

The Impact of Principal Leadership and Committee Roles on Teacher Performance and Student Achievement

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Abstract

This study examines the influence of madrasah principals' leadership and committee roles on teacher performance and their impact on student achievement in Madrasah Tsanawiyah (MTs) across Tabanan Regency, Bali Province. Employing a quantitative approach with an explanatory causal design, data were collected from 49 respondents selected through purposive sampling, including principals, teachers, and committee members with a minimum of two years of experience. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that all constructs meet validity and reliability criteria, with strong measurement and structural model performance ($R^2 = 0.713$ for teacher performance and 0.857 for student achievement; $Q^2 = 0.9589$). The findings reveal that principal leadership and committee roles have positive and significant effects on both teacher performance and student achievement. Among these, the committee role demonstrates the strongest influence, particularly in enhancing teacher performance. Teacher performance also significantly affects student achievement, confirming its role as a key mediating variable. Mediation analysis shows that teacher performance partially mediates the relationship between committee roles and student achievement, while it does not significantly mediate the effect of principal leadership. These findings highlight the importance of collaborative leadership and stakeholder involvement in improving educational outcomes. Practically, the study suggests that strengthening institutional leadership and community participation can effectively enhance teacher performance and student achievement in Islamic secondary education.

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INTRODUCTION

Education plays a fundamental role in developing human potential, shaping individuals who are intellectually capable, morally grounded, and socially responsible. In Indonesia, the mandate of Law No. 20 of 2003 on National Education System emphasizes the importance of fostering holistic human development, integrating cognitive, affective, and psychomotor dimensions (Undang Nomor 20 Tahun 2003 Tentang Sistem Pendidikan Nasional, 1991). Within this framework, madrasah as Islamic educational

institutions hold a strategic position in cultivating not only academic excellence but also spiritual and moral values (Yono & Abrista Devi, 2025). However, in the contemporary era characterized by rapid technological advancement and increasing educational competition, madrasah are required to continuously improve their quality and adaptability. This challenge places strong emphasis on several key determinants, namely principal leadership, committee role, teacher performance, and student achievement. Principal leadership is essential as it determines the direction, vision, and effectiveness of institutional management (Burkett, 2023; Bush, 2025; Midha, 2024). The committee role reflects stakeholder involvement and community participation, which are crucial in ensuring accountability and support (Elbadiansyah & Masyni, 2023; Hasanuddin & Muhri, 2021; Mandaguio, 2025). Teacher performance represents the operational core of the educational process, directly influencing instructional quality, while student achievement serves as the ultimate indicator of educational success (Dutta & Sahney, 2022; Osborne, 2021). The integration of these variables becomes critical in understanding how educational quality can be systematically improved in madrasah contexts.

Previous studies have highlighted the importance of leadership and stakeholder involvement in improving educational outcomes. Research on educational leadership indicates that effective leadership significantly influences teacher performance and school effectiveness (Brown & Salzman, 2024). Similarly, studies on community participation demonstrate that school committees contribute to decision-making processes, resource mobilization, and institutional accountability (Bell & Reed, 2022; Egan et al., 2025; Post et al., 2022). Furthermore, teacher performance has been consistently identified as a key determinant of student achievement, as teachers directly shape learning experiences and outcomes (Darlina, 2022; Kerimova, 2025; Sørensen et al., 2023). However, most prior studies tend to examine these variables in isolation rather than within an integrated structural model. This fragmented approach limits a comprehensive understanding of how leadership, stakeholder involvement, and teacher performance interact simultaneously in influencing student achievement.

Despite the growing body of literature, several research gaps remain. First, limited studies have explored the combined effect of principal leadership and committee role within a single analytical framework, particularly in the context of Islamic educational institutions. Second, the mediating role of teacher performance in linking leadership and stakeholder involvement to student achievement has not been sufficiently examined. Third, empirical evidence from madrasah contexts, especially in regions outside major urban centers such as Tabanan Regency, Bali, remains scarce. Therefore, this study offers novelty by integrating these variables into a comprehensive structural model and by focusing on a specific socio-cultural and institutional context.

This study aims to examine the direct and indirect relationships among principal leadership, committee role, teacher performance, and student achievement in Madrasah Tsanawiyah in Tabanan Regency, Bali. Specifically, the study seeks to analyze how leadership and committee roles influence teacher performance and student achievement, as well as to investigate the mediating role of teacher performance. The findings are expected to contribute to the development of educational management theory and provide practical insights for improving the quality of Islamic education.

From a theoretical perspective, this study is grounded in transformational leadership theory and stakeholder theory. Transformational leadership emphasizes the role of leaders in inspiring and motivating organizational members, while stakeholder theory highlights the importance of collaboration and participation in achieving organizational goals. In this study, principal leadership and committee role are

positioned as key drivers that shape teacher performance, which in turn influences student achievement. This conceptual framework reflects a systemic and interconnected approach to educational effectiveness, where multiple factors interact dynamically rather than independently.

RESEARCHS METHOD

This study employed a quantitative approach with an explanatory design to examine the direct and indirect relationships among principal leadership, committee role, teacher performance, and student achievement. The explanatory design was selected to analyze the relationships among variables using numerical data collected through structured questionnaires (Fragkandreas, 2022; Rech et al., 2025; Varacca, 2025). The study was conducted in Madrasah Tsanawiyah (MTs) across Tabanan Regency, Bali, Indonesia. The population consisted of principals, teachers, and school committee members from six private MTs institutions. The sample was determined using purposive sampling based on specific criteria, namely respondents who had at least two years of experience in their respective roles (Bootsma, 2023; Navarrete et al., 2022; Novosel, 2023). A total of 49 respondents participated in this study. Data were collected using a structured questionnaire developed based on relevant theoretical constructs and prior empirical studies. The instrument measured four latent variables: principal leadership (X1), committee role (X2), teacher performance (Y1), and student achievement (Y2). All items were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Prior to data collection, the instrument was tested for validity and reliability, and all indicators were confirmed to be valid and reliable. The variables and indicators used in this study are presented in **Table 1**.

Table 1. Research Variables and Indicators

Variable	Dimension	Indicator	Number of Items
Principal Leadership (X1)	Leadership Competence	Analytical ability	2
		Communication skills	2
		Courage in decision making	2
		Listening ability	2
		Assertiveness	2
Committee Role (X2)	Advisory Role	Providing input and policy recommendations	2
	Supporting Role	Providing resources (financial, ideas, support)	3
	Monitoring Role	Supervising school programs	3
	Mediator Role	Bridging school and community	2
Teacher Performance (Y1)	Instructional Planning	Mastery of syllabus and planning	3
	Instructional Implementation	Teaching methods and strategies	3
	Evaluation	Assessment of student learning outcomes	4
Student Achievement (Y2)	Cognitive	Understanding and mastery of material	3
	Affective	Motivation and learning attitude	3
	Psychomotor	Skills and application ability	2

The data were analyzed using Structural Equation Modeling based on Partial Least Squares (SEM-PLS) with the assistance of SmartPLS software. This method was chosen due to its ability to analyze complex relationships among variables and accommodate relatively small sample sizes (El Oubani, 2023; Singh, 2025; YILDIZ &

KELLECI, 2023). The analysis procedure consisted of several stages. First, descriptive statistical analysis was conducted to describe the characteristics of respondents and research variables. Second, the measurement model (outer model) was evaluated through convergent validity (outer loading and Average Variance Extracted), discriminant validity (cross loading), and reliability (Cronbach's Alpha and Composite Reliability). Third, the structural model (inner model) was assessed using the coefficient of determination (R^2), predictive relevance (Q^2), and effect size (f^2). Finally, hypothesis testing was performed using bootstrapping, where hypotheses were accepted if the t-statistic exceeded 1.96 and the p-value was below 0.05 (El Tecle et al., 2022; Lin & Lin, 2025; Méndez-Suárez, 2021).

RESULT AND DISCUSSION

Result

Evaluation of Measurement Model (Outer Model)

Outer Loading (Convergent Validity)

The evaluation of convergent validity in this study begins with the assessment of outer loading values for each indicator. Outer loading reflects the degree to which each indicator is able to represent its corresponding latent construct. In Partial Least Squares Structural Equation Modeling (PLS-SEM), an indicator is considered valid if it has a loading value greater than 0.70. To assess the validity of each indicator, an outer loading test was conducted. The results of this analysis are presented in **Table 2**.

Table 2. Results of Convergent Validity (Outer Loading)

Indicator	X1 (Principal Leadership)	X2 (Committee Role)	Y1 (Teacher Performance)	Y2 (Student Achievement)
KG1			0.779	
KG2			0.849	
KG3			0.845	
KG4			0.791	
KG5			0.768	
KG6			0.845	
KG7			0.824	
KG8			0.820	
KG9			0.731	
KG10			0.836	
KM1	0.766			
KM2	0.775			
KM3	0.711			
KM4	0.762			
KM5	0.757			
KM6	0.782			
KM7	0.790			
KM8	0.768			
KM9	0.752			
KM10	0.824			
PB1				0.726
PB2				0.796
PB3				0.721
PB4				0.803
PB5				0.873
PB6				0.817
PB7				0.719

PB8	0.818
PB9	0.819
PB10	0.767
PK1	0.762
PK2	0.765
PK3	0.804
PK4	0.835
PK5	0.722
PK6	0.748
PK7	0.858
PK8	0.755
PK9	0.808
PK10	0.862

Based on **Table 2**, all indicators show outer loading values above the threshold of 0.70. This indicates that each indicator is valid in measuring its respective latent construct. The results confirm that the convergent validity criteria have been fulfilled after the second estimation stage, following the removal of indicators that did not meet the required threshold. Furthermore, the consistently high loading values across all constructs demonstrate that each latent variable is well represented by its indicators. Therefore, all indicators are retained and considered appropriate for further analysis.

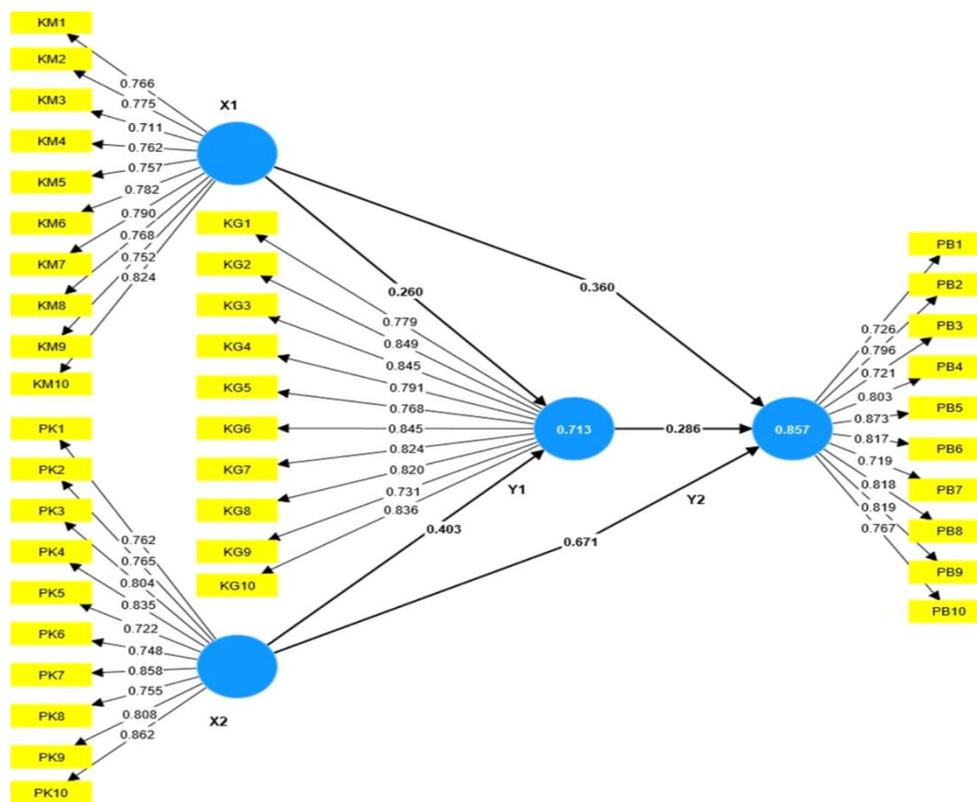


Figure 1. Outer Model

The outer model presented in **Figure 1** illustrates the relationships between latent variables and their indicators, including the loading values of each measurement item. The figure further confirms that all indicators have strong loadings on their respective constructs, supporting the results of the convergent validity test. In addition

to outer loading, convergent validity can also be evaluated at the construct level using the Average Variance Extracted (AVE). A construct is considered to have adequate convergent validity if its AVE value exceeds 0.50. The results of the AVE analysis are presented in **Table 3**.

Table 3. Average Variance Extracted (AVE)

Variable	AVE
X1 (Principal Leadership)	0.591
X2 (Committee Role)	0.629
Y1 (Teacher Performance)	0.656
Y2 (Student Achievement)	0.620

The results show that all constructs have AVE values greater than 0.50, indicating that each latent variable explains more than half of the variance of its indicators. This confirms that the model satisfies the criteria for convergent validity at the construct level.

Discriminant Validity

Discriminant validity is assessed to ensure that each construct is empirically distinct from other constructs in the model. In this study, discriminant validity is evaluated using the cross-loading approach, which compares the loading values of each indicator on its respective construct with its loadings on other constructs. An indicator is considered to have good discriminant validity if it has a higher loading on its own construct than on other constructs. To evaluate discriminant validity, the cross-loading values of all indicators were examined. The results of this analysis are presented in **Table 4**.

Table 4. Results of Discriminant Validity (Cross Loading)

Indicator	X1 (Principal Leadership)	X2 (Committee Role)	Y1 (Teacher Performance)	Y2 (Student Achievement)
KG1	0.569	0.518	0.779	0.601
KG2	0.543	0.660	0.849	0.649
KG3	0.620	0.772	0.845	0.794
KG4	0.613	0.581	0.791	0.622
KG5	0.463	0.564	0.768	0.587
KG6	0.519	0.688	0.845	0.705
KG7	0.437	0.678	0.824	0.711
KG8	0.421	0.761	0.820	0.700
KG9	0.365	0.629	0.731	0.607
KG10	0.581	0.708	0.836	0.808
KM1	0.766	0.304	0.396	0.540
KM2	0.775	0.402	0.493	0.596
KM3	0.711	0.257	0.434	0.482
KM4	0.762	0.702	0.680	0.868
KM5	0.757	0.347	0.381	0.477
KM6	0.782	0.335	0.482	0.555
KM7	0.790	0.364	0.470	0.520
KM8	0.768	0.527	0.513	0.608
KM9	0.752	0.407	0.383	0.494
KM10	0.824	0.473	0.512	0.578
PB1	0.656	0.581	0.543	0.726
PB2	0.609	0.750	0.677	0.796

PB3	0.540	0.688	0.696	0.721
PB4	0.519	0.716	0.721	0.803
PB5	0.649	0.761	0.686	0.873
PB6	0.552	0.668	0.632	0.817
PB7	0.619	0.568	0.582	0.719
PB8	0.597	0.665	0.712	0.818
PB9	0.643	0.642	0.695	0.819
PB10	0.671	0.542	0.691	0.767
PK1	0.464	0.762	0.549	0.616
PK2	0.258	0.765	0.653	0.556
PK3	0.538	0.804	0.703	0.699
PK4	0.401	0.835	0.739	0.709
PK5	0.505	0.722	0.583	0.660
PK6	0.542	0.748	0.661	0.741
PK7	0.552	0.858	0.664	0.719
PK8	0.373	0.755	0.582	0.604
PK9	0.238	0.808	0.595	0.579
PK10	0.522	0.862	0.710	0.731

Based on **Table 4**, each indicator shows a higher loading value on its respective construct compared to its loadings on other constructs. This indicates that all indicators are more strongly associated with their own latent variables than with other variables in the model. Furthermore, the results demonstrate that all constructs—principal leadership, committee role, teacher performance, and student achievement—are empirically distinct and do not exhibit overlapping measurements. Therefore, it can be concluded that the discriminant validity requirement has been successfully fulfilled, and the measurement model is considered adequate for further structural analysis.

Composite Reliability

In addition to validity testing, reliability analysis was conducted to evaluate the internal consistency of each construct. Reliability in this study is assessed using Cronbach's Alpha and Composite Reliability (rho_a and rho_c). A construct is considered reliable if both values exceed the threshold of 0.70. To assess the reliability of the measurement model, the results of Cronbach's Alpha and Composite Reliability are presented in **Table 5**.

Table 5. Composite Reliability Results

Variable	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)
X1 (Principal Leadership)	0.924	0.934	0.935
X2 (Committee Role)	0.934	0.937	0.944
Y1 (Teacher Performance)	0.941	0.945	0.950
Y2 (Student Achievement)	0.931	0.933	0.942

Based on **Table 5**, all constructs exhibit Cronbach's Alpha and Composite Reliability values above the recommended threshold of 0.70. This indicates that all constructs have a high level of internal consistency. Furthermore, the reliability values across all variables are above 0.90, which reflects excellent reliability. This suggests that

the indicators used in this study consistently measure their respective constructs. Therefore, it can be concluded that all variables in this study are reliable and suitable for further structural model analysis.

Evaluation of Structural Model (Inner Model)

The structural model evaluation aims to examine the relationships among variables and assess the model's predictive capability. It focuses on the direct and indirect effects of principal leadership and committee role on teacher performance and student achievement. The model is evaluated using R^2 , Q^2 , f^2 , and path coefficient analysis to measure explanatory power, predictive relevance, effect size, and the significance of relationships. The results are presented in the following sections.

Coefficient of Determination (R^2)

The coefficient of determination (R^2) is used to evaluate the explanatory power of the structural model by measuring the extent to which endogenous variables can be explained by their corresponding exogenous variables. Higher R^2 values indicate a stronger ability of the model to explain the variance of the dependent variables. The results of the R^2 analysis are presented in **Table 6**.

Table 6. Coefficient of Determination (R^2)

Structural Model	Dependent Variable	R^2	Adjusted R^2
Model 1	Teacher Performance (Y1)	0.713	0.700
Model 2	Student Achievement (Y2)	0.857	0.847

Based on **Table 6**, the R^2 value for teacher performance (Y1) is 0.713, indicating that principal leadership and committee role are able to explain 71.3% of the variance in teacher performance. This suggests that the model has a strong explanatory power in predicting teacher performance, while the remaining 28.7% is influenced by other variables outside the model. Furthermore, the R^2 value for student achievement (Y2) is 0.857, indicating that principal leadership, committee role, and teacher performance jointly explain 85.7% of the variance in student achievement. This reflects a very strong explanatory power, suggesting that the proposed model is highly effective in predicting student outcomes. Overall, these findings indicate that the structural model has substantial explanatory capability, particularly in explaining student achievement, which is strongly influenced by both direct and indirect relationships among the variables.

Predictive Relevance (Q^2)

Predictive relevance (Q^2) is used to assess the predictive capability of the structural model by evaluating how well the observed values are reconstructed by the model and its parameter estimates. A Q^2 value greater than zero indicates that the model has predictive relevance, while values closer to 1 suggest a higher level of predictive accuracy. The results of the predictive relevance analysis are presented in **Table 7**.

Table 7. Predictive Relevance (Q²)

Calculation
$Q^2 = 1 - (1 - R_1^2)(1 - R_2^2)$ $= 1 - (1 - 0.713)(1 - 0.857)$ $= 1 - (0.287)(0.143)$ $= 1 - 0.04104$ $= 0.9589$

Based on **Table 7**, the Q² value obtained is 0.9589, which indicates that the model has excellent predictive relevance. This value is very close to 1, suggesting that the model is highly capable of predicting the observed data. Furthermore, this result implies that approximately 95.89% of the variance in student achievement can be predicted by principal leadership, committee role, and teacher performance, while the remaining 4.11% is influenced by other variables not included in the model. Overall, these findings confirm that the structural model is not only strong in terms of explanatory power but also demonstrates a high level of predictive accuracy.

Effect Size (f²)

Effect size (f²) is used to assess the magnitude of the impact of each exogenous construct on endogenous constructs in the structural model. This measure indicates how strongly a predictor variable contributes to the R² value of the dependent variable when it is included in the model. According to the guidelines, f² values of 0.02, 0.15, and 0.35 indicate small, medium, and large effects, respectively. The results of the effect size (f²) analysis are presented in **Table 8**.

Table 8. Effect Size (f²)

Variable	Y1 (Teacher Performance)	Y2 (Student Achievement)
X1 (Principal Leadership)	0.161	0.535
X2 (Committee Role)	1.075	0.376
Y1 (Teacher Performance)	—	0.164

Based on **Table 8**, principal leadership (X1) has a moderate effect on teacher performance (f² = 0.161) and a strong effect on student achievement (f² = 0.535). This indicates that leadership plays a significant role, particularly in directly influencing student achievement. Furthermore, the committee role (X2) demonstrates the strongest influence in the model, with a very high effect on teacher performance (f² = 1.075) and a strong effect on student achievement (f² = 0.376). This finding highlights that institutional and stakeholder involvement plays a dominant role in shaping both teacher performance and student outcomes. In addition, teacher performance (Y1) has a moderate effect on student achievement (f² = 0.164), indicating that improvements in teacher performance contribute meaningfully to enhancing student achievement, although its influence is not as strong as the committee role. These results suggest that the committee role emerges as the most influential variable in the model, followed by principal leadership, while teacher performance acts as an important mediating factor in improving student achievement.

Hypothesis Testing (Direct Effects)

Hypothesis testing in this study was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) through a bootstrapping procedure. This

analysis aims to examine the significance and direction of the relationships among variables in the structural model. The empirical model of the study based on the bootstrapping results is presented in **Figure 2**.

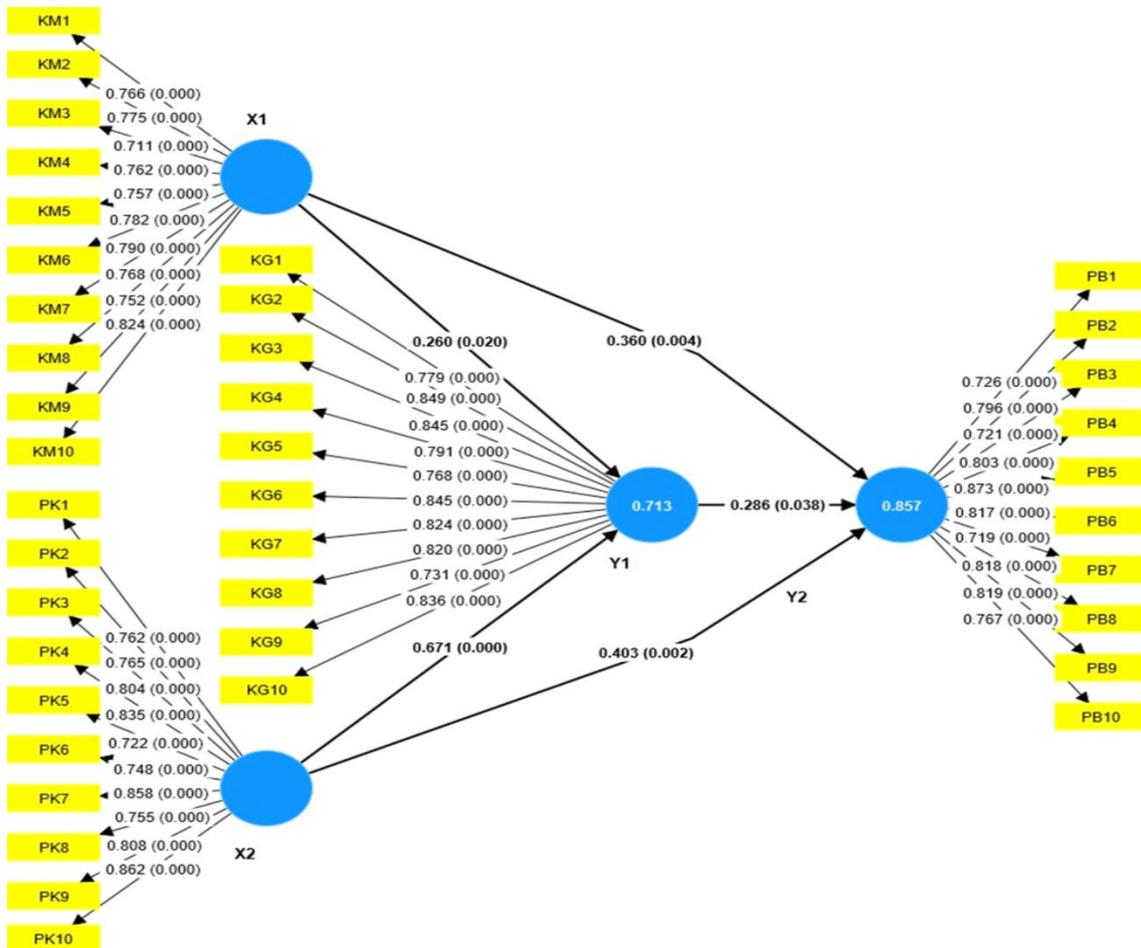


Figure 2. Empirical Model (PLS Bootstrapping)

The results of the direct effect testing based on path coefficients are presented in **Table 9**.

Table 9. Direct Effect Testing (Path Coefficient)

Hypothesis	Relationship	Path Coefficient (β)	T-Statistic	P-Value	Result
H1	X1 \rightarrow Y1	0.260	2.334	0.020	Supported
H2	X2 \rightarrow Y1	0.671	6.786	0.000	Supported
H3	X1 \rightarrow Y2	0.360	2.878	0.004	Supported
H4	X2 \rightarrow Y2	0.403	3.105	0.002	Supported
H5	Y1 \rightarrow Y2	0.286	2.079	0.038	Supported

Based on **Table 9**, all hypothesized relationships are found to be positive and statistically significant, as indicated by p-values below 0.05. These findings confirm that all hypotheses (H1–H5) are supported. The first hypothesis (H1) indicates that principal leadership (X1) has a positive and significant effect on teacher performance (Y1) ($\beta = 0.260$, $p < 0.05$). This finding suggests that effective leadership practices contribute to

improving teacher performance in madrasahs. The second hypothesis (H2) shows that committee role (X2) has a positive and significant effect on teacher performance (Y1) ($\beta = 0.671, p < 0.001$). The magnitude of this effect is substantially stronger than that of principal leadership, indicating that the involvement of the school committee plays a dominant role in enhancing teacher performance.

The third hypothesis (H3) demonstrates that principal leadership (X1) has a positive and significant effect on student achievement (Y2) ($\beta = 0.360, p < 0.01$). This result implies that effective leadership contributes directly to improving students' academic outcomes. The fourth hypothesis (H4) reveals that committee role (X2) has a positive and significant effect on student achievement (Y2) ($\beta = 0.403, p < 0.01$). This finding indicates that the role of the committee slightly exceeds that of leadership in influencing student achievement. The fifth hypothesis (H5) confirms that teacher performance (Y1) has a positive and significant effect on student achievement (Y2) ($\beta = 0.286, p < 0.05$). This suggests that improvements in teacher performance lead to better student learning outcomes. Overall, the results highlight that the committee role emerges as the most influential variable in the model, particularly in affecting teacher performance, while principal leadership and teacher performance also play important roles in shaping student achievement.

Hypothesis Testing (Indirect Effects / Mediation Analysis)

The indirect effect analysis in this study aims to examine the mediating role of teacher performance (Y1) in the relationship between principal leadership (X1), committee role (X2), and student achievement (Y2). The results of the indirect effect testing are presented in **Table 10**.

Table 10. Indirect Effect Testing (Mediation)

Relationship	Path Coefficient (β)	T-Statistic	P-Value	Result
X1 \rightarrow Y1 \rightarrow Y2	0.074	1.217	0.224	Not Significant
X2 \rightarrow Y1 \rightarrow Y2	0.192	2.103	0.036	Significant

Based on **Table 10**, the indirect effect of principal leadership (X1) on student achievement (Y2) through teacher performance (Y1) is not statistically significant ($\beta = 0.074, p > 0.05$). This indicates that teacher performance does not mediate the relationship between principal leadership and student achievement. In other words, the influence of principal leadership on student achievement occurs primarily through direct pathways rather than through teacher performance. In contrast, the indirect effect of committee role (X2) on student achievement (Y2) through teacher performance (Y1) is positive and statistically significant ($\beta = 0.192, p < 0.05$). This finding indicates that teacher performance plays a mediating role in the relationship between committee role and student achievement.

Furthermore, considering that the direct effect of committee role on student achievement is also significant, the mediation can be classified as partial mediation. This suggests that the influence of the committee role on student achievement operates both directly and indirectly through teacher performance. This results highlight that teacher performance functions as an important mechanism through which institutional support, represented by the committee role, contributes to improving student achievement. However, such a mediating mechanism is not evident in the relationship between principal leadership and student achievement.

Discussion

This study was conducted to examine the structural relationships between principal leadership, committee role, teacher performance, and student achievement within the context of Islamic junior secondary schools (MTs) in Tabanan Regency, Bali. The research is grounded in the increasing demand for improving educational quality through collaborative governance and effective leadership practices. While previous studies have emphasized the importance of leadership and stakeholder involvement, there remains a gap in understanding how these variables interact within a comprehensive structural model, particularly in Islamic educational institutions (Burkett, 2023; Yono & Abrista Devi, 2025). Therefore, this study aims to investigate both the direct and indirect effects of leadership and committee roles on student achievement, as well as to explore the mediating role of teacher performance.

The findings of this study reveal several important insights. First, all direct relationships among variables are positive and statistically significant, indicating that principal leadership, committee role, and teacher performance each contribute meaningfully to improving educational outcomes. Among these, the committee role emerges as the most influential factor, particularly in enhancing teacher performance. Second, the structural model demonstrates strong explanatory and predictive power, as reflected by high R^2 and Q^2 values. Third, the mediation analysis shows that teacher performance plays a crucial role in transmitting the effects of committee involvement to student achievement, while its mediating role in the relationship between leadership and student achievement is not statistically significant.

These findings partially align with expectations derived from established theories. The positive influence of principal leadership on teacher performance supports transformational leadership theory (Ladkin & Patrick, 2022), which emphasizes the role of leaders in inspiring and empowering subordinates. Similarly, the significant role of committee involvement is consistent with stakeholder theory (Biggar, 2021), highlighting the importance of community engagement in organizational effectiveness. However, an unexpected finding is the absence of a significant indirect effect of leadership on student achievement through teacher performance. This suggests that leadership may exert its influence more directly rather than through mediating mechanisms, or that its indirect pathways are context-dependent.

The results of this study are also consistent with prior research indicating that teacher performance is a central determinant of student achievement (Burkett, 2023; Bush, 2025; Yono & Abrista Devi, 2025). This finding aligns with educational production theory, which posits that teacher quality is the most critical input in the learning process (Marsh & Deacon, 2025). Studies by Hallinger (2025) similarly emphasize the importance of instructional leadership in shaping teaching practices, which ultimately affect student outcomes. However, the stronger influence of committee roles observed in this study provides a contrasting perspective, suggesting that external stakeholders may play a more substantial role than previously assumed, particularly in community-based educational settings.

The findings suggest that improving student achievement requires an integrated approach combining leadership development, stakeholder engagement, and teacher capacity building. Principals should empower teachers through professional development and participatory decision-making, while school committees should actively support both resources and academic programs. In the context of MTs in

Tabanan, the integration of local values such as *Tri Hita Karana* strengthens collaboration among stakeholders and supports educational improvement. This study also highlights the need for future research to explore these relationships in broader contexts and to develop frameworks based on collaborative leadership ecosystems. However, the findings are limited by the specific regional scope and the use of cross-sectional data. Therefore, future studies are recommended to adopt longitudinal designs and include additional variables to enhance understanding. Overall, the results emphasize that student achievement is driven by the synergy of leadership, stakeholder involvement, and teacher performance within a collaborative educational system.

CONCLUSION

The need to enhance student achievement in madrasah requires a clearer understanding of how leadership and stakeholder involvement contribute to educational outcomes. This study demonstrates that principal leadership and committee roles significantly influence teacher performance and student achievement, with the committee role emerging as the most dominant factor, particularly in improving teacher performance. In addition, teacher performance plays a crucial role in driving student achievement and acts as a partial mediator in the relationship between committee role and learning outcomes. These findings highlight that improving educational quality is not solely dependent on leadership or external support, but on the synergy among leadership, stakeholder engagement, and teacher capacity. Practically, this implies the importance of strengthening collaborative governance, empowering teachers, and fostering active community participation in madrasah management. Future research is encouraged to expand this model across different contexts and incorporate additional variables to deepen the understanding of integrated educational systems.

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