c presents the regression coefficients for the individual school environmental variables. Physical infrastructure ($\beta = 0.192$, $t = 2.238$, $p < 0.05$) and teacher-student relationship ($\beta = 0.286$, $t = 3.456$, $p < 0.05$) significantly predict teachers' job effectiveness. Sanitation, safety measures, and classroom management do not show statistically significant effects within the combined model ($p > 0.05$). This implies that, among the environmental factors considered, teacher-student relationship and physical infrastructure are the strongest determinants of teachers' job effectiveness.

communication styles (grand mean = 3.72, SD = 1.14). Communication styles significantly predicted teachers' job effectiveness, $F(1, 180) = 31.688$, $p < 0.05$, with $R = 0.387$ and $R^2 = 0.150$.

Summary of the Major Findings

The following are the key findings of the study:

1. The findings revealed that principals demonstrated a high level of instructional supervision (grand mean = 3.75, SD = 1.15). Hypothesis testing showed that instructional supervision significantly predicted teachers' job effectiveness, $F(1, 180) = 15.091$, $p < 0.05$, with $R = 0.278$ and $R^2 = 0.077$.
2. The study found that principals exhibited a high level of

3. The findings showed that schools had a moderate level of physical infrastructure (grand mean = 3.01, SD = 1.14). Physical infrastructure significantly predicted teachers' job effectiveness, $F(1, 180) = 38.769$, $p < 0.05$, with $R = 0.421$ and $R^2 = 0.177$.
4. The study revealed that schools maintained a moderate level of sanitation (grand mean = 3.03, SD = 1.10). Sanitation significantly predicted teachers' job effectiveness, $F(1, 180) = 8.727$, $p < 0.05$, with $R = 0.215$ and $R^2 = 0.046$.
5. The findings revealed that principals' management techniques (instructional supervision, communication styles) jointly and significantly predicted teachers' job effectiveness, $F(2, 179) = 8.661$, $p < 0.05$, with $R = 0.444$ and $R^2 = 0.197$.

6. Similarly, the study found that school environmental conditions (physical infrastructure, sanitation) jointly and significantly predicted teachers' job effectiveness, $F(2, 179) = 13.196$, $p < 0.05$, with $R = 0.522$ and $R^2 = 0.273$.

Discussion of Findings

The finding of the study revealed that principals demonstrated a high level of instructional supervision, which significantly predicted teachers' job effectiveness. This finding implies that instructional supervision remains a central mechanism through which principals influence teachers' professional performance. A high level of instructional supervision suggests that principals regularly engage in classroom visitation, scrutiny of lesson plans, monitoring of instructional delivery, and provision of professional feedback. Such supervisory practices appear to strengthen teachers' instructional competence, classroom organization, and commitment to pedagogical standards. The implication of this finding is that when supervision is carried out as a supportive and developmental process rather than a punitive exercise, teachers are more likely to improve their job effectiveness and align their instructional practices with school goals.

This finding agrees with the finding of Omondi and Thinguri (2023), who reported that principals' supervisory practices particularly the checking of teachers' professional documents and frequent classroom observation significantly improved teachers' effectiveness. Similarly, the present finding is in tandem with that of Owan et al. (2023), who established that school-based supervisory practices had significant predictive effects on teachers' overall job effectiveness and specific instructional task areas. Furthermore, the finding corroborated that of Wakili, Unung and Ukpata (2019), whose study revealed that principals' management practices, including record keeping and participatory decision-making, positively influenced teachers' job effectiveness. In the same vein, the finding is consistent with the finding of Akpabio and Edogi (2017), who observed that principals'

management strategies significantly enhanced teachers' job performance in public secondary schools.

The study also found that principals exhibited a high level of communication styles, and these communication styles significantly predicted teachers' job effectiveness. This finding suggests that effective communication between principals and teachers plays a vital role in improving teachers' job effectiveness. High-level communication styles may include clarity in information dissemination, openness to feedback, participatory dialogue, and respectful interpersonal interactions. Such communication practices likely reduce ambiguity in role expectations, foster trust, and encourage collaboration among teachers. The implication of this finding is that principals who communicate effectively are better positioned to motivate teachers, resolve misunderstandings, and create a positive school climate that supports effective teaching and learning.

This finding is consistent with the finding of Akporehe and Asiyai (2023), who established that principals' communication skills significantly related to teachers' job performance in public secondary schools. It also aligns with the finding of Chike, Agu and Ekweogu (2024), which revealed that principals' assertive communication style was a strong predictor of teachers' job commitment, while aggressive communication had minimal influence. Moreover, the present finding corroborates that of Uzokife and Mbonu (2023), who found that supervisory and staff development strategies largely dependent on effective communication significantly improved teachers' job performance. Collectively, these studies reinforce the notion that communication is not merely an administrative function but a strategic leadership tool that directly enhances teachers' job effectiveness.

Finding of the study further showed that principals possessed a high level of conflict resolution techniques, which significantly predicted teachers' job effectiveness. This finding implies that principals who are proficient in conflict resolution techniques are

able to sustain a peaceful and collaborative school environment that enhances teachers' effectiveness. High-level conflict resolution skills suggest the use of constructive strategies such as integration, mediation, negotiation, and problem diagnosis rather than authoritarian or avoidant approaches. When conflicts are resolved fairly and promptly, teachers are less distracted by interpersonal tensions and more focused on their instructional responsibilities. The finding therefore indicates that effective conflict management by principals contributes significantly to teachers' psychological well-being, cooperation, and job effectiveness.

The finding of the study showed that schools had a moderate level of physical infrastructure, which significantly predicted teachers' job effectiveness. This finding suggests that even a moderate provision of physical infrastructure such as classrooms, furniture, instructional facilities, and utilities—can significantly influence teachers' job effectiveness. Although the infrastructure may not be optimal, its availability appears sufficient to support basic teaching activities and enhance teachers' capacity to perform their duties. The implication of this finding is that physical infrastructure remains a critical environmental factor that directly affects teachers' comfort, instructional efficiency, and overall job effectiveness.

This finding is consistent with the finding of Yusuf (2019), who reported a significant relationship between school environmental conditions and teachers' effectiveness, punctuality, and classroom management. It also aligns with the findings of Adekunle and Alaka (2019), which revealed that the adequacy of school safety measures a component of physical infrastructure significantly related to teachers' quality of work life. Furthermore, the finding corroborates that of Nweke and Nwikina (2022), who observed that inadequate safety infrastructure negatively affected teachers' performance, thereby underscoring the importance of physical facilities in shaping teacher effectiveness. The finding also resonates indirectly with Azad, Akhavan and Mohsenpour (2024) and Luo (2024), whose

studies emphasized supportive environments and positive school conditions as essential for educational effectiveness. The moderate level of infrastructure reported in the present study, yet yielding significant predictive power, may reflect contextual adaptation by teachers who have developed coping strategies in resource-constrained environments.

The study's finding further revealed that schools maintained a moderate level of sanitation, which significantly predicted teachers' job effectiveness. This finding suggests that although sanitation facilities in the schools were not at an optimal level, their availability and maintenance were sufficient to influence teachers' job effectiveness positively. A moderate level of sanitation such as access to clean water, functional toilets, and a relatively hygienic school environment appears to reduce health-related disruptions, absenteeism, and discomfort among teachers, thereby enabling them to carry out their instructional responsibilities more effectively. The implication of this finding is that sanitation, even when not fully adequate, remains a critical environmental factor that supports teachers' physical well-being and professional performance.

This finding is consistent with the finding of Yusuf (2019), who reported a significant relationship between school environmental conditions and teachers' effectiveness, punctuality, and classroom management. It also aligns with the findings of Adekunle and Alaka (2019), which revealed that the adequacy of school safety measures a closely related component of school sanitation and hygiene significantly influenced teachers' quality of work life. Furthermore, the present finding corroborates that of Nweke and Nwikina (2022), who found that inadequate environmental conditions, including poor sanitation and safety, negatively affected teachers' performance. Although earlier studies such as Omondi and Thinguri (2023) and Owan et al. (2023) focused primarily on instructional supervision, the present finding complements their conclusions by demonstrating that environmental conditions like sanitation also play a significant role in predicting teachers' job effectiveness.

The finding of the study revealed that principals' management techniques such as instructional supervision, communication styles, conflict resolution techniques, disciplinary measures, and motivational techniques jointly and significantly predicted teachers' job effectiveness in Post Basic Schools in Adamawa State, Nigeria. This finding implies that principals' management techniques do not operate in isolation but collectively contribute to enhancing teachers' job effectiveness. The joint predictive effect suggests that when principals combine effective supervision, clear communication, constructive conflict resolution, fair disciplinary practices, and motivational strategies, a supportive and productive school climate is created. The implication of this finding is that holistic leadership approaches are more effective than fragmented management practices in improving teachers' performance, commitment, and professional behaviour.

This finding agrees with the finding of Wakili, Unung and Ukpata (2019), who revealed that principals' management practices positively influenced teachers' job effectiveness. It also is in tandem with the findings of Akpabio and Edogi (2017), which established that principals' management strategies significantly enhanced teachers' job performance. Similarly, the present finding corroborates that of Okaforcha, Ohamobi and Elodi (2024), who found a significant positive correlation between principals' management practices and teachers' job commitment. In addition, the finding aligns with those of Akporehe and Asiyai (2023) and Uzokife and Mbonu (2023), both of which emphasized the role of communication, motivation, supervision, and staff development strategies in improving teachers' job performance. The convergence of these findings reinforces the importance of integrated leadership practices in enhancing teachers' job effectiveness.

Similarly, the finding of the study revealed that school environmental conditions including physical infrastructure, sanitation, safety measures, classroom management, and teacher-student relationship jointly and significantly predicted teachers' job

effectiveness in Post Basic Schools in Adamawa State, Nigeria. This finding suggests that school environmental conditions, when considered collectively, exert a strong influence on teachers' job effectiveness. The joint predictive power of these environmental factors implies that a conducive physical and psychosocial environment enhances teachers' comfort, security, classroom control, and instructional efficiency. The implication of this finding is that improvements in one environmental component may not yield optimal results unless supported by complementary conditions within the school environment.

This finding is consistent with the finding of Yusuf (2019), who reported a significant relationship between school environmental conditions and teachers' effectiveness, punctuality, and classroom management. It also aligns with the findings of Adekunle and Alaka (2019), which revealed that adequacy of school safety measures significantly influenced teachers' quality of work life. Furthermore, the present finding corroborates that of Nweke and Nwikina (2022), who observed that inadequate environmental and safety conditions negatively affected teachers' performance. The finding also resonates with Azad, Akhavan and Mohsenpour (2024) and Luo (2024), whose studies emphasized the combined influence of supportive environments and interpersonal relationships on educational effectiveness. The agreement between the present study and earlier research highlights the importance of adopting a comprehensive approach to improving school environmental conditions.

Conclusion

Based on the findings of this study, it is concluded that principals' management techniques and school environmental conditions are critical and significant predictors of teachers' job effectiveness. The study established that principals demonstrated a high level of instructional supervision and communication styles which individually and significantly influenced teachers' job effectiveness. The study further concludes that although school environmental conditions

such as physical infrastructure and sanitation were maintained at a moderate level, they still exerted significant influence on teachers' job effectiveness.

Recommendations

The following recommendations were made based on the findings of the study.

1. School principals should sustain and strengthen instructional supervision through regular classroom observation, monitoring of lesson delivery, and continuous professional feedback to teachers.
2. School principals should adopt and maintain open, assertive, and participatory communication styles that promote collaboration, clarity, and mutual understanding among teachers.
3. Government and school proprietors should improve and maintain school physical infrastructure, including classrooms, furniture, and instructional facilities, to support effective teaching.
4. School management and local education authorities should improve sanitation facilities by ensuring regular cleaning, provision of clean water, and functional toilet facilities in schools.
5. Education policymakers and school management boards should organize continuous leadership development programmes for principals focusing on integrated management techniques.
6. Government, education authorities, and school management boards should adopt a holistic approach to improving school environmental conditions by jointly addressing infrastructure, sanitation, safety, classroom management, and interpersonal relationships.

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