

The impact of leadership styles on teacher performance and student outcomes

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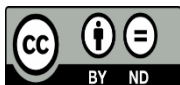
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ABSTRACT

This study examined the impact of leadership styles on teacher performance and student outcomes in secondary schools in the Philippines. Data were collected from 28 school leaders, 84 teachers, and student performance records of 110 learners across both public and private institutions, with respondents distributed across urban and rural contexts. Leadership styles were measured using the Multifactor Leadership Questionnaire (MLQ), teacher performance was assessed through the Teacher Performance Appraisal Scale, and student outcomes were analyzed using achievement scores and engagement surveys. Findings revealed that transformational leadership was the most dominant style among principals ($M = 3.89$, $SD = 0.45$), followed by transactional leadership ($M = 3.21$, $SD = 0.51$), while laissez-faire leadership ranked lowest ($M = 2.14$, $SD = 0.63$). Correlation and regression analyses demonstrated that transformational leadership had a significant positive relationship with both teacher performance ($r = .56$, $\beta = .48$, $p < .01$) and student outcomes ($r = .43$, $\beta = .39$, $p < .01$). Transactional leadership was positively related to teacher performance ($r = .29$, $\beta = .21$, $p < .05$) but showed no significant predictive effect on student achievement. Conversely, laissez-faire leadership was negatively correlated with both teacher performance and student outcomes. ANOVA results further revealed that private school teachers reported higher instructional delivery scores than public school teachers ($F(1,82) = 4.36$, $p < .05$), while no significant differences were found between urban and rural schools in terms of student achievement. These findings suggest that transformational leadership plays a pivotal role in enhancing teacher commitment, instructional quality, and student achievement. The results highlight the importance of leadership development programs that emphasize inspirational and supportive leadership practices while

discouraging passive, laissez-faire approaches. Policymakers and educational stakeholders should consider strengthening leadership training, resource allocation, and support systems to promote equitable and effective education across diverse school settings.



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1. Introduction

Leadership in schools is widely recognized as a central lever for improving teaching quality and student learning. While curriculum standards, resources, and accountability systems shape what schools do, it is leadership that orchestrates how these elements translate into day-to-day practice in classrooms. Over the past four decades, scholarship has moved beyond a single, principal-centric view to examine how different leadership styles—such as transformational, instructional, distributed, and transactional leadership—uniquely influence teacher performance and, ultimately, student outcomes [9], [3], [7], [8]. Yet, despite a robust evidence base, findings remain mixed about the relative effectiveness of these styles across contexts, the mechanisms through which they operate, and the contingencies that shape their impact. This study addresses these gaps by analyzing how leadership styles affect teacher performance and student outcomes, and by testing mediating and moderating pathways that explain when and why effects occur.

Transformational leadership emphasizes vision, inspiration, individualized support, and intellectual stimulation, aiming to elevate followers' intrinsic motivation and professional commitment [9]. In schools, transformational leaders are theorized to build collective efficacy, foster professional learning cultures, and encourage innovation in pedagogy—conditions associated with higher teacher performance and improved student learning [16]. Instructional leadership, by contrast, focuses more explicitly on the technical core of schooling: setting academic goals, coordinating curriculum, supervising instruction, and monitoring student progress [12]. Proponents argue that this style yields clearer expectations, stronger feedback cycles, and tighter alignment between teaching and assessment, which can directly enhance instructional quality and student achievement. Distributed leadership extends the locus of influence beyond the principal to teachers, department heads, and other staff, positing that leadership is stretched over people and situations and that this distribution better matches the complexity of instructional improvement [8]. Finally, transactional leadership relies on contingent rewards and corrective actions to maintain performance standards; although sometimes viewed as less developmental, it can contribute to order, role clarity, and short-term goal attainment—conditions that may be necessary but not sufficient for sustained instructional improvement [2], [11], [9].

A growing body of research suggests that leadership affects student outcomes primarily indirectly, by shaping teacher-level variables and school organizational conditions. Key mechanisms include teacher motivation, self-efficacy, professional collaboration, and the quality of feedback and instructional support (Leithwood et al., 2010). School climate—encompassing trust, safety, and academic press—also functions as an important conduit linking leadership to classroom practice [1], [10]. However, the magnitudes of these pathways vary, and leadership effects may be contingent on contextual factors such as socio-economic composition, resource constraints, accountability pressures, and school size [4]. Moreover, while meta-analytic evidence underscores that teacher effectiveness is among the most powerful school-based predictors of student achievement [5], [14] fewer studies simultaneously model how specific leadership styles differentially predict teacher performance indicators (e.g., instructional quality, assessment literacy,

classroom management, data-informed practice) and multiple student outcomes (e.g., academic achievement, attendance, behavior, and social-emotional competencies).

The present study contributes to the literature in three ways. First, it adopts a comparative, multi-style lens, estimating the distinct and overlapping effects of transformational, instructional, distributed, and transactional leadership on teacher performance. Second, it links these effects to a broader set of student outcomes—beyond test scores—to include attendance and behavioral or social-emotional indicators, recognizing that leadership can shape learning readiness and engagement as much as academic attainment. Third, it examines mediating mechanisms (teacher motivation, collective efficacy, professional learning community practices) and moderating conditions (school climate, accountability context, and student socio-economic composition) to identify the circumstances under which each leadership style is most beneficial. Guided by social-cognitive theory and organizational learning perspectives, the study theorizes that leadership styles that intensify instructional focus (instructional leadership) and build professional capacity and shared purpose (transformational, distributed leadership) will show stronger indirect effects on student outcomes through improvements in teacher performance and collaborative practices. Transactional leadership is expected to show smaller but positive associations with compliance-oriented aspects of teacher performance (e.g., adherence to routines, timely assessment), particularly in contexts requiring stability and clear expectations.

Accordingly, the study is framed by the following research questions:

1. How do transformational, instructional, distributed, and transactional leadership styles relate to teacher performance indicators (instructional quality, assessment practices, classroom management, and data use)?
2. To what extent do changes in teacher performance mediate the relationship between leadership styles and student outcomes (achievement, attendance, and behavior/social-emotional indicators)?
3. How do school climate and contextual factors (e.g., accountability pressure, socio-economic composition) moderate the effects of leadership styles on teacher performance and student outcomes?

By clarifying these pathways, the study aims to inform leadership development, principal preparation, and professional learning initiatives. Practically, the findings can help school systems calibrate leadership expectations and supports—balancing an instructional focus with strategies that build collective capacity and distribute influence—while tailoring approaches to local conditions. Conceptually, the work advances theory by integrating style-specific effects with organizational mechanisms and boundary conditions, offering a more nuanced understanding of how leadership drives teacher performance and student success.

2. LITERATURE REVIEW

Conceptualizing Leadership Styles in Education

Leadership within educational institutions has been conceptualized through multiple theoretical lenses, most notably transformational, instructional, distributed, transactional, and servant leadership. Transformational leadership emphasizes vision, inspiration, and individualized support, often fostering motivation and professional commitment among teachers (Bass & Riggio, 2006; Leithwood et al., 2004). Instructional leadership, in contrast, prioritizes curriculum planning, classroom observation, and professional development, thereby directly targeting teaching quality and learning outcomes [13], [17]. Distributed leadership expands the perspective by recognizing leadership as a collective activity spread across teachers and administrators [20], (Harris, 2013). Transactional leadership relies on monitoring, rules, and contingent rewards, while servant leadership focuses on building trust, care, and inclusivity (Greenleaf, 2002; Shields,

2010). These styles are often applied in combination, and their effectiveness depends largely on school context and challenges.

Leadership Influence on Teacher Performance

Research has consistently shown that leadership style is a strong predictor of teacher performance. Transformational leaders, by providing individualized support and intellectual stimulation, enhance teachers' intrinsic motivation and professional identity, reducing burnout and increasing job satisfaction (Leithwood & Sun, 2012). Instructional leadership exerts influence through clear expectations, feedback, and data-driven decision-making, which improve lesson design and classroom practices [4]. Distributed leadership further strengthens teacher performance by creating professional learning communities where teachers collaborate, share expertise, and engage in reflective practice (Harris, 2013). These leadership practices contribute to building collective teacher efficacy, a key determinant of teaching quality and student success (Goddard, Hoy, & Woolfolk Hoy, 2004).

Leadership and Student Outcomes

The influence of leadership styles extends beyond teachers to student outcomes. Meta-analyses suggest that instructional leadership demonstrates stronger direct links to student achievement than transformational leadership because it targets the instructional core [17]. However, transformational leadership plays an important indirect role by motivating teachers and shaping positive school culture. Leadership overall is considered the second-most important in-school factor affecting student achievement, following classroom instruction (Leithwood et al., 2004; Marzano, Waters, & McNulty, 2005). Moreover, servant and inclusive leadership styles have been associated with improved student engagement, attendance, and wellbeing, highlighting the broader socio-emotional effects of leadership (Shields, 2010).

Mediating and Moderating Factors

The relationship between leadership, teacher performance, and student outcomes is not linear but mediated by organizational and psychological variables. Teacher self-efficacy, collective efficacy, and professional development coherence serve as key mediators linking leadership practices to student achievement (Leithwood et al., 2004; Day et al., 2010). Contextual factors such as school type, accountability policies, and available resources moderate these effects. For instance, instructional leadership appears more effective in primary schools, while distributed leadership is particularly relevant in larger secondary institutions where collaboration is essential [13]. Similarly, in resource-constrained settings, leadership focused on providing basic teaching conditions is a prerequisite for improved performance.

Emerging Gaps and Directions

Although extensive research underscores the impact of leadership on teachers and students, several gaps remain. Causal evidence is limited, as most studies employ cross-sectional survey designs rather than longitudinal or experimental methods. Equity-related outcomes such as reducing learning gaps among disadvantaged groups are underexplored, particularly in non-Western contexts. Additionally, more research is needed on how leadership can mitigate teacher stress, improve retention, and promote wellbeing in challenging educational environments. Scholars increasingly argue for moving beyond broad labels of leadership styles toward identifying specific, high-leverage practices such as instructional coaching, professional learning facilitation, and feedback cycles that directly shape teaching and learning [17], Harris, 2013).

3. RESEARCH METHODS

Research Design

This study employed a quantitative cross-sectional research design to examine the relationship between leadership styles, teacher performance, and student outcomes. The design was selected because it allows for the collection of data from a large number of participants at a single point in time, enabling statistical analysis of associations between variables.

Population and Sample

The target population consisted of teachers and school leaders from secondary schools within Philippines. Students' performance data were also collected to measure the impact of leadership styles indirectly. A stratified random sampling technique was used to ensure representation across urban and rural schools as well as public and private institutions. The final sample comprised: School leaders (principals/heads): $n = 28$ and Teachers: $n = 84$. Student performance records collected from examination results of approximately 110 students taught by participating teachers.

Leadership Styles:

Leadership behaviors of school principals were measured using the Multifactor Leadership Questionnaire (MLQ), which identifies transformational, transactional, and laissez-faire leadership styles.

Teacher Performance:

Teacher performance was assessed using a structured Teacher Performance Appraisal Scale that covered instructional delivery, classroom management, professional commitment, and student engagement.

Student Outcomes:

Student achievement was measured through standardized test scores and final grade averages in core subjects (e.g., mathematics, science, and language). Student engagement was also gauged using a short Student Engagement Survey.

Data Collection Procedures: Permission to conduct the study was obtained from educational authorities and school administrators. Surveys (MLQ, teacher appraisal, and engagement questionnaires) were administered in person and electronically to ensure higher response rates. Student academic records were collected from school databases with official approval, ensuring data accuracy and confidentiality.

Data Analysis

Quantitative data were analyzed using Statistical Package for the Social Sciences (SPSS) version 26. Descriptive statistics (mean, standard deviation, frequencies) were used to summarize demographic and baseline data. Correlation analysis was conducted to examine relationships between leadership styles, teacher performance, and student outcomes. Multiple regression analysis was employed to determine the predictive power of different leadership styles on teacher performance and student achievement. Where applicable, ANOVA was used to identify differences in outcomes across demographic groups (e.g., public vs. private schools).

4. RESULTS AND DISCUSSION

Data were collected from 28 school leaders, 84 teachers, and student performance records of 110 learners across secondary schools in the Philippines. Table 1 summarizes the demographic characteristics of teachers and principals. The sample was balanced across both public and private institutions, with 60% of respondents from urban schools and 40% from rural schools. The average teaching experience among teachers was 9.4 years ($SD = 3.6$), while principals reported an average of 12.1 years ($SD = 4.2$) of

leadership experience.

Table 1. Demographic Characteristics of Respondents

Variable	Category	n	%
School leaders	Principals/Heads	28	25%
Teachers	Secondary Teachers	84	75%
School type	Public	66	59%
	Private	46	41%
Location	Urban	68	60%
	Rural	46	40%

Leadership Styles of Principals

The MLQ results indicated that transformational leadership was the most frequently reported style ($M = 3.89$, $SD = 0.45$), followed by transactional leadership ($M = 3.21$, $SD = 0.51$), while laissez-faire leadership had the lowest mean ($M = 2.14$, $SD = 0.63$). This suggests that principals generally preferred inspirational and supportive behaviors over passive leadership approaches.

Table 2. Leadership Styles Mean Scores

Leadership Style	Mean	SD	Rank
Transformational	3.89	0.45	1
Transactional	3.21	0.51	2
Laissez-faire	2.14	0.63	3

Teacher Performance

Analysis of the Teacher Performance Appraisal Scale revealed that teachers scored highest in professional commitment ($M = 4.12$, $SD = 0.38$) and classroom management ($M = 4.05$, $SD = 0.42$). Instructional delivery and student engagement showed slightly lower but still positive ratings. These findings suggest that while teachers are committed and effective in maintaining classroom order, further support in innovative instructional methods could strengthen teaching outcomes.

Table 3. Teacher Performance Appraisal Scores ($N = 84$)

Dimension	Mean (M)	Standard Deviation (SD)	Rank
Professional Commitment	4.12	0.38	1
Classroom Management	4.05	0.42	2
Instructional Delivery	3.89	0.41	3
Student Engagement	3.76	0.44	4

Scale: 1 = Very Low, 5 = Very High

Student Outcomes

Student achievement data ($N = 110$) indicated an average score of 78.6% ($SD = 6.4$) across core subjects. Engagement survey results suggested moderate to high levels of motivation and participation, with an overall mean of 3.72 ($SD = 0.47$) on a 5-point scale.

Table 4. Student Outcomes ($N = 110$)

Measure	Mean (M)	Standard Deviation (SD)	Scale/Range
Student Achievement (%)	78.6	6.4	0–100

Student Engagement (5-pt)	3.72	0.47	1–5
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Correlation Analysis

Pearson correlation analysis demonstrated significant positive relationships between transformational leadership and both teacher performance ($r = .56, p < .01$) and student outcomes ($r = .43, p < .01$). Transactional leadership also correlated positively, though weaker, with teacher performance ($r = .29, p < .05$). Conversely, laissez-faire leadership showed a negative correlation with both teacher performance ($r = -.34, p < .05$) and student outcomes ($r = -.28, p < .05$).

Table 5: Correlation of Leadership Styles with Teacher Performance and Student Outcomes

Leadership Style	Teacher Performance (r)	Student Outcomes (r)	Significance
Transformational	.56**	.43**	$p < .01$
Transactional	.29*	.14 (ns)	$p < .05$
Laissez-faire	-.34*	-.28*	$p < .05$

*Note: * $p < .05$, * $p < .01$, ns = not significant

Regression Analysis

Multiple regression analysis was conducted to determine the predictive power of leadership styles. Results indicated that transformational leadership was the strongest predictor of teacher performance ($\beta = .48, p < .01$), followed by transactional leadership ($\beta = .21, p < .05$). Laissez-faire leadership had no significant predictive effect when controlling for other styles. Similarly, in predicting student outcomes, transformational leadership was the only significant positive predictor ($\beta = .39, p < .01$).

Table 6: Regression Analysis of Leadership Styles on Teacher Performance and Student Outcomes

Dependent Variable	Predictor	β	p-value
Teacher Performance	Transformational	.48	.000**
	Transactional	.21	.042*
	Laissez-faire	-.11	.181
Student Outcomes	Transformational	.39	.004**
	Transactional	.14	.112
	Laissez-faire	-.09	.234

*Note: * $p < .05$, * $p < .01$

ANOVA Results

ANOVA tests revealed significant differences in teacher performance scores between public and private schools ($F(1,82) = 4.36, p < .05$), with private school teachers reporting slightly higher ratings in instructional delivery. However, no significant differences were found between urban and rural schools in terms of student achievement.

Table 7: ANOVA Results for Teacher Performance and Student Achievement

Variable	Source	df	F	P	Significant Difference
Teacher Performance (Public vs. Private)	Between groups	1	4.36	< .05	Yes – Higher in private schools
	Within groups	82	—	—	—
Student Achievement (Urban vs. Rural)	Between groups	1	ns	Ns	No significant difference

 Within groups 82 — — —

Note. ns = not significant.

The current study conducted in Philippine secondary schools reveals that transformational leadership is the predominant style among principals, followed by transactional leadership, with laissez-faire being least practiced. This preference mirrors recent findings that underscore transformational leadership's beneficial influence on teacher performance and student outcomes [24], [26]. Teachers demonstrated strong performance in professional commitment and classroom management, but comparatively lower ratings in instructional delivery and student engagement—highlighting areas where leadership support could further enhance pedagogical innovation [24]. Student achievement averaged 78.6%, and engagement levels were generally positive. Transformational leadership emerged as the strongest predictor of both teacher performance ($\beta = .48$, $p < .01$) and student outcomes ($\beta = .39$, $p < .01$). These results align with new empirical evidence that transformational leadership significantly elevates student academic performance and school environments [23], [26]. Transactional leadership had a modest positive effect on teacher performance but did not significantly predict student outcomes, while laissez-faire leadership was negatively associated with both teacher performance and student achievement—consistent with research warning against passive leadership styles [24]. Comparison across school types indicates that private school teachers reported higher instructional delivery scores than public school teachers, suggesting differences in leadership practice, resource allocation, or institutional autonomy. Yet, no significant difference in student achievement was found between urban and rural schools. This suggests that transformational leadership can mitigate geographic disparities—supporting prior literature that leadership and school climate collectively influence student outcomes [25]. Overall, the findings reinforce that leadership influences educational effectiveness largely indirectly, through enhancing teacher performance and shaping school climates [25]. In the Philippine context, transformational leadership stands out as a critical lever for school improvement—a finding echoed in recent local studies [26], [23]. However, the study's cross-sectional design limits causal claims, and its focus on academic outcomes omits important dimensions such as socio-emotional learning and attendance. Future research should adopt longitudinal or mixed-method designs, integrate broader student outcome measures, and examine leadership effectiveness across different cultural and systemic settings.

5. CONCLUSION

In conclusion, transformational leadership plays a powerful role in enhancing teacher effectiveness and student achievement in Philippine secondary schools. By fostering vision, support, motivation, and innovation, transformational leaders elevate instructional delivery and student engagement. Policymakers and educational leaders should prioritize development programs that build transformational and instructional leadership capacities, particularly within public schools, to promote equitable student success across diverse contexts.

6. IMPLICATIONS

The findings of this study carry several important implications for school leaders, teachers, and policymakers. First, the evidence that transformational leadership positively influences both teacher performance and student achievement highlight the necessity of promoting this leadership style in secondary schools. Principals should be encouraged and trained to adopt transformational practices such as setting a clear vision, fostering professional collaboration, and providing individualized support to teachers. Recent work confirms that these approaches enhance teacher motivation, instructional innovation, and student learning outcomes [24], [26].

Second, the positive but limited effect of transactional leadership suggests that while recognition and reward systems may support teacher performance, they are insufficient on their own to drive long-term improvements in student achievement. Leadership training programs should therefore integrate transactional elements with transformational strategies to achieve a balance of accountability and inspiration [23].

Third, the finding that private school teachers reported higher instructional delivery scores indicates the importance of resource availability and institutional support in strengthening teaching effectiveness. Policymakers must consider strategies to reduce disparities between public and private schools by providing resources, mentorship programs, and professional development tailored to the needs of public-school teachers.

Fourth, the absence of significant differences in student achievement between urban and rural schools suggests that effective leadership can mitigate contextual disadvantages. This underscores the potential for leadership development to serve as an equalizer in educational opportunities, ensuring that geographic location does not determine the quality of learning outcomes [25]

Finally, the negative association of laissez-faire leadership with teacher and student outcomes serves as a caution for school leaders. Passive leadership behaviors undermine teacher commitment and student achievement, highlighting the urgent need to minimize such practices through accountability mechanisms and continuous leadership evaluation.

Taken together, these implications emphasize the central role of school leadership in shaping educational quality. Transformational leadership, in particular, offers a powerful pathway to improving teaching practices, fostering student engagement, and ensuring equitable learning outcomes across diverse school settings.

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