

Collaborative Leadership and Administrative Effectiveness of Principals in Public Senior Secondary Schools in Rivers State

Jumbo, Joy Kingsley ¹, Dr. Ogunne T. Amie-Ogan, (Reader) ²

^{1,2} Educational management, of the Department of Educational Management, Faculty of Education, Rivers State University, Nkpolu–Oroworukwo, Port Harcourt

Email: ¹jumbo.kingsley@rsu.edu.ng ²tekena.amieogan@ust.edu.ng

ORCID ID: ¹0009 0004 7010 7572

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ABSTRACT

This study examined the relationship between collaborative leadership and administrative effectiveness of principals in public senior secondary schools in Rivers State, Nigeria. Ten research questions and ten corresponding null hypotheses guided the study. The study was anchored on the Transformational Leadership Theory, and Path–Goal Theory. A correlational survey research design was adopted. The population comprised 5,676 teachers in 367 public senior secondary schools across the 23 Local Government Areas of Rivers State. A sample of 361 respondents was selected using proportionate stratified and simple random sampling techniques. Data were collected using self-structured questionnaires titled “Collaborative Leadership Questionnaire” and “Administrative Effectiveness of Principals in Senior Secondary Schools Questionnaire.” The instrument was validated by experts and its reliability was established using the test-retest method, yielding reliability coefficients of 0.91 and 0.79. Data were analysed using Pearson Product Moment Correlation (PPMC) to answer the research questions, while the hypotheses were tested using t-transformation at the 0.05 level of significance. The findings revealed positive and statistically significant relationships between collaborative leadership and all ten dimensions of administrative effectiveness. All ten null hypotheses were rejected because the calculated t-values, ranging from 22.92 to 31.02, exceeded the critical value of ± 1.96 . The strongest relationship was between collaborative leadership and innovation management ($r = .856$), while the weakest was between collaborative leadership and time management ($r = .774$). The study concluded that collaborative leadership is significantly and positively associated with the administrative effectiveness of principals in public senior secondary schools in Rivers State. It therefore recommended, among other measures, that principals should strengthen participatory decision-making, involve teachers in resource management effectiveness and policy implementation to enhance school administration.

Introduction

Collaborative leadership and administrative effectiveness are important to the successful management of public senior secondary schools because principals are responsible for coordinating teachers, students, parents, non-teaching staff and other stakeholders towards the achievement of educational objectives. Administrative effectiveness involves the ability of principals to plan, organise, coordinate, supervise, direct and evaluate school activities while ensuring the effective utilisation of available resources (Ibrahim & Bello, 2022; Nwosu & Okeke, 2024; Yusuf et al., 2025). In practice, it is reflected in effective communication, resource management, discipline, goal attainment, decision-making, staff development, policy implementation, time management, innovation and accountability. However, challenges such as ineffective communication, poor resource utilisation, weak stakeholder

participation, inadequate staff development, delayed policy implementation, limited innovation and poor accountability continue to affect school administration (Ezeugbor & Victor, 2023; Nwosu & Okeke, 2024). Sam-Kalagbor (2026) also found that principals and vice-principals in public senior secondary schools in Port Harcourt Metropolis rated the role of artificial intelligence high in school record management but low in administrative decision-making and instructional supervision, which shows that the decision-making side of school administration still needs attention.

Collaborative leadership provides an approach for addressing these administrative challenges because it emphasises shared responsibility, teamwork, stakeholder participation, collective decision-making, mutual trust, open communication and joint problem-solving (Adebayo & Adigun, 2021). Through collaboration, principals can involve teachers and other stakeholders in decisions concerning school activities, thereby promoting ownership, commitment and accountability. Nwanguma and Nwuke (2024) showed that the school based management committee, which brings parents, community members and staff into the running of the school, enhances the governance of public senior secondary schools in Rivers State, and this is the kind of shared responsibility that collaborative leadership requires. Collaborative leadership can also strengthen communication by encouraging openness, active listening, information sharing and feedback. Northouse (2022) and Kouzes and Posner (2023) noted that participatory leadership and shared communication promote common understanding and commitment to organisational objectives. Similarly, Edmondson (2019) emphasised that supportive environments encourage members to express concerns and contribute ideas, thereby improving communication and collective problem-solving.

Collaborative leadership is also relevant to resource management because effective utilisation of financial, human, material and technological resources requires adequate information, participation and coordination. Nwuke and Nwanguma (2025) linked the proper management of educational facilities to effective administration in public senior secondary schools in Rivers State, which shows that the way principals handle physical resources is closely tied to their overall effectiveness as administrators. Northouse (2022) and Yukl (2020) indicated that participation, consultation and cooperation improve organisational decision-making and accountability. Recent studies further associate shared leadership with improved resource coordination, integration and utilisation (Abson et al., 2024; Chamberlin et al., 2024; Curşeu & Schruijer, 2024; van Osch et al., 2024). In the same way, collaborative leadership can promote goal attainment by involving organisational members in planning, implementation and monitoring. Woods and Roberts (2019) and Harris (2020) observed that participation strengthens commitment and collective responsibility, while Chizoba et al. (2019) found that participatory decision-making improves motivation, productivity and goal attainment.

In public senior secondary schools, these relationships are particularly significant because principals must coordinate diverse stakeholders to achieve educational objectives. Through collaborative leadership, principals can improve communication, promote efficient resource utilisation, strengthen staff participation, support policy implementation, enhance discipline, encourage innovation and foster accountability. Nevertheless, the effectiveness of collaboration may depend on the organisational environment. A supportive organisational culture characterised by trust, teamwork, participation and accountability can facilitate collaborative practices, whereas a rigid culture may constrain them (Nwosu & Okeke, 2024; Yusuf et al., 2025). Organisational culture may therefore influence the extent to which collaborative leadership translates into administrative effectiveness.

Although previous studies have associated collaborative leadership with communication, resource utilisation, staff commitment, decision-making, innovation and organisational effectiveness, many have examined different educational or organisational contexts (Ibrahim & Bello, 2022; Ezeugbor & Victor, 2023). Consequently, there remains a need for context-specific evidence on the relationship between

collaborative leadership and the administrative effectiveness of principals in public senior secondary schools in Rivers State, particularly across communication effectiveness, resource management effectiveness, discipline, goal attainment, decision-making efficiency, staff development, policy implementation, time management, innovation and accountability. The present study therefore examines the relationship between collaborative leadership and administrative effectiveness of principals in public senior secondary schools in Rivers State, while considering the moderating role of organisational culture.

Purpose of the Study

The purpose of this study was to determine the relationship between collaborative leadership and administrative effectiveness of principals in public senior secondary schools in Rivers State. The specific objectives of the study were to:

1. determine the relationship between collaborative leadership and communication effectiveness of principals in public senior secondary schools in rivers state.
2. examine the relationship between collaborative leadership and resource management effectiveness of principals in public senior secondary schools in rivers state.
3. ascertain the relationship between collaborative leadership and policy implementation in public senior secondary schools in rivers state.

Research Questions

The following research questions guided the study:

1. What is the relationship between collaborative leadership and communication effectiveness of principals in public senior secondary schools in Rivers State?
2. What is the relationship between collaborative leadership and resource management effectiveness of principals in public senior secondary schools in Rivers State?
3. What is the relationship between collaborative leadership and policy implementation in public senior secondary schools in Rivers State?

Hypotheses

The study tested the following hypotheses at 0.05 alpha level:

- H₀₁:** There is no significant relationship between collaborative leadership and communication effectiveness of principals in public senior secondary schools in Rivers State.
- H₀₂:** There is no significant relationship between collaborative leadership and resource management effectiveness of principals in public senior secondary schools in Rivers State.
- H₀₇:** There is no significant relationship between collaborative leadership and policy implementation in public senior secondary schools in Rivers State.

Methodology

The study adopted a correlational survey design to examine the relationship between collaborative leadership and administrative effectiveness without manipulating the variables (Creswell & Creswell, 2018; Sekaran & Bougie, 2020). It was conducted across the three senatorial districts and 23 Local Government Areas of Rivers State. The population comprised 5,676 teaching staff in 367 public senior secondary schools, based on the September 2024 staff records of the Rivers State Senior Secondary Schools Board.

A sample of 361 respondents was determined using the Krejcie and Morgan (1970) procedure and selected through proportionate stratified random sampling across the 23 LGAs. The respondents comprised principals, Vice Principals (Academic), and Vice Principals (Administration). Data were collected using two self-structured instruments, the *Collaborative Leadership Questionnaire (CLQ)* and *Administrative Effectiveness of Principals in Senior Secondary Schools Questionnaire (AEPSSSQ)*, based on a four-point rating scale. The instruments were face- and content-validated by three experts from Rivers State University and the University of Port Harcourt. Reliability was established through

test-retest, yielding coefficients of 0.91 for the CLQ and 0.79 for the AEPSSSQ. Of the 361 questionnaires administered, 357 were retrieved and 353 were found valid, representing a 97.8% valid response rate. Data were analysed using Pearson Product Moment Correlation to answer the research questions, while hypotheses were tested at the 0.05 significance level using the *t*-transformation of the correlation coefficient and SPSS. The null hypotheses were rejected where the calculated *t*-value exceeded the critical value of ± 1.96 .

Result Presentation

Research Question 1: What is the relationship between collaborative leadership and communication effectiveness of principals in public senior secondary schools in Rivers State?

Table 1: Relationship between Collaborative Leadership and Communication Effectiveness of Principals

		Collaborative Leadership	Communication Effectiveness
Collaborative Leadership	Pearson Correlation	1	.824
	Sig. (2-tailed)	.	.000
	N	353	353
Communication Effectiveness	Pearson Correlation	.824	1
	Sig. (2-tailed)	.000	.
	N	353	353

Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Version Data Output (2026)

The result on Table 1 revealed that there is a very strong and positive relationship between collaborative leadership and communication effectiveness of principals ($r = .824$, $p = .000$). This indicates that higher levels of collaborative leadership are associated with better communication effectiveness among principals in public senior secondary schools in Rivers State. The finding implies that communication effectiveness is strengthened when teachers and other stakeholders are actively involved in school administration. Thus, the study concludes that collaborative leadership is positively related to communication effectiveness of principals in public senior secondary schools in Rivers State.

Research Question 2: What is the relationship between collaborative leadership and resource management effectiveness of principals in public senior secondary schools in Rivers State?

Table 2: Relationship between Collaborative Leadership and Resource management effectiveness of Principals

		Collaborative Leadership	Resource Management Effectiveness
Collaborative Leadership	Pearson Correlation	1	.796
	Sig. (2-tailed)	.	.000
	N	353	353
Resource management effectiveness	Pearson Correlation	.796	1
	Sig. (2-tailed)	.000	.
	N	353	353

Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Version Data Output (2026)

The result on Table 2 revealed that there is a strong and positive relationship between collaborative leadership and resource management effectiveness ($r = .796$, $p = .000$). This indicates that higher levels of collaborative leadership are associated with more effective management of school resources by principals. The finding further implies that collaborative leadership can promote shared ownership and

responsibility for school resources. When teachers participate in resource management, they may be more committed to the proper utilisation and protection of available facilities and materials. Thus, the study concludes that collaborative leadership has a strong and positive relationship with resource management effectiveness of principals in public senior secondary schools in Rivers State.

Research Question 3: What is the relationship between collaborative leadership and policy implementation in public senior secondary schools in Rivers State?

Table 3: Relationship between Collaborative Leadership and Policy Implementation

		Collaborative Leadership	Policy Implementation
Collaborative Leadership	Pearson Correlation	1	.808
	Sig. (2-tailed)	.	.000
	N	353	353
Policy Implementation	Pearson Correlation	.808	1
	Sig. (2-tailed)	.000	.
	N	353	353

Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Version Data Output (2026)

The result on Table 3 revealed that there is a very strong and positive relationship between collaborative leadership and policy implementation ($r = .808$, $p = .000$). This indicates that increased collaborative leadership is associated with improved implementation of educational policies in public senior secondary schools in Rivers State. Effective communication, consultation and information sharing can also reduce misunderstanding and resistance while encouraging staff commitment to policy execution. Therefore, it is concluded that collaborative leadership has a very strong and positive relationship with policy implementation in public senior secondary schools in Rivers State.

Test of Hypotheses

H₀₁: There is no significant relationship between collaborative leadership and communication effectiveness of principals in public senior secondary schools in Rivers State.

To test this hypothesis, the r-value of .824 obtained from Table 1 was subjected to t-transformation at the 0.05 level of significance with a critical value of ± 1.96 .

Table 4: t-Transformation Result on the Significant Relationship between Collaborative Leadership and Communication Effectiveness

Variables	N	Df	r-value	t-cal	t-crit.	LS	Decision
Collaborative Leadership	353	351	.824	27.25	± 1.96	0.05	H ₀₁ Rejected
Communication Effectiveness	353						Significant Relationship Exists

Source: Researcher's SPSS Data Output (2026)

The finding revealed a very strong, positive and statistically significant relationship between collaborative leadership and communication effectiveness of principals ($r = .824$, $p = .000$; $t = 27.25$, $df = 351$). Since the calculated t-value of 27.25 exceeds the critical value of ± 1.96 at the 0.05 significance level, the null hypothesis was rejected. This confirms that collaborative leadership is significantly related to principals' communication effectiveness. The result suggests that principals who encourage teacher participation, consultation, teamwork and open communication are better positioned to communicate school goals, policies, expectations and decisions effectively. Therefore, H₀₁ was rejected at the 0.05 level of significance, and it was concluded that there is a very strong, positive and significant relationship between collaborative leadership and communication effectiveness of principals in public senior secondary schools in Rivers State.

Ho₂: There is no significant relationship between collaborative leadership and resource management effectiveness of principals in public senior secondary schools in Rivers State.

To test this hypothesis, the r-value of .796 obtained from Table 2 was subjected to t-transformation at the 0.05 level of significance with a critical value of ± 1.96 .

Table 5: t-Transformation Result on the Significant Relationship between Collaborative Leadership and Resource Management Effectiveness

Variables	N	Df	r-value	t-cal	t-crit.	LS	Decision
Collaborative Leadership	353	351	.796	24.25	± 1.96	0.05	Ho ₂ Rejected
Resource Management Effectiveness	353						Significant Relationship Exists

Source: Researcher's SPSS Data Output (2026)

The finding revealed a strong, positive and statistically significant relationship between collaborative leadership and resource management effectiveness of principals ($r = .796$, $p = .000$; $t = 24.25$, $df = 351$). Since the calculated t-value of 24.25 is greater than the critical value of ± 1.96 at the 0.05 level of significance, the null hypothesis was rejected. This confirms that collaborative leadership is significantly related to effective resource management. The result suggests that involving teachers and other stakeholders in planning, decision-making and resource-related activities can improve the identification of resource needs, prioritisation, allocation, utilisation and monitoring. Therefore, Ho₂ was rejected at the 0.05 level of significance, and it was concluded that there is a strong, positive and significant relationship between collaborative leadership and resource management effectiveness of principals in public senior secondary schools in Rivers State.

Ho₃: There is no significant relationship between collaborative leadership and policy implementation in public senior secondary schools in Rivers State.

To test this hypothesis, the r-value of .808 obtained from Table 6 was subjected to t-transformation at the 0.05 level of significance with a critical value of ± 1.96 .

Table 6: t-Transformation Result on the Significant Relationship between Collaborative Leadership and Policy Implementation

Variables	N	Df	r-value	t-cal	t-crit.	LS	Decision
Collaborative Leadership	353	351	.808	25.69	± 1.96	0.05	Ho ₇ Rejected
Policy Implementation	353						Significant Relationship Exists

Source: Researcher's SPSS Data Output (2026)

Table 6 shows a significant relationship between collaborative leadership and policy implementation in public senior secondary schools in Rivers State. The calculated t-value of 25.69 exceeded ± 1.96 at 0.05 significance level and 351 degrees of freedom; hence, HO₃ was rejected. The Pearson correlation result ($r = .808$, $p = .000$) also indicates a very strong, positive and significant relationship. The finding implies that collaborative leadership facilitates effective policy implementation through staff participation, clear communication, shared responsibility, and cooperation.

Discussion of Findings

The result for Research Question 1 on Table 1, which sought to determine the relationship between collaborative leadership and communication effectiveness of principals in public senior secondary schools in Rivers State, showed a very strong positive relationship, with a Pearson Product Moment Correlation coefficient of $r = .824$. This indicates that increased collaborative leadership is associated with improved communication among principals, teachers, and other stakeholders. The finding suggests that participation, consultation, active listening, information sharing, and regular feedback can promote

clearer and more effective communication. This agrees with Northouse (2022), who identified communication as an important mechanism through which leaders influence followers, and Kouzes and Posner (2023), who emphasized shared vision and stakeholder participation in effective leadership. In the Rivers State setting, LongJohn (2022) examined information sharing among secondary school principals in Port Harcourt metropolis in the wake of COVID-19, and that study draws attention to how much the effectiveness of principals depends on the flow of information within and between schools.

The result for Hypothesis 1 showed a calculated t -value of 27.25, which exceeded the critical value of ± 1.96 at the 0.05 level of significance and 351 degrees of freedom. With $r = .824$ and $p = .000$, the null hypothesis was rejected, indicating a statistically significant relationship between collaborative leadership and communication effectiveness. This finding is consistent with Majeed et al. (2021) and Ajayi (2021), who reported that participatory leadership, trust, and effective communication enhance collaboration and administrative effectiveness. Since much of the communication in schools now passes through digital channels, the competence of teachers also matters, and Ikechukwu et al. (2026) related teachers' digital competence to effective classroom instructional delivery in senior secondary schools in Port Harcourt Metropolis. The finding therefore indicates that collaborative leadership is significantly associated with communication effectiveness among principals in public senior secondary schools in Rivers State.

The result for Research Question 2 on Table 2 showed a strong positive relationship between collaborative leadership and resource management effectiveness, with $r = .781$. This suggests that principals who involve teachers and other stakeholders in planning, allocating, utilizing, and monitoring school resources are more likely to achieve effective resource management. The finding is consistent with Northouse (2022) and Yukl (2020), who emphasized participation, consultation, delegation, and cooperation in improving organizational decisions and performance. It also agrees with Bryson et al. (2025), Abson et al. (2024), Chamberlin et al. (2024), and Curşeu and Schruijer (2024), who associated collaborative or shared leadership with resource coordination, stakeholder engagement, and collective problem-solving.

The result for Hypothesis 2 revealed a calculated t -value of 23.50, which was greater than ± 1.96 at the 0.05 level of significance and 351 degrees of freedom. The corresponding $r = .781$ and $p = .000$ led to the rejection of the null hypothesis, indicating a statistically significant relationship between collaborative leadership and resource management effectiveness. The finding implies that involving teachers, vice-principals, heads of departments, and other stakeholders in resource-related decisions can promote transparency, shared responsibility, effective utilization, and accountability. This agrees with Abson et al. (2024), Chamberlin et al. (2024), and van Osch et al. (2024), who reported that shared leadership facilitates resource coordination, collaborative decision-making, and effective work processes.

The result for Research Question 3 on Table 3 showed a very strong positive relationship between collaborative leadership and policy implementation, with $r = .808$. This indicates that stronger collaborative leadership is associated with more effective implementation of educational policies. The finding suggests that involving teachers and other stakeholders in policy interpretation, planning, implementation, problem-solving, and monitoring can promote shared understanding, ownership, coordination, and commitment. This agrees with Patterson et al. (2021), who found that distributed leadership supported instructional reform implementation, and Cai (2026), who emphasized teacher participation, collective sensemaking, organizational culture, resources, and professional networks in school-level policy enactment. Dokubo et al. (2020) similarly found in Rivers State that the participation of youths influenced the sustainability of community development projects, which supports the view that people are more committed to carrying through programmes in which they have been involved.

The result for Hypothesis 3 showed a calculated t -value of 25.69, exceeding the critical value of ± 1.96 at the 0.05 level of significance and 351 degrees of freedom. Since $r = .808$ and $p = .000$, the null hypothesis was rejected, indicating a statistically significant relationship between collaborative leadership and policy implementation. The finding is consistent with Patterson et al. (2021), Nnamezie and Ayodele (2025), Hongzhuo (2024), and Hafeez and Akhtar (2022), whose findings linked distributed or collaborative leadership with stakeholder participation, teacher autonomy, organizational culture, school improvement, and successful policy processes. Overall, the result indicates that collaborative leadership is significantly associated with effective policy implementation in public senior secondary schools in Rivers State.

Conclusion

Based on the findings, the study concluded that Collaborative Leadership has a strong, positive and significant relationship between communication, resource management, and policy implementation effectiveness of principals in public senior secondary schools in Rivers State.

Recommendations

Based on the findings of the study, the researcher recommended that:

1. Principals of public senior secondary schools in Rivers State should adopt and strengthen collaborative leadership practices by creating regular opportunities for teachers to participate in school administration, planning and decision-making. This will promote open communication, mutual understanding and stronger cooperation between principals and teachers.
2. Principals should involve teachers and relevant stakeholders in the planning, allocation, utilization and monitoring of school resources. Participatory resource management effectiveness should be encouraged to promote transparency, reduce wastage and ensure that available resources are directed towards priority areas that support effective teaching and learning.
3. Principals should involve teachers in the implementation of educational and school-based policies. Policy expectations should be clearly communicated, and teachers should be given opportunities to seek clarification, provide feedback and identify implementation challenges. This will enhance understanding, ownership and effective translation of policies into practice.

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