

# Culturally Rooted Leadership and Its Role in Shaping School Climate and Teacher Competence: The Case of *Ing Ngarso Sung Tulodo*

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**ABSTRACT.** This study investigates the influence of school principals' leadership, grounded in the Javanese philosophy of *Ing Ngarso Sung Tulodo*, which, in English, at the front gives an example, and the school climate on the professional competence of elementary school teachers in Indonesia. The *Ing Ngarso Sung Tulodo* philosophy emphasizes the role of leaders as role models who inspire and guide their subordinates. A positive and supportive school climate is likewise considered essential for fostering teacher development. Adopting a quantitative research design, this study involved 122 elementary school teachers selected through cluster sampling in Lampung Province, Indonesia. Data were collected using a structured questionnaire and analyzed using Structural Equation Modeling (SEM) with SmartPLS 3.0. The results of the study indicate that leadership grounded in *Ing Ngarso Sung Tulodo* and a conducive school climate have a positive, statistically significant effect on improving teacher competency ( $p < 0.001$ ). This result differs from most studies of educational leadership at the global level, which still focus on the dominance of Western leadership models and rarely integrate local cultural values as the primary basis for analysis. This study explicitly fills this gap by presenting a leadership model rooted in local wisdom. This study provides a new space for empirical testing of culture-based leadership to improve teacher competency. This area has so far been under-researched in the international literature. Theoretically, this study enriches the study of educational leadership by broadening the perspective of leadership models through the integration of non-Western cultural values. Practically and internationally, this study can provide important implications for policymakers and school administrators, especially in multicultural and developing countries, in designing leadership development programs and school governance that are contextual, globally relevant, and sensitive to local culture.

**Keywords:** *Culturally rooted leadership, Ing Ngarso Sung Tulodo, school climate, teacher competence, elementary education, Indonesia.*

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## INTRODUCTION

Improving educational quality remains a major challenge, especially in developing countries like Indonesia (Dacholfany et al., 2024). Even though the Indonesian government has made many changes and tried new strategies, the overall results in education remain poor (Toropova et al., 2021). Reports show that Indonesia ranks 10th out of 14 developing countries in general education

quality, and its teachers rank last in how well they teach (Iriany & Paciana, 2019). These results show that Indonesia's education system still faces many problems, especially in teacher quality, complex curricula, how funds are spent, and the rules that guide schools. Solving these problems is very important for improving education across the country (UNESCO-GEMR, 2021). Many developing countries face the same problems with low teacher quality, such as teachers lacking sufficient teaching skills, receiving infrequent training, and using technology little in the classroom (Sukadari et al., 2021). Running education systems in these countries is also made harder by insufficient funding, complex government systems, and weak policy implementation, which means efforts to improve education often do not work well (Zhang & Tian, 2025).

Teacher professionalism is a key determinant of educational quality, as it is directly reflected in teaching performance and student learning outcomes (Ditya et al., 2023). Effective teacher performance signifies high levels of competence, while poor outcomes often point to deficiencies in pedagogical practice (Agustin & Sugiyono, 2019). The performance of professional educators encompasses their capacity to carry out instructional responsibilities effectively, underpinned by four core competencies: pedagogical, professional, social, and personal (Rohma et al., 2020). Professional teachers, within a global framework, are viewed as agents of change who play a crucial role in shaping the quality of education. Teachers are not only required to master teaching materials but also to be able to adapt to the complexities of 21st-century needs, including technological mastery, cross-cultural understanding, and critical thinking skills (Ofosu-Asare, 2024).

Pedagogical competence, as outlined in Indonesian Law No. 14 of 2005 on Teachers and Lecturers, pertains to a teacher's ability to understand learners, apply educational theories, design effective curricula, leverage instructional technology, and conduct meaningful assessments (Siri et al., 2020). Teachers are therefore expected to not only master content knowledge but also adopt reflective practices that enhance student learning (Novianti & Nurlaelawati, 2019; Otyushina et al., 2024). Pedagogical competence is not only related to mastery of teaching materials but also encompasses reflective and innovative abilities (Shulman, 2015). Reflective abilities enable teachers to evaluate learning practices continuously. In contrast, innovative abilities encourage the creation of new, relevant strategies, thus becoming an important prerequisite for improving the quality of learning.

Teacher professional competence is not just a set of technical skills; it also shows how well teachers can adapt to changes in knowledge, teaching methods, and educational technology. (Dayanty & Nuryani, 2023). According to Fadli (2024), professional competence includes knowledge of the subject, effective teaching methods, and the integration of research and technology into the classroom. This competence is also closely linked to ongoing professional learning and to teachers' ability to improve themselves and support the wider goals of education (Brass & Holloway, 2021; Riadi et al., 2022). From a global perspective, strong professional competence is the foundation for teachers' digital skills, helping them not only use technology but also assess, adapt, and incorporate it into teaching across different subjects. Professional competence is needed for ongoing teaching innovation and working together across different fields, which is important for global changes in education (Zhao et al., 2023).

Although Indonesian data, like the results of the 2020 National Teacher Competency Test (TCT), show a gap between what the government wants and what is actually happening, this is not just a problem for Indonesia. The low national average score (53.02), including low teaching (48.94) and professional (54.77) skills, indicates problems many countries face: the struggle to balance changing policies, supporting teacher growth, and putting plans into action (Annisa et al., 2020). So, Indonesia's situation is an example of the global challenge of preparing teachers for digital change, not just a local issue. This gap shows that rules and training programs have not solved the main problems in improving learning, which affects how well teachers teach, how well students learn, and the overall quality of education (Ally, 2019; Tjabolo & Herwin, 2020).

In this situation, the principal should be seen as a leader who connects policy, school culture, and teaching practices (Ayu et al., 2025). Around the world, school leaders have been

shown to affect teacher motivation, the school environment, and student results (Mumpuniarti et al., 2020). Leadership styles based on Indonesian local wisdom, such as the Javanese idea of *Ing Ngarso Sung Tulodo*, can be seen as local versions of moral and ethical leadership that align with the concepts of transformational and ethical leadership worldwide (Arifin & Hermawan, 2022). This Javanese principle, "set an example in front, support behind," highlights leadership that goes beyond office duties and includes guiding, inspiring, and sharing responsibility among teachers (Hartiwi et al., 2020). However, there is a significant gap in the research because *Ing Ngarso Sung Tulodo* has not been clearly explained or tested within global educational leadership theory. So far, most models have described it only in simple terms and kept it within the Indonesian context, which can lead to an overly positive view of local wisdom (Hoque et al., 2020). But if we examine it more deeply, this idea can contribute to the discussion of international educational leadership, especially by bringing together local cultural values with the needs of modern leadership in today's global and digital world (Zalli, 2024). This research views *Ing Ngarso Sung Tulodo* not just as a local idea but as a new concept that can be useful worldwide.

Leadership grounded in the principle of *Ing Ngarso Sung Tulodo* transcends mere bureaucratic functions, encompassing the capacity to mentor, inspire, and optimize teachers' potential (Asnawan, 2020). It provides a culturally relevant foundation for nurturing teacher character and competence, particularly in Indonesian elementary schools (Kusnadi, 2023). At the core of this model lies the conviction that effective leaders lead by example, embodying the values, attitudes, and practices they seek to cultivate among their staff. Beyond leadership, the school climate also plays a pivotal role in shaping the teaching and learning process (Nugroho, 2021). A positive and supportive school climate not only strengthens teacher motivation but also promotes collaboration and facilitates ongoing professional development (Siahaan et al., 2023). The intersection between culturally rooted leadership and a conducive school climate highlight that cultural dimensions cannot be overlooked in efforts to enhance teacher competence.

Leadership based on the ideas of *Ing Ngarso Sung Tulodo* is worth closer examination because, until now, it has been discussed mostly in the national setting and seen as just local wisdom. But if we look more deeply, the main idea in *Ing Ngarso Sung Tulodo* aligns closely with global leadership ideas, such as transformational and ethical leadership, which both emphasize leaders as moral and inspiring role models (Schiuma et al., 2022). The ideas in this philosophy are rooted in culture but are also important everywhere. This research shows that local values are not unique to one place but can contribute to the global conversation about leadership in education. Bringing together culture-based leadership and a positive school environment expands the study beyond local actions to a better understanding of how culture can help teachers perform their jobs more effectively.

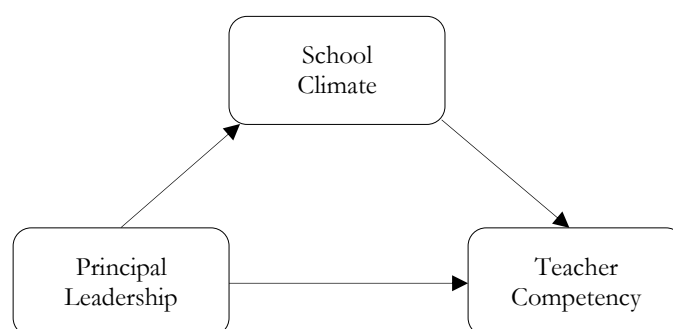
Given this context, the present study aims to investigate the influence of *Ing Ngarso Sung Tulodo*-based principal leadership and school climate on teacher competency in Indonesian elementary schools. This research contributes to the broader understanding of how culturally embedded leadership practices and environmental factors intersect to shape teacher development. By examining the practical implications of these leadership strategies, this study offers valuable insights for educational policymakers, school leaders, and teacher training institutions aiming to enhance the professionalism and effectiveness of educators in Indonesia. This research theoretically enriches the leadership discourse by connecting local philosophies to a global conceptual framework. At the same time, it provides a contextual model that can be adopted in leadership training and school governance policies in Indonesia.

## **METHOD**

This study employed a quantitative research design with a survey method to examine the influence of principal leadership based on *Ing Ngarso Sung Tulodo* and school climate on teacher competency in elementary schools in Indonesia. A quantitative approach was chosen because it facilitated the systematic collection of numerical data and the application of statistical analysis to test hypotheses about the relationships between variables (Johnson & Christensen, 2022;

Stockemer, 2019). Strict ethical considerations were observed in this study, including obtaining informed consent from all participants and obtaining approval from the institutional ethics committee, ensuring compliance with established research ethics standards.

A self-administered structured questionnaire was designed as the primary data collection instrument. This method allows for systematic measurement of respondents' perceptions using standardized indicators, thus ensuring comparability and objectivity (Zimmer et al., 2021). Structural Equation Modeling (SEM) was used through SmartPLS 3.0 software to examine complex relationships between constructs. SEM is a rigorous analytical technique well-suited to examine a wide range of interrelated relationships in the social sciences and education (Al-Emran et al., 2019). The application of PLS-SEM in this study is justified by its flexibility in handling small sample sizes, non-normally distributed data, and complex models. Furthermore, PLS-SEM is well-suited for exploratory research, theory development, prediction-oriented studies, and the use of formative measurement models. The conceptual model (Figure 1) illustrates the hypothesized relationships among the study variables.



**Figure 1** Conceptual Model of the Study

Hypothesis H1 states that principal leadership, as demonstrated by Ing Ngarso Sung Tulodo, improves teacher skills. H2 states that this leadership creates a school environment where people trust one another, work together, and show respect. H3 says that a supportive school environment helps teachers grow in their jobs and teach well. H4 states that principal leadership and the school environment together strongly affect teacher skills, indicating that both are important for effective education.

The study population comprised elementary school teachers in Metro City, Lampung Province, Indonesia. A total of 122 teachers from five different elementary schools were selected using cluster sampling, a technique suitable for geographically dispersed populations and school-based research. Cluster sampling enhances representativeness by allowing researchers to draw samples from naturally occurring groups (schools, in this case), thereby maintaining variability and reducing bias. The sample composition based on school and gender is presented in Table 1. The research location is Lampung Province, with Metro City being chosen intentionally because it represents the educational characteristics of both urban and semi-urban areas. Metro City was chosen because it provides a relevant context for testing the research variables and allows for generalization of the findings to areas with similar characteristics in Indonesia.

**Table 1** Demographic Distribution of Teacher Respondents

No.	School Name	Male	Female	Total
1	Elementary School Pertiwi Teladan Metro	8	17	25
2	Elementary School Wahdatul Ummah Metro	7	14	21
3	Elementary School Muhammadiyah Sang Pencerah Metro	10	16	26
4	Elementary School Muhammadiyah Central Metro	13	17	30
5	Elementary School Aisyiyah Metro	7	13	20
<b>Total</b>		<b>44</b>	<b>77</b>	<b>122</b>

The inclusion of a diverse set of schools supports the generalizability of the findings and reflects a broad cross-section of elementary-level educational institutions in the region. Data were collected using a standardized five-point Likert scale questionnaire, adapted and refined from validated instruments in previous empirical studies (Imron et al., 2020; Saleem et al., 2020; Schipper et al., 2020). The instrument consisted of 20 items, equally distributed across three constructs: principal leadership (PL), school climate (SC), and teacher competency (TC). Each item was phrased in straightforward language to ensure comprehension among elementary school teachers. Responses were captured using a Likert scale with the following values: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. To ensure the psychometric robustness of the instrument. Content validity was assessed by carefully reviewing relevant literature and obtaining feedback from experts. To make the tool even stronger, we checked how well it measured what it was supposed to and how reliable it was, using special statistical tests. We used a score of 0.70 or higher as the lowest acceptable level for how consistent the tool's results were (Hair et al., 2021).

The research instrument underwent an expert judgment by expert validators to assess its clarity and content suitability. Instrument pilot testing was also conducted to ensure cross-cultural validity in the Indonesian context. This methodological rigor ensures that the instrument accurately captures perceptions related to *Ing Ngarso Sung Tulodo*-based leadership, school climate, and teacher competency in the Indonesian context.

The data analysis employed the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach to examine the structural relationships between both exogenous and endogenous variables while accounting for measurement errors (Wong, 2019). This approach is particularly appropriate for complex models involving latent constructs, as it allows simultaneous analysis of the measurement model (outer model) and the structural model (inner model).

Analysis was conducted using SmartPLS 3.0, a popular tool in the social sciences and education for assessing how well measurement models perform (Mueller & Hancock, 2018). PLS-SEM works well with small to medium-sized datasets and does not require the data to follow a normal distribution. It finds the best connections between variables by explaining as much as possible about the results, which makes it well-suited for building theories and for research focused on prediction.

The outer model assesses how well the measurements perform, considering factors such as indicator reliability, consistency of results, and whether the measurements match what they are supposed to measure. For this, only items with a factor loading of 0.70 or higher and an Average Variance Extracted (AVE) of 0.50 or higher were kept. Composite Reliability (CR) and Cronbach's Alpha were also calculated to check consistency (Memon et al., 2021). Carefully following these steps shows that the tools used in the study are strong and trustworthy, making the results more reliable and easier to apply to other situations, as they meet well-known quality standards.

To check for possible bias from using the same method to collect data, a full collinearity check was done using the Variance Inflation Factor (VIF) in SmartPLS 3.0. This follows Kock (2015) advice to examine the extent of overlap among the variables, rather than relying on older tests such as Harman's single-factor test. In this study, VIF values for all variables were checked, and a limit of <10 was used, indicating that the overlap is at a safe level. All VIF values were below this limit, indicating that bias from the data-collection method is not a significant problem for the model. Adding this test strengthens the study and provides greater confidence that the results are not due solely to how the data were collected.

To test the study's ideas, the bootstrapping method (using 5,000 samples) was used to assess whether the connections between variables were meaningful. A p-value less than 0.05 indicates that the result is significant. The model's fit was also evaluated using measures such as the Standardized Root Mean Square Residual (SRMR) and the Normed Fit Index (NFI), where SRMR below 0.10 and NFI above 0.80 indicate a good fit (Hoyle, 2023). Using bootstrapping, checking model fit, and testing for bias together makes sure the model is solid and the study's results are trustworthy.

## RESULT AND DISCUSSION

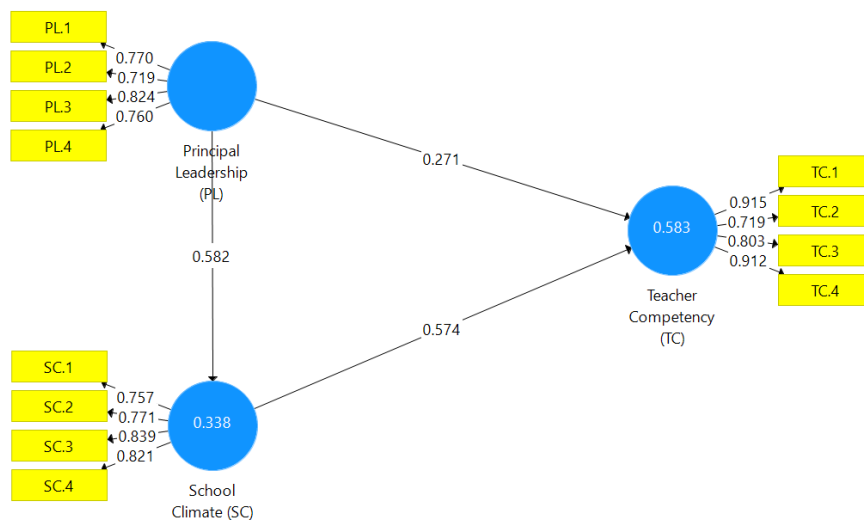
### Result

The external model analysis results confirmed the research instrument's validity and reliability. Confirmatory Factor Analysis (CFA) was applied to verify the measurement items representing three latent variables: Principal Leadership (PL), School Climate (SC), and Teacher Competence (TC). Table 2 presents more details; the narrative highlights that all constructs meet the minimum threshold, thus demonstrating reliability and convergent validity. This integration avoids redundancy while ensuring that the table is the primary reference for detailed statistical values.

**Table 2** Validity and Reliability of Constructs

Variable	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Principal Leadership (PL)	0.911	0.852	0.701
School Climate (SC)	0.810	0.875	0.736
Teacher Competency (TC)	0.858	0.906	0.808

All constructs meet the established thresholds: Cronbach's Alpha > 0.70, CR > 0.70, and AVE > 0.50. These values indicate strong internal consistency and convergent validity (Heale & Twycross, 2015; Mohamad et al., 2015). All indicators demonstrated factor loadings above 0.70, validating their contribution to their respective latent variables. All indicators had factor loading values above 0.70, confirming their contribution to their respective latent variables. The results of the VIF test analysis show that all constructs have a VIF value <10, so it can be concluded that there are no multicollinearity or normality problems in the model. Cross-validation was integrated into the analysis results, minimizing potential bias and providing a more straightforward and accurate mechanism for evaluating model performance.



**Figure 2** Path Model Diagram: Validity and Reliability Assessment

The good-of-fit test results suggest that the structural model is well-specified and fits the data. The latter is evidenced by the NFI of 0.832 (above the threshold of > 0.80) and the SRMR of 0.091 (below the criterion of < 0.10). Finally, these indices indicate a good fit of the model and suggest that it is statistically appropriate for structural hypothesis testing, according to the specifications provided by (Hair et al., 2021). The relationships among these variables were further examined using a bootstrapping approach (N = 5,000) to provide more stable, consistent parameter estimates. Finally, reporting confidence intervals for effect sizes also gives a better idea of the accuracy with which the estimate has been computed and about the practical strength of each

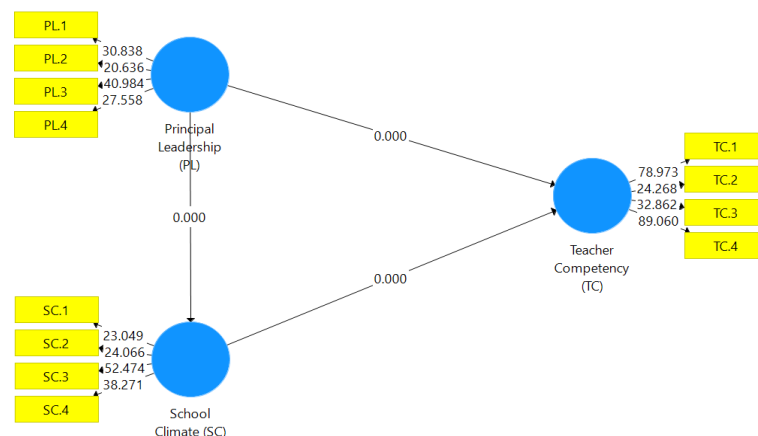
estimated relationship. Figure 2 presents a path model diagram and reports construct validity and reliability results for the directionality of relationships (Kyriazos, 2018b). Simultaneously, all the findings of hypothesis testing, including the original sample values, t-statistics, and p-values in this table, provide a complete general picture of the analysis results using the PLS-SEM approach (Table 3).

**Table 3** Hypothesis Testing Results Using PLS-SEM

Hypothesized Path	Original Sample (O)	T-Statistics	P-Value
PL → SC	0.634	15.889	0.000
PL → TC	0.416	6.183	0.000
SC → TC	0.711	14.349	0.000
PL → SC → TC	0.236	11.293	0.000
PL + SC → TC (Total Effect)	0.321	10.293	0.000

The findings of this study reveal that all the hypothesized relationships are supported at the 0.05 level of significance ( $p < 0.05$ ), supporting the predicted model. Indeed, PL exerts a strong, direct positive effect on SC ( $\beta = 0.634$ ). This indicates that a large portion of the variance in school climate is explained by leadership practices and confirms the perception of a favorable institutional environment in the school with favorable outcomes. In addition, PL also has a direct impact on TC, with  $\beta = 0.416$  (moderate), thus supporting the idea that leadership contributes to improving teacher professional capacity. But the variable with the greatest impact on TC is SC ( $\beta = 0.711$ ), with a very strong effect size, and this finding also confirms that school climate is the most dominant factor predicting variance in teacher competence. School Climate (SC) has a greater impact on Teacher Competency (TC) than the direct effect of Principal Leadership (PL), indicating that principal leadership is most effective when it fosters a positive school climate. The influence of PL through SC is significant, as school climate serves as the main channel for translating leadership vision into improved teacher competency. This finding highlights that effective principal leadership depends not only on individual actions but also on the ability to create an environment that promotes ongoing teacher learning and professionalism (Bellibaş et al., 2025).

This is also supported by the indirect effect of PL on TC through SC ( $=0.236$ ), implying that leadership influences teachers not only directly but also indirectly through the development of a positive school climate. As for the explanatory power of the models,  $R^2 = 0.501$  (50.1%) and  $R^2 = 0.498$  (49.8%) were obtained for SC and TC, respectively, which means that about half of the variance in both constructs is explained by exogenous variables, which reflects a medium to high amount of explanatory power. By comparison, these findings suggest that while leadership based on *Ing Ngarso Sung Tulodo* is a necessary foundation, school climate operates more as a principal driver of teacher efficacy. This relationship between these variables is clearly shown in Figure 3. This video conference has practical repercussions for educational policy and strategies, which may reinforce leadership and school climate to improve learning quality.



**Figure 3** Structural Model with Significant Path Coefficients

The SEM results demonstrate that principal leadership grounded in the *Ing Ngarso Sung Tulodo* philosophy significantly enhances both the school climate and teacher competency. The path analysis underscores that effective leadership not only inspires a collaborative climate but also promotes continuous professional growth among teachers. The model confirms the indirect effect of leadership via school climate, suggesting that nurturing a positive educational environment is critical for sustained teacher development and educational quality. This empirical evidence supports leadership training and school management policies that align with culturally rooted values of integrity, vision, and empowerment, essential for improving education at the elementary level in Indonesia. Narratively emphasizing these implications strengthens the study's practical contributions, showing that culturally rooted leadership and supportive environments can serve as actionable levers for improving teacher professionalism in Indonesia.

## Discussion

Principal leadership based on the Javanese philosophical concept of *Ing Ngarso Sung Tulodo* is an approach that emphasizes the internalization and practical application of core values such as courage, integrity, and justice (Habsa & Prasetyo, 2018). These values shape the moral character of educational leaders and play a crucial role in fostering a positive and ethical school environment (Martinah, 2023). Rather than being understood as abstract ideals, these principles are demonstrated through school leaders' daily behavior and decision-making processes (Sari, 2023). Placed in a global perspective, this philosophy resonates with the ideals of transformational leadership, where leaders inspire, serve as role models, and foster an ethical vision that motivates teachers to go beyond routine practices (Bass & Riggio, 2006). The Javanese wisdom of *Ing Ngarso Sung Tulodo*, developed by Ki Hajar Dewantara, is not only deeply rooted in Indonesian culture but also contextually relevant to current thinking about leadership on the international stage. General moral values are embedded in discernible forms of leadership. Thus, leadership theory shows that the moral guidance from which standards derive constitutes an invasion of professional practice in schools. The ethics of leadership is thus not so much a normative ideal as an empirical concept that defines organizational practice.

The principle of courage is embodied in decisive and innovative actions aimed at improving the quality of basic education (Towaf, 2016). Integrity refers to honesty, transparency, and consistency in leadership responsibilities, while fairness encompasses the equal treatment of all stakeholders in the school community (Abdullah et al., 2020; Howard et al., 2021; Makorohim et al., 2022). Principals who practice these values serve as teacher role models and foster a school culture grounded in ethical leadership (Yuliana et al., 2023). Culturally grounded leadership can bridge global theory and local practice, demonstrating how universal concepts of justice and fairness can be operationalized in diverse educational contexts.

Equally important is the role of a conducive school climate in supporting leadership effectiveness (Agustina et al., 2021; McGiboney, 2023). A positive school climate—characterized by collaborative teacher relationships, responsive leadership, and adequate infrastructural support—contributes to a work environment that promotes teacher development and job satisfaction (Long et al., 2021; McCarley et al., 2016; Sanchez et al., 2022). Such an environment encourages teachers to collaborate, innovate, and actively engage in continuous professional learning (Suratman et al., 2020). The school climate is one that is cast as an interactive resource for leadership effects. This knowledge helps broaden theory about organizational climate, in that the effects of leadership depend on environmental reinforcement. This redirects the discourse from linear causality to a dynamic, systemic reading (Maharani & Soesanto, 2022; Sandra & Juniar, 2021). School climate is situated as a mediating factor that amplifies the impact of leadership. This implies that leadership effects are contingent on environmental support, which extends our knowledge of organizational climate research. This moves the conversation away from linear causality to a conception of causality as more dynamic and systemic.

Leadership that draws on local cultural wisdom can inspire change, while a positive school climate supports this through daily routines and structures. These results support organizational climate theory, which emphasizes how shared views of a supportive environment shape professional behavior and outcomes (Schneider et al., 2013). Combining *Ing Ngarso Sung Tulodo*-based leadership with a strong school climate matches global findings on the interaction between leadership and organizational culture (Splitter et al., 2023). The study also shows that local cultural wisdom exposes gaps in dominant leadership theories, which often focus too much on individual leaders and miss the moral, relational, and contextual factors present in daily school life.

Bringing together culturally rooted leadership and a supportive school environment helps create the best conditions for developing teacher competency (Senapathi et al., 2017; Hermawan & B. Tan, 2021). Competency includes academic and teaching skills, as well as interpersonal and self-management abilities (Triyono et al., 2020). It involves classroom management, clear communication, ways to motivate students, and understanding each student's needs (Astuti et al., 2020; Didion et al., 2020). This approach fits with Darling-Hammond's (2020) international study, which connects teacher professionalism to a mix of expertise, skills, and social-emotional strengths. By focusing on local leadership values, this study challenges the common belief that effectiveness is universal, showing that leadership depends on social and cultural context. This study finds that national leadership styles can help shape global ideas of professionalism by highlighting important values in daily school life (Englmaier et al., 2025). Teacher effectiveness is complex and influenced by many factors, but research shows that organizational leadership is associated with competence (Kuznetsova et al., 2024). Rather than just supporting current models, this paper broadens them by recognizing the importance of cultural leadership. Local wisdom adds to existing theories and points out gaps, especially the lack of focus on ethical role models, shared responsibility, and moral authority in leading frameworks. This combination strengthens the global professionalism model.

This combination helps teachers build their personal, teaching, social, and professional skills (Amtu et al., 2020; Darling-Hammond, 2020; Setyaningsih & Suchyadi, 2021). Leadership based on cultural wisdom encourages ethical actions and personal growth, while a positive school climate supports teamwork and collaboration (George Theoharis & Martin Scanlan, 2021; Jafar, 2021; Tambak et al., 2021). By situating *Ing Ngarso Sung Tulodo* within transformational leadership and organizational climate theories, this research shows that local philosophies not only align with global frameworks but also offer new perspectives, particularly on aspects often overlooked in Western leadership models (Johnston et al., 2024).

Previous studies support these findings. For instance, DeMatthews et al., (2020), Navaridas-Nalda et al., (2020), Ulfathmi et al., (2021), and Werang, (2023) show that leadership grounded in culture and a positive school environment has a significant effect on how well teachers perform their jobs. Fitriyani et al., (2020) say that using *Ing Ngarso Sung Tulodo* values is a strong starting point for improving primary education in Indonesia. Nugroho (2021), point out that mixing these traditional values with modern leadership styles is important for education, especially in building dedication and performance. Along with supporting earlier research, this study shows that local cultural wisdom is key to identifying gaps in popular leadership theories, which often focus on technical skills and ignore moral leadership, relationships, and authority grounded in culture. This research fills a gap by showing that the local leadership philosophy, *Ing Ngarso Sung Tulodo*, can be combined with transformational leadership and organizational climate theory. These findings show how important cultural values are in educational leadership and broaden research that has mostly focused on Western ideas. Local wisdom, then, is a way to question the idea that mainstream leadership models work everywhere.

This study goes beyond earlier research, which mostly confirmed the links among leadership, school climate, and teacher skills, by examining how the local leadership philosophy of *Ing Ngarso Sung Tulodo* can be combined with transformational leadership and organizational climate theory to advance current ideas (Cho & Kao, 2022). By treating culture as something that explains how things work, rather than merely as background, this study identifies gaps in popular leadership

theories that often ignore context, values, and moral authority (Fadli et al., 2024; Yada et al., 2025). The framework is improved by showing that cultural leadership actively shapes how leaders act and how organizations work. This approach transforms *Ing Ngarso Sung Tulodo* from merely a local value or symbol into a clear idea that explains how leadership occurs and is understood in schools. As a result, the study helps global leadership theory become more open and better suited for schools with many cultures.

This research also shows that principals who lead by example and use cultural values can greatly improve how well teachers teach and grow in their jobs (Pattier, 2023; Tan, 2024). A positive school environment, built through supportive leadership, teacher teamwork, and sufficient resources, makes these results even stronger (Anita Pankake & Chuey Abrego, 2017; Pane, 2015). This kind of environment helps teachers reflect on their work, learn from one another, and take shared responsibility (Bolman & Deal, 2019; Özgenel, 2019; Tan et al., 2021). These findings show that we cannot fully understand good leadership without considering the moral and relationship-based aspects that stem from culture, which are often overlooked in popular leadership theories. Because of this, the research is important for leadership training, suggesting that programs should mix global leadership standards with local cultural wisdom. This mix ensures leadership aligns with the local situation and meets today's educational needs. By linking global ideas with local wisdom, this study shows that leadership based on culture can fill in the gaps of popular theories and make leadership models stronger, which can improve school climate, teacher skills, and how schools compete both in the country and around the world.

The integration of *Ing Ngarso Sung Tulodo*-based leadership and a positive school climate yield a synergistic effect, offering a more substantial impact on teacher competency than either factor alone. An integration model of leadership values, organizational climate, and professional outcomes shows that local philosophies are not peripheral but central to the development of global theories of leadership. Therefore, the contribution of this study is in terms of conceptual aspects by re-conceptualizing how local wisdom is able to develop a universal model for educational leadership. The combination of *Ing Ngarso Sung Tulodo* and a positive school climate has a multiplicative impact, providing a much greater influence on teacher competency than either variable alone. This research contributes to the international dialogue by demonstrating that indigenous philosophies can inform generalizable theories of how 'local' practices and global institutions interact in educational leadership and organizational development.

## CONCLUSION

This study advances educational leadership theory by demonstrating that local cultural wisdom is essential, not merely background information. It highlights what is missing in common leadership theories by combining *Ing Ngarso Sung Tulodo* with transformational leadership and ideas about the school environment. The results show that leadership success cannot be fully explained by general, action-based models. While common theories focus on what leaders do and their personal power, they often miss the importance of setting a good example, building relationships, and cultural influence. This research presents *Ing Ngarso Sung Tulodo* as a way to turn leadership values into a better school environment and stronger teacher skills, helping global leadership theory become more aware of culture and local situations.

Looking at this from a practical and global perspective, these findings matter beyond Indonesia. The study shows that leadership grounded in local values works best when the school environment is positive. This is especially important for schools in diverse societies, where global leadership models may not fit local customs. The results suggest that training and professional development for leaders should not use a one-size-fits-all method, but instead should combine local values with global standards. This way, teachers become more professional, schools work together more effectively, and school improvement lasts longer across different countries.

Instead of ending with what it could not do, this study gives a clear plan for future research. Studies that compare countries should examine how different types of locally rooted leadership

align with global leadership ideas across contexts. Research over a longer period is needed to examine how culture-based leadership affects the school environment and teacher growth over time. Using both numbers and stories in research can help show how values, leadership, and school practices connect. Future research should view local wisdom as a new way to transform global ideas about educational leadership.

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