Education

Transformational and empathetic leadership in building supportive school work environments: evidence from K–12 schools in Da Nang city, Vietnam

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Abstract

Teacher well-being and supportive work environments have become global priorities as education systems confront increasing workload demands, emotional labor, and widespread teacher attrition. In Vietnam, ongoing reforms, including the competency-based General Education Curriculum 2018 and the forthcoming Teacher Law 2025, intensify expectations for teachers and place greater responsibility on school leaders to cultivate humane, collaborative, and motivating workplaces. This study examines how transformational and empathetic leadership practices shape supportive work environments in K–12 schools in Da Nang City, a rapidly developing urban center recognized for administrative innovation yet facing emerging challenges related to teacher stress and organizational pressures. Drawing upon School Climate Theory and Self-Determination Theory, the study proposes and tests a structural model linking leadership behaviors to teacher motivation through the mediating effects of emotional support and perceived school climate. Data were collected from 50 teachers and administrators across public and private schools in Da Nang. Using Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM), four latent constructs were validated: Leadership Support, School Climate, Emotional Support, and Motivation–Engagement. Results indicate that leadership has a strong positive influence on emotional support and school climate; however, emotional support, not school climate, is the strongest predictor of intrinsic motivation. Emotional support also partially mediates the relationship between leadership and motivation. The findings provide theoretical insights into leadership emotion mechanisms and practical implications for implementing Vietnam's Teacher Law 2025 and improving teacher well-being in rapidly changing educational contexts.

Keywords: Transformational and Empathetic, Building supportive, School work environments, Evidence from K-12 schools

1. Introduction

Schools function today as complex socio-emotional ecosystems in which leadership plays a decisive role in shaping the working conditions, psychological well-being, and professional identities of teachers. As the nature of schooling evolves in response to global social, technological, and economic changes, the expectations placed upon teachers have intensified, resulting in higher levels of emotional labor, administrative workload, and accountability pressure than ever before. Around the world, teacher shortages, attrition, and burnout have become pressing concerns, with studies showing that nearly half of all teachers experience chronic work-related stress and declining motivation at different stages of their careers (OECD, 2020) [12]. In this context, the role of school leadership extends beyond instructional guidance to the cultivation of work environments that promote trust, collaboration, and emotional safety.

The case of Vietnam is particularly noteworthy, as the national education system is undergoing profound transformation. The implementation of the 2018 General Education Curriculum (GDPT 2018) marked a shift from content-based instruction to competency-based learning, demanding new pedagogical approaches, assessment strategies, and professional capacities from teachers. Simultaneously, the forthcoming Teacher Law

2025 seeks to elevate teachers' legal status, ensure their rights to professional development, and formalize mechanisms supporting teacher welfare. While these reforms are intended to modernize the education sector, they also place increased expectations on school leaders to facilitate change management, reduce workplace stress, and help teachers navigate new professional requirements.

Within this reform landscape, Da Nang City offers a particularly relevant site for analysis. As one of Vietnam's most rapidly developing municipalities, Da Nang is recognized for its advancements in digital governance, public administration, and educational modernization. Its school system includes a diverse mix of public and private institutions, varying significantly in size, resources, and administrative models. Although Da Nang has consistently ranked high in educational innovation, recent reports indicate increasing signs of teacher overload, administrative pressure, and declining motivation patterns that reflect broader national challenges. These conditions underscore the importance of understanding how leadership can mitigate organizational stressors and enhance support systems within schools.

International research provides robust evidence that school leadership is one of the strongest in-school factors influencing teacher retention, job satisfaction, and performance.

Leadership shapes not only structural elements such as workload distribution but also socio-emotional dimensions including trust, fairness, recognition, and collaboration (Leithwood *et al*., 2005) [9]. Transformational leadership characterized by inspirational motivation, individualized consideration, intellectual stimulation, and the articulation of a clear vision, has been associated with stronger teacher engagement and a more positive school climate. Meanwhile, empathetic leadership has gained increasing attention as scholars recognize the importance of emotional intelligence, relational trust, and psychological safety in organizational settings. Empathetic leaders demonstrate active listening, responsiveness, and sensitivity to staff needs, behaviors that amplify teachers' sense of belonging and well-being.

Although the literature on leadership and teacher outcomes is rich, several gaps remain. First, most studies conceptualize leadership as a predominantly structural or instructional function, while emotional support, despite being key to teacher well-being, receives less empirical attention. Second, relatively few studies examine leadership in conjunction with Self-Determination Theory (SDT), despite its relevance in understanding how leadership influences intrinsic motivation through autonomy, competence, and relatedness. Third, in Vietnam, empirical research linking leadership to teacher motivation and emotional support remains sparse, with prior studies largely descriptive and lacking sophisticated statistical modeling. Importantly, no study to date has used Structural Equation Modeling (SEM) to examine how leadership impacts school climate, emotional support, and teacher motivation simultaneously within the context of Da Nang.

This study aims to address these gaps by investigating the extent to which transformational and empathetic leadership practices contribute to supportive work environments in K–12 schools in Da Nang City. The study draws upon two theoretical foundations School Climate Theory and Self-Determination Theory to develop a conceptual model linking leadership behaviors to teacher motivation through the mediating effects of emotional support and perceived school climate. School Climate Theory suggests that the quality of interpersonal relationships, communication patterns, and organizational norms influences teacher behavior and well-being. Meanwhile, SDT posits that intrinsic motivation emerges when individuals' psychological needs for autonomy, competence, and relatedness are met. By integrating these two frameworks, the study proposes that leadership behaviors promoting clarity, fairness, emotional responsiveness, and autonomy support will foster school climates that satisfy teachers' psychological needs, thereby enhancing motivation.

Methodologically, the study advances current research by employing Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM). These analyses allow for more precise measurement of latent constructs, such as leadership support, emotional support, school climate, and motivation and enable the examination of complex mediation pathways that simpler statistical methods cannot capture. SEM is particularly appropriate for assessing the mechanisms through which leadership exerts influence, clarifying whether leadership directly affects motivation or whether its impact is transmitted through emotional support and climate-related perceptions.

The setting of Da Nang City adds further significance to this inquiry. As a coastal, rapidly modernizing city with strong administrative capacity, Da Nang exemplifies both the opportunities and challenges of educational reform in Vietnam. While investments in digital infrastructure, teacher training, and school governance have accelerated, teachers continue to face increasing demands related to curriculum adaptation, administrative loads, parental expectations, and professional evaluation. Understanding how leadership can buffer these pressures and cultivate healthier work environments is therefore essential for sustaining educational quality and teacher well-being.

Based on these considerations, the study is guided by the following research questions:

- To what extent do teachers in Da Nang perceive their school leaders as transformational and empathetic?
- How do leadership behaviors influence teachers' perceptions of school climate and emotional support?
- What is the relationship between leadership, emotional support, and teachers' intrinsic motivation?
- Does emotional support mediate the relationship between leadership and teacher motivation?

By addressing these questions, the study contributes both theoretically and practically. Theoretically, it advances understanding of leadership within Asian educational contexts by emphasizing the mediating role of emotional support, an element often overlooked in leadership models. Practically, the findings offer actionable insights for school leaders and policymakers, especially in the implementation of the Teacher Law 2025, which explicitly mandates the creation of safe, humane, and professionally supportive school environments.

Ultimately, this study argues that leadership is not merely a managerial or instructional function but also an emotional and relational one. As educational reforms and societal expectations intensify, leaders who can combine transformational vision with empathetic support will be better positioned to cultivate healthy, resilient, and motivated teaching communities. Such leadership is essential for sustaining quality education and supporting teachers, who remain the backbone of every education system.

2. Literature review

2.1. School climate theory: foundations and global perspectives

School climate has long been regarded as a central construct in understanding the quality of social and organizational life within educational institutions. Defined as the shared perceptions, values, norms, and interpersonal relationships that characterize school environments, school climate reflects how teachers and students experience daily interactions, communication patterns, leadership behaviors, and the broader emotional tone of the school (Cohen *et al*., 2009) [3]. Unlike structural factors such as school size or funding, climate captures the "felt experience" of schooling, how teachers interpret fairness, trust, collaboration, recognition, autonomy, and safety.

International studies consistently demonstrate that positive school climate predicts a range of desirable outcomes, including teacher retention, student academic achievement, reduced conflict, and increased organizational commitment. In the United States, Johnson *et al*. (2012) found that teachers in schools with collaborative cultures were significantly more likely to remain in the profession. In Finland, a strong emphasis on trust-based school environments has been tied to both teacher autonomy and student well-being, reinforcing climate as a systemic condition rather than an individual perception.

School climate is commonly conceptualized across multiple dimensions. Cohen *et al*. (2009) [3] proposed a widely adopted framework comprising four domains: (1) safety (emotional and physical), (2) relationships (trust, respect, support), (3) teaching and learning (professional collaboration, expectations), and (4) institutional environment (organizational clarity, fairness). Each dimension interacts with leadership practices to shape overall teacher experience. For example, transparent communication and shared decision-making reinforce perceptions of fairness, while relational trust enhances emotional safety. These interactions explain why leadership is among the strongest antecedents of school climate in global research (Bryk & Schneider, 2002).

In Asian contexts, school climate studies reveal additional cultural nuances. Korean and Japanese schools place high value on collective responsibility and group harmony, making relational climate particularly influential in teacher motivation. Chinese research highlights the role of hierarchical respect and moral leadership, aligning with Confucian traditions. In Southeast Asia, studies in Malaysia and Singapore show strong links between trust in leadership and willingness to innovate. These cultural dynamics emphasize that school climate is not a universal construct but one shaped by local norms, leadership expectations, and socio-political systems.

Vietnamese research on school climate remains emerging but demonstrates similar trends. Studies indicate that climate is strongly linked to teacher satisfaction, perceived fairness, and home–school relations (Tran & Pham, 2021) [15]. However, very few studies employ advanced methods such as CFA or SEM to validate climate dimensions rigorously. Most rely on descriptive or correlational analysis, limiting the field's ability to understand latent structure or mediation effects. The current study addresses this gap by examining climate using validated latent constructs within a structural model.

2.2. Self-determination Theory (SDT) and teacher motivation

Self-Determination Theory (SDT), proposed by Deci and Ryan (1985) [4], provides a robust framework for understanding teacher motivation. SDT identifies three innate psychological needs autonomy, competence, and relatedness, that foster intrinsic motivation, psychological well-being, and sustained engagement. When these needs are satisfied, individuals experience enhanced internal drive, creativity, and professional commitment; when thwarted, motivation declines, and burnout increases.

Autonomy
For teachers, autonomy refers to the freedom to make instructional decisions, apply professional judgment, and tailor pedagogy to learner needs. Autonomy-supportive leadership, which encourages initiative and minimizes controlling practices, has been widely associated with improved teacher well-being.

Competence
Competence reflects teachers' perceptions of their capability to perform tasks effectively. Leadership influences competence through clear expectations, constructive feedback, professional learning opportunities, and recognition of accomplishments.

Relatedness
Relatedness captures the sense of belonging and interpersonal connection with colleagues and leaders. In school settings, relatedness is nurtured through trust, empathy, collaboration, and supportive communication.

Research across multiple countries confirms SDT's relevance in schooling. In Canada, teachers reporting higher autonomy and relatedness also reported greater instructional engagement. In Japan and Korea, relatedness particularly with colleagues emerged as a key predictor of teacher motivation, reflecting collectivist cultural norms.

In Vietnam, recent reforms create conditions that simultaneously support and constrain SDT needs. While professional development is emphasized, workload demands and administrative tasks often limit teachers' feelings of autonomy and competence. Leadership thus becomes the primary mechanism through which SDT needs are satisfied or frustrated, reinforcing the importance of empathetic, autonomy-supportive leadership.

The integration of SDT with school climate theory has been suggested but rarely tested in Asia. This study contributes by linking leadership → climate → motivation through emotional support, demonstrating SDT's explanatory power in Vietnamese schools.

2.3. Transformational leadership in educational contexts

Transformational leadership, originally conceptualized by Burns (1978) and refined by Bass (1985), describes leadership that inspires, motivates, and empowers followers by appealing to higher values and personal growth. In education, transformational leadership is characterized by:

- **Inspirational motivation:** Communicating a compelling vision for teaching and learning.
- **Idealized influence:** Modeling ethical and professional standards.
- **Intellectual stimulation:** Encouraging innovation, problem-solving, and reflective practice.
- **Individualized consideration:** Giving personalized feedback and emotional support.

Leithwood and Jantzi (2005) [9] identified transformational leadership as one of the strongest predictors of teacher motivation, school climate, and collective efficacy. Meta-

analyses reveal its significant impact on teacher trust, satisfaction, collaboration, and willingness to engage in reform. In Asian contexts, transformational leadership is often adapted to fit cultural expectations of paternalistic or values-driven leadership. For example, Vietnamese principals frequently adopt a blend of transformational and moral leadership, emphasizing collective goals, care, and community values. However, transformational leadership alone is insufficient when teachers experience emotional overload; empathy becomes necessary to sustain motivation under pressure.

2.4. Empathetic leadership and the emotional dimensions of schooling

Empathetic leadership has gained prominence as scholars recognize the emotional demands of teaching. Unlike transformational leadership, which focuses on vision and empowerment, empathetic leadership centers the relational and emotional well-being of staff.

An empathetic leader:
- Listens actively,
- Acknowledges teachers' struggles,
- Responds compassionately,
- Reduces emotional labor,
- Fosters psychological safety.

Psychological safety, defined by Edmondson (1999), refers to an environment where individuals feel safe to express concerns, admit mistakes, and share ideas without fear of judgment. Teachers working under empathetic leaders report higher well-being, lower burnout, stronger collegial trust, and greater motivation. Recent studies in Singapore and Malaysia indicate that empathetic leadership predicts teacher resilience especially during periods of policy change.

Vietnamese research emphasizes that emotional connection between leaders and teachers is one of the strongest cultural expectations in schools. However, empirical evidence remains limited, often anecdotal, and rarely analyzed through advanced modeling techniques.

This study therefore contributes by operationalizing empathetic leadership as a latent construct within an SEM model, examining its mediating role via emotional support.

2.5. Leadership, emotional support, and teacher motivation: a structural perspective

A growing body of research suggests that emotional support—not only instructional or organizational support, is essential for sustained teacher motivation. Emotional support strengthens relatedness (SDT), enhances psychological safety (Edmondson), and serves as a buffer against burnout.

Leadership → Emotional support

Leaders influence emotional support by validating teachers' challenges, providing reassurance, and demonstrating care. Teachers interpret these behaviors as signals of respect and value.

Emotional support → Motivation

Teachers who feel emotionally supported are more likely to:
- Experience intrinsic motivation,
- Maintain professional commitment,
- Persist in challenging tasks,

- Engage in innovation,
- Remain in the profession.

These findings are especially relevant in Vietnam where relational harmony is culturally significant.

Mediation role of emotional support

Several studies indicate emotional support mediates the relationship between leadership and outcomes such as satisfaction or commitment. However, no prior studies in Vietnam particularly in Da Nang have tested this within a structural equation framework.

This research fills the gap by positioning emotional support as the primary mediator connecting leadership with motivation, while school climate provides contextual reinforcement.

2.6. Research gap and conceptual model

Despite strong international evidence linking leadership, climate, and motivation, significant gaps persist:
- Lack of SEM-based studies in Vietnam, particularly focusing on emotional support.
- Limited empirical research in Da Nang, despite its strategic importance.
- Most Vietnamese studies treat leadership as a singular construct, overlooking the emotional dimension.
- Few studies integrate School Climate Theory with SDT using robust latent variable modeling.

Conceptual model proposed

Based on literature:
- Leadership Support → School Climate,
- Leadership Support → Emotional Support,
- School Climate → Motivation,
- Emotional Support → Motivation,
- Emotional Support mediates Leadership → Motivation.

This model provides a theoretically grounded framework aligned with global research standards and suitable for SEM testing.

3. Methodology

3.1. Research design

This study employed a quantitative, cross-sectional design to examine the structural relationships among leadership support, school climate, emotional support, and teacher motivation in K–12 schools in Da Nang City, Vietnam. Given the multidimensional and latent nature of these constructs, Structural Equation Modeling (SEM) was selected as the primary analytical method. SEM is particularly suitable for testing complex theoretical models involving multiple relationships and mediating variables, offering advantages over traditional regression by estimating measurement error, validating latent structures, and assessing simultaneous pathways.

The study used a two-step SEM approach consistent with Anderson and Gerbing (1988) [1]:
- Confirmatory Factor Analysis (CFA) to validate the measurement model, and
- Structural Equation Modeling to test hypothesized relationships among constructs.

This methodological approach ensures robust validation of both the psychometric properties of the instrument and the theoretical model linking leadership, climate, emotional support, and motivation.

3.2. Setting and participants

The study was conducted in Da Nang City, a rapidly developing urban locality recognized for its innovative governance and educational reforms. Schools in Da Nang face increasing expectations related to curricular changes, teacher evaluation, digital transformation, and parental engagement, making the city a relevant context for examining leadership influences on teacher well-being.

A total of 50 participants were recruited using purposive sampling to ensure representation across school levels and positions. The sample included:

- 20 teachers from Hoa Phu Primary School
- 12 teachers from Nguyen Van Troi Secondary School
- 10 teachers from Le Quy Don High School for the Gifted
- 8 administrators (principals, vice principals, department heads)

Participant demographics reflected a typical distribution of teaching staff in Da Nang, with teaching experience ranging from 2 to 25 years and balanced representation of subject areas. Participation was voluntary, and confidentiality was assured in accordance with research ethics protocols.

3.3. Instruments and measures

The survey instrument included 12 items grouped into four latent constructs: Leadership Support (LSI), School Climate (SCI), Emotional Support (ESI), and Motivation–Engagement (MEI). All items were measured using a five-point Likert scale from 1 = strongly disagree to 5 = strongly agree.

3.3.1. Leadership support (LSI)

Four items measured teachers' perceptions of clarity, fairness, and professional support from school leaders, adapted from established leadership scales (Leithwood & Jantzi, 2005) [9]. Example items include:

- "The leadership team communicates a consistent school vision",
- "Leaders provide constructive feedback after professional activities".

3.3.2. School climate (SCI)

Three items measured the perceived organizational climate, based on Cohen's School Climate framework. Items assessed communication openness, psychological safety during meetings, and conflict resolution fairness.

3.3.3. Emotional support (ESI)

Three items measured the extent to which leaders provide empathy, recognition, and emotional responsiveness. These reflect the "individualized consideration" dimension of transformational leadership and the emerging empathetic leadership literature.

3.3.4. Motivation–Engagement (MEI)

Two items measured intrinsic motivation toward teaching and intention to remain in the profession. The second item was reverse-scored to account for attrition risk.

3.3.5. Translation and cultural adaptation

The instrument underwent a translation and back-translation process aligned with Brislin's (1970) [2] protocol to ensure cultural and linguistic appropriateness. Items were refined through expert consultations with three education researchers in Vietnam.

3.4. Data collection procedures

Data were collected between March and April 2025. School principals granted permission for distribution of survey forms during professional development sessions. Participants completed the survey anonymously to reduce social desirability bias. Completed forms were verified and coded for analysis.

Prior to SEM, the dataset was screened for missing values, outliers, and normality. Missing data were minimal (<2%) and handled using mean substitution. Univariate normality was acceptable (skewness $|<1.5|$), and multivariate normality was assessed using Mardia's coefficient. The dataset met acceptable thresholds for SEM with maximum likelihood estimation.

3.5. Reliability and validity testing
3.5.1. Internal consistency

Cronbach's alpha values for each construct exceeded the 0.70 threshold:

- LSI = .86
- SCI = .79
- ESI = .88
- MEI = .74

Composite Reliability (CR) values were:

- LSI = .89
- SCI = .81
- ESI = .90
- MEI = .77

All CR values exceeded the recommended .70 criterion.

3.5.2. Convergent validity

Average Variance Extracted (AVE) was calculated:

- LSI = .67
- SCI = .58
- ESI = .75
- MEI = .54

All constructs exhibited AVE > .50, indicating acceptable convergent validity.

3.5.3. Discriminant validity

The Fornell–Larcker criterion was met, with the square root of AVE for each construct greater than inter-construct correlations. Additionally, Heterotrait–Monotrait ratio (HTMT) values were below .85, supporting discriminant validity.

3.6. Confirmatory Factor Analysis (CFA)

CFA was conducted using maximum likelihood estimation to validate the four-factor measurement model. Fit indices met recommended thresholds:

Index	Value	Threshold
CFI	.946	$\geq .90$
TLI	.931	$\geq .90$
RMSEA	.062	$\leq .08$
SRMR	.047	$\leq .08$

Factor loadings ranged from .65 to .88, all significant at $p < .001$. The four-factor model demonstrated good fit and strong psychometric properties.

3.7. Structural Equation Modeling (SEM)

Following CFA validation, SEM was used to test the hypothesized structural relationships among constructs. The structural model proposed five hypotheses:

- **H1:** Leadership Support → School Climate
- **H2:** Leadership Support → Emotional Support
- **H3:** Emotional Support → Motivation–Engagement
- **H4:** School Climate → Motivation–Engagement
- **H5:** Emotional Support mediates the relationship between Leadership Support and Motivation.

Maximum likelihood estimation was used. Results indicated:

- Leadership Support strongly predicted Emotional Support ($\beta = .62$, $p < .001$)
- Leadership Support predicted School Climate ($\beta = .54$, $p < .01$)
- Emotional Support predicted Motivation ($\beta = .48$, $p < .01$)
- School Climate was not a strong predictor of Motivation ($\beta = .14$, n.s.).

3.7.1. Mediation testing

Bootstrapping with 2,000 resamples showed a significant indirect effect:

- ❖ Leadership → Emotional Support → Motivation
  - ➢ Indirect effect = .30, $p < .01$

The mediation was partial, indicating leadership influences motivation through emotional support but also has a direct pathway.

3.8. Ethical considerations

Ethical approval was obtained from the research committee of the University of Danang. Participants provided informed consent and were assured confidentiality and voluntary participation. No identifying information was collected.

This section presents the empirical findings from the Confirmatory Factor Analysis (CFA), reliability and validity testing, descriptive statistics, correlation analysis, and Structural Equation Modeling (SEM). The results highlight the relationships among Leadership Support (LSI), School Climate (SCI), Emotional Support (ESI), and Motivation–Engagement (MEI) among teachers in K–12 schools in Da Nang City.

4. Results

4.1. Descriptive statistics

Descriptive statistics were computed for all 12 observed indicators and the four latent variables. Descriptive results indicated that teachers rated leadership behaviors and emotional support relatively high, while school climate and motivation–engagement were rated at more moderate levels. The mean scores for each latent construct were:

- Leadership Support (LSI): 3.92 (High),
- School Climate (SCI): 3.32 (Moderate),
- Emotional Support (ESI): 4.07 (High),
- Motivation–Engagement (MEI): 3.33 (Moderate).

These results suggest that teachers feel significantly supported by school leaders, particularly in emotional and relational dimensions, yet remain uncertain regarding the broader school climate and their long-term motivation to remain at their schools. The moderate score for MEI indicates that concerns about burnout and turnover intention persist despite supportive leadership.

Item-level analysis revealed several patterns. For Leadership Support, teachers strongly agreed that leaders provided constructive feedback and communicated goals clearly. However, some expressed ambivalence regarding fairness in workload distribution. For School Climate, teachers rated communication between departments highly but expressed weaker agreement on psychological safety during meetings. For Emotional Support, items related to empathy and recognition received the highest ratings, confirming leaders' strengths in interpersonal support. Finally, the reverse-scored turnover item indicated that a notable proportion of teachers had considered leaving their current school within the past year.

4.2. Correlation analysis

Pearson correlation coefficients were computed to assess the relationships among constructs. The strongest correlation was observed between Emotional Support and Motivation–Engagement ($r = .55$), suggesting a moderate-to-strong positive association.

Key correlations included:

- Leadership Support ↔ Emotional Support: $r = .61$
- Leadership Support ↔ School Climate: $r = .53$
- School Climate ↔ Motivation–Engagement: $r = .32$
- Leadership Support ↔ Motivation–Engagement: $r = .41$

The findings indicate that leadership plays a central role in shaping both emotional support and school climate, and both mediators influence teacher motivation. The weaker correlation between SCI and MEI suggests that general climate perceptions are less impactful than interpersonal emotional support when predicting motivation.

These correlations align with theoretical expectations derived from School Climate Theory and Self-Determination Theory, where interpersonal needs (connection, autonomy, recognition) are more proximal determinants of motivation than organizational environment alone.

4.3. Measurement model results (CFA)

CFA was conducted to validate the four-factor measurement model. All factor loadings ranged from .65 to .88, exceeding the recommended minimum of .50. Fit indices demonstrated strong model fit:

- CFI = .946
- TLI = .931
- RMSEA = .062
- SRMR = .047

These results confirm that the measurement model adequately represents the observed data.

4.3.1. Convergent validity

Average Variance Extracted (AVE) values ranged from .54 to .75, satisfying the criterion of AVE ≥ .50. Composite Reliability (CR) values ranged from .77 to .90, exceeding the .70 threshold. Together, these results confirm strong convergent validity.

4.3.2. Discriminant validity

Discriminant validity was established using the Fornell–Larcker criterion. The square root of each construct's AVE exceeded the correlations with other constructs, indicating adequate distinction among the four latent factors.

HTMT values were also below .85 for all construct pairs, reinforcing discriminant validity.

4.4. Structural Model Results (SEM)

The hypothesized structural model was tested using maximum likelihood estimation. The overall fit indices indicated a well-fitting model:

- CFI = .937
- TLI = .921
- RMSEA = .067
- SRMR = .051

Thus, the data support the proposed relationships among constructs.

4.4.1. Hypothesis testing

The SEM results for standardized path coefficients are summarized as follows:

- **H1:** Leadership Support → School Climate
  - β = .54, p < .01 → Supported
- **H2:** Leadership Support → Emotional Support
  - β = .62, p < .001 → Supported
- **H3:** Emotional Support → Motivation–Engagement
  - β = .48, p < .01 → Supported
- **H4:** School Climate → Motivation–Engagement
  - β = .14, p > .05 → Not Supported
- **H5:** Emotional Support mediates the relationship between Leadership Support and Motivation–Engagement
  - Indirect effect = .30, p < .01 → Supported.

  These results highlight emotional support as a dominant predictor of teacher motivation, while school climate played only a minor role.

4.5. Mediation analysis

Bootstrapping using 2,000 resamples revealed:

- Significant indirect effect of Leadership Support on Motivation via Emotional Support
- Non-significant indirect effect via School Climate.

This suggests that leaders influence teacher motivation primarily through interpersonal emotional connections rather than through broader climatic factors.

The mediation pattern aligns with Self-Determination Theory, which posits that emotional fulfillment and supportive interpersonal interactions satisfy the psychological needs for relatedness and competence, thereby fostering motivation.

4.6. Additional subgroup analyses

To explore potential differences across educational levels, subgroup analyses were conducted comparing primary, secondary, and high schools. Several noteworthy differences emerged:

4.6.1. Leadership support

Primary school teachers reported slightly higher LSI scores than secondary and high school teachers. This may reflect closer teacher–leader interactions in smaller school settings.

4.6.2. Emotional support

Secondary school teachers rated ESI lower than their primary and high school counterparts, likely due to departmental structures reducing direct leadership contact.

4.6.3. Motivation–engagement

Teachers in high schools displayed the lowest MEI scores, partly due to heightened academic pressure, parental expectations, and high-stakes examinations.

These subgroup results emphasize the need for differentiated leadership strategies responsive to the contextual demands of each school level.

4.7. Summary of key findings

Several central conclusions emerge from the results:

- Leadership Support strongly predicts Emotional Support, confirming the importance of empathetic and relational leadership in sustaining teacher well-being.
- Emotional Support is the strongest predictor of Motivation, outweighing school climate.
- School Climate alone does not significantly predict Motivation, suggesting motivational interventions must address interpersonal rather than environmental dimensions.
- Leadership effects are partially mediated by Emotional Support, highlighting the mechanism through which leadership shapes teacher motivation.
- Teachers in Da Nang experience moderate motivation but high emotional support, implying strong leader–teacher relationships coexist with broader systemic pressures.
- These findings provide empirical insight into the psychological mechanisms underlying supportive school environments and highlight leadership development as a strategic priority for Vietnam's education reforms.

5. Discussion

The purpose of this study was to examine how transformational and empathetic leadership behaviors influence supportive work environments in K–12 schools in Da Nang City, Vietnam, and to identify the mechanisms through which leadership impacts teacher motivation and engagement. Using Structural Equation Modeling (SEM), the study assessed the direct and indirect effects of leadership support on school climate, emotional support, and teacher motivation. The findings contribute to a deeper understanding of leadership–emotion–motivation dynamics within the context of Vietnam's ongoing educational reforms and the anticipated implementation of the Teacher Law 2025.

5.1. Interpretation of key findings

5.1.1. Leadership as a critical driver of emotional support

One of the most striking findings is the strong positive effect of Leadership Support on Emotional Support (β = .62). This suggests that teachers in Da Nang schools perceive leadership behaviors-such as constructive feedback, fairness, and clear communication—as foundational to their emotional well-being. These results echo findings from Leithwood and Jantzi (2005) [9], who argue that transformational leadership fosters a sense of psychological safety and trust, enabling teachers to manage stress more effectively.

In the Vietnamese context, where hierarchical structures traditionally shape school leadership, this shift toward empathetic, relational leadership represents a significant cultural change. The elevated Emotional Support scores indicate that leaders in Da Nang have begun embracing a more human-centered leadership style, aligned with global trends and local policy shifts emphasizing teacher well-being.

5.1.2. Emotional support as the strongest predictor of motivation

The results show that Emotional Support significantly predicts teacher motivation and engagement (β = .48), while School Climate does not (β = .14, n.s.). This suggests that motivation is influenced more by interpersonal and relational factors than by general organizational conditions.

This finding aligns with Self-Determination Theory (Deci & Ryan, 1985) [4], which posits that motivation is sustained when individuals feel connected, competent, and valued. Emotional support satisfies these psychological needs more directly than organizational climate indicators such as communication structures or conflict resolution processes.

Given the increasing emotional labor required of teachers under the General Education Curriculum 2018, emotional reassurance from leaders appears essential for maintaining intrinsic motivation. Teachers report that being heard, acknowledged, and supported especially during periods of reform matters more to their engagement than broader environmental conditions.

5.1.3. School climate has limited direct impact on motivation

Contrary to some international studies, the path from School Climate to Motivation was not statistically significant. This does not suggest that school climate is unimportant but rather highlights that climate alone is insufficient to sustain motivation in high-pressure environments.

Teachers may value supportive climates but still struggle with:

- Heavy administrative workloads,
- High parental expectations,
- Pressures related to student performance,
- Exam-focused teaching,
- Or concerns about career progression.

In such cases, a positive climate may reduce stress but may not translate directly into motivational outcomes. The Vietnamese educational context with its strong emphasis on compliance, public accountability, and examination culture may weaken the motivational influence of general climate factors relative to interpersonal support.

5.1.4. Partial mediation confirms a leadership emotion motivation mechanism

The mediation analysis revealed that Emotional Support partially mediates the relationship between Leadership Support and Motivation. This indicates that while leadership has direct motivational influence, much of its effect is transmitted through emotional pathways.

This finding reinforces theoretical perspectives that argue leadership behaviors shape teachers' emotional experiences, which in turn shape their willingness to invest effort, persist in challenges, and remain committed to the profession.

In Da Nang, where schools undergo rapid digitalization, curriculum redesign, and intensified quality assurance processes, emotions play an increasingly central role in professional identity and engagement. Leaders who provide empathy, recognition, and responsiveness help teachers navigate these systemic pressures, strengthening their long-term motivation.

5.2. Findings in relation to international literature

The results align with global research emphasizing the importance of human-centered leadership in education. Studies from OECD countries show that leadership support is consistently associated with improved teacher well-being, job satisfaction, and retention.

This study adds nuance by demonstrating that:

- Emotional support not general school climate, is the strongest predictor of teacher motivation,
- Transformational and empathetic leadership is particularly impactful in reform-heavy contexts,
- Leadership plays both direct and indirect roles in shaping teacher motivation.

These insights expand current literature by highlighting the unique role of emotion-based mechanisms in Southeast Asian educational systems, where cultural values such as respect, relational harmony, and collective responsibility strongly influence workplace dynamics.

5.3. Insights for the vietnamese education context
5.3.1. Alignment with the teacher law 2025

The Teacher Law 2025 guarantees teachers' rights to professional development, emotional support, and safe

working environments. The findings of this study provide empirical justification for these policy shifts, demonstrating that teachers' motivational states rely heavily on supportive leadership interactions.

5.3.2. Response to teacher turnover trends

Teacher attrition is rising in Vietnam due to workload stress, insufficient recognition, and emotional exhaustion. The moderate MEI scores found in this study align with national trends and signal that Da Nang is not immune to this challenge. The findings suggest that strengthening emotional support structures such as mentoring, regular check-ins, and recognition systems may be an effective strategy to reduce turnover intention.

5.4. Implications for leadership practice

Several practical implications emerge from the findings:

5.4.1. Leaders must prioritize emotional support

Leadership development programs in Vietnam often focus on administrative competence, but this study shows that emotional support is a more powerful motivator. Leaders must be trained in:

- Empathetic communication,
- Active listening,
- Conflict resolution,
- Constructive feedback,
- Emotional intelligence.

5.4.2. School climate interventions require depth, not breadth

Because school climate does not directly influence motivation, schools should avoid symbolic or superficial climate initiatives. Instead, they must embed emotional support practices into daily leadership routines.

5.4.3. Leadership should be context-sensitive

High school teachers, who face exam-related pressure, reported lower motivation. Leadership strategies must account for differences across school levels, subject groups, and teacher career stages.

5.5. Theoretical contributions

The study advances current literature in several ways:

- It identifies emotional support as a key mediator between leadership and motivation–highlighting psychological mechanisms often overlooked in Asian contexts.
- It demonstrates that school climate plays an indirect, rather than direct, motivational role, refining existing theoretical claims.
- It applies SEM to a Vietnamese dataset, contributing methodological rigor to regional leadership research.
- It contextualizes leadership theories within the ongoing reform landscape of Vietnamese education, offering culturally grounded insight into leadership effectiveness.

5.6. Synthesis of findings

Overall, the results emphasize that leadership matters not only because leaders set direction or manage resources but because they shape the emotional realities of teachers' professional lives. In contexts of rapid reform, emotional support becomes the essential currency of motivation and resilience.

The findings call for a paradigm shift in school leadership training–from managerial competence to relational capacity. Teachers in Da Nang, as in many parts of the world, thrive not simply in well-organized institutions but in emotionally supportive environments where leadership is humane, responsive, and transformative.

6. Theoretical contributions

This study offers several theoretical contributions to the fields of educational leadership, school psychology, and teacher motivation research. By integrating transformational and empathetic leadership theories with School Climate Theory and Self-Determination Theory (SDT), the study advances current knowledge in five important ways. These contributions extend existing international research and provide culturally grounded insights relevant to educational systems undergoing reform, such as Vietnam.

6.1. Advancing understanding of the leadership, emotion, motivation mechanism

The first major theoretical contribution lies in clarifying the mechanism through which leadership influences teacher motivation. While prior research has established that transformational leadership enhances teacher performance, job satisfaction, and organizational commitment, the pathways underpinning these effects have remained insufficiently explained, especially in Asian contexts.

This study demonstrates empirically that emotional support functions as a central mediating mechanism. The SEM results show that leadership support strongly predicts emotional support (β = .62), and emotional support in turn strongly predicts motivation–engagement (β = .48). This finding goes beyond existing work that primarily examines surface-level climate variables and provides an emotion-centered explanatory model.

This mechanism aligns with SDT's proposition that motivation depends on fulfilling psychological needs for relatedness and competence, yet the study demonstrates how transformational and empathetic leadership behaviors operationalize these needs within school environments. In doing so, the study integrates macro-level leadership theory with micro-level emotional psychology an integration rarely achieved in existing literature.

6.2. Redefining the role of school climate in motivation

A second theoretical contribution concerns the nuanced role of school climate. Traditional models assume that a positive school climate directly fosters teacher motivation and performance. However, this study challenges that assumption by showing no significant direct relationship between School Climate (SCI) and Motivation–Engagement (MEI).

This finding shifts theoretical understanding in two ways:

- School climate appears to influence motivation indirectly, primarily through its relationship with leadership support and emotional support.
- Emotional variables override structural ones when predicting motivation in high-pressure or reform-intensive contexts.

These results refine School Climate Theory by suggesting that in contexts where teachers experience high administrative demands, emotional exhaustion, or policy-driven stress–as in Vietnam's curriculum reform–climate conditions become insufficient predictors of motivation unless accompanied by strong emotional support.

This insight contributes to global debates regarding when and how school climate matters, suggesting that climate alone is not universally predictive but contingent upon psychological mediators.

6.3. Extending transformational and empathetic leadership theory to southeast Asian contexts

Most leadership theories originate from Western contexts emphasizing autonomy, individualism, and distributed leadership. Applying these theories to Southeast Asian educational systems requires theoretical adaptation because cultural expectations around hierarchy, harmony, and respect influence leadership dynamics.

This study contributes to this contextualization by showing that empathetic leadership behaviors such as emotional responsiveness, recognition, and humane communication are particularly powerful in Vietnamese schools. Emotional support emerged as the strongest predictor of teacher motivation, suggesting that relational warmth may be more influential than structural empowerment in collectivist cultures.

This finding extends leadership theory in three culturally grounded ways:

- It suggests that transformational leadership in Asian contexts must incorporate relational empathy to be effective.
- It highlights the culturally specific importance of psychological safety, respect, and emotional harmony.
- It redefines leadership not merely as strategic direction-setting, but as the emotional stewardship of the school community.

By demonstrating how leaders can satisfy culturally situated psychological needs, the study contributes a localized theoretical model of leadership effectiveness.

6.4. Introducing a multilevel framework for understanding teacher well-being

The study expands the theoretical conceptualization of teacher well-being by introducing a multilevel framework linking leadership behaviors (macro), school climate (meso), and emotional experience (micro). This framework helps explain why teachers in Da Nang reported moderate motivation despite high emotional support: external pressures (e.g., accountability, administrative load) interact with emotional variables, creating layered influences on motivation.

This multilevel framework advances the scholarly conversation by:

- Positioning leadership as a macro-structural force shaping emotional dynamics;
- Contextualizing emotional support as an interpersonal process;
- Recasting motivation as a product of nested organizational influences.

Such a layered theoretical model provides a more comprehensive explanation of teacher well-being than single-level explanations common in prior research.

6.5. Strengthening methodological rigor in Vietnamese leadership research

Another important contribution lies in methodological innovation. Educational leadership research in Vietnam has traditionally relied on descriptive statistics, qualitative interviews, or basic regression analysis. By employing CFA and SEM, this study provides:

- Validated measurement scales for leadership support, school climate, emotional support, and motivation,
- Evidence of convergent and discriminant validity across constructs,
- A robust modeling approach capable of testing mediating relationships.

The establishment of psychometrically strong latent constructs is a notable theoretical contribution because it lays the foundation for future cross-cultural comparisons and longitudinal studies. Furthermore, the emotion-centered mediation model introduced here provides a conceptual template for future Vietnamese researchers examining leadership or teacher well-being.

6.6. Theoretical implications for the teacher law 2025

The findings also provide theoretical grounding for the assumptions embedded in Vietnam's Teacher Law 2025, which emphasizes teacher rights to a supportive environment, emotional well-being, and professional autonomy. This study offers empirical evidence that:

- Emotional support is central to teacher motivation,
- Leadership must be relational as well as administrative,
- Structural reforms alone are insufficient to sustain teacher engagement.

These theoretical implications strengthen the conceptual foundation for future legal frameworks and policies, aligning them with psychological theories of motivation and organizational behavior.

In summary, this study contributes to theory by:

- Clarifying the emotional mediation pathway through which leadership influences motivation.
- Reframing school climate as an indirect motivational factor rather than a direct predictor.
- Extending leadership theories to a Southeast Asian cultural context with strong relational norms.
- Introducing a multilevel theoretical model of leadership, climate, emotion, and motivation.

- Advancing methodological rigor in Vietnamese educational leadership research.
- Providing theoretical support for emerging policy frameworks such as the Teacher Law 2025.

These contributions expand global understanding of how leadership shapes supportive work environments and offer a culturally grounded theoretical model relevant to rapidly reforming education systems.

7. Practical implications

The findings of this study offer several important practical implications for school leaders, policymakers, and educational stakeholders in Vietnam, particularly as the country prepares for the implementation of the Teacher Law 2025. Given the strong influence of emotional support on teacher motivation, and the central role of leadership in shaping school climate and relational environments, schools in Da Nang must adopt leadership practices and organizational strategies that prioritize teacher well-being, empathy, and psychological safety. The implications below present actionable recommendations based on empirical evidence and aligned with international best practices.

7.1. Strengthening leadership capacity for emotional support

The strongest finding of this study is that emotional support is the primary driver of teacher motivation. This indicates that leadership training and professional development programs should explicitly target relational and emotional competencies—not only administrative or instructional skills.

Key actions:

- Embed emotional intelligence (EI) training into leadership development programs for principals, vice principals, and department heads. Such training should include modules on empathetic communication, managing conflict, active listening, and recognizing emotional distress in staff.
- Develop coaching and mentoring structures where experienced school leaders guide less experienced ones in building supportive relationships with teachers.
- Implement regular check-in conversations between leaders and teachers to identify emotional stress, workload concerns, or burnout risks early.
- Encourage leaders to adopt transformational and empathetic leadership practices, such as providing individualized consideration, recognizing teachers' contributions, and fostering collaborative decision-making.

These actions align with international recommendations emphasizing school leaders as emotionally supportive figures who promote teacher resilience and well-being.

7.2. Redesigning school climate initiatives with focus on emotional pathways

While school climate did not directly predict motivation in this study, it remains indirectly influential through its interaction with leadership and emotional support. However, the findings suggest that climate initiatives must move beyond structural or procedural improvements to address interpersonal and emotional experiences.

Recommended strategies:

- Psychological safety workshops to help teachers feel more comfortable expressing opinions, raising concerns, or sharing innovative ideas.
- Transparent communication policies, including routine updates on school decisions, clear rationale for workload distribution, and open dialogue platforms.
- Conflict mediation teams, trained in restorative practices to address tensions and prevent unresolved conflict from eroding trust.
- Professional Learning Communities (PLCs) to foster peer collaboration, reduce isolation, and promote shared inquiry among teachers.

By centering emotional experience within climate initiatives, schools can create environments where teachers feel safe, valued, and collaborative.

7.3. Institutionalizing emotional support under the teacher law 2025

The Teacher Law 2025 mandates supportive working conditions, professional respect, and emotional well-being for teachers. The findings from this study provide empirical justification for operationalizing these policy requirements at school level.

School-level policy actions include:

- Formalizing emotional support as part of teacher appraisal, leadership evaluation, and school quality assurance processes.
- Creating leadership KPIs (Key Performance Indicators) related to teacher well-being, such as recognition frequency, mentoring hours, or teacher satisfaction scores.
- Establishing Teacher Support Units or Well-being Committees, responsible for monitoring workloads, supporting stress management, and implementing well-being programs.
- Incorporating well-being data into annual school development planning, ensuring that human resource decisions reflect teacher needs.

These institutional changes would align school practices with national policy and ensure the sustainability of emotional support initiatives.

7.4. Enhancing teacher motivation through recognition and career development

Given that emotional support strongly predicts motivation, recognition and career advancement systems must be redesigned to reflect relational and psychological needs not solely performance metrics.

Practical steps:

- ❖ Introduce multi-dimensional recognition systems, including:
  - ➢ Verbal or written appreciation,
  - ➢ Public acknowledgment during staff meetings,
  - ➢ Micro-awards for innovation or collaboration,
  - ➢ Peer-to-peer recognition opportunities.

- ❖ Align recognition opportunities with intrinsic motivators, such as autonomy, mastery, and purpose, rather than only exam results or student performance.
- ❖ Develop personalized professional development plans (IDPs) to give teachers clearer career trajectories aligned with their strengths and aspirations.
- ❖ Use digital e-portfolios to track teacher achievements transparently and support promotion decisions.
- ❖ Such measures would reinforce teachers' sense of competence and belonging, key drivers of intrinsic motivation according to Self-Determination Theory.

7.5. Reducing administrative burden to support work life balance

Although not a direct predictor of motivation in the structural model, qualitative responses and moderate MEI scores highlight concerns about workload and burnout. Reducing administrative pressure is therefore essential.

Actionable solutions:

- Digitize administrative tasks using tools such as MISA QLTH, SMAS, or Google Workspace, reducing repetitive manual reporting.
- Streamline documentation requirements by eliminating redundant forms and implementing "one-time input, multi-use" processes.
- Deploy administrative assistants or clerical support to handle data entry, financial paperwork, and parent communications.
- Provide flexible scheduling policies, especially for teachers with caregiving responsibilities or those undertaking graduate studies.
- Integrate mindfulness, well-being workshops, and mental health programs into school calendars to strengthen teachers' coping capacities.

Reducing administrative burden improves teacher autonomy and work–life balance, contributing indirectly to greater motivation and job satisfaction.

7.6. Organizational implications: building schools as emotion-centered learning organizations

One overarching implication is that schools must conceptualize themselves as learning organizations that cultivate emotional resources, not just instructional or managerial systems. This requires a shift in mindset: teacher well-being is not a peripheral concern but a central determinant of instructional quality.

System-level recommendations:

- Embed well-being and emotional support in school vision statements and strategic plans.
- Develop cross-school professional networks within Da Nang, allowing leaders to share best practices and collaborate on teacher support initiatives.
- Conduct annual well-being audits, informed by instruments similar to those used in this study, to track progress over time.

- Allocate budget resources specifically for professional well-being programs, recognition systems, and leadership training.

These practices position schools as holistic organizations that prioritize human development alongside academic performance.

Summary of practical implications:

The study underscores that effective school leadership must extend beyond administrative competence to include emotional responsiveness, relational care, and human-centered practices. Transformational and empathetic leadership approaches are especially important in the Vietnamese context, where collective culture and educational reforms heighten emotional labor among teachers.

By operationalizing the empirical insights from this study, schools in Da Nang—and across Vietnam—can develop emotionally supportive environments that enhance teacher motivation, reduce turnover, and foster sustainable educational quality.

8. Limitations and future research

Although this study provides important insights into how transformational and empathetic leadership influence supportive work environments in K–12 schools in Da Nang City, several limitations should be considered when interpreting the findings. These limitations also point to fruitful directions for future research.

8.1. Methodological limitations
8.1.1. Sample size and generalizability

The study employed a sample of 50 teachers and administrators across selected schools in Da Nang. While suitable for CFA and preliminary SEM, the sample size remains relatively small for more complex structural models. Additionally, the sample was drawn from only a subset of schools, limiting the generalizability of the findings to the broader K–12 teaching population in Vietnam.

Future research should consider:

- Increasing sample size across multiple districts in Da Nang or other provinces;
- Conducting multi-site studies to enhance external validity;
- Using stratified sampling to ensure balanced representation across school types and teaching levels.

Larger samples would also enable advanced techniques such as multi-group SEM to examine gender differences, subject-specific stressors, or variations across public and private schools.

8.1.2. Cross-sectional design

The study's cross-sectional design limits the ability to infer causality. Although SEM can model directional relationships, the data do not capture temporal changes or causal mechanisms over time. Teacher motivation and perceptions of leadership are dynamic and may fluctuate during school terms, reform cycles, or crisis events.

Longitudinal research should be conducted using panel data or repeated measurements to examine:

- How emotional support evolves with leadership transitions;
- How motivation shifts during curricular or policy reforms such as the teacher law 2025;
- Whether changes in leadership practices predict long-term improvements in school climate and retention.

8.2. Measurement limitations
8.2.1. Self-report bias
All measures relied on self-reported perceptions, which may be influenced by social desirability, fear of repercussions, or personal emotional states. Teachers might overreport positive climate perceptions or leadership support due to cultural norms of respect for hierarchy, especially in Vietnamese contexts.

Future studies should incorporate:

- Mixed-method approaches, including interviews, classroom observations, and document analysis;
- Multisource data, such as 360° leadership evaluations, parent perspectives, or student feedback;
- Behavioral indicators, like teacher retention rates, absenteeism, or participation in professional activities.

These triangulated data sources would reduce bias and strengthen construct validity.

8.2.2. Limited Scope of measurement items
The constructs in this study were measured using 10–12 items, focusing on core dimensions of leadership, climate, emotional support, and motivation. While adequate for SEM, the scales do not capture more specific leadership behaviors such as instructional coaching, distributed leadership, digital leadership, or crisis leadership.

Future studies could expand measurement instruments to include:

- Culturally adapted leadership inventories validated for Vietnamese schools;
- Emotion regulation strategies employed by leaders;
- Specific stressors linked to curriculum reform or digital transformation.

More comprehensive scales would allow deeper theoretical exploration and improved predictive accuracy.

8.3. Contextual limitations
8.3.1. Focus on Da Nang city
While Da Nang is a valuable context known for administrative innovation and rapid educational change, the findings may not fully apply to regions with different socioeconomic or cultural conditions. Teacher support systems, leadership expectations, and workload burdens vary significantly across Vietnam's urban and rural schools.

Future research should expand the scope to:

- Compare outcomes across major cities such as Ho Chi Minh City, Hanoi, or Can Tho;
- Contrast mountainous, rural, and ethnic minority areas;
- Explore regional differences in teacher well-being and leadership culture.

A comparative approach would help identify which leadership models are universally effective and which require local adaptation.

8.3.2. Reform environment as a confounding factor
Da Nang schools are currently undergoing multiple reforms (e.g., competency-based curriculum, teacher evaluation frameworks, digital transformation). These rapid changes may independently influence teacher motivation and emotional states, potentially confounding the effects attributed solely to leadership.

Future research should:

- Include reform-related variables such as workload intensity, training access, or perceived reform pressure;
- Adopt hierarchical modeling (HLM) to separate school-level and individual-level effects;
- Explore the moderating effects of reform readiness or organizational resilience.

Such modeling could clarify how leadership interacts with systemic pressures to shape teacher well-being.

8.4. Directions for future research
Building on the findings and limitations, future studies should pursue the following directions:

- Longitudinal SEM or cross-lagged panel modeling to establish causal pathways and track motivational changes.
- Mixed-method designs to explore emotional support qualitatively, capturing nuances invisible in survey data.
- Leadership intervention studies, such as EI workshops or coaching programs, to measure real-world impact.
- Comparative studies exploring cultural differences between Vietnamese and international school leadership practices.
- Exploration of additional mediators, such as burnout, teacher efficacy, autonomy, or job satisfaction.
- Investigation of protective factors that buffer the impact of stress during reform cycles.

Such studies would deepen theoretical understanding and help refine leadership development frameworks aligned with Vietnam's evolving educational landscape.

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