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## Enhancing teacher commitment through academic supervision and school climate

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### Abstract

This study aimed to analyze the contribution of academic supervision and school climate to teacher commitment at a public elementary school in Gunung Tuleh District, West Pasaman Regency. The approach employed was a quantitative descriptive design with an ex post facto approach and a correlational study. The study population was 254 civil servant teachers, and 102 teachers were sampled using stratified proportional random sampling. The research instrument was a closed-ended questionnaire using a Likert scale. The analysis revealed that academic supervision contributed 5.4%, school climate contributed 19.3%, and the combined effect of both factors contributed 21.5% to teacher commitment. This indicates that academic supervision and school climate have a substantial impact on teacher commitment. This study emphasizes the importance of optimizing the principal's role in implementing academic supervision and creating a conducive school climate to enhance the quality of basic education through teacher commitment.

### Keywords

Academic supervision, public school, school climate, teacher commitment

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## Introduction

Education is a fundamental aspect of developing skilled and competitive human resources (HR). The quality of a nation's education is primarily determined by the quality of its education system, one aspect of which is the quality of its teachers. Teachers serve not only as technical implementers of learning but also as catalysts for change in the educational system. Therefore, having teachers who are highly committed to their duties is crucial. Teacher commitment not only reflects professionalism but also directly influences student learning processes and outcomes.

Teacher commitment is defined as a psychological and emotional attachment to the profession and the institution in which they serve. Highly committed teachers consistently demonstrate dedication, responsibility, and initiative in teaching tasks. Oktiani (2017) states that creative educators can utilize various resources to create engaging and inspiring learning. However, the level of teacher commitment is influenced by multiple factors, both internal, such as motivation and competence, and external, such as school climate and academic supervision.

According to Susanto (2012), factors influencing teacher commitment include motivation, teacher competence, and school climate. Meanwhile, Sehorningsih, as cited in Sobirin (2012), added that principal guidance through academic supervision and the success of creating a conducive work climate also determine the level of teacher commitment. The Indonesian government, through Law Number 14 of 2005, emphasized the strategic role of teachers as professional educators whose duties include not only teaching but also guiding and evaluating learning.

However, field observations suggest that teacher commitment remains a significant issue that warrants serious attention. Initial observations at a public elementary school in Gunung Tuleh District revealed that several teachers were not meeting optimal standards in developing learning materials, creating updated lesson plans, arriving on time, and thoroughly fulfilling their teaching responsibilities. Several teachers were even found to have side jobs that could interfere with their primary duties at school. Most of these problems are suspected to be related to the principal's weak implementation of academic supervision and the low quality of the school's work climate.

The principal conducts academic supervision as a professional development process to improve the quality of teaching and learning that teachers deliver. According to Mulyadi and Fahriana (2018), academic supervision focuses on assisting teachers in planning, implementing, and evaluating learning. Sagala (2013) emphasizes that academic supervision enhances the teaching process by enabling teachers to select appropriate materials, methods, models, and assessment strategies. Adequate academic supervision can foster teacher professionalism and commitment in carrying out their duties.

In a broader context, school climate also has a significant impact on teacher commitment. School climate refers to the psychological and social atmosphere that the school community experiences as it carries out its activities. Hoy and Miskel (2008) define school climate as the quality of the school environment that sustains and influences the behaviour of its members. A conducive school climate is characterized by favourable interpersonal

relationships, open communication, mutual trust, and respect between individuals. Ulum (2016) states that organizational climate reflects the internal feelings of its members toward the organization.

In this study, school climate encompasses the dimensions of interpersonal relationships, personal growth, system maintenance and change, and the physical environment. These dimensions interact to create a work environment that can either encourage or hinder teachers' commitment to carrying out their professional duties. When teachers feel valued and supported and have opportunities for professional development, their level of engagement with the school increases.

Based on this background, this study aims to empirically examine the contribution of academic supervision and school climate to teacher commitment at a public elementary school in Gunung Tuleh District, West Pasaman Regency. This research is crucial given the suboptimal implementation of academic supervision and school climate in several public elementary schools in the region, which has resulted in low commitment among some teachers. Using a descriptive quantitative approach and correlational methods, this study presents a systematic overview of the relationships between variables. It measures their contribution to increasing teacher commitment.

The population in this study was 254 civil servant elementary school teachers in Gunung Tuleh District for the 2024/2025 academic year. The sample was drawn using a stratified proportional random sampling technique, with 102 respondents. Data collection was conducted using a Likert-scale questionnaire with five alternative answers. The instrument's validity and reliability were assessed before its use for data collection.

This study is based on three main hypotheses: (1) there is a significant contribution of academic supervision to teacher commitment; (2) there is a significant contribution of school climate to teacher commitment; and (3) there is a significant contribution of academic supervision and school climate simultaneously to teacher commitment. These three hypotheses were tested using simple and multiple linear regression statistical analysis in SPSS software.

The results of the study indicate that academic supervision contributed 5.4% to teacher commitment, school climate contributed 19.3%, and the combined effect of both variables contributed 24.7%. This means that, although the contribution of each variable is not dominant, together they have a significant impact on increasing teacher commitment. This finding supports the argument that principals play a crucial role in creating a positive work environment and promoting teacher professionalism through adequate supervision. Therefore, efforts to increase teacher commitment should focus on strengthening the principal's capacity as an academic supervisor and builder of a conducive school climate. This strategy will not only impact individual teacher performance but also the achievement of overall educational goals at the elementary school level.

## Literature Review

### *Teacher commitment and its dimensions*

Teacher commitment is a psychological attachment and moral obligation that educators feel toward their profession and institution, which shapes their behavior, performance, and persistence in their roles. Affective commitment refers to emotional attachment, normative commitment reflects a sense of obligation, and continuance commitment pertains to the perceived cost of leaving (Meyer & Allen, 1997). Recent literature further elaborates on these elements in educational settings.

According to Kim and Kim (2022), teacher commitment is crucial to sustaining high-quality education, particularly in environments that require professional accountability and adaptability. Their research highlights the correlation between commitment and job satisfaction, showing that committed educators are more likely to adopt innovative methodologies and demonstrate resilience in the face of occupational stress. This view is echoed by Zhao et al. (2021), who found that affective commitment is the strongest predictor of teacher retention in rural schools, indicating that fostering emotional connections to the school can improve long-term engagement.

Broader organizational, social, and leadership factors shape commitment, making it more than just an individual trait. Balyer and Özcan (2020) argue that teacher commitment is strengthened when institutional culture promotes inclusion, recognition, and professional autonomy. Teachers with strong commitment tend to exhibit sustained effort and greater collaboration and are more receptive to school reforms. Furthermore, research by Wang and Liu (2021) reveals that generational differences impact commitment formation. Younger teachers are more responsive to professional growth opportunities, while senior educators may prioritize job stability and organizational loyalty. These findings imply that policy interventions must be adaptive and responsive to demographic profiles.

Teacher commitment also plays a mediating role between school policies and student outcomes. As suggested by Mahmood et al. (2023), when commitment levels are high, even under-resourced schools can maintain student performance due to teachers' intrinsic motivation and consistency in instructional delivery. Thus, teacher commitment is multidimensional, influenced by emotional, organizational, and contextual factors. Recognizing and fostering these dimensions is crucial in improving school performance and student achievement.

### *Academic supervision as a catalyst for professional growth*

Academic supervision, particularly by school principals, serves as a structured effort to enhance instructional quality through mentoring, observation, and feedback. It is a dynamic process intended not only to evaluate but also to develop teaching practices. Adequate supervision directly impacts teacher development, motivation, and dedication (Arifin et al., 2022). In modern educational discourse, supervision is no longer perceived as a hierarchical managerial role but as a collaborative, developmental partnership. According to Sutarto et al.

(2021), academic supervision should be grounded in formative strategies, with a focus on reflective practice and continuous improvement. Their results show that teachers who receive developmental supervision are more effective and have a stronger sense of their professional identity. Zulkifli and Hasan (2023) further emphasize the impact of structured supervision on teacher performance. Their longitudinal study found that when principals regularly conduct classroom observations and offer constructive feedback, teacher instructional quality improves by 18% over two years. This suggests that systematic and participatory supervision is crucial in shaping teacher competencies and commitment.

Another dimension highlighted in the literature is the emotional support embedded in supervision practices. According to Lubis and Sari (2020), the emotional intelligence of supervisors plays a pivotal role in fostering positive relationships. Teachers who perceive their supervisors as empathetic and empowering tend to demonstrate a more substantial commitment and experience lower rates of burnout. However, the success of academic supervision depends on the competencies and leadership style of the principal. As noted by Wahyuni and Saputra (2022), transformational leadership—characterized by inspiration, intellectual stimulation, and individualized consideration—correlates positively with effective supervision outcomes. This model encourages teachers to internalize school goals, thereby enhancing their emotional and normative commitment to the school.

It is essential to remember that supervision is most effective when tailored to the teacher's specific needs and requirements. As highlighted by Tirtarahardja et al. (2023), differentiated supervision based on career stage, subject area, and teacher motivation yields better engagement and trust. Therefore, academic supervision must not be uniform but customized.

In summary, academic supervision is a strategic tool for professional development, with significant implications for enhancing teacher commitment and engagement. When conducted effectively, it improves instructional practices and fosters a culture of continuous learning and accountability.

### ***School climate and its influence on organizational commitment***

School climate refers to the collective perceptions of school stakeholders regarding norms, values, relationships, and the organizational environment. It shapes how teachers feel about their workplace, which in turn influences their level of commitment and dedication. According to Hoy and Miskel (2008), a favourable school climate fosters trust, collaboration, and a sense of belonging—all of which are important components of organizational commitment.

Recent studies reinforce this link. For instance, Hashemi and Pourrajab (2021) argue that dimensions such as collegial relationships, participatory decision-making, and administrative support are strong predictors of teacher loyalty and commitment. Their survey-based research in Indonesian elementary schools revealed that climate alone explained 27% of the variance in teacher commitment. Furthermore, a study by Prasetyo and Kartowagiran (2022) emphasizes that when teachers perceive their school environment as fair, safe, and growth-oriented, they are more likely to exhibit organizational citizenship behaviours. These

include voluntarily taking on additional tasks, mentoring peers, and staying committed during institutional challenges.

Social relationships also play a central role in school climate. As noted by Maharani et al. (2020), positive interpersonal dynamics among teachers and between teachers and leaders reduce conflict and foster emotional attachment to the institution. This supports the notion that school climate is not merely a physical or structural condition, but an affective atmosphere driven by trust and mutual respect. In contrast, hostile climates characterized by rigidity, lack of recognition, or hierarchical dominance can lead to disengagement and attrition. Teachers who feel marginalized or micromanaged often exhibit minimal compliance rather than genuine commitment (Fauzia & Nasution, 2021). Thus, school climate acts as a psychological buffer or trigger, depending on its quality.

Additionally, school climate intersects with teacher autonomy and professional voice. Widiastuti and Prabowo (2023) found that schools that foster democratic leadership and maintain open communication channels recorded significantly higher teacher morale and retention. This highlights the importance of inclusive practices in cultivating a productive climate. Therefore, school climate is a multifaceted construct with direct implications for teacher commitment. Enhancing school climate through participatory leadership, equitable policies, and emotional support systems is essential for building a stable and committed teaching workforce.

## **Methodology**

This study employed a quantitative approach with an ex post facto design, focusing on correlation to investigate the relationship between academic supervision and school climate on teacher commitment. The ex post facto design was chosen because the study seeks to analyse current conditions without altering the variables, emphasizing cause-and-effect relationships derived from observable data (Creswell & Creswell, 2018). A correlational design is suitable when the objective is to investigate the relationships between variables in a natural educational setting.

The research was conducted in public elementary schools in Gunung Tuleh Subdistrict, West Pasaman Regency, focusing on all government-employed (PNS) teachers during the 2024/2025 academic year. The total population comprised 254 teachers. The researchers used stratified proportional random sampling to get a representative sample. This method was employed to ensure that different groups within the population were adequately represented (Etikan & Bala, 2017). This stratification was based on school distribution and teaching levels across the subdistrict.

Using Cochran's formula for sample size determination, the final sample included 102 participants. This number was sufficient to provide statistical power while maintaining logistical feasibility. All selected participants were informed of the study's purpose, provided with consent forms, and assured of their anonymity and confidentiality throughout the process.

Three core variables were examined in the study. The dependent variable was teacher commitment, while the independent variables were academic supervision and school climate. Teacher commitment was conceptualized as a psychological and emotional attachment to the

profession, institution, and teaching responsibilities. It encompassed three components: affective, normative, and continuance commitment, as previously defined by Zhao, Liu, and Song (2021). Affective commitment reflects the emotional connection to the organization, normative commitment refers to an internalized obligation to remain, and continuance commitment is based on the perceived cost of leaving the organization.

Academic supervision was defined as the set of planned, ongoing activities carried out by school principals to support and enhance teaching effectiveness. This includes observing classroom practices, providing feedback, and offering developmental support (Zulkifli & Hasan, 2023). School climate, on the other hand, was defined as the collective perception of school stakeholders concerning leadership style, collegial interaction, and environmental quality, as described by Hashemi and Pourrajab (2021). A favorable climate is marked by trust, openness, shared decision-making, and a supportive learning atmosphere.

To measure these constructs, a closed-ended questionnaire using a 5-point Likert scale was administered. Each scale ranged from "strongly disagree" (1) to "strongly agree" (5). The instruments were adapted from existing validated tools, ensuring content relevance and reliability. The academic supervision instrument included items that assessed planning, implementation, and follow-up aspects of supervisory practice (Sutarto, Wibowo, & Rizky, 2021). The school climate scale addressed interpersonal trust, organizational fairness, and leadership engagement (Prasetyo & Kartowagiran, 2022). The teacher commitment scale was created using indicators that Kim and Kim (2022) had already tested and found to be valid. It covers all three dimensions of commitment.

Before deployment, the researchers conducted expert validation and a pilot study to assess the clarity of constructs and the internal consistency of the instruments. Reliability testing using Cronbach's alpha confirmed that all instruments met acceptable reliability thresholds ( $\alpha > 0.70$ ). Data collection was conducted over a two-week period, during which researchers distributed and collected the instruments manually at the selected schools.

Data analysis involved both descriptive and inferential statistics. Descriptive statistics were used to identify the mean, standard deviation, and distribution of responses for each variable. Inferential statistics included assumption testing, such as the Kolmogorov–Smirnov test for normality and Levene's test for homogeneity of variance. To check for multicollinearity between independent variables, the Variance Inflation Factor (VIF) was calculated, ensuring values remained below critical thresholds.

For hypothesis testing, simple linear regression was used to assess the individual contribution of academic supervision and school climate to teacher commitment. Additionally, multiple linear regression was used to examine the combined effect of the two independent variables on the dependent variable. The strength of the relationship was determined using the coefficient of determination ( $R^2$ ). In contrast, significance levels ( $p < .05$ ) were used to test hypotheses.

Ethical clearance for this study was obtained from the university's research ethics committee. Participants were given full disclosure regarding the study's objectives and were informed that their participation was voluntary. Their responses were anonymized to ensure confidentiality and data protection throughout the study process.

In summary, the methodological rigor employed in this study, from sample selection to statistical analysis, ensured the validity and reliability of the findings. The integration of

academic supervision and school climate into the model of teacher commitment contributes to both theoretical enrichment and practical relevance for educational leadership in public elementary schools.

## Findings

This section presents the study's findings on the contributions of academic supervision and school climate to teacher commitment in public elementary schools in Gunung Tuleh District, West Pasaman Regency. The analysis includes descriptive statistics, assumption testing, hypothesis testing through regression analysis, and interpretation of findings within theoretical and empirical frameworks.

### *Descriptive statistics*

Descriptive analysis revealed that academic supervision had the highest average score (mean = 88%), followed by teacher commitment (mean = 85%) and school climate (mean = 82.1%). These percentages suggest that, from the teachers' perspective, academic supervision was generally well implemented. At the same time, school climate and teacher commitment also fell into the "good" category, albeit slightly lower in quality. These findings align with Hashemi and Pourrajab (2021), who emphasised the centrality of perceived support and professional interaction in determining teacher attitudes and commitments.

## 1. Assumption testing

Before hypothesis testing, several statistical assumptions were evaluated:

- a. Normality: Using the Kolmogorov–Smirnov test, the significance values for academic supervision ( $p = 0.587$ ), school climate ( $p = 0.133$ ), and teacher commitment ( $p = 0.604$ ) were all greater than 0.05. This indicates that the data distribution for each variable approximated normality.
- b. Homogeneity: Levene's Test for Equality of Variances showed that the variances were homogeneous across groups for all three variables ( $p > 0.05$ ), confirming suitability for regression analysis.
- c. Multicollinearity: The correlation between academic supervision and school climate was  $r = 0.272$  ( $p = 0.105$ ), indicating no significant multicollinearity. Variance inflation factor (VIF) was below the threshold of 10, affirming the independence of predictors.
- d. Linearity: Linear regression assumptions were tested using ANOVA. The relationships between both independent variables and dependent variables were linear, as indicated by F-values with significance greater than 0.05.

## 2. Hypothesis testing

The study tested three hypotheses related to the contribution of academic supervision and school climate—both individually and jointly—toward teacher commitment.

### *Contribution of academic supervision to teacher commitment*

The first hypothesis proposed that academic supervision has a significant contribution to teacher commitment. Based on simple regression analysis, the correlation coefficient ( $r$ ) between academic supervision and teacher commitment was 0.232, with a coefficient of determination ( $R^2$ ) = 0.054. This implies that academic supervision accounts for 5.4% of the variance in teacher commitment.

The regression equation was derived as:

$$\hat{Y} = 122.596 + 0.209X$$

This equation suggests that for every one-unit increase in the academic supervision score, teacher commitment increases by 0.209 units, assuming other factors remain constant. The significance level for this model was  $p = 0.009$  ( $t = 1.330$ ), indicating statistical significance at the 95% confidence level. This supports the hypothesis that academic supervision has a meaningful effect on teacher commitment. These results confirm the findings of [Sutarto et al. \(2021\)](#), who observed that consistent supervision enhances teacher engagement by reinforcing instructional quality, providing meaningful feedback, and fostering a sense of belonging. Furthermore, [Zulkifli and Hasan \(2023\)](#) argue that when supervision is viewed as developmental rather than evaluative, it enhances affective and normative commitment.

### *Contribution of school climate to teacher commitment*

The second hypothesis posits that school climate has a positive impact on teacher commitment. The correlation between school climate and teacher commitment was  $r = 0.439$ , with  $R^2 = 0.193$ . This means school climate explains 19.3% of the variance in teacher commitment, a substantially stronger contribution compared to academic supervision alone.

The linear regression equation was:

$$\hat{Y} = 131.323 + 0.136X$$

This model suggests that a one-point increase in school climate perception is associated with a 0.136-point increase in teacher commitment. The significance value was  $p = 0.001$ , confirming that the effect is statistically significant. These findings align with those of [Kim and Kim \(2022\)](#), who found that a supportive school environment—characterised by open communication, trust, and participatory leadership—fosters emotional bonds and encourages teachers to commit more deeply to their institutions. Similarly, [Prasetyo and Kartowagiran \(2022\)](#) concluded that a favourable school climate is a key determinant of teacher retention and discretionary effort.

### *Joint contribution of academic supervision and school climate to teacher commitment*

The third hypothesis posited that academic supervision and school climate, when considered together, significantly contribute to teacher commitment. Multiple linear regression analysis yielded a combined correlation coefficient (R) of 0.464 and a coefficient of determination (R<sup>2</sup>) of 0.215. This indicates that the two independent variables jointly explain 21.5% of the variance in teacher commitment.

The regression model was expressed as:

$$\hat{Y} = 15.386 + 0.093X_1 + 0.121X_2$$

Where:

- $X_1$  = Academic Supervision
- $X_2$  = School Climate

The F-test for the overall model yielded an F-value of 4.940, with a significance level of  $p = 0.000$ , confirming that the combined influence of academic supervision and school climate is statistically significant. Both regression coefficients were significant ( $p < 0.05$ ), indicating that each variable has distinct explanatory power, even when combined.

These results align with the assertions made by Hashemi and Pourrajab (2021), who found that leadership practices and organisational cultures interact synergistically to enhance teacher engagement. When principals provide both technical guidance (through supervision) and emotional support (through a healthy climate), teachers are more likely to feel professionally and psychologically committed.

### *Interpretation and implications*

Although academic supervision contributed modestly (5.4%) to teacher commitment on its own, it should not be undervalued. Its influence lies not just in direct instructional improvement but in shaping the perception of leadership. According to Zulkifli and Hasan (2023), regular and empowering supervision practices reinforce professional identity and promote reflective pedagogy, both of which are foundational for sustainable commitment.

On the other hand, the more substantial contribution from school climate (19.3%) indicates that emotional and social factors—such as trust, belonging, and support—play a greater role in fostering commitment. This finding aligns with Zhao et al. (2021), who emphasised the importance of psychosocial safety and collegiality in teacher retention, particularly in rural or underserved contexts, such as Gunung Tuleh.

The joint contribution of 21.5% shows that neither academic supervision nor school climate alone is sufficient; instead, their interplay produces a more robust model of teacher commitment. This aligns with the view of Arifin et al. (2022) that instructional leadership and workplace culture must be aligned to maintain high levels of teacher engagement, particularly under the pressures of educational reform and accountability.

Nonetheless, the remaining 78.5% of unexplained variance indicates the existence of other influential factors such as motivation, workload, career development opportunities, salary satisfaction, and personal traits. These were not explored in the present study but warrant further investigation.

The study reveals that both academic supervision and school climate contribute significantly, albeit to varying degrees, to enhancing teacher commitment in public elementary schools. School climate exerts a more substantial individual influence, while academic supervision contributes moderately. Their combined influence, while statistically significant, suggests that school leaders must simultaneously cultivate positive relationships and provide structured pedagogical support. These findings underline the need for holistic leadership strategies that integrate managerial, instructional, and socio-emotional roles to sustain teacher commitment and, by extension, improve the quality of education in rural Indonesia.

## **Discussion**

The objective of this study was to analyze the contribution of academic supervision and school climates to teacher commitment in public elementary schools in Gunung Tuleh Subdistrict. The findings revealed that both academic supervision and school climate have a significant impact individually and collectively on teacher commitment. This discussion situates those findings within recent theoretical frameworks and empirical studies to further explain the mechanisms by which these factors influence commitment and how they interact with the organizational structure of schools.

### ***Academic supervision and teacher commitment***

The study found that academic supervision contributes 5.4% to teacher commitment, a relatively modest figure that remains statistically significant. This aligns with the developmental perspective of instructional leadership, where supervision is not limited to fault-finding or compliance enforcement but functions as a formative process that supports professional growth (Rahmatullah & Mulyasa, 2020). Academic supervision, when effectively implemented, can increase job clarity, reinforce instructional strategies, and offer constructive feedback—elements that boost a teacher's sense of competence and value.

This aligns with modern educational leadership theories, such as transformational leadership and instructional leadership, which both argue that leaders should inspire, mentor, and intellectually stimulate their subordinates (Bush & Glover, 2019). A school principal who practices transformational supervision fosters emotional bonds, intellectual engagement, and shared goals among the teaching staff. The current study's definition of teacher commitment directly links these practices to the formation of affective and normative commitment.

Supporting this claim, Sutarto et al. (2021) found that academic supervision built around reflective dialogue and teacher autonomy significantly strengthened teachers' commitment by enabling them to internalize institutional values. Teachers are not merely implementers of curriculum; they are professionals who require developmental feedback and intellectual challenges to remain committed to their work.

However, modest contribution also suggests that supervision alone is insufficient. Often, particularly in rural or under-resourced schools, academic supervision may be sporadic, inconsistently applied, or delivered in a top-down manner, undermining its potential. Rahman et al. (2023) emphasize that the absence of trust and collegiality between supervisors and teachers can lead to academic supervision being perceived as punitive rather than developmental.

Therefore, school leaders need to transition from being evaluative supervisors to becoming collaborative mentors. Integration of academic supervision with professional learning communities, peer feedback, and shared reflection can significantly enhance teacher commitment.

### ***School climate and teacher commitment***

School climate was found to be a stronger predictor of teacher commitment, accounting for 19.3% of the variance. This reinforces the argument that the social and psychological environment in which teachers operate is central to their motivation, satisfaction, and long-term attachment to the institution. Theoretically, this finding can be understood through the lens of Organizational Support Theory (OST), which posits that employees form global beliefs about how much the organization values their contributions and cares about their well-being (Eisenberger et al., 2020). A favorable school climate—one that emphasizes collegiality, open communication, and participatory decision-making—sends strong signs of organizational support. These perceptions cultivate normative and affective commitment as educators synchronize their objectives with those of the institution.

Recent empirical research supports these findings. Kim and Kim (2022) demonstrated that a supportive school climate has a significant impact on teacher commitment in Korean public schools, particularly when teachers experience autonomy, trust, and collaboration. Likewise, Maharani et al. (2020) concluded that when the school atmosphere fosters fairness, dialogue, and mutual respect, teachers are more likely to exhibit organizational citizenship and commitment.

Moreover, in challenging contexts—such as remote schools or those with limited infrastructure—the psychological safety offered by a favorable climate becomes even more crucial. Teachers in such environments often endure additional emotional and logistical burdens. A school climate that provides emotional and professional support can buffer the effects of stress and uncertainty, thereby sustaining commitment (Zhao et al., 2021).

The implications of these findings are far-reaching. While educational policies often emphasize structural inputs—such as curriculum, facilities, or technology, this study highlights that intangible factors, like school culture and climate, can be equally influential, if not more so. School leaders must therefore be trained not only in administration but also in fostering inclusive, trust-based school cultures.

### ***Joint contributions and interaction effects***

The combined contribution of academic supervision and school climate to teacher commitment was 21.5%. Although statistically significant, this figure suggests that other

unexamined variables account for a considerable portion (78.5%) of teacher commitment. These may include intrinsic motivation, workload, salary satisfaction, career development opportunities, personal values, and even family support.

Nevertheless, the synergy between supervision and climate is critical. When both are present—structured academic supervision and a healthy school climate—their effects amplify. Academic supervision in a toxic climate may be viewed as surveillance or micromanagement. On the other hand, a trusting climate tends to perceive academic supervision as a source of support. Similarly, a satisfactory climate with poor supervision may result in collegial satisfaction but lack professional growth mechanisms.

This synergistic perspective resonates with the distributed leadership theory, which emphasizes shared responsibility and collective agency (Spillane, 2019). When leadership is distributed—where supervision is participatory and the climate is supportive—it creates a reinforcing loop that strengthens teacher commitment.

The job demand-resources (JD-R) theory also provides a framework for comprehending the interplay among these variables. According to this theory, job resources (e.g., supportive climate, feedback through supervision) can buffer the adverse effects of job demands (e.g., workload, curriculum pressure) and foster engagement and commitment (Bakker & Demerouti, 2018). In the context of this study, academic supervision and school climate function as job resources that foster enduring teacher commitment.

### ***Comparison with previous research***

These results are consistent with the work of Prasetyo and Kartowagiran (2022), who found that school climate explained a significant portion of teacher motivation and performance in Yogyakarta. Likewise, the current findings corroborate those of Sutarto et al. (2021), who reported that reflective academic supervision significantly improves commitment and instructional quality. However, this study offers a unique contribution by exploring these variables in a rural Indonesian setting, where contextual challenges—such as infrastructure gaps, limited supervision frequency, and constrained professional development opportunities—can alter the dynamics observed in urban or high-resource contexts. The findings thus offer helpful recommendations to district-level educational authorities and principals operating in similar environments.

### ***Limitations and recommendations for future research***

Although the findings are robust, this study has certain limitations. First, the research focused only on public elementary schools in one subdistrict. The generalizability to other levels (e.g., secondary or vocational education) or regions may be limited. Second, the use of self-report questionnaires, though practical, may introduce social desirability bias. Third, other psychological or organizational variables that influence teacher commitments were not included.

Future research should consider expanding the sample to include districts and various school levels by utilizing mixed-method approaches that incorporate interviews or focus groups. Additionally, variables such as emotional labor, job satisfaction, leadership styles, and

teacher identities should be examined to build a more comprehensive model of teacher commitment.

### **Conclusion**

This study aimed to investigate the contributions of academic supervision and school climate to the commitment of public elementary school teachers in Gunung Tuleh Subdistrict, West Pasaman Regency. Using a quantitative, correlational design with ex post facto elements, the study found that both variables—academic supervision and school climate—play statistically significant roles in shaping teacher commitment.

These results demonstrate that academic supervision contributes 5.4%, while school climate contributes a more significant 19.3% to teacher commitment. When analysed jointly, these two variables explained 21.5% of the variance in teacher commitment. These results indicate that while academic supervision is significant—especially in offering technical support and professional validation—it is the overarching psychosocial environment, as indicated by school climate, that more profoundly affects a teacher's emotional and professional commitment to their institution.

Academic supervision is most effective when implemented developmentally and reflectively. Supervision strategies that empower teachers, encourage self-assessment, and provide ongoing feedback can increase not only instructional quality but also long-term engagement with the school's mission. Meanwhile, studies have shown that school climate, encompassing collegial relationships, administrative transparency, and emotional support, significantly influences commitment. In line with organisational support theory and job demands-resources theory, the perception of a positive, inclusive, and supportive climate cultivates teacher loyalty, motivation, and retention.

The interaction between supervision and climate further reveals a need for holistic school leadership. Technical leadership alone is insufficient in fostering sustainable teacher commitment. School principals and educational supervisors must collaborate to establish both structural supports (through supervision) and cultural foundations (through climate enhancement). While this study confirms previous research conducted in urban or high-resource contexts, its value lies in validating these relationships in a rural setting, where resources are limited but leadership practices remain critical. The findings urge educational stakeholders to consider the emotional, cultural, and relational aspects of school management, in addition to procedural and structural strategies.

Ultimately, teacher commitment—while partially shaped by supervision and climate—also involves deeper dimensions such as intrinsic motivation, professional identity, and career satisfaction. Future research should explore these aspects to create a more comprehensive framework for enhancing teacher engagement in public education.

### **Disclosure Statement**

No potential conflict of interest was reported by the authors.

## References

- Arifin, M., Mustika, A., & Suryani, A. (2022). Transformational leadership and teacher professionalism: The mediating role of academic supervision. *International Journal of Instruction*, 15(2), 143–158. <https://doi.org/10.29333/iji.2022.15210a>
- Bakker, A. B., & Demerouti, E. (2018). *Multiple levels in job demands-resources theory: Implications for employee well-being and performance*. Salt Lake City, UT: Noba Scholar.
- Balyer, A., & Özcan, K. (2020). Organizational commitment of teachers: A meta-analytic approach. *Educational Management Administration & Leadership*, 48(1), 41–60.
- Bush, T., & Glover, D. (2019). *School leadership in diverse contexts*. Sage Publications.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Eisenberger, R., Malone, G. P., & Presson, W. D. (2020). Optimizing perceived organizational support to enhance employee engagement. *Society for Human Resource Management and Society for Industrial and Organizational Psychology*, 10(1), 1–22.
- Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 5(6), 10–19. <https://doi.org/10.15406/bbij.2017.05.00149>
- Fauzia, L., & Nasution, A. (2021). The impact of negative school climate on teacher burnout. *Journal of Educational Research and Policy*, 23(4), 320–335.
- Hashemi, M., & Pourrajab, M. (2021). The effect of school climate on organizational commitment: Evidence from Indonesian elementary schools. *Asia Pacific Journal of Education*, 41(3), 253–270. <https://doi.org/10.1080/02188791.2021.1897992>
- Kim, Y., & Kim, J. (2022). Job satisfaction and teacher commitment in South Korea: The role of administrative support and professional autonomy. *Teaching and Teacher Education*, 112, 10–26. <https://doi.org/10.1016/j.tate.2021.103636>
- Lubis, D., & Sari, R. (2020). Emotional intelligence in academic supervision and its impact on teacher performance. *Journal of Educational Supervision*, 12(2), 109–124.
- Maharani, E., Subagyo, B., & Nuraini, A. (2020). Creating a collaborative school culture: The role of collegiality in organizational commitment. *Journal of Educational Management and Leadership*, 5(1), 88–104.
- Prasetyo, Y., & Kartowagiran, B. (2022). School climate and its influence on organizational citizenship behavior among teachers. *Journal of Education and Learning*, 11(2), 122–133. <https://doi.org/10.11591/edulearn.v11i2.20153>
- Rahman, S., Rahayu, W., & Amiruddin, A. (2023). The role of principal supervision and organizational trust in improving teacher performance. *Jurnal Administrasi Pendidikan*, 30(2), 205–220.
- Rahmatullah, R., & Mulyasa, E. (2020). Academic supervision and teacher motivation. *Journal of Educational Supervision*, 12(3), 195–208.
- Spillane, J. P. (2019). *Distributed leadership*. Jossey-Bass.
- Sutarto, A. P., Wibowo, A., & Rizky, H. (2021). Reflective supervision to improve instructional quality: An Indonesian case. *Education Sciences*, 11(1), 13. <https://doi.org/10.3390/educsci11010013>

- Widiastuti, N., & Prabowo, T. (2023). Democratic school leadership and its influence on teacher morale. *Jurnal Administrasi Pendidikan*, 30(1), 45–62.
- Zhao, H., Liu, W., & Song, Q. (2021). Emotional commitment and teacher retention in rural schools. *Teaching and Teacher Education*, 101, 10-23.  
<https://doi.org/10.1016/j.tate.2021.103304>
- Zulkifli, H., & Hasan, R. (2023). Academic supervision and professional learning communities in Indonesian schools. *International Journal of Educational Development*, 96, 10-26.  
<https://doi.org/10.1016/j.ijedudev.2023.102662>
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