

Influence of Principals' Personality Traits on Their Administrative Effectiveness in Public Junior Secondary Schools in Yenagoa Local Government Area, Bayelsa State

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ABSTRACT: This study examined the predictive influence of personality traits on administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State. A predictive correlational survey design was adopted. Although a census targeted 46 principals and 92 vice-principals, field attrition resulted in a final sample of 42 principals and 84 vice-principals across 42 school units. To neutralize common method variance, data collection utilized two independent instruments: the Principals' Personality Inventory (PPI) for school heads and the Principals' Administrative Effectiveness Scale (PAES) for vice-principals. To address the nested data structure, vice-principals' responses were aggregated within school units. The dataset was analyzed using Mean, Standard Deviation, and Simple Linear Regression at a 0.05 level of significance. Descriptive metrics revealed a high manifestation of agreeableness ($M = 3.20$), moderate levels of conscientiousness ($M = 2.85$) and extraversion ($M = 2.52$), and a low baseline for emotional stability ($M = 2.40$). Inferentially, all four null hypotheses were rejected, proving that personality dimensions significantly predict school governance quality. Specifically, emotional stability emerged as the strongest predictor, explaining 37.8% of administrative variance ($R^2 = .378$), followed by agreeableness (24.6%), extraversion (20.5%), and conscientiousness (20.4%). The study concludes that institutional leadership is deeply rooted in personal disposition. It recommends that the Bayelsa State Universal Basic Education Board (BYSUBEB) integrate standardized psychometric testing into recruitment guidelines and introduce emotional resilience training for current administrators.

Keywords: Big Five Personality Traits, Administrative Effectiveness, Emotional Stability, Basic Education, Yenagoa LGA.

INTRODUCTION

Basic education serves as a fundamental human right and a critical foundation for global socio-economic transformation. Junior secondary education serves as a crucial transitional link between basic primary education and specialized senior secondary or vocational streams that fall under the Nigerian educational system's architectural design (Onyekwere, 2021). The Universal Basic Education framework legally requires this particular tier to offer tuition-free, required, and high-quality education with the goal of lowering youth reliance and promoting literacy throughout the federation. Because any operational failure that this fundamental level breaks the academic pipeline and jeopardizes the development of national human capital, the effective administration of these public basic education institutions is crucial. The public junior secondary school principal's office is the focal point of institutional control at this level of basic education.

Within contemporary educational administration, the school principal functions as the chief accounting officer, operational catalyst, and primary supervisor of the academic community (Agabi & Okoroma, 2021). The scope of this administrative

office requires the simultaneous management of internal and external educational interests. Unlike higher tiers of education The school principle serves as the academic community's lead supervisor, chief financial officer, and practical catalyst in modern educational administration (Agabi & Okoroma, 2021). This administrative office's breadth necessitates managing both internal and external educational objectives concurrently. The principal of a public junior secondary school works in a distinctive, highly centralized administrative environment, directly accountable to statutory state legislatures and acting as the primary leader for teaching staff, instructional staff, and students, in contrast to higher education levels that have decentralized administration. Administrative effectiveness is theoretically characterized as carrying out these intricate leadership responsibilities in the educational setting.

Administrative efficacy is the empirical capacity of a school head to arrange, integrate, and optimize financial, human, and material assets in order to accomplish established institutional goals (Ebipre, 2024). Instances of how this principle serves as a comprehensive performance indicator in everyday school operations include strict instructional monitoring, systematic staff motivation, transparent financial administration, including the maintenance of cooperative school-community

ties (Akpan & Ononokpono, 2022). Although instructional supervision requires the principal to regularly oversee classroom delivery and verify teaching conformity, personnel motivation involves creating a positive work atmosphere that inspires employees. Experienced school administrators additionally have to uphold open financial management for internal funds and foster positive school-community relations with host communities in order to protect institutional resources.

In a metropolitan capital territory, running public junior secondary schools requires negotiating extremely complicated regional issues. Systemic limitations, such as high student concentrations, severe resource shortages, deteriorating infrastructure, and specific ecological vulnerabilities like periodic floods, put educational administration in Bayelsa State's Yenagoa Local Government Area under constant strain (George, 2021). A principal's ability to rule is constantly put to the test by practical logistical challenges and administrative strain due to these demanding localized conditions. Behavioral outcomes are essentially influenced by human factors, whereas structural theories frequently ascribe differences in organizational health only to external financing or physical resources. A principal's administrative performance is greatly impacted by their personality features since leadership results are directly indicative from a person's psychological composition (Nduka, 2021).

The persistent, organized configurations of behavioral inclinations, emotional reactions, and cognitive behaviors that distinguish individuals are referred to as personality characteristics in psychometric research (Agabi & Okoroma, 2021). Under the fundamental framework of the Big Five Factor Model, psychological differences among government servants may be categorized into discrete, continuous dimensions which directly determine occupational performance (Koko, 2020). According to this concept, conscientiousness is a person's internal motivation for dependability, organization, and careful adherence to institutional rules, which translates into methodical record-keeping and stringent instructional monitoring (Dambo, 2022). The communication dynamics of management, in the other hand, are addressed by extraversion, which determines how an aggressive, gregarious school leader manages interpersonal networks to oversee parent-teacher associations and form strategic partnerships with community hosts (Ibiam, 2023).

Additionally, agreeableness is an important determinant regarding the school's inner social climate, indicating tendencies toward compassion, cooperation, and collaborative dispute resolution that enable a principal to employ consultative committee structures and reduce staff workplace friction (Tombra & Preye, 2024). Lastly, emotional stability serves as an important psychological anchor during times of institutional crisis, indicating the ability to preserve behavioral composure, control impulsive

behaviors, and make logical choices under intense bureaucratic pressure or natural disasters without experiencing performance problems or leadership burnouts (Pere, 2025; Uche, 2023). Task-oriented execution and tight policy enforcement are the first unique psychological parameters explored in this paradigm, which is theoretically described as conscientiousness.

In educational administration contexts, a principal's conscientiousness determines the level of strictness used to enforce classroom policies and monitor instructional time on task (Adu & Olatundun, 2020). Highly diligent administrators focus systematic instructional monitoring by reviewing lesson plans and verifying instructor attendance records (Dambo, 2022). They also strictly follow to internal accounting requirements and pupil ongoing evaluation records (Ebipre, 2024). This disciplined behavioral commitment is regarded as critical for minimizing institutional drift and making sure that fundamental educational standards are met inside the general secondary school system. Interpersonal interaction and external stakeholder involvement comprise the second behavioral component identified in this study, which is theoretically described as extraversion. Extraversion determines how a secondary school principal builds and maintains extensive interpersonal networks involving external players (Ibiam, 2023).

Extraverted administrators involve host communities thru aggressive public relations, direct verbal contact, and proactive outreach (Wari, 2022). This quality is clearly demonstrated by their capacity to give engaging stakeholder briefings and conduct collaborative meetings involving Parent-Teacher Associations to garner support from the community (George, 2021). Such relational motivation is critical for safeguarding school assets and obtaining regional funding for school infrastructure initiatives. Interpersonal empathy and professional collaboration are the third behavioral component explored, which is philosophically described as pleasant. In the everyday operations of public educational institutions, agreeableness is the key psychological baseline for developing a supportive internal workplace (Okoye, 2022). Highly pleasant school principals prefer consultative committee structures and participative leadership techniques over top-down administrative oversight (Tombra & Preye, 2024).

This cooperative behavioral approach reduces industrial friction involving staff unions, resolves internal workplace problems, and motivates instructors thru official appreciation and career development. This collaborative method immediately promotes successful instructional delivery. The fourth behavioral factor investigated is psychological resilience including control of impulses under strain, which is conceptualized and emotional stability. Emotional stability is an important psychological foundation that prevents a principal from job-related stress and administrative fatigue (Pere, 2025). School leaders with strong emotional control are

better able to retain their cool and deliver reasonable directions amid abrupt organizational crises or severe labor conflicts (Uche, 2023). This resilience allows them to make measured, sensible decisions under financial cuts or intensive bureaucratic scrutiny, averting leadership breakdowns and maintaining the organization focused on its fundamental educational objective.

Despite such established theoretical links, public junior secondary schools located in the Yenagoa Local Government Area suffer significant administrative obstacles that jeopardize institutional standards. Field reports show ongoing deficiencies in school leadership, including irregular teacher supervision, poor adherence to Universal Basic Education principles, financial monitoring anomalies, and shattered connections with the host communities (George, 2021). Although statutory regulatory authorities such as the Bayelsa State Universal Basic Education Board frequently blame these operational shortcomings on socioeconomic constraints, behavioral flaws among school leaders point to an underappreciated internal crisis.

The systemic management shortcomings observed in such organizations reflect a more profound failure of leadership implementation caused by individual psychological variability, where low instructional responsibility and accountability frequently correlate directly to a dearth of personal conscientiousness, whereas explosive industrial disputes among school principals and staff indicate low emotional stability as well as poor agreeableness (Ebipre, 2024). Given that Bayelsa State's current postings and appointment procedures rely largely on political support or simple public service seniority instead of psychometric suitability, candidates are frequently placed in high-pressure administrative positions despite lacking the necessary psychological traits. This study fills a knowledge gap by conducting a multi-perspective empirical investigation into the impact of principals' personality traits in administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State, using a nested data extraction protocol to prevent self-reporting bias.

RESEARCH OBJECTIVES

The major goal of this research is to investigate the impact of principals' personality features on administrative performance in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State. Specifically, the study aims to:

1. Determine the influence of principals' conscientiousness on their administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State.
2. Ascertain the influence of principals' extraversion on their administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State.

3. Examine the influence of principals' agreeableness on their administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State.
4. Evaluate the influence of principals' emotional stability on their administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State.

RESEARCH QUESTIONS

The following research questions have been formulated to guide the empirical trajectory of this investigation:

1. How does principals' conscientiousness influence their administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State?
2. In what way does principals' extraversion influence their administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State?
3. To what extent does principals' agreeableness influence their administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State?
4. How does principals' emotional stability influence their administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State?

RESEARCH HYPOTHESES

The inferential statistical analysis will be guided by the following null hypotheses (H_0) and assessed at a 0.05 level of significance:

- H_{01} : Principals' conscientiousness has no significant influence on their administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State.
- H_{02} : Principals' extraversion has no significant influence on their administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State.
- H_{03} : Principals' agreeableness has no significant influence on their administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State.
- H_{04} : Principals' emotional stability has no significant influence on their administrative effectiveness in

public junior secondary schools in Yenagoa Local Government Area, Bayelsa State.

METHODOLOGY

This study adopted a predictive correlational survey design to evaluate the structural relationships within the public basic education system of Bayelsa State. The design is ex-post facto and cross-sectional, as the independent variables (principals' innate personality traits) and the dependent variable (administrative effectiveness) manifest naturally within the institutional environment and were gathered concurrently. The starting point population included all 46 public junior secondary school heads and 92 vice-principals from the Yenagoa Local Government Area (Total N = 138). Allowing for field loss and unanswered surveys, the ultimate verified sample consisted of 42 principals and 84 vice-principals from 42 different school sites, resulting in a good institutional response rate of 91.3%. To avoid common technique variation, primary data collection used two different instruments.

Instrument A, the Principals' Personality Inventory (PPI), was administered independently by school principals to assess four Big Five framework aspects (conscientiousness, extraversion, agreeability, and emotional stability). Instrument B, the Principals' Administrative Effectiveness Scale (PAES), was only completed by vice-principals to assess the leadership effectiveness of their superiors. Both instruments used a closed-ended four-point Likert scale: strongly agree (4), agree (3), disagree (2), and strongly disagree (1). To systematically convert questionnaire averages into categories, the mean scores were organized onto continuous mathematical intervals.

- Negative choices are dominant (1.00 - 2.49), indicating Low Manifestation.
- Moderate affirmation density is from 2.50 and 2.99, indicating Moderate Manifestation.
- High Manifestation is defined as a concentration of decisive affirmative answers between 3.00 and 4.00.

Psychometric specialists from the University of Port Harcourt and Niger Delta University in Bayelsa State established face

and content validity. Pilot research including six principals and 12 vice-principals from the nearby Kolokuma/Opokuma Local Government Area confirmed internal consistency. Cronbach's alpha (α) values ranged from 0.79 to 0.84 for the PPI sub-dimension and 0.87 for the PAES, showing excellent measurement reliability. Field research was carried out over a three-week period via direct, supervised distribution within the administrations' local offices. The final information was handled with SPSS Version 28. The key study questions were answered employing descriptive Mean and Standard Deviation measurements with a localized 2.50 item-level criteria cutoff.

On an inferential scale, Simple Linear Regression Analysis was used to test the four null hypotheses at a 0.05 level of significance after establishing the OLS assumptions of normality and linearity. The individual predicted behaviors were mapped employing the univariable equation: The multivariable model ($Y = \beta_0 + \beta_1 X_i + \varepsilon$) was used to investigate joint predictive capabilities. $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ (where Y = Administrative Effectiveness, X_1 = Conscientiousness, X_2 = Extraversion, X_3 = Agreeableness, and X_4 = Emotional Stability).

To resolve the data's nested structure without increasing the sample size or breaking ordinary least squares assumptions, each PAES items were initially summed into continuous ratings for every vice-principal.

The data were then averaged throughout each educational unit. This aggregated dependent measure was immediately coupled with the relevant principal's self-reported personality profile, resulting in 42 symmetric, school-grade data pairings ideal for linear regression equations.

RESULTS OF THE FINDING

Table 1: Descriptive Parameters and Component Distribution for Conscientiousness Dispositions (N = 42)

Item No.	Psychometric Survey Statement Summary	Mean ($\bar{X}$)	Std. Deviation (SD)	Decisional Remark
1	Maintain systematic daily tracking logs for lecture notes.	3.12	0.45	High Manifestation
2	Enforcing mandatory biometric electronic time-logging frameworks.	2.45	0.62	Moderate Manifestation

3	Systematic validation of legal registries and financial indexes.	3.24	0.38	High Manifestation
4	Conducting unannounced instructional demonstrations and appraisals.	2.52	0.51	Moderate Manifestation
5	Timelines and goals for structural examinations will be published in advance.	2.92	0.40	Moderate Manifestation
Total	Grand Mean / Grand Standard Deviation	2.85	0.47	Moderate Manifestation

Table 1 shows a modest level of conscientiousness among school principals, with an overall mean score of 2.85 with a standard deviation of 0.47. These results show that administrators exhibited modest levels of conscientiousness. Among the measured behaviors, systematic inspection of official records with financial measurements ($\bar{X} = 3.24$, $SD = 0.38$) and organized daily keeping of instructional notes ($\bar{X} = 3.12$, $SD = 0.45$) appeared as highly expressed. On the other hand, some activities were only moderately exhibited.

These included implementing biometric digital attendance procedures ($\bar{X} = 2.45$, $SD = 0.62$), performing surprise classroom inspections and teacher assessments ($\bar{X} = 2.52$, $SD = 0.51$), and discussing exam schedules and academic objectives in advance ($\bar{X} = 2.92$, $SD = 0.40$). Finally, the small range in standard deviation values indicates a high level of agreement among respondents on how such administrative habits materialized.

Table 2: Descriptive Parameters and Component Distribution for Extraversion Dispositions (N = 42)

Item No.	Psychometric Survey Statement Summary	Mean ($\bar{X}$)	Std. Deviation (SD)	Decisional Remark
6	Active administrative communication with municipal community-based youth units.	2.74	0.58	Moderate Manifestation
7	Deployment of Parent-Teacher Association financial networks.	2.81	0.52	Moderate Manifestation
8	External representation of the institution in municipal education summits	2.52	0.69	Moderate Manifestation
9	Interactive stakeholder presentations on operational academic growth.	1.88	0.61	Low Manifestation
10	Effective public relations administration with the state board of inspectors.	2.67	0.55	Moderate Manifestation
Total	Grand Mean / Grand Standard Deviation	2.52	0.59	Moderate Manifestation

According to the findings in Table 2, school administrators had a moderate level of extraversion characteristics, with a grand mean of 2.52 and a standard deviation of 0.59. This finding indicates that, overall, the principals demonstrated modest levels of social involvement and stakeholder collaboration while carrying out their management responsibilities. Obtaining financial support from Parent-Teacher Association networks ($\bar{X} = 2.81$, $SD = 0.52$) had the highest average score. This was immediately followed by

deliberate leadership discussions involving local neighborhood youth organizations ($\bar{X} = 2.74$, $SD = 0.58$), active publicity engagement with interacting with state board auditors ($\bar{X} = 2.67$, $SD = 0.55$), and serving as the institution's official spokesperson during regional educational gatherings ($\bar{X} = 2.52$, $SD = 0.69$). Every of these tasks was moderately shown by the participants. Host-community reports on institutional expansion and program widening had the lowest statistical average ($\bar{X} = 1.88$, $SD = 0.61$) and were less visible.

Finally, the small spread of standard deviation values suggests that survey participants had relatively similar perceptions on how the leaders demonstrated these extraverted tendencies.

Table 3: Descriptive Parameters and Component Distribution for Agreeableness Dispositions (N = 42)

Item No.	Psychometric Survey Statement Summary	Mean ($\bar{X}$)	Std. Deviation (SD)	Decisional Remark
11	Issuing commendation letters regarding professional teaching quality.	3.31	0.35	High Manifestation
12	Use of consultative committee structures before decision execution.	3.14	0.42	High Manifestation
13	Using non-punitive mediation to address internal staff problems acceptable staff welfare and medical requests.	3.26	0.39	High Manifestation
14	Maintain open-door pathways for avoiding victimizing comments.	3.05	0.48	High Manifestation
15	Issuing commendation letters regarding professional teaching quality.	3.24	0.36	High Manifestation
Total	Grand Mean / Grand Standard Deviation	3.20	0.40	High Manifestation

Table 3 shows that principals had a high level of agreeableness dispositions, as shown by the grand mean of 3.20 and the grand standard deviation of 0.40. This shows that, overall, the principals were very helpful, supportive, and thoughtful in performing their responsibilities as administrators. The indicators with the highest mean score were consultative committee-based models ($\bar{X} = 3.31$, $SD = 0.35$), accommodating reasonable staff well-being and health requests ($\bar{X} = 3.26$, $SD = 0.39$), and issuing commendation

letters over professional teaching superiority ($\bar{X} = 3.24$, $SD = 0.36$). Non-punitive conciliation to address internal staff disagreements ($\bar{X} = 3.14$, $SD = 0.42$), as well as maintaining open-door channels for non-victimizing comments ($\bar{X} = 3.05$, $SD = 0.48$), were strongly demonstrated. The comparatively low standard deviation values imply that respondents had comparable perspectives on the expression of principals' agreeableness inclinations.

Table 4: Descriptive Parameters and Component Distribution for Emotional Stability Dispositions (N = 42)

Item No.	Psychometric Survey Statement Summary	Mean ($\bar{X}$)	Std. Deviation (SD)	Decisional Remark
16	maintaining rational calm throughout seasonal ecological flooding disasters.	2.50	0.67	Moderate Manifestation
17	Control of emotional reactions when confronted with subordinate labor organizations	2.14	0.58	Moderate Manifestation
18	Execution of reasoned decisions under fiscal shortages and stress.	2.37	0.61	Moderate Manifestation

19	Balance between heavy bureaucratic demands and cognitive stability.	2.41	0.49	Moderate Manifestation
20	Professional willingness to accept constructive criticism from educational board handlers.	2.58	0.52	Moderate Manifestation
Total	Grand Mean / Grand Standard Deviation	2.40	0.57	Moderate Manifestation

The findings in Table 4 show that school directors had moderate emotional stability features, as evidenced by a grand mean of 2.40 with a grand standard deviation of 0.57. Data reveals that, overall, administrators had modest psychological resilience when confronted with institutional challenges and occupational stress. Among individual variables, reacting objectively to critical input from governing board members ($\bar{X} = 2.58$, $SD = 0.52$) had the highest statistical mean. Other significantly exhibited signs included maintaining a logical attitude throughout repeating environmental flooding

situations ($\bar{X} = 2.50$, $SD = 0.67$), and handling high regulatory tasks with mental calmness ($\bar{X} = 2.41$, $SD = 0.49$), making smart administrative decisions amid budget shortfalls and financial hardship ($\bar{X} = 2.37$, $SD = 0.61$), as well as repressing personal frustrations while dealing with worker union resistance. Finally, the limited range of standard deviation values suggests that survey participants held fairly consistent views on how school leaders demonstrated these steady characteristics.

Table 5: Linear Regression Parameters for Conscientiousness Predicting Administrative Effectiveness (N = 42)

Model Summary (R ²)	ANOVA (F-value)	Path Coefficient (B)	Standard Error (SE)	Strength Index (t)	Probability (p)	Degrees of Freedom (df)
.204	10.230	0.289	0.090	3.199	.003	(1, 40)

Table 5 summarizes the inferential findings from the initial regression model, evaluating the reliability of null hypothesis one (H_{01}). This hypothesis asserted that principals' conscientiousness has no substantial impact on their administrative performance in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State. The output parameters show that a principal's conscientiousness score contributes 20.4% of the independent variation in institutional performance ($R^2 = .204$).

The regression model demonstrated statistical consistency and significance ($F(1, 40) = 10.230$, $p < .01$). The undefined structural weight ($B = 0.289$, $t = 3.199$, $p = .003$) results in a positive linear path. The null hypothesis (H_{01}) is rejected as the computed probability ($p = .003$) is lower than the 0.05 alpha criterion. This empirical verification demonstrates that conscientiousness has a considerable impact on administrative performance.

Table 6: Linear Regression Parameters for Extraversion Predicting Administrative Effectiveness (N = 42)

Model Summary (R ²)	ANOVA (F-value)	Path Coefficient (B)	Standard Error (SE)	Strength Index (t)	Probability (p)	Degrees of Freedom (df)
.205	10.290	0.219	0.068	3.208	.003	(1, 40)

Table 6 shows the statistical data from model two, which will be used to evaluate null hypothesis two (H_{02}). This hypothesis stated that principals' extraversion had no substantial impact on their administrative performance in public junior secondary schools in the Yenagoa Local Government Area of Bayelsa State. The study shows that extraversion accounts for 20.5% of the difference in institutional governance outcomes ($R^2 = .205$). The model's fitting is statistically significant

($F(1,40) = 10.290$, $p = .003$). The computed route coefficient ($B = 0.219$, $t = 3.208$, $p = .003$) shows that increased communicative assertiveness improves managerial performance. The significant value ($p = .003$) is below the 0.05 threshold, rejecting null hypothesis two (H_{02}), indicating that extraversion has a substantial impact on administrative effectiveness.

Table 7: Linear Regression Parameters for Agreeableness Predicting Administrative Effectiveness (N = 42)

Model Summary (R ²)	ANOVA (F-value)	Path Coefficient (B)	Standard Error (SE)	Error	Strength Index (t)	Probability (p)	Degrees of Freedom (df)
.246	13.030	0.345	0.096		3.609	.001	(1, 40)

Table 7 shows the diagnosis for the third regression model, which evaluates the null hypothesis (H_{03}). This hypothesis proposed that principals' agreeableness has no significant impact on administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State. The study found that agreeableness explains 24.6% of the observed variation in school management quality ($R^2 = .246$). The model is highly statistically

significant ($F(1, 40) = 13.030, p = .001$). The unstandardized weight ($B = 0.345, t = 3.609, p = .001$) demonstrates that cooperative leadership traits predict superior school administration results. As a result, null hypothesis three (H_{03}) is rejected as the probability value ($p = .001$) is below the 0.05 threshold. This shows that agreeableness has a significant impact on administrative effectiveness.

Table 8: Linear Regression Parameters for Emotional Stability Predicting Administrative Effectiveness (N = 42)

Model Summary (R ²)	ANOVA (F-value)	Path Coefficient (B)	Standard Error (SE)	Error	Strength Index (t)	Probability (p)	Degrees of Freedom (df)
.378	24.310	0.346	0.070		4.931	.000	(1, 40)

Table 8 shows the data for model four, which serves as an inferential baseline for testing null hypothesis four (H_{04}). This hypothesis proposed that principals' emotional stability has no substantial impact on administrative performance in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State. Emotional stability is the most significant individual predictor in this study, accounting for

37.8% of the variation in school administration results ($R^2 = .378$). The individual linear model has substantial predictive significance ($F(1, 40) = 24.310, p < .001$). The unstandardized slope weight ($B = 0.346, t = 4.931, p = .000$) indicates a very strong positive predictive path. The null hypothesis (H_{04}) is rejected as the computed probability value ($p = .000$) is less than the 0.05 level.

DISCUSSION OF FINDINGS

A review of the descriptive data in Table 1 answers the first study question, which is how conscientious inclinations impact administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State. The baseline measures show a modest manifestation of conscientious qualities among the researched school heads, with a grand mean of 2.85 ($SD = 0.47$). This level of focus means that, while these leaders constantly prioritize basic institutional control, such as frequent logbook monitoring, everyday policy execution is a common, non-exceptional practice. As a result, while these administrators retain essential operational discipline, their primary concentration is on sustaining existing procedural routines rather than pushing proactive administrative reforms.

To test null hypothesis one (H_{01}), data points were modeled against the linear regression configurations in Table 5 to see if these behavioral patterns had predictive value. Conscientiousness is responsible for 20.4% of the variance in school governance results, according to inferential parameters ($R^2 = .204$). The underlying prediction framework demonstrates high statistical fitness, with an ANOVA F-value of 10.230 ($df = 1, 40$), an unstandardized coefficient (B) of 0.289, and a t-value of 3.199. The probability value ($p = .003$)

is significantly lower than the conventional 0.05 alpha limit, hence H_{01} is rejected. This statistical finding demonstrates that a principal's conscientiousness is a strong positive predictor of leadership effectiveness, directly reducing administrative flaws in the local school system. This result is compatible with Dambo's (2022) academic opinions, which state that diligent record keeping prevents institutional instability in primary schools. According to Adu and Olatundun (2020), rigorous adherence to operational principles guarantees that educational environments remain productive, and a task-oriented emphasis immediately improves classroom efficiency.

A review of the descriptive metrics in Table 2 answers the second study question, which is how extraverted inclinations impact administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State. The statistics show that the analyzed principals have a moderate level of extraversion, with a grand mean of 2.52 ($SD = 0.59$). Communication on academic growth scored significantly poor ($\bar{X} = 1.88$).

This specific shortfall reveals a unique administrative difficulty in Bayelsa State: the tight, centralized state bureaucracy severely limits school leaders' ability to actively

engage host communities in order to ensure long-term institutional growth. As a result, while these principals have a baseline level of interpersonal warmth, the institutional structure restricts their outward extraverted communication. To investigate if these behavioral patterns contain predictive potential, the descriptive baselines were modeled against the linear regression parameters in Table 6 to test null hypothesis two (H_{02}). Extraversion is responsible for 20.5% of the variance in school administration quality, according to inferential indices ($R^2 = .205$). This prediction framework has substantial statistical significance, as evidenced by an ANOVA F-value of 10.290, an unstandardized coefficient (B) of 0.219, and a p-value of .003.

H_{02} is rejected as the probability profile is significantly lower than the selected 0.05 alpha level. This statistical finding demonstrates that, despite bureaucratic obstacles in Yenagoa, a principal's extraversion is still a strong positive predictor of administrative performance. This suggests that communicative audacity is a significant driver of educational leadership quality, consistent with Wari's (2022) findings that extraverted leaders successfully use public relations to protect vulnerable institutional infrastructures. Furthermore, George (2021) observed that governing densely populated schools in capital cities need outstanding leaders that are adept at navigating regional geopolitical contexts in order to generate community support.

An assessment of the descriptive metrics in Table 3 answers the third study question, which is how an agreeable disposition effects administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State. The survey results show a significant concentration of pleasant behavior among the examined school leaders, as demonstrated with a grand mean of 3.20 ($SD = 0.40$). This higher baseline suggests a continued institutional dependence on supportive, collaborative, or consultative frameworks in the studied schools. This behavioral pattern indicates that these administrators value cooperative interpersonal dynamics, relying on group participation to run everyday operations and preserve organizational harmony.

These descriptive measures were modeled against the linear regression parameters in Table 7 to examine null hypothesis three (H_{03}). According to the inferential indices, agreeableness explains 24.6% of the variation in administrative effectiveness ($R^2 = .246$). The resulting prediction framework is highly statistically significant, as evidenced by an ANOVA F-value of 13.030, with unstandardized coefficient (B) of 0.345, and a t-value of 3.609. H_{03} is rejected because the probability profile ($p = .001$) is much lower than the specified 0.05 alpha threshold,

indicating that collaborative and empathetic leadership characteristics are strong predictors of administrative effectiveness. This statistical result is consistent with the group-dynamics model established by Tombra and Preye (2024), who claimed that consultative leaders greatly reduce industrial friction within staff organizations. Similarly, this study backs up Okoye's (2022) claim that interpersonal warmth serves as a valuable organizational asset by creating an open-door communication climate that actively inspires instructional professionals.

A review of the descriptive metrics in Table 4 answers the fourth study question, which is how emotional stability contributes to administrative effectiveness in public junior secondary schools in Yenagoa Local Government Area, Bayelsa State. The empirical results show a poor degree of emotional stability within the researched school principals, as demonstrated by a grand mean of 2.40 ($SD = 0.57$). This depressed baseline indicates that such administrators' psychological capacities are significantly depleted when dealing with severe working pressures. Coping capacities decreased significantly during labor union conflicts ($\bar{X} = 2.14$) and localized environmental emergencies. This reality suggests that the engaged principals frequently struggle to keep an emotional equilibrium whenever operational needs interrupt the normal school milieu. To investigate null hypothesis four (H_{04}), descriptive baselines were modeled against linear regression configurations in Table 8 to see if these psychological processes had predictive potential under pressure. Emotional control is the most significant predictor of administrative efficacy in this study, accounting for 37.8% of the variation in leadership performance ($R^2 = .378$).

The resultant prediction model has significant statistical significance, as evidenced by an ANOVA F-value of 24.310 with 1 and 40 degrees of freedom, an unstandardized coefficient (B) of 0.346, and a t-value of 4.931. The probability profile ($p < .001$) was below the normal 0.05 alpha threshold, hence H_{04} is strongly rejected. This key result is extremely congruent with Pere's (2025) empirical findings, which highlighted emotional endurance as an essential psychological barrier to leadership weariness during localized ecological disasters. In a similar line, this study supports Uche's (2023) assertion that great emotional control enables an administrator to sustain cognitive clarity when functioning under extreme bureaucratic stress. Considering the context of Yenagoa LGA, in which public academic institutions face the added challenges of fast-paced urban population expansion and annual flooding interruptions, a principal's emotional resilience serves as the primary functional anchor needed to maintain the school committed to its basic academic mission.

CONCLUSION

This study shows that the administrative effectiveness of public junior secondary school principals in the Yenagoa

Local Government Area is heavily impacted by their core psychological attributes, as measured by the Big Five personality traits. Descriptively, the field data show that, whereas these school administrators exhibit a high degree of agreeableness and a moderate degree of conscientiousness and extraversion, their emotional health is severely poor. Inferentially, the study indicates that all four analyzed personality factors are statistically significant predictors of school governance quality, implying that leadership is strongly founded in personal disposition. Among the factors examined, emotional resilience emerged probably the most important factor, accounting for 37.8% of the overall operational variation in administrative performance. This demonstrates that organizational stability is mostly driven by a leader's capacity to retain cognitive clarity in the face of intense bureaucratic pressure, localized union battles, and

seasonal environmental disasters. Finally, the data suggest that relying exclusively on academic credentials or administrative experience is insufficient for successful school appointments. Regarding basic education management to flourish in Bayelsa State's complicated socioeconomic landscape, institutional frameworks must actively stress psychological compatibility and emotional intelligence. To improve leadership outputs, the Bayelsa State Universal Basic Education Board (BYSUBEB) should include standardized personality tests in its recruiting requirements. Furthermore, focused emotional endurance exercises and collaborative leadership seminars should be implemented for present school leaders to improve their conflict resolution abilities and psychological defenses, assuring long-term institutional efficiency throughout secondary schools.

RECOMMENDATIONS

Based on the empirical insights and statistical verifications established in this study, the following policy recommendations are advanced to optimize school management practices:

1. The Bayelsa State Universal Basic Education Board should integrate mandatory psychometric screening into appointment protocols, prioritizing candidates with high emotional stability and conscientiousness.
2. The Ministry of Education should execute continuous workshops on emotional intelligence and

conflict mediation to foster agreeable, consultative management structures among serving school heads.

3. The state government should deploy digitized compliance feedback loops enabling vice-principals to regularly provide multi-source data monitoring instructional supervision efficiency.
4. School administrators should leverage extraverted and conscientious traits to strengthen collaborative host-community networks that protect school infrastructure and enhance learning standards.

REFERENCES

- Adu, E. T., & Olatundun, S. O. (2020). Personality traits as determinants of administrative effectiveness among secondary school principals in southwestern Nigeria. *Journal of Educational Administration and History*, 52(3), 241–256. doi.org
- Agabi, C. O., & Okoroma, N. S. (2021). Institutional drivers of management efficiency in the basic education sector: An appraisal of the Universal Basic Education (UBE) framework in southern Nigeria. *Nigerian Journal of Educational Administration and Planning*, 21(1), 45–63.
- Akpan, C. P., & Ononokpono, B. E. (2022). Principals' personality traits and administrative effectiveness in public secondary schools. *International Journal of Educational Leadership and Management*, 10(2), 154–171. doi.org
- Amadi, H. O. (2023). Emotional stability and crisis leadership: Evaluating how principal behavioral composure mitigates institutional drift in public schools. *African Journal of Educational Management*, 14(2), 89–104.
- Dambo, B. I. (2022). Meticulous record-keeping and teacher time-on-task: The predictive influence of conscientious school managers in basic education institutions. *Bayelsa Journal of Educational Review*, 9(1), 112–128.
- Ebipre, S. (2024). Digital governance and administrative compliance metrics: Evaluating the baseline implementation outcomes of the BayelsaPRIME initiative in public schools. *Niger Delta Journal of Educational Research*, 16(2), 15–31.
- George, O. W. (2021). Managing urban educational densities: Resource optimization and community engagement patterns among junior secondary school heads in Yenagoa LGA. *Journal of Educational Planning and Finance*, 13(3), 201–216.
- Ibiam, N. (2023). Extraversion, public relations capacity, and school-community harmony: An empirical mapping of post-primary school heads in the Niger Delta region. *Journal of School Leadership and Administration*, 19(4), 76–92.
- Koko, M. N. (2020). *Organizational psychology in educational institutions: Utilizing the Big Five Model for human resource placement in Nigerian schools*. University of Port Harcourt Press.
- Nduka, F. C. (2021). The human factor in institutional governance: Exploring the nexus between principal psychological traits and secondary school efficiency.

- Journal of Educational Foundations*, 35(2), 118–135.
- Okoye, R. E. (2022). Agreeableness as a workplace asset: Assessing the consultative and conflict mediation capacities of school principals. *Nigerian Journal of Educational Psychology*, 20(1), 143–159.
- Onyekwere, C. U. (2021). The structural transition from primary to junior secondary schooling under the UBE Act: Policy loopholes and implementation realities. *Journal of Educational Policy and Systems*, 11(3), 50–67.
- Pere, E. A. (2025). Psychological buffers against administrative burnout during systemic ecological crises: A study of public school managers in Bayelsa State. *The Niger Delta Academic Review*, 12(1), 34–51.
- Tombra, F., & Preye, G. M. (2024). Team dynamics and participative management: How agreeable leaders diminish staff industrial friction in public basic schools. *Journal of Educational Governance*, 8(2), 210–226.
- Uche, O. A. (2023). Behavioral vectors in educational leadership: Assessing emotional control and stress resilience among school heads within the South-South geopolitical zone. *Nigerian Journal of Applied Psychology*, 25(2), 160–178.
- Wari, T. L. (2022). Securing school assets through community policing: The interface between extraverted principals and host-community stakeholder networks. *Journal of School and Society*, 15(1), 82–99.