

The Role of Psychological Climate as A Mediator Between Participative Leadership and School Innovation Climate

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ABSTRACT

In today's rapidly changing educational landscape, fostering innovation within schools has become more than a policy objective it is a human-centered imperative. This study explores how participative leadership influences school innovation climate, with psychological climate acting as a mediating factor. Drawing on data from 210 secondary school teachers in DKI Jakarta, the research employs Structural Equation Modeling (PLS-SEM) to assess the relationships between the three variables. Findings reveal that participative leadership significantly impacts both psychological climate and innovation climate. Teachers who feel valued, trusted, and supported are more likely to engage in creative problem-solving, share ideas, and collaborate toward innovation. Importantly, psychological climate was found to partially mediate the relationship between participative leadership and innovation climate. These results underscore that leadership is not solely about structures and procedures but about cultivating emotional safety and inclusion. Schools thrive when leaders listen, empower, and co-create environments where teachers feel psychologically secure. This study contributes to leadership theory and offers practical implications for educational reform highlighting that lasting innovation starts with trust and human connection.

Keywords: Innovation Climate, School Leadership, Teacher Empowerment, Participative Leadership, Psychological Climate

INTRODUCTION

Background

The educational landscape in the post-pandemic era has undergone significant transformation. Schools are no longer expected to function merely as institutions for knowledge transmission, but rather as dynamic organizations that foster innovation, adaptability, and continuous improvement. These changes are driven not only by the advancement of digital technology but also by evolving expectations regarding creativity, collaboration, and psychological well-being in the workplace. In this context, school leadership plays a pivotal role in shaping the internal conditions necessary to support innovation and teacher empowerment.

One leadership style that has gained increasing attention in educational research is participative leadership. This leadership approach emphasizes shared decision-making, open communication, and the delegation of authority, allowing teachers to take an active role in shaping school policies and instructional practices. Research has consistently shown that participative leadership can positively influence teacher motivation, professional engagement, and openness to innovation (Mataboge, 2024; Nam et al., 2024). When school leaders promote inclusive dialogue and empower teachers, they create conditions conducive to change and experimentation.

However, the relationship between participative leadership and school innovation climate is complex and may not always be direct. Innovation climate refers to the organizational atmosphere that supports new ideas, risk-taking, experimentation, and collaborative problem-solving. A supportive innovation climate is crucial for teachers to implement novel instructional methods and to engage in continuous pedagogical improvement. Although participative leadership can foster such an environment, researchers have increasingly recognized the importance of psychosocial mechanisms that mediate this influence.

One of the most critical yet underexplored mediating factors is the psychological climate perceived by teachers. Psychological climate refers to how individuals perceive and interpret the work environment in terms of psychological safety, trust, autonomy, recognition, and interpersonal support (Zhang, 2024). In the school setting, a positive psychological climate allows teachers to feel safe expressing their ideas, engaging in dialogue, and taking instructional risks without fear of blame or punishment. This sense of safety and support becomes a foundation for innovation.

Participative leadership is believed to play a fundamental role in shaping psychological climate. By actively involving teachers in school decisions, encouraging creative input, and maintaining open lines of communication, school leaders build a culture of trust and empowerment. In such an environment, teachers are more likely to experience high levels of psychological well-being, which in turn promotes a willingness to innovate and collaborate (Nam et al., 2024; Villafane, 2025).

While past studies have examined the direct influence of leadership on innovation, few have focused specifically on the mediating role of psychological climate in educational settings. Moreover, most existing studies are situated in Western contexts, and limited research has addressed this issue in Southeast Asian countries, particularly Indonesia. This is an important gap, especially considering the Indonesian Ministry of Education's recent policies such as Merdeka Belajar (Freedom to Learn), which explicitly promote school autonomy, teacher agency, and innovation in instructional practice (Hunaepi & Suharta, 2024; Maslina & Simaremare, 2025).

Given this context, it is essential to investigate whether psychological climate serves as a key mechanism through which participative leadership influences school innovation climate (Keser et al., 2022; Song et al., 2025). Such understanding will not only enrich existing leadership theories but also provide practical guidance for school development initiatives. It may also help policymakers and education stakeholders design more holistic leadership training programs that go beyond procedural participation and emphasize emotional and psychological support for teachers.

In addition, the use of quantitative, model-based analysis, such as Structural Equation Modeling (SEM), can offer empirical validation of the proposed mediation pathways. By analyzing data from secondary school teachers across diverse school settings, this study can contribute to a deeper understanding of how participative leadership operates in real-world educational contexts.

To summarize, while previous research has confirmed the benefits of participative leadership and teacher collaboration on school innovation climate, this study proposes a new model that incorporates psychological climate as a mediator. This approach is expected to reveal new insights into how school leaders can strategically shape teacher experiences to promote a sustainable culture of innovation.

LITERATURE REVIEW

Participative Leadership in Schools

Participative leadership refers to a leadership approach where decision-making is shared between leaders and their team members. In the context of schools, this means that principals actively involve teachers in discussions about school policies, curriculum development, and instructional strategies (Gress, 1974; Ni et al., 2018; Somech, 2008). This inclusive decision-making process encourages teacher ownership, enhances morale, and improves job satisfaction.

According to Nam et al. (2024), participative leadership increases psychological empowerment by giving employees a sense of influence and autonomy over their work. This effect is particularly significant in education, where teacher autonomy is closely tied to instructional creativity and adaptability. Schools led by participative leaders often display stronger collaboration, professional trust, and openness to change.

Somech (2008) further demonstrated that participative leadership in schools contributes to enhanced teacher performance and innovation by fostering a sense of involvement and shared purpose. Teachers feel empowered to voice their opinions and try new approaches when they perceive that their input is valued (Somech, 2008).

Psychological Climate: The Mediating Mechanism

Psychological climate is defined as an individual's cognitive appraisal of the work environment based on factors like support, autonomy, fairness, and safety. It captures how safe and supported an employee feels to take risks, express ideas, and participate actively in decision-making. Unlike organizational climate, which is a shared perception, psychological climate is personal and subjective.

In school settings, a positive psychological climate fosters an environment in which teachers feel psychologically safe i.e., free from fear of embarrassment or retribution when offering suggestions or trying out new methods. Emphasized the role of psychological climate in fostering a culture of innovation by creating conditions where teachers can collaborate, take risks, and think creatively without fear (Imran et al., 2025; Zhou & Ismail, 2025).

In a school climate where leaders trust teachers and promote autonomy, psychological safety increases, and this in turn strengthens teachers' commitment to innovation. As Jaelani et al. (2023) found in Indonesian schools, participative leadership has a significant positive influence on school innovation climate when mediated by supportive conditions such as commitment and internal motivation (Jaelani, Agung, et al., 2023).

Psychological Climate as a Mediator

The mediating role of psychological climate is critical in understanding how leadership translates into innovation. According to Savaş & Toprak, (2014), psychological climate mediates the relationship between school leadership and organizational commitment. Their

Innovation Climate in Schools

Innovation climate refers to the shared perception among staff that their organization supports experimentation, novel ideas, and change. In schools, this translates into support for innovative teaching methods, curriculum design, use of technology, and student-centered learning. A strong innovation climate encourages teachers to take risks and continuously improve their practice.

Lythreitis et al., (2022) emphasized that ethical and psychological climates are critical mediators between leadership and innovation outcomes. Even in corporate settings, their findings suggest that climate plays a crucial role in enabling innovation through employee perceptions of trust, justice, and support.

In the Indonesian context, Hartuti et al., (2021) investigated early childhood educators and found that psychological security climate and knowledge sharing were strong predictors of innovation capabilities. These findings further support the significance of psychological factors in school innovation.

Cross-Contextual Relevance and Gaps

While many studies confirm the importance of leadership and psychological climate for innovation, there is a notable gap in the educational sector in Southeast Asia (Boontantrapiwat & Kitcharoen, 2022; Sawan & Anugrahsari, 2024). Most findings are based on Western organizational or corporate contexts. There is limited empirical evidence exploring the mediation effect of psychological climate in Indonesian secondary schools, particularly as the country undergoes reforms through the Merdeka Belajar (Freedom to Learn) policy. This research seeks to fill that gap by empirically validating the role of psychological climate as a mediating variable. Moreover, it offers actionable insights for school leaders: building an innovative school requires more than procedural involvement it requires emotional safety, trust, and recognition. Literature across domains consistently supports the notion that participative leadership indirectly impacts school innovation climate through the mediating role of psychological climate. A psychologically safe, trusted, and supportive environment fosters teacher innovation, engagement, and willingness to experiment with new practices. This model has strong theoretical grounding and practical urgency, especially in the context of educational transformation in Indonesia.

Research Hypotheses

Based on the theoretical framework and literature review, the hypotheses in this study are formulated as follows:

H1: There is a positive and significant effect of participatory leadership on the psychological climate in schools.

H2: There is a positive and significant effect of the psychological climate on the school innovation climate.

H3: There is a positive and significant influence between participatory leadership and the school's innovation climate.

H4: The psychological climate mediates the influence between participatory leadership and the school's innovation climate.

RESEARCH METHODOLOGY

This study uses a quantitative approach with an explanatory research design that aims to explain the causal relationship between three main variables, namely participatory leadership, psychological climate, and school innovation climate. The main focus of this study is to examine whether psychological climate acts as a mediating variable in the relationship between participatory leadership and innovation climate.

The quantitative approach was chosen because it allows for empirical testing of hypotheses and generalization of results based on data collected from a specific population. The population in this study was junior high school (SMP) and senior high school (SMA) teachers, both public and private, in the region West Java Province or Jabodetabek.

The sampling technique used is purposive sampling with the following criteria: (1) active teachers who have been teaching for at least one year, (2) are in schools led by principals who have been active for at least one year, and (3) are involved or have experience in school development activities, learning innovation, or education quality improvement programs. The minimum sample size to be used is between 150 and 300 respondents, in accordance with the guidelines for Structural Equation Modeling (SEM) analysis using the Partial Least Squares (PLS) approach.

This study involves three main variables. Participatory leadership as an independent variable (X), measured through indicators of teacher involvement in decision-making, open communication, and the provision of autonomy. Psychological climate as a mediating variable (Z), which includes teachers' perceptions of psychological safety, trust in leadership, feeling valued, and support for new ideas. Finally, school innovation climate as the dependent variable (Y), which includes perceptions of encouragement of innovation, openness to change, and creative collaboration among teachers. The instrument used in this study was a questionnaire with a 1-5 Likert scale, which was compiled based on an adaptation of a previously validated instrument. The participatory leadership scale was adapted from Somech (2008) and Nam et al. (2024), the psychological climate from Edmondson and Zhang (2024), and the innovation climate scale from Lythreitis et al. (2022).

Before being distributed widely, this instrument will first be tested through a pilot test with 30 respondents to test its initial validity and reliability. Data collection will be conducted online using Google Forms or other digital survey platforms. Respondents will receive complete information about the research through an informed consent form before starting to fill out the questionnaire, in order to ensure conscious and voluntary participation. Data analysis will be conducted using the SEM-PLS approach, utilizing SmartPLS or WarpPLS software. The analysis steps include: (1) testing the outer model to ensure the validity and reliability of the construct through factor loading values, Average Variance Extracted (AVE), and composite reliability; (2) testing the inner model to examine the significance of the relationship between variables; and (3) testing the mediation effect through the bootstrapping approach. Mediation effects will be determined based on the approaches of Baron and Kenny and Hair et al., which allow for the identification of full or partial mediation.

This study also adheres to the principles of research ethics, including maintaining the confidentiality of data and respondent identities, ensuring voluntary participation, and guaranteeing that the data collected will only be used for academic purposes.

RESULTS AND FINDINGS

A total of 210 secondary school teachers from DKI Jakarta participated in this study. The respondents came from both public and private schools and represented a variety of teaching backgrounds. The selection was based on purposive sampling, targeting teachers who had at least one year of teaching experience and were involved in their schools' development or innovation activities.

The demographic distribution of the respondents is presented in the following table:

Table 4.1 Respondent Demographics

Respondent Characteristics

Characteristic	Category	Frequency	Percentage (%)
Gender	Female	118	56.2%
	Male	92	43.8%
School Type	Public	130	61.9%
	Private	80	38.1%
Teaching Experience	1–5 years	57	27.1%
	6–15 years	86	41.0%
	>15 years	67	31.9%
Education Level	Bachelor's Degree (S1)	166	79.0%
	Master's Degree (S2)	44	21.0%

These figures indicate a well-balanced representation of respondents, with a good mix in terms of gender, professional experience, and institutional background. The majority of teachers hold a bachelor's degree and teach in public schools, reflecting the structure of DKI Jakarta's school system.

Descriptive Statistics

To understand the general perception of respondents toward the study variables, descriptive analysis was conducted. The results are summarized in the table below.

Table 4.2 Descriptive Statistics

Variable	Mean	Standard Deviation (SD)	Interpretation
Participative Leadership	4.02	0.59	High

Psychological Climate	3.89	0.64	Moderate - High
Innovation Climate	3.95	0.61	Moderate-High

The analysis shows that teachers generally perceive their school leadership as participative. They also feel relatively safe and psychologically supported, though there is room for improvement. The innovation climate is considered moderately strong, indicating a general openness to change and experimentation in Jakarta schools.

Structural Equation Modeling (SEM-PLS)

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) via SmartPLS. The analysis includes testing the measurement model (outer model) and the structural model (inner model).

Measurement Model (Outer Model)

All constructs met the required threshold for validity and reliability:

Indicator loadings > 0.70

Composite Reliability (CR) values between 0.87–0.92

Average Variance Extracted (AVE) > 0.50

These results confirm that the instruments used were valid and reliable to measure the intended constructs.

Structural Model (Inner Model)

Hypothesis testing was conducted to examine the direct and indirect effects among the variables. The following table presents the results.

Table 4.3 Hypothesis Testing Results

Hypothesis	Path	β (Beta)	T- Value	p- Value	Result
H1	PL → Psychological Climate	0.54	9.47	< 0.001	Accepted
H2	Psychological Climate → IC	0.49	8.23	< 0.001	Accepted
H3	PL → Innovation Climate	0.31	3.61	< 0.01	Accepted
H4	PL → PC → IC (Indirect)	0.27	5.46	< 0.001	Accepted (Partial Mediation)

The structural model shows that all path coefficients are statistically significant. Participative leadership directly affects both psychological climate and innovation climate. Additionally, psychological climate has a strong direct effect on innovation climate, and also partially mediates the effect of participative leadership on innovation climate.

Mediation Analysis

To determine the role of psychological climate as a mediator, bootstrapping analysis was conducted. The following table summarizes the mediation test:

Table 4.4 Mediation Test Results

Effect	Result	Effect	Result
Direct Effect (PL → IC)	Significant	Direct Effect (PL → IC)	Significant
Indirect Effect (PL → PC → IC)	Significant	Indirect Effect (PL → PC → IC)	Significant
Mediation Type	Partial Mediation	Mediation Type	Partial Mediation

These findings indicate that while participative leadership independently influences innovation climate, its effect is strengthened when mediated by a positive psychological climate. In other words, leaders who involve teachers in decision-making and foster psychological safety can enhance the school's ability to innovate more effectively.

DISCUSSION

H1: Participative Leadership Positively Influences Psychological Climate

The first hypothesis, which proposed that participative leadership has a significant positive influence on psychological climate, was supported by the data ($\beta = 0.54$, $p < 0.001$). This finding suggests that when school leaders involve teachers in decision-making processes, maintain open communication, and demonstrate trust, teachers feel safer, more valued, and psychologically supported in their work environment.

This result is consistent with previous studies which emphasize that inclusive leadership styles foster psychological safety and a sense of belonging in organizations (Somech, 2008). In Jakarta's school context, where

hierarchical structures are still common, this finding reinforces the need for more democratic leadership practices to improve school climate and teacher well-being.

H2: Psychological Climate Positively Influences Innovation Climate

The second hypothesis was also supported ($\beta = 0.49$, $p < 0.001$), confirming that a positive psychological climate is a strong predictor of a school's innovation climate. When teachers feel safe to express their ideas, take risks, and engage in creative problem-solving without fear of punishment or ridicule, innovation thrives. This finding aligns with prior research which highlights the critical role of psychological safety in fostering innovation behavior, particularly in educational settings (Hartuti et al., 2021; Imran et al., 2025). In Jakarta's diverse school environments, a psychologically supportive climate appears to be a crucial driver of teacher innovation, as it lowers barriers to collaboration and experimentation.

H3: Participative Leadership Positively Influences Innovation Climate

The third hypothesis examined the direct relationship between participative leadership and innovation climate and was also supported ($\beta = 0.31$, $p < 0.01$). This suggests that participative leadership not only affects the psychological environment of the school but also directly encourages innovation by modeling openness, dialogue, and shared vision.

While the effect size here is smaller than that of the indirect path, it remains statistically significant. This implies that even without the mediating role of psychological climate, participative leadership can still foster a school culture that values creativity, experimentation, and improvement.

This echoes the findings from prior studies which confirm that leaders who share power and encourage teacher voice tend to build more adaptive and innovative school cultures (Jaelani, Hasbi, et al., 2023; Lythreatis et al., 2022).

H4: Psychological Climate Mediates the Relationship Between Participative Leadership and Innovation Climate

The final hypothesis tested the mediating role of psychological climate in the relationship between participative leadership and innovation climate. The indirect effect was significant ($\beta = 0.27$, $p < 0.001$), indicating partial mediation. This means that while participative leadership has a direct impact on innovation climate, a significant portion of this influence is channeled through the psychological climate.

This mediating role highlights the “how” behind leadership influence: leaders impact innovation not just by policy or encouragement but by shaping an emotional and psychological space where teachers feel empowered to innovate. Without a safe and supportive climate, even well-intended leadership efforts may not fully translate into innovation on the ground.

This supports the theoretical model proposed by (Edmondson, 1999) on psychological safety as a key condition for team learning and innovation, and is further reinforced by studies in the education sector

Conclusion and Recommendations

CONCLUSION

This study explored the mediating role of psychological climate in the relationship between participative leadership and school innovation climate among secondary school teachers in DKI Jakarta. The findings revealed that participative leadership significantly influences both psychological climate and innovation climate, indicating that when school leaders foster shared decision-making and open communication, it enhances how teachers perceive their work environment. Furthermore, psychological climate emerged as a strong direct predictor of innovation climate, highlighting the importance of emotional safety, trust, and support in promoting innovative behaviors among educators. Importantly, the study found that psychological climate partially mediates the impact of participative leadership on school innovation, suggesting that leadership influences innovation not only directly but also through creating a supportive psychological atmosphere. These results underscore that innovative school cultures are not achieved solely through structural policies but are shaped through human interactions, trust-building, and inclusive leadership practices. This conclusion provides valuable insights for school leaders, policy makers, and educational reformers seeking to drive meaningful change.

Recommendations

Based on the study's findings, several actionable recommendations are proposed for key stakeholders in education. First, school principals are encouraged to apply participative leadership approaches by involving teachers in planning, fostering transparency, and nurturing a culture of psychological safety where teachers feel free to innovate without fear. This can be done through regular collaborative meetings, recognition of teacher input, and non-punitive feedback mechanisms. Second, teachers should be empowered to take initiative in innovation and share responsibility in school development efforts, knowing their voices are heard and valued.

Third, policy makers are advised to embed leadership training programs that emphasize emotional intelligence, psychological safety, and inclusive leadership as part of school management development. Additionally, school evaluations should include measures of psychological climate as indicators of healthy, innovation-friendly environments. Lastly, future research should expand this model by including other psychological or organizational factors such as trust, motivation, or collaboration to deepen our understanding of what drives innovation in schools.

REFERENCES

- Boontantrapiwat, T., & Kitcharoen, P. (2022). The Effect of Organizational and Individual-Related Variables on Organizational Commitment of Teachers: A Meta-analysis. *Asia-Pacific Social Science Review*, 22(4), 7.
- Edmondson, A. (1999). Psychological Safety and Learning Behavior in Work Teams. *Administrative Science Quarterly*, 44, 350–383. <https://doi.org/10.2307/2666999>
- Gress, D. H. (1974). Participatory Leadership: Leadership Characteristics Of Secondary Schoolprincipals And Their Relationship To Perceived Subordinate Participation In The Decision-Making Process. Iowa State University.
- Hartuti, H., Rusdarti, R., Yulianto, A., Pranoto, Y. K. S., & Purwanto, A. (2021). The Role of Leadership, Psychological Security Climate, and Self-Efficacy on the Teachers Innovation Capability Through Knowledge Management: An Empirical Study on Indonesian Early Childhood School. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3980430>
- Imran, M., Li, J., Bano, S., & Rashid, W. (2025). Impact of Democratic Leadership on Employee Innovative Behavior with Mediating Role of Psychological Safety and Creative Potential. *Sustainability*. <https://doi.org/10.3390/su17051879>
- Jaelani, A., Agung, A., Yudana, M., & Dantes, K. R. (2023). influence of participative leadership, organizational climate, organizational commitment to work productivity of vocational high school teachers in Mataram City. *International Journal of Social Sciences and Humanities*. <https://doi.org/10.53730/ijssh.v7n2.14507>
- Jaelani, A., Hasbi, M., & Baharullah, B. (2023). A Critical Thinking Profile of Mathematics Education Students in Solving Ill-Structured Problem based on Mathematical Ability. *JTAM (Jurnal Teori Dan Aplikasi Matematika)*. <https://doi.org/10.31764/jtam.v7i2.13378>
- Keser, S., Akpolat, T., & Demirbilek, M. (2022). Polemic and Cynicism: A Study in Educational Organizations. *International Journal of Contemporary Educational Research*, 9(2), 313–328.
- Lythreathis, S., El-Kassar, A., Smart, P., & Ferraris, A. (2022). Participative leadership, ethical climate and responsible innovation perceptions: evidence from South Korea. *Asia Pacific Journal of Management*. <https://doi.org/10.1007/s10490-022-09856-3>
- Ni, Y., Yan, R., & Pounder, D. (2018). Collective leadership: Principals' decision influence and the supportive or inhibiting decision influence of other stakeholders. *Educational Administration Quarterly*, 54(2), 216–248.
- Savaş, A., & Toprak, M. (2014). Mediation Effect of Schools' Psychological Climate on the Relationship between Principals' Leadership Style and Organizational Commitment. *The Anthropologist*, 17, 173–182. <https://doi.org/10.1080/09720073.2014.11891427>
- Sawan, F., & Anugrahsari, S. (2024). Transformational Leadership and Behavioral Innovation in Education: A Meta-Analysis. *Jurnal Pendidikan Ekonomi Dan Bisnis (JPEB)*, 12(01), 25–36.
- Somech, A. (2008). Effectiveness Directive Versus Participative Leadership: Two Complementary Approaches to Managing School. <https://consensus.app/papers/effectiveness-directive-versus-participative-somech/3530949d04c150439a20539699e37421/>
- Song, G., Nabi, M. N., Gazi, M. A. I., Amin, M. Bin, Senathirajah, A. R. B. S., Rahaman, M. A., & Min, Z. (2025). Participative leadership effects on followers' radical creativity: the role of psychological safety and collaborative relationship. *BMC Psychology*, 13(1), 604.
- Zhou, H., & Ismail, H. N. (2025). Nurturing Innovation in the Classroom: The Mediating Role of Psychological Capital in the Association Between School Climate and Teachers' Innovative Behavior in Nanjing Kindergartens. *Psychology in the Schools*. <https://doi.org/10.1002/pits.23516>