



Principals' Collaborative and Conflict Resolution Leadership Qualities as Predictors of Teachers' Job Productivity in Senior Secondary Schools in Adamawa State, Nigeria

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ABSTRACT

The study examined principals' collaborative and conflict resolution leadership qualities as predictors of teachers' job productivity in Senior Secondary Schools in Adamawa State, Nigeria. The study three objectives, three research questions, and three null hypotheses. A predictive correlational research design was adopted. The population of the study comprised all principals and teachers in public post-basic schools across the five education zones of Adamawa State, out of which 873 respondents (202 principals and 671 teachers) were selected using a multi-stage sampling technique. Three adapted instruments titled "Principals' Collaborative Leadership Quality Questionnaire (PCLQQ), Principals' Conflict Resolution Leadership Quality Questionnaire (PCRLQQ) and Teachers' Job Productivity Questionnaire (TJPQ)" were used for data collection. The three instruments yielded a reliability co-efficients of; 0.83, 0.91 and 0.76 for PCLQQ, PCRLQQ and TJPQ. Data collected were analyzed using descriptive statistics of mean and standard deviation, while linear and multiple regressions were used to test hypotheses at the 0.05 level of significance. The analysis showed that principals' collaborative leadership quality ($F(1,200) = 159.015$, $p < 0.05$, $R^2 = 0.443$), and conflict resolution leadership quality ($F(1,200) = 145.564$, $p < 0.05$, $R^2 = 0.421$) significantly predicted teachers' job productivity. the findings of the study reveal that principals' leadership qualities—specifically collaboration, and conflict resolution—significantly predicted teachers' productivity, $F(2, 199) = 67.877$, $p < 0.05$, with $R = 0.761$ and $R^2 = 0.580$. The finding revealed that two predictors—collaborative leadership quality ($\beta = 0.170$, $p < 0.05$), and conflict resolution leadership quality ($\beta = 0.169$, $p < 0.05$)—significantly predict teachers' job productivity. This suggests that principals who prioritize professional development, collaboration, and effective conflict resolution considerably boost teachers' job productivity. Based on the findings, it can be inferred that principals exhibited moderate to high levels of leadership qualities, particularly in collaboration and conflict resolution, both of which had a significant positive influence on teachers' productivity. It was recommended that principals should promote teamwork and collaborative problem-solving among teachers through regular staff meetings, joint projects, and shared professional learning communities.

Keywords: Principals' Collaborative Leadership Quality, Principals' Conflict Resolution Leadership Quality, and Teachers' Job Productivity.

INTRODUCTION

Education is a fundamental pillar of national growth. It plays a crucial role in societal progress by empowering individuals with social recognition, authority, and power, leading to a prosperous and fulfilling life. In Nigeria, formal education is provided through schools to foster desirable changes in individuals' attitudes, behaviors, and skills for national development (Dunu, 2023). Central to the success of these educational objectives is teachers' job productivity, which is identified as a key criterion for measuring school effectiveness. Teachers' productivity can have a significant positive impact on the realization of educational goals, as motivated and well-trained teachers can foster better learning outcomes, enhance students' skills, and instill essential values. Conversely, low teachers' job productivity due to factors such as inadequate training, poor remuneration, lack



of motivation can undermine the quality of education, leading to disengaged students, sub-optimal learning environments, and hindered national development (Dunu, 2023).

Thus, teachers' job productivity directly influences the effectiveness of the education system and by extension, the development of the nation. The issue of poor teachers' job performance in schools presents a significant challenge to the quality of education and student outcomes. While there may be various factors contributing to this problem, some possible reasons for the poor job productivity of teachers in Adamawa State may include limited school resources, high student-teacher ratio, inadequate management support for teachers, low motivation, poor morale and inadequate teachers' professional development. This may have contributed to some teachers' poor job performance in Adamawa State's Post-Basic Schools. Nevertheless, there is a lack of empirical evidence to back up this claim. Consequently, this study seeks to principals' managerial competencies and leadership qualities as predictors of teachers' job productivity in Post Basic Schools in Adamawa State, Nigeria. Teachers' job productivity pertains to their effectiveness in carrying out their core responsibilities of teaching and facilitating learning, along with their overall attitude towards the teaching profession and related activities.

Teachers' job productivity is defined as the successful completion of assigned tasks especially as it relates to pedagogical delivery. In Nigeria, assessing teachers' job productivity involves examining their attitude, level of dedication, ability to handle complex situations, and the intentionality of their work (Chiomalbezem, 2024). According to a study by Zhang and Zhou (2023), Teachers' job productivity can be evaluated based on several factors, including adherence to the curriculum, punctuality, conflict management skills, student's discipline and efficient use of physical facilities (Oviawe, 2016). Low teacher productivity may be evident in incomplete curriculum coverage, frequent teacher lateness to work, conflicts, student truancy, poor physical facilities, and inefficient resource use.

Although the roles of principals as managers and school leaders are demanding, it is crucial for them to consistently excel in their duties. While principals utilize their knowledge and experience to enhance teacher's job productivity, they should also adopt the managerial competencies and leadership qualities highlighted in this study to ensure the overall success of teachers (Ugorji & Kagbaranen, 2022). Teacher's job productivity is not only about delivering instruction but also involves connecting learning activities to the developmental processes of students, addressing their immediate interests and needs (Yashaswini & Sarvamangala, 2022). Teachers engage in various activities such as teaching, guiding, and inspiring students, helping them achieve academically and fulfilling other classroom and school-related responsibilities. Effective school leadership, therefore, requires principals to support teachers in these multifaceted roles, thereby contributing to both student development and school success (Hallinger, 2011).

However, recent observations indicate a marked decline in teacher enthusiasm and professional dedication compared to previous years (Abdulkarim & Mohammed, 2022; Bello & Okonkwo, 2023). This growing concern about professional laxity has prompted education scholars to emphasize the critical role of principals' managerial practices in reshaping teacher attitudes and fostering positive work ethics (Nnebedum & Akinfolarin, 2017; Okeke & Eze, 2021). Contemporary studies have documented troubling patterns of behaviour, including teachers who maintain punctuality in clocking-in but frequently leave early to attend to personal matters, demonstrating compromised professional commitment (Ibrahim, Abdullahi & Yusuf, 2022). These findings align with earlier research by Asiyai (2017) that identified persistent issues of absenteeism, persistent lateness, unauthorized early departures, and classroom truancy among public secondary school teachers. More recent investigations suggest these problems have intensified post-pandemic, with teachers showing decreased engagement in both classroom instruction and extracurricular activities (Umar & Hassan, 2023). By strengthening these leadership qualities, principals can make informed decisions, foster trust within the school community, and create an environment conducive to student and staff success (Day *et al.*, 2021). An essential aspect of this development is collaborative leadership, which emphasizes teamwork, shared decision-making, and collective responsibility (Harris & Jones, 2022).

Collaborative leadership quality refers to the ability of school leaders to foster a cooperative, inclusive, and team-oriented environment where all stakeholders teachers, staff, students, and parents are encouraged to contribute ideas, make decisions collectively, and work together toward shared goals (Harris & Jones, 2019;



Leithwood, 2020). This leadership approach significantly enhances teachers' job productivity by providing them with opportunities to develop their potential, abilities, and skills, thereby contributing to the school's overall excellence. In such a framework, all school staff are granted equal authority and responsibility in resolving issues and making decisions, ensuring that organizational goals are achieved collaboratively (Fullan, 2014). Principals who cultivate strong collaborative leadership foster a culture of trust and cooperation, empowering teachers to contribute meaningfully to school improvement (García-Martínez *et al.*, 2022). This, in turn, enhances instructional innovation, teacher job productivity, and student achievement (Bradshaw *et al.*, 2023). Conversely, a lack of collaboration can lead to staff disengagement, poor communication, and reduced motivation, ultimately hindering school's progress and success (OECD, 2023). However, for collaboration to succeed, principals must also possess strong conflict resolution skills. In situations where disagreements or tensions arise, the ability to mediate conflicts, facilitate constructive discussions, and maintain a focus on the school's goals is essential (Garcia *et al.*, 2021). Effective conflict resolution complements collaborative leadership by ensuring that differences do not disrupt the harmony or productivity of the school community (Johnson & Johnson, 2021).

Principals' conflict resolution leadership quality refers to the ability of school leaders to effectively identify, manage, and resolve disputes or disagreements that arise within the school community, whether between staff, students, parents, or other stakeholders (Johnson & Johnson, 2021). This quality involves employing strategies such as active listening, negotiation, mediation, and finding mutually beneficial solutions to conflicts while maintaining a focus on the broader goals of the school (Leithwood, 2018). Principals with strong conflict resolution skills are able to create a positive and productive school environment by addressing issues promptly and fairly, fostering open communication, and ensuring that conflicts do not hinder the school's functioning (Leithwood, 2018). When conflicts are handled with integrity, it not only resolves the immediate issues but also strengthens the overall culture of respect and accountability within the school, ensuring that all stakeholders feel valued and supported (Fullan, 2014).

Globally, the issue of low teachers' job productivity is concerning as it impedes the development of a competent workforce capable of addressing both local and global challenges. Educational underachievement in one region has broader implications, as it undermines the overall quality of education in the country, thereby affecting Nigeria's global standing in international education assessments. Given the significance of education in achieving the United Nations Sustainable Development Goals, any decline in teachers' job productivity could hinder progress toward these global objectives.

The problem, therefore, lies in the urgent need to investigate the factors contributing to the declining productivity of teachers in Senior Secondary Schools in Adamawa State, Nigeria. Specifically, the role of principals' managerial competencies and leadership qualities as predictors of teachers' job productivity needs exploration, as these factors may hold the key to reversing the trend and enhancing educational outcomes in the region. Therefore, this study investigated principals' collaborative and conflict resolution leadership qualities as predictors of teachers' job productivity in Senior Secondary Schools in Adamawa State, Nigeria.

Purpose of the Study

This study investigated principals' collaborative and conflict resolution leadership qualities as predictors of teachers' job productivity in Senior Secondary Schools in Adamawa State, Nigeria. Specifically, the study sought to examine;

- 1) Principals' collaborative leadership quality as a predictor of teachers' job productivity in Senior Secondary Schools in Adamawa State, Nigeria.
- 2) Principals' conflict resolution leadership quality as a predictor of teachers' job productivity in Senior Secondary Schools in Adamawa State, Nigeria.
- 3) Principals' collaborative and conflict resolution leadership qualities as predictors of teachers' job productivity 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' collaborative leadership quality in Senior Secondary Schools in Adamawa State, Nigeria?
2. What is the level of Principals' conflict resolution leadership quality in Senior Secondary Schools in Adamawa State, Nigeria?
3. What is the level of teachers' productivity in Senior Secondary Schools in Adamawa State, Nigeria?

Hypotheses

The following hypotheses were formulated to guide the study and were tested at 0. 05 Alpha level of significance:

H₀₁: Principals' collaborative leadership quality does not significantly predict teachers' job productivity in Senior Secondary Schools in Adamawa State, Nigeria.

H₀₂: Principals' conflict resolution leadership quality does not significantly predict teachers' job productivity in Senior Secondary Schools in Adamawa State, Nigeria.

H₀₃: Principals' collaborative and conflict resolution leadership qualities do not significantly predict teachers' job productivity in Senior Secondary Schools in Adamawa State, Nigeria.

METHODOLOGY

The researchers employed predictive correlational research design. This study was carried out in Adamawa State, Nigeria. The study's population comprises 7,113 teachers and principals from Post Basic Schools in Adamawa State (Adamawa State Post Primary School Management Board, 2024). The study sampled 873 respondents (671 teachers and 202 principals). Sample sizes followed Creswell and Creswell's (2023) guideline-based rules of thumb (e.g., 10% for a few thousands; 50% for a few hundreds), applied to populations of 6,709 teachers (10% → 671) and 404 principals (50% → 202). A multi-stage sampling strategy was used across five educational zones (Numan, Yola, Ganye, Gombi, Mubi). First, 202 Senior Secondary Schools were chosen by simple random sampling (hat-and-draw). Then proportionate sampling allocated teachers and principals to zones: teachers — Numan 110, Yola 207, Ganye 66, Gombi 177, Mubi 111 (total 671); principals — Numan 41, Yola 31, Ganye 34, Gombi 44, Mubi 52 (total 202). Within those allocations, simple random sampling selected individual teachers and principals to ensure equal selection probability, while principals were also purposively identified at each sampled school (one principal per school) because of their central managerial role. Stratification was used to improve precision and reduce estimation error. Three adapted instruments titled "Principals' Collaborative Leadership Quality Questionnaire (PCLQQ), Principals' Conflict Resolution Leadership Quality Questionnaire (PCRLQQ) and Teachers' Job Productivity Questionnaire (TJPQ)" were used for data collection. The three instruments yielded a reliability co-efficients of; 0.83, 0.91 and 0.76 for PCLQQ, PCRLQQ and TJPQ. Before the instruments were administered, a letter of introduction bearing the endorsement of the Head of the Department of Physical Sciences Education was obtained and presented to the principals of the participating schools. That communiqué reassured respondents that their answers were protected and held in strict confidence. The data were analysed using descriptive statistics of mean and standard deviation to answer the research questions. While, simple linear and multiple-regression analyses were used in testing the null hypotheses.

RESULTS

Three research questions were answered using descriptive statistics of mean and standard deviation, while the three null hypotheses were tested at 0.05 level of significance using simple linear and multiple-regression



analyses.

Research Question 1: What is the level of principals' collaborative leadership quality in Post Basic Schools in Adamawa State, Nigeria?

Table 1: Mean and Standard Deviation of Level of Principals' Collaborative Leadership Quality in Post Basic Schools

S/N	Item (n = 671)	Mean	S. D	Remark
1	Developing a shared vision that aligns with school objectives	3.25	0.64	ML
2	Actively involving teachers in the decision-making process regarding school policies	3.10	0.62	ML
3	Engaging teachers in the creation of long-term academic goals for the school	3.19	0.64	ML
4	Promoting a cooperative work environment where teachers collaborate across grade levels, subjects, and departments	3.12	0.64	ML
5	Encouraging team-based approaches to problem-solving within the school	3.38	0.63	ML
6	Facilitating regular collaboration opportunities (meetings, workshops) to share best practices to improve instruction	3.40	0.62	ML
7	Supporting teachers to take leadership roles within their respective departments or areas of expertise	3.16	0.62	ML
8	Establishing peer collaboration programs to foster professional growth	3.25	0.64	ML
9	Promoting shared leadership by allowing teachers to take ownership of school projects	3.32	0.63	ML
10	Creating a school culture that values teamwork among all staff members	3.12	0.63	ML
	Grand Mean	3.23	0.63	ML

The results of analysis in Table 1 show mean ratings ranging from 3.10 to 3.40, with standard deviations between 0.62 and 0.64, reflecting moderate variability. The highest mean (3.40) relates to facilitating collaboration among staff, while the lowest (3.10) concerns involving teachers in school decision-making. The grand mean of 3.23 (SD = 0.63) indicates a moderate level of collaborative leadership quality, suggesting that principals encourage teamwork and shared leadership to some extent but need to deepen participatory collaboration.

Research Question 2: What is the level of Principals' conflict resolution leadership quality in Post Basic Schools in Adamawa State, Nigeria?

Table 2: Mean and Standard Deviation of Level of Principals' Conflict Resolution Leadership Quality in Post Basic Schools

S/N	Item	Mean	S. D	Remark
1	Actively promoting open communication among school personnel through active listening	3.19	0.64	ML
2	Establishing a climate of trust where teachers feel valued through open	2.98	0.65	ML



	communication			
3	Addressing conflicts among teachers in a timely yet effective manner through collaborative problem-solving	2.93	0.62	ML
4	Meditating disputes among teachers with a focus on understanding each party's perspective to facilitate resolution	2.98	0.65	ML
5	Fostering a collaborative approach to resolving disagreements and promoting peaceful solutions	3.02	0.64	ML
6	Encouraging a culture of empathy, where diverse viewpoints are respected by all members of the school community	3.00	0.65	ML
7	Providing guidance to teachers who are in conflict, to help them work through differences productively	3.22	0.62	ML
8	Making concessions to find a mutually acceptable solution	3.08	0.63	ML
9	Involving a neutral third party to facilitate the conflict resolution process through mediation	2.92	0.64	ML
10	Considering arbitration where a third party makes a binding decision	3.14	0.64	ML
	Grand Mean	3.05	0.64	ML

The results of analysis in Table 2 indicate that the mean ratings ranged from 2.92 to 3.22, with standard deviations between 0.62 and 0.65, signifying relative consistency among responses. The highest mean (3.22) was for providing guidance to teachers in conflict, while the lowest (2.92) related to involving a neutral third party in mediation. The grand mean of 3.05 (SD = 0.64) reveals a moderate level of conflict resolution leadership quality, meaning principals moderately manage conflicts but could improve in mediation and collaborative problem-solving techniques.

Research Question 3: What is the level of teachers' productivity in Post Basic Schools in Adamawa State, Nigeria?

Table 3: Mean and Standard Deviation of Level of Teachers' Productivity in Post Basic Schools

S/N	Item (n = 202)	Mean	S. D	Remark
1	Delivers high-quality, engaging lessons that cater to students' learning needs through adequate lesson plan planning	3.59	0.68	HL
2	Assesses students' progress accurately by using assessment data to improve instructional practices	3.61	0.63	HL
3	Maintains classroom discipline effectively by creating a conducive learning environment	3.73	0.63	HL
4	Promotes an inclusive learning environment that encourages student engagement through active participation	3.48	0.68	ML
5	Demonstrates a high level of commitment to continuous professional development	3.73	0.64	HL
6	Collaborates effectively with colleagues by sharing resources	3.62	0.65	HL



7	Actively participates in school activities beyond the classroom, contributing to the development of the school community	3.77	0.66	HL
8	Uses effective classroom management techniques to ensure productive teaching-learning process	3.74	0.66	HL
9	Demonstrates responsibility in fulfilling administrative duties (such as grading, record-keeping, etc).	3.83	0.62	HL
10	Continuously seeks feedback from students so as to refine instructional approaches improved teaching effectiveness	3.61	0.67	HL
Grand Mean		3.67	0.65	HL

The results of analysis in Table 3 indicate mean scores ranging from 3.48 to 3.83, with standard deviations between 0.62 and 0.68, reflecting high consistency. The highest mean (3.83) was for teachers' responsibility in administrative duties, while the lowest (3.48) pertained to promoting inclusive learning environments. The grand mean of 3.67 ($SD = 0.65$) signifies a high level of teachers' productivity, showing that teachers in post-basic schools in Adamawa State are highly committed, effective, and engaged in enhancing student learning outcomes.

H01: Principals' collaborative leadership quality does not significantly predict teachers' job productivity in Post Basic Schools in Adamawa State, Nigeria.

Table 4a: ANOVA Results of Principals' Collaborative Leadership Quality as Predictor of Teachers' Job Productivity in Post Basic Schools

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.401	1	25.401	159.015	.000 ^b
	Residual	31.948	200	.160		
	Total	57.349	201			
a. Dependent Variable: Teacher's Job Productivity						
b. Predictors: (Constant), Principals' Collaborative Leadership Quality						

The ANOVA result in Table 4a shows that principals' collaborative leadership quality significantly predicts teachers' job productivity in post-basic schools in Adamawa State. The analysis yielded $F(1, 200) = 159.015, p < 0.05$, indicating that the regression model is statistically significant. This implies that principals' ability to foster teamwork and collaboration among staff contributes meaningfully to explaining variations in teachers' job productivity. Therefore, the null hypothesis which states that principals' collaborative leadership quality does not significantly predict teachers' job productivity is rejected.

Table 4b: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.666 ^a	.443	.440	.39968
a. Predictors: (Constant), Principals' Collaborative Leadership Quality				

The model summary in Table 4b shows an R value of 0.666, indicating a strong positive relationship between principals' collaborative leadership quality and teachers' job productivity. The R^2 value of 0.443 suggests that



44.3% of the variance in teachers' job productivity can be explained by principals' collaborative leadership quality, while the remaining 55.7% is attributed to other factors not included in the model. The adjusted R^2 value of 0.440 confirms the reliability and stability of the model.

Table 4c: Coefficients of Beta

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	1.438	.179		8.016	.000
	Principals' Collaborative Leadership Quality	.685	.054	.666	12.610	.000
a. Dependent Variable: Teacher's Job Productivity						

As presented in Table 4c, the unstandardized coefficient (B) is 0.685, and the standardized beta coefficient is 0.666, indicating that a one-unit increase in principals' collaborative leadership quality results in a 0.685-unit increase in teachers' job productivity. The t -value of 12.610 is significant at $p < 0.05$, confirming that principals' collaborative leadership quality has a strong and positive influence on teachers' job productivity. This finding implies that principals who promote collaboration and teamwork among teachers enhance their overall productivity.

H₀₂: Principals' conflict resolution leadership quality does not significantly predict teachers' job productivity in Post Basic Schools in Adamawa State, Nigeria.

Table 5a: ANOVA Results of Principals' Conflict Resolution Leadership Quality as Predictor of Teachers' Job Productivity in Post Basic Schools

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.157	1	24.157	145.564	.000 ^b
	Residual	33.192	200	.166		
	Total	57.349	201			
a. Dependent Variable: Teacher's Job Productivity						
b. Predictors: (Constant), Principals' Conflict Resolution Leadership Quality						

The result in Table 5a reveals that principals' conflict resolution leadership quality significantly predicts teachers' job productivity in post-basic schools. The ANOVA result indicates $F(1, 200) = 145.564$, $p < 0.05$, meaning that the model is statistically significant. This shows that principals' ability to manage and resolve conflicts effectively has a significant impact on improving teachers' job productivity. Hence, the null hypothesis is rejected.

Table 16b: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.649 ^a	.421	.418	.40738
a. Predictors: (Constant), Principals' Conflict Resolution Leadership Quality				



In Table 5b, the correlation coefficient (R) is 0.649, demonstrating a strong positive relationship between principals' conflict resolution leadership quality and teachers' job productivity. The R^2 value of 0.421 reveals that 42.1% of the variance in teachers' productivity is explained by principals' conflict resolution leadership quality. The adjusted R^2 of 0.418 suggests that the model is stable and reliable in predicting the dependent variable.

Table 5c: Coefficients of Beta

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	1.627	.172		9.461 .000
	Principals' Conflict Resolution Leadership Quality	.672	.056	.649	12.065 .000
a. Dependent Variable: Teacher's Job Productivity					

Table 5c shows an unstandardized coefficient (B) of 0.672 and a standardized beta of 0.649. This implies that a one-unit increase in principals' conflict resolution leadership quality will lead to a 0.672-unit increase in teachers' job productivity. The t -value of 12.065 is significant at $p < 0.05$, confirming that effective conflict management by principals promotes harmony and higher productivity among teachers.

H03: Principals' collaborative and conflict resolution leadership qualities do not significantly predict teachers' job productivity in Post Basic Schools in Adamawa State, Nigeria.

Table 6a: ANOVA Results of Principals' Leadership Qualities as Predictors of Teachers' Job Productivity in Post Basic Schools

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.235	2	8.309	67.877	.000 ^b
	Residual	24.114	199	.122		
	Total	57.349	201			
a. Dependent Variable: Teacher's Job Productivity						
b. Predictors: (Constant), Principals' Conflict Resolution Leadership Quality, Principals' Collaborative Leadership Quality						

The ANOVA result in Table 6a reveals that principals' collaboration and conflict resolution leadership qualities jointly predict teachers' job productivity in post-basic schools. The result shows $F(2, 199) = 67.877, p < 0.05$, indicating that the model is statistically significant. This implies that the combined influence of these leadership qualities has a meaningful impact on teachers' job productivity.

Table 6b: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.761 ^a	.580	.571	.34987
a. Predictors: (Constant), Principals' Conflict Resolution Leadership Quality, Principals' Collaborative Leadership Quality				



The model summary in Table 6b shows an R value of 0.761, denoting a very strong correlation between principals' collaborative and conflict resolution leadership qualities and teachers' job productivity. The R^2 value of 0.580 indicates that 58% of the variation in teachers' productivity is explained by the combined effect of the principals' leadership qualities of collaboration and conflict resolution. The adjusted R^2 of 0.571 suggests that the model is both stable and reliable for predicting teachers' job productivity.

Table 6c: Coefficients of Beta

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
1	(Constant)	.745	.184		4.056 .000
	Principals' Collaborative Leadership Quality	.175	.080	.170	2.181 .030
	Principals' Conflict Resolution Leadership Quality	.175	.077	.169	2.281 .024

a. Dependent Variable: Teacher's Job Productivity

As shown in Table 6c, two predictors—collaborative leadership quality ($\beta = 0.170, p < 0.05$), and conflict resolution leadership quality ($\beta = 0.169, p < 0.05$)—significantly predict teachers' job productivity. This suggests that principals who prioritize professional development, collaboration, and effective conflict resolution considerably boost teachers' job productivity. This finding revealed that collaborative leadership quality contributed the most in predicting teachers job productivity with a ($\beta = 0.170, p < 0.05$).

Summary of Findings

1. The finding of the study reveals that principals exhibited a moderate level of collaborative leadership quality (grand mean = 3.23, SD = 0.63). This leadership quality significantly predicted teachers' productivity, $F(1, 200) = 159.015, p < 0.05$, with $R = 0.666$ and $R^2 = 0.443$.
2. The finding of the study reveals that principals demonstrated a moderately strong conflict resolution leadership quality (grand mean = 3.05, SD = 0.64), which significantly predicted teachers' productivity, $F(1, 200) = 145.564, p < 0.05$. The results show a correlation of $R = 0.649$ and $R^2 = 0.421$.
3. Finally, the findings of the study reveal that principals' leadership qualities—specifically collaboration, and conflict resolution—significantly predicted teachers' productivity, $F(2, 199) = 67.877, p < 0.05$, with $R = 0.761$ and $R^2 = 0.580$.

DISCUSSION OF FINDINGS

The first finding of the study reveals that principals exhibited a moderate level of collaborative leadership quality. Analysis in Table 1 indicates mean scores from 3.10 to 3.40 with standard deviations of 0.62–0.64, showing moderate variability. The highest mean (3.40) pertains to promoting staff collaboration, while the lowest (3.10) relates to involving teachers in school decision-making. The overall mean of 3.23 (SD = 0.63) points to a moderate level of collaborative leadership, implying principals somewhat foster teamwork and shared leadership but should strengthen participatory collaboration. This finding supports Etudor-Eyo et al. (2023), who reported that collaborative administrative practices and leadership predict teachers' job performance. The moderate level of professional-development leadership here suggests principals recognize its importance but are limited by resources, time, or institutional support. Still, its strong effect on productivity shows schools benefit when principals invest in ongoing staff capacity—via professional learning communities, workshops, and peer mentoring—to raise competence and commitment. This aligns with



transformational leadership and with Murod and Shohib (2022), who found collaborative leadership and job satisfaction jointly influence teacher performance.

The second finding of the study reveals that principals demonstrated a moderately strong conflict resolution leadership quality. Table 2's analysis shows mean scores ranging from 2.92 to 3.22, with standard deviations of 0.62 to 0.65, indicating fairly consistent responses. The highest mean (3.22) pertained to offering guidance to teachers involved in conflict, while the lowest (2.92) concerned engaging a neutral third party for mediation. The overall mean of 3.05 ($SD = 0.64$) points to a moderate level of conflict-resolution leadership, implying that principals manage conflicts moderately but could improve in mediation and collaborative problem-solving. This concurs with Maxwell and Member (2024), who found that communication, negotiation, collaboration, and counselling/support by principals improve teachers' service delivery in public senior secondary schools. It also aligns with Oliech (2023) that unresolved conflicts harm learning (antagonism, transfers, disengagement) and with the observed moderate, significant link between conflict management and teacher performance ($r = 0.439$, $p = 0.000$), as well as Edet et al. (2017), who found that cause-identification and integration strategies relate significantly to classroom effectiveness, discipline, and student supervision.

The study found that principals' leadership—particularly in professional development, collaboration, and conflict resolution—significantly predicts teacher productivity, corroborating Etudor-Eyo et al. (2023). A moderate level of support suggests principals promote growth but face limits from funding, time, or institutional backing. The strong effect of development leadership highlights the value of capacity-building (peer mentoring, workshops, learning communities). Results align with evidence from Nigeria, Kenya, Indonesia, Pakistan, and the Philippines; minor discrepancies (e.g., Murod & Shohib, 2022; Go & Eslabon, 2024) likely reflect contextual or cultural differences. Overall, effective school leadership is essential for sustained teacher performance and quality education.

CONCLUSION

Based on the findings, it can be inferred that principals exhibited moderate to high levels of leadership qualities, particularly in collaboration and conflict resolution, both of which had a significant positive influence on teachers' productivity. The findings further revealed that teachers in the study area generally displayed a high level of productivity, suggesting that leadership practices of principals played an important role in fostering effective teacher performance.

Limitations

The research relies solely on self-reported survey data (which solely relied on the use of structured questionnaire), which could introduce bias, particularly social desirability bias, as respondents (principals and teachers) may overstate their practices (curricula and extra-curricular activities) or classroom effectiveness. Although, the study used regression analysis (simple linear and multiple-regression analysis), it does not control for other potential confounding variables, such as; teacher experience, workload, training, or school size, which might influence job effectiveness. Despite the above limitations, the study was able to reduce social desirability bias using forced-choice items, through randomized response technique via self-administration of the questionnaires.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made:

1. Principals should promote teamwork and collaborative problem-solving among teachers through regular staff meetings, joint projects, and shared professional learning communities.
2. Educational management training programmes should include modules on conflict resolution and emotional intelligence to enable principals to handle staff disputes constructively and maintain harmony in schools.



3. Policymakers should integrate leadership development courses (specifically, on collaboration and conflict resolution qualities) into principal certification and promotion requirements to strengthen leadership qualities that directly enhance teacher performance and school outcomes.

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