Situational Leadership and Work Culture in Relation to Teacher Professional Competence in Public Elementary Schools

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ABSTRACT

Teacher professional competence depends not only on individual capabilities but also on the leadership and organizational conditions in which teachers work. Yet, relatively few studies have considered situational leadership, work culture, and professional competence together in public elementary schools. This study examined the relationships among principals' situational leadership, work culture, and teachers' professional competence in public elementary schools in the Pinang District, Tangerang City, Indonesia. A quantitative cross-sectional survey involved 160 teachers selected through proportional random sampling from a population of 267 teachers; an additional 30 teachers participated in the instrument pilot. Data were collected through five-point Likert-scale questionnaires and analyzed using descriptive statistics, assumption testing, Pearson correlations, and hypothesis testing using IBM SPSS. The results showed significant positive associations between situational leadership and professional competence ($r = .940$, $p < .001$), work culture and professional competence ($r = .806$, $p < .001$), and situational leadership and work culture ($r = .866$, $p < .001$). The strongest association was between situational leadership and professional competence. By considering the three organizational dimensions together, this study provides contextual evidence from public elementary schools. The findings point to leadership support, a collaborative work culture, and sustained professional development as interconnected features of teachers' work environments. However, the cross-sectional and self-report design, together with the detected deviation from linearity, calls for cautious interpretation and further study using longitudinal, multi-source, and nonlinear approaches.

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1. Introduction

Teacher professional competence is increasingly viewed as both an individual and an organizational concern because teachers' ability to sustain effective practice is shaped by the conditions in which their work occurs. School leadership is one of the central conditions. Research on successful school leadership shows that leadership helps shape the organizational and professional environment in which teachers work, while instructional leadership has become a well-established area of educational management research (Bellibaş et al., 2026). Rather than viewing leadership as a collection of isolated administrative behaviors, recent scholarship points to the interplay among leadership practices, workplace conditions, professional learning, and teacher engagement. Liu et al. (2026) found that leadership practices can connect organizational direction with support for teaching and learning, while Karaferye and Bellibaş (2025) emphasized that leadership effectiveness depends on the context and on the mechanisms through which leadership is enacted in the workplace. These perspectives are especially relevant in elementary schools, where principals must coordinate school priorities while supporting teachers' ongoing professional development.

The organizational setting also matters because professional competence does not develop through individual efforts alone. Teachers' professional learning is shaped by the opportunities, relationships, and forms of support available in their schools. Tinoca et al. (2025) highlighted the role of schools as professional learning communities, whereas Aypay et al. (2026) showed how structured collaboration and distributed teacher leadership can connect professional learning with school change. Professional development, however, does not automatically translate into stronger professional practice. Özdoğru et al. (2025) identified the importance of school leadership and principal–teacher relationships in supporting teacher professional learning. This suggests that the conditions surrounding professional learning deserve closer attention. From this perspective, work culture provides a context in which leadership decisions can become shared expectations, patterns of collaboration, and everyday professional routines.

These considerations raise a broader question about how organizational support is associated with teachers' professional competence. Research has shown that principals can shape teachers' work experiences and professional outcomes, but these relationships are not necessarily direct or consistent across settings. Berhanu (2025), for instance, found associations between principals' pedagogical leadership practices and teachers' job performance, suggesting that teachers' views of leadership matter for professional outcomes. Eryilmaz et al. (2025) likewise explained that teachers' work experiences and outcomes are connected to school working conditions. Adams et al. (2025) further demonstrated that the leadership teacher relationship is situated within collaborative organizational conditions. Taken together, these studies indicate that leadership is better understood alongside the work environment in which it is experienced.

A related issue is the challenge of translating leadership intentions into everyday professional practice. Principals may provide direction, resources, feedback, or developmental support, but the meaning of these practices depends partly on how teachers experience and enact them within the organization. Lushaj and Shatri (2026) emphasized the importance of leadership and collaboration in school improvement, underscoring the contextual character of leadership practice. Li and Zhang (2026) likewise described instructional leadership as a process whose influence on teacher behavior operates through school-level psychological conditions. The Job Demands Resources perspective offers another useful lens: workplace

resources can shape motivation and functioning, while the balance between demands and available resources influences employees' experiences and outcomes (Reintjes et al., 2025). Reintjes et al. (2025) similarly described teacher engagement as shaped by school management and collegial resources rather than solely as an individual attribute. These perspectives support viewing leadership and work culture as connected features of the organizational setting rather than as separate conditions.

Previous research has approached these issues from several directions. Leadership studies have examined transformational, instructional, authentic, and distributed leadership, whereas professional learning research has focused on coaching, collaboration, and professional learning communities (Bellibaş, Polatcan, et al., 2025; Bellibaş et al., 2026). Montgomery and Shriner (2025) found evidence that instructional coaching is strengthened when collaborative leadership structures align coaching work with instructional improvement, underscoring the value of feedback and sustained professional support. At the same time, Bellibaş et al. (2026) showed that the relationship between leadership and teacher instructional practice varies across leadership models and organizational conditions. These strands of research provide a useful foundation; however, they do not fully show how teachers' perceptions of adaptive leadership and collective work culture are related to professional competence when the three constructs are considered within the same elementary school context.

This unresolved issue is particularly relevant to public elementary schools in the Pinang District, Tangerang City. The present study covers 18 public elementary schools and considers teachers' reported experiences of situational leadership (Hersey & Blanchard, 1969), work culture, and professional competence. Existing research offers substantial evidence on leadership, professional learning, engagement, and organizational conditions; however, the relationships among these three constructs have received less direct attention when examined together at the elementary school level. The literature also suggests that organizational context matters because leadership practices are experienced in relation to school climate, organizational culture, and teachers' professional competence (Dacholfany et al., 2026; Chen et al., 2025). Therefore, this study examines whether situational leadership and work culture are statistically related to teachers' professional competence and whether situational leadership is also related to work culture. In doing so, it addresses a contextual and relational gap by bringing these organizational dimensions into a single empirical framework.

This study examines the relationships among situational leadership, work culture, and teachers' professional competence in public elementary schools in the Pinang District, Tangerang City. It addresses three questions: (1) Is situational leadership of school principals significantly related to teachers' professional competence? (2) Is work culture significantly related to teachers' professional competence? and (3) Is situational leadership significantly related to work culture? Using data from 160 teachers selected proportionally across the participating schools, the study provides empirical evidence on the associations among leadership, organizational culture, and professional competence at the school level. Its contribution lies in linking leadership practices with the organizational conditions of professional work while maintaining a clear distinction between statistical association and causal inference in a cross-sectional design.

2. Methods

Research Design and Setting

This study used a quantitative, cross-sectional survey design to examine the relationships among principals' situational leadership, work culture, and teachers' professional competence (Creswell & Creswell, 2018). The research was conducted in public elementary

schools (Sekolah Dasar Negeri, SDN) within Groups 1, 2, and 3 in Pinang District, Tangerang City, Indonesia, from February to July 2026. The study considered three variables: situational leadership of school principals (X_1), work culture (X_2), and teachers' professional competence (X_3). Because the data were collected at one point in time and all three constructs were reported by the same respondents, the statistical findings were treated as associations rather than evidence of causality. This single-source design may also introduce common method bias.

Population and Sampling

The study population consisted of 267 teachers working in the targeted public elementary schools in the Pinang District. The main sample comprised 160 teachers, determined using the Slovin formula with a 5% margin of error. Proportional random sampling was used to ensure that the sample reflected the distribution of teachers across the participating school groups. A separate group of 30 teachers participated in the instrument pilot before the main survey. These pilot participants were not included in the primary analysis, leaving 160 teachers in the final analytical sample.

Variables and Measurement

Three constructs were examined in this study: situational leadership of school principals (X_1) was measured using 12 indicators and 34 questionnaire items, as follows: work culture (X_2) was assessed using 12 indicators concerning attitudes toward work and workplace behavior, represented by 34 items in the questionnaire. Teachers' professional competence (X_3) was measured using 15 indicators covering conceptual, human relations, and technical skills represented by 30 items. These dimensions were retained from the research instrument developed for this study.

All questionnaire items used a five-point Likert response scale, consistent with the basic principles of Likert-type attitude measurement. Using the same structured response format allowed the researchers to quantify teachers' perceptions of principal leadership, work culture, and professional competence across the three constructs.

Instrument Validity and Reliability

Before the main survey, the questionnaire was examined for item-level validity and internal consistency using a pilot study. The items were tested using Pearson product–moment correlations, and an item was retained when its calculated correlation exceeded the corresponding critical value at the 5% significance level. Items that did not meet this criterion were removed from the final list. This procedure provided an empirical basis for retaining statements that were sufficiently related to the intended constructs.

Internal consistency was assessed using Cronbach's alpha (Cronbach, 1951). The coefficient was used to determine the consistency of items within each instrument in measuring the intended constructs. Pilot testing was completed before the main data collection, allowing item validity and reliability to be evaluated before the questionnaire was administered to the principal samples.

Data Collection

Data were collected by administering a validated questionnaire to teachers in the participating public elementary schools. Each respondent completed the three study measures using a five-point Likert scale. The resulting dataset contained 160 complete cases for statistical analysis. Because all three constructs were reported by teachers, the findings describe relationships among teachers' perceptions of principal leadership, work culture, and professional competence at the time of data collection.

Data Analysis

The data were analyzed using the IBM SPSS software. The procedure included descriptive statistics, assumption testing and hypothesis testing. For each variable, the analysis

produced the mean, standard deviation, minimum, and maximum scores to describe the observed distribution.

Three assumption checks were then performed. First, normality was assessed using the one-sample Kolmogorov–Smirnov test with Lilliefors adjustment, which is appropriate when the population mean and variance are estimated from the sample. Second, multicollinearity between the predictor variables was examined using tolerance and variance inflation factor (VIF) statistics. The study used a tolerance value above 0.10 and a VIF below 10 as the decision criteria. Third, the Test of Linearity was used to assess whether the relationships among the variables were adequately described by a linear form.

Hypothesis tests were evaluated at the 5% significance level (= .05). Three relationships were examined: (1) situational leadership and teachers' professional competence, (2) work culture and teachers' professional competence, and (3) situational leadership and work culture. The analytical framework was informed by the principles of path analysis associated with Wright's formulation for examining relationships among variables (Wright, 1921). However, the reported results focus on Pearson correlations and significance tests for the specified pairwise relationships; no direct, indirect, or total path effects were reported. Accordingly, the coefficients are interpreted as statistical associations within the cross-sectional dataset rather than as causal effects. This distinction is important because the data came from a single respondent source and a common measurement format, conditions that may contribute to common method bias.

3. Results

Descriptive Statistics

The analysis involved 160 teachers from public elementary schools in Pinang District, Tangerang City. Three variables were examined: situational leadership of school principals (X_1), work culture (X_2), and teachers' professional competence (X_3). Descriptive statistics are presented in Table 1.

Table 1. Descriptive Statistics of the Study Variables

Variable	N	Min	Max	Mean	SD
Situational leadership (X_1)	160	74	114	92.05	8.132
Work culture (X_2)	160	69	101	84.84	6.129
Professional competence (X_3)	160	73	106	88.67	6.412

Table 1 shows that the mean score for situational leadership was 92.05 (SD = 8.132), compared with 84.84 (SD = 6.129) for work culture, and 88.67 (SD = 6.412) for professional competence. The observed scores ranged from 74 to 114 for situational leadership, 69 to 101 for work culture, and 73 to 106 for professional competence, respectively.

Assumption Testing

Normality

The normality of the three study variables was examined using the one-sample Kolmogorov-Smirnov test. The results are presented in Table 2.

Table 2. One-Sample Kolmogorov–Smirnov Normality Test

Variable	N	Kolmogorov–Smirnov Z	p	Result
Situational leadership (X_1)	160	0.852	.462	Normal
Work culture (X_2)	160	0.949	.329	Normal
Professional competence (X_3)	160	0.898	.396	Normal

As shown in Table 2, the p-values were .462 for situational leadership, .329 for work

culture, and .396 for professional competence. Each value was greater than .05, under the criterion used in the analysis.

Linearity

Table 3. Reports The Linearity Tests For The Three Relationships Examined in The Study

Table 3. Tests of Linearity

Relationship	Sig. Linearity	Sig. Deviation from Linearity
$X_1 \rightarrow X_3$	< .001	.030
$X_2 \rightarrow X_3$	< .001	.953
$X_1 \rightarrow X_2$	< .001	.335

The linearity component was significant for all three relationships ($p < .001$). However, the deviation-from-linearity test was also significant for situational leadership and professional competence ($p = .030$), indicating that this relationship did not fully conform to the linearity criterion used in the study. In contrast, the deviation-from-linearity results for work culture and professional competence ($p = .953$) and for situational leadership and work culture ($p = .335$) were not significant.

Multicollinearity

Multicollinearity between the predictors was examined using tolerance and variance inflation factor (VIF) statistics. The results are presented in Table 4.

Table 4. Multicollinearity **Statistics**

Predictor	Tolerance	VIF
Situational leadership (X_1)	0.251	3.989
Work culture (X_2)	0.251	3.989

Both predictors had a tolerance of 0.251 and VIF of 3.989. These values met the study's specified criteria of tolerance above 0.10 and a VIF below 10.

Relationships Among the Study Variables

This study examined three pairwise relationships involving situational leadership, work culture, and teachers' professional competence. The corresponding hypothesis tests are reported below.

Situational Leadership and Professional Competence

The association between situational leadership and teachers' professional competence was statistically significant ($t = 34.589$, $p < .001$). The Pearson correlation was $r = .940$. The results are summarized in Table 5.

Table 5. Relationship Between Situational Leadership and Professional Competence

Relationship	**t**	**p**	**Pearson's r**
Situational leadership → Professional competence	34.589	< .001	.940

The positive correlation indicates that higher reported levels of situational leadership were associated with higher reported levels of teachers' professional competence.

Work Culture and Professional Competence

Work culture was also positively associated with teachers' professional competence. The analysis produced $t = 17.136$ with $p < .001$, while the Pearson correlation was $r = .806$. The results are shown in Table 6.

Table 6. Relationship Between Work Culture and Professional Competence

Relationship	t	p	Pearson's r
Work culture → Professional competence	17.136	< .001	.806

The positive correlation indicates that higher reported levels of work culture are associated with higher reported levels of professional competence.

Situational Leadership and Work Culture

Situational leadership was also significantly associated with work culture (t = 21.730, p <.001; Pearson correlation =.866). The results are presented in Table 7.

Table 7. Relationship Between Situational Leadership and Work Culture

Relationship	t	p	Pearson's r
Situational leadership → Work culture	21.730	< .001	.866

Note. N = 160.

The positive correlation indicates that higher reported levels of situational leadership were associated with higher reported levels of workplace culture.

Across the three analyses, all reported relationships were positive and statistically significant. The largest Pearson correlation was observed between situational leadership and professional competence (r = .940), followed by situational leadership and work culture (r = .866) and work culture and professional competence (r = .806). However, the deviation-from-linearity result for situational leadership and professional competence (p = .030) should be considered when interpreting this association.

Discussion

The results show a clear pattern of positive associations among situational leadership, work culture, and teachers' professional competence in public elementary schools in Pinang District, Tangerang City. The strongest association was between situational leadership and professional competence (r = .940, p < .001), followed by situational leadership and work culture (r = .866, p < .001), and work culture and professional competence (r = .806, p < .001). These results correspond to all three research questions: teachers who reported stronger situational leadership also tended to report higher professional competence and a more positive work culture. Because the study was cross-sectional and relied on teacher self-reports, these relationships should be read as associations rather than causal effects. Observed links may also reflect reciprocal or contextual processes. Wright's (1921) distinction between correlation and causation is therefore relevant, as is the possibility of common method bias when the same respondents provide data for all constructs (Podsakoff et al., 2003). Situational leadership theory also emphasizes the adjustment of leadership behavior to contextual and follower conditions rather than a single universally effective style (Hersey & Blanchard, 1969).

The strong association between situational leadership and professional competence is consistent with research that places school leadership within the professional conditions of teachers' work. Recent evidence links instructional and pedagogical leadership with teacher competency and performance (Liu et al., 2026; Berhanu, 2025). In the present study, the association may reflect teachers' perception that principals provide support that fits their needs and working circumstances. Dacholfany et al. (2026) similarly showed that leadership and school climate are associated with teacher competence in an Indonesian educational context. From this perspective, the observed relationship may be connected to the extent to which teachers experience direction, feedback, encouragement, and opportunities for professional growth. This interpretation is consistent with research showing that leadership is associated with teacher-related professional outcomes.

The size of this association nonetheless calls for caution. A Pearson 'scorrelation of .940 is exceptionally strong and indicates that the two measures were closely aligned in this sample. Such alignment may reflect a meaningful relationship, but it also raises questions about construct distinctiveness and possible measurement overlap. All three variables were measured through teacher-reported Likert questionnaires, with professional competence represented by conceptual, human-relations, and technical dimensions and situational leadership represented by 34 items across 12 indicators. Teachers therefore evaluated leadership practices and their own competence within the same perceptual setting. As Podsakoff et al. (2003) noted, common

method variance can inflate observed relationships when predictors and outcomes come from the same source and are measured in similar ways. The present result is consequently better understood as a very strong perceived association than as evidence that situational leadership directly produces professional competence. This caution is also relevant because professional competence is a multidimensional construct whose measurement can encompass knowledge, skills, beliefs, and affective-motivational characteristics (Weyers et al., 2026). Studies using multiple sources, including principal ratings, classroom observations, professional performance records, or longitudinal assessments, could help determine whether the relationship remains when common-source effects are reduced.

The second finding, the strong positive association between work culture and professional competence ($r = .806$, $p < .001$), points to the importance of the organizational context in understanding teachers' professional functioning. Professional competence develops within social and organizational settings rather than in isolation. Aypay et al. (2026) showed that distributed leadership is closely connected to collaborative school culture, while Tinoca et al. (2025) emphasized professional development within learning communities. These perspectives help explain why work culture may be closely connected with professional competence: professional learning and practice are embedded in relationships, expectations, collaboration, and opportunities for interaction. Cucchiara et al. (2025) further conceptualized school culture as a broad organizational system, rather than a narrow collection of isolated practices. The present findings add a contextual dimension to this discussion by showing that work culture is strongly associated with teachers' reported professional competence. A culture that supports collaboration, shared expectations, professional responsibility, and continuous learning may create conditions in which professional knowledge and skills can be maintained and developed.

This interpretation also fits the Job Demands–Resources perspective. Reintjes et al. (2025) showed that school management and collegial resources are associated with teacher work engagement and emotional exhaustion. The present study did not test a Job Demands–Resources model directly; therefore, this perspective is used only to contextualize the observed association. Eryilmaz et al. (2025) likewise demonstrated that school working conditions are related to teachers' work experiences and job satisfaction. In schools, work culture can therefore be viewed as part of the contextual resources available to teachers. This finding does not show that culture causes competence; rather, it indicates that professional competence is closely associated with the organizational environment in which teachers carry out their daily work. Zibenberg and Da'as (2026) similarly linked school culture with teachers' professional behavior, reinforcing the view that teacher functioning is embedded in organizational conditions.

The third finding, the strong association between situational leadership and work culture ($r = .866$, $p < .001$), links the two organizational dimensions examined in this study. Leadership and work culture may be experienced together because leadership practices can influence expectations, interactions, and routines through which the organizational environment takes shape. Tran (2025) showed that principals' leadership is associated with school culture, while Bellibaş, Çelik, et al. (2025) demonstrated that learning-centered leadership and collective teacher culture are connected through organizational trust. In the present sample, stronger perceptions of adaptive leadership tended to coincide with more positive perceptions of work culture. Lushaj and Shatri (2026) likewise found that contemporary leadership models and collaboration are intertwined in primary school quality. However, the cross-sectional design does not establish the direction of this relationship. A constructive work culture could support leadership practices that teachers perceive as adaptive, leadership could be associated with changes in work culture, or both could develop through reciprocal organizational processes.

Together, these three relationships offer a more connected picture than any single

bivariate association. Situational leadership had the strongest association with professional competence and was strongly associated with work culture, which was strongly associated with professional competence. This pattern is consistent with research portraying school leadership as embedded in organizational and professional conditions rather than as a set of isolated administrative actions (Bellibaş et al., 2026; Adams et al., 2025). This aligns with evidence that principal–teacher relationships and innovative leadership are associated with teachers' professional learning (Özdoğru et al., 2025). Therefore, the contribution of this study is not simply to report separate associations between leadership, work culture, and competence. It places the three constructs within one empirical framework in public elementary schools and shows that, from teachers' perspectives, these organizational dimensions are closely related. This offers contextual evidence for the literature that has often examined particular leadership approaches, professional learning, engagement, and organizational conditions separately.

The methodological findings also impose an important boundary on this interpretation. The linearity test showed a significant deviation from linearity for situational leadership and professional competence ($p = .030$), whereas the corresponding tests for work culture and professional competence ($p = .953$) and situational leadership and work culture ($p = .335$) were not significant. Thus, the very strong Pearson correlation between situational leadership and professional competence should not be interpreted as the association being adequately represented by a simple linear form across the full observed range. This is especially important because the manuscript describes the analytical framework in terms of path analysis, while the reported results primarily consist of Pearson correlations and significance tests. Therefore, the evidence supports strong statistical associations but does not establish a causal pathway or a specific linear effect (Wright, 1921). The VIF values of 3.989 and tolerance values of .251 for both predictors remained within the study's stated thresholds, although they also reflected the substantial relationship between the two predictors. Therefore, future research should examine these constructs jointly using analytical approaches that can address possible nonlinearity and reciprocal relationships.

The findings also have practical implications for educational management. Efforts to strengthen teacher professional competence may need to extend beyond individual development and consider leadership practices and the everyday professional environment within schools. Research on instructional coaching, leadership, and teacher wellbeing supports sustained professional support rather than isolated development activities (Montgomery & Shriner, 2025; Karaferye & Bellibaş, 2025). In practical terms, the present evidence points to the value of aligning leadership support, collaborative work norms, and professional development rather than treating them as unrelated initiatives. This does not mean that changing leadership alone will necessarily improve teacher competence; instead, the results suggest that leadership and work culture merit attention as interconnected features of the professional environment. This interpretation is consistent with evidence from Indonesia showing a positive relationship between school leadership and teacher competence (Muslihah et al., 2025).

Several limitations should be considered when interpreting the contribution of this study. The participants were 160 teachers drawn from a population of 267 teachers in the targeted public elementary schools, and all three constructs were measured through self-report questionnaires. Therefore, the evidence reflects teachers' perceptions at one point in time rather than independently verified changes in professional competence. The strong correlations should be considered alongside the possibility of common method bias, construct overlap, and the observed deviation from linearity (Podsakoff et al., 2003). In addition, the study is situated in public elementary schools in Pinang District; therefore, the findings should not automatically be generalized to other educational levels, school systems, or geographical settings. Future studies could address these limitations through longitudinal designs, multi-source measurement, direct observation of leadership and teaching practice, and models capable of

examining nonlinear and reciprocal relationships. Such designs would help clarify whether the strong associations observed here persist beyond shared perceptions and common measurement conditions. Overall, the study provides contextual evidence that situational leadership, work culture, and professional competence are closely associated, while also highlighting the methodological care needed to interpret these relationships. Research on professional competence also supports treating competence as a multidimensional construct rather than a single undifferentiated outcome (Ahmed et al., 2025; Weyers et al., 2026).

3. Conclusion

The study found strong positive associations among situational leadership, work culture, and teachers' professional competence in public elementary schools in Pinang District, Tangerang City. Situational leadership had the strongest association with professional competence ($r = .940$, $p < .001$), followed by situational leadership and work culture ($r = .866$, $p < .001$) and work culture and professional competence ($r = .806$, $p < .001$). Taken together, the findings show that teachers' perceptions of adaptive principal leadership were closely aligned with their perceptions of professional competence and the school work environment. By examining the three organizational dimensions within one empirical framework, the study adds contextual evidence to research that has often considered leadership, professional learning, and organizational conditions separately. Nevertheless, the findings should be understood as statistical associations, not causal effects, given the cross-sectional design and teacher-reported measures.

Several limitations should guide the interpretation and application of these findings. The study involved 160 teachers from a defined population of 267 teachers, relied on self-report measures for all three constructs, and identified a significant deviation from linearity in the relationship between situational leadership and professional competence ($p = .030$). These conditions limit causal inference and generalizability and caution against treating the strongest observed relationship as a simple linear effect. For practice, schools may consider leadership support, collaborative work practices, and sustained professional development as interconnected elements of the professional environment rather than isolated interventions. Future research should use longitudinal or multi-source designs, include classroom or professional performance measures, and examine nonlinear or reciprocal relationships to determine whether the associations observed here persist beyond shared teacher perceptions. The study's main contribution is therefore both empirical and contextual: it provides a coherent account of the interrelationships among situational leadership, work culture, and professional competence while identifying directions for more rigorous explanatory research.

4. Conflict of Interest

The authors declare that there is no conflict of interest.

5. Author Contributions

F. A. was responsible for conceptualization, data collection, data analysis, and manuscript writing. M.S.S served as the primary supervisor, providing methodological guidance and research supervision. I.E.K served as the co-supervisor, providing substantive input and manuscript revision.

6. Data Availability Statement

The data used in this study are available from the corresponding author upon reasonable requests.

REFERENCES

Adams, D., Mohamed, A., Moosa, V., Shareefa, M., & Tan, K. L. (2025). Toward effective inclusive practices: Dynamics among school leadership, academic optimism, and teacher collaboration. *International Journal of Developmental Disabilities*, *71*(6), 867–878. https://doi.org/10.1080/20473869.2025.2479746

Ahmed, A. M., Worku, B. N., & Ayane, Z. N. (2025). Enhancing teachers' professional competence through licensure tests and intervention: A study on teacher competence and student academic performance in Ethiopia. *Discover Education*, *4*(1), 322. https://doi.org/10.1007/s44217-025-00561-z

Aypay, A., Çakır, Ç., Özkan, M., & Bellibaş, M. Ş. (2026). Is distributed leadership key to a just and collaborative school culture? A mediation analysis. *International Journal of Educational Management*, *40*(3), 550–569. https://doi.org/10.1108/IJEM-08-2025-0660

Bellibaş, M. Ş., Ninković, S., & Polatcan, M. (2026). Educational leadership and teacher instructional practices: A meta-analytic comparison of leadership models. *International Journal of Educational Management*, *40*(4), 765–785. https://doi.org/10.1108/IJEM-12-2025-1081

Bellibaş, M. Ş., Polatcan, M., Kaya, E., & Frick, W. C. (2025). School leadership types and teacher job satisfaction: A meta-analytic review. *Leadership and Policy in Schools*. https://doi.org/10.1080/15700763.2025.2543807

Bellibaş, M. Ş., Çelik, M., & Polatcan, M. (2025). The role of horizontal and vertical trust in relationships between learning-centered leadership and collective teacher culture. *Psychology in the Schools*, *62*(11), 4826–4838. https://doi.org/10.1002/pits.70041

Berhanu, K. Z. (2025). The relationship between principals' pedagogical leadership practices and teachers' job performance: The role of sociodemographic characteristics. *BMC Psychology*, *13*(1), 89. https://doi.org/10.1186/s40359-025-02415-7

Chen, C.-C., Li, C.-Y., & Chin, J. M.-C. (2025). A multilevel moderation analysis of the relationship among teachers' perceptions of the principal's leadership occupational competency and the school's organizational culture on the school's effectiveness in state-run experimental elementary schools. *Journal of Research in Education Sciences*, *70*(4), 225–257. https://doi.org/10.6209/JORIES.202512_70(4).0008

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*, 297–334. https://doi.org/10.1007/BF02310555

Cucchiara, M., Golann, J. W., & Diehl, D. (2025). What is school culture? Proposing a new, integrative model. *Theory and Research in Education*, *23*(2), 163–187. https://doi.org/10.1177/14778785251351272

Dacholfany, M. I., Wibowo, A., Handoko, C., Sururi, M., Fadli, M. R., & Awang, M. M. (2026). Culturally rooted leadership and its role in shaping school climate and teacher competence: The case of Ing Ngarso Sung Tulodo. *Munaddhomah*, *7*(1), 157–172. https://doi.org/10.31538/munaddhomah.v7i1.2247

Eryilmaz, N., Kennedy, A. I., Strietholt, R., & Johansson, S. (2025). Teacher job satisfaction: International evidence on the role of school working conditions and teacher characteristics. *Studies in Educational Evaluation*, *86*, 101474. https://doi.org/10.1016/j.stueduc.2025.101474

Hersey, P., & Blanchard, K. H. (1969). Life cycle theory of leadership. *Training and Development Journal*, *23*(5), 26–34.

Karaferye, F., & Bellibaş, M. Ş. (2025). Key school leadership practices to enhance teacher wellbeing: A meta-synthesis of qualitative evidence. *Research Papers in Education*, *40*(5), 684–716. https://doi.org/10.1080/02671522.2025.2475496

Li, R., & Zhang, M. (2026). Principal instructional leadership and teacher innovative behavior: The mediating role of psychological safety in Chinese K–12 schools. *Acta Psychologica*, *268*, 107199. https://doi.org/10.1016/j.actpsy.2026.107199

Liu, X., Hamid, A. H. A., & Nor, M. Y. M. (2026). Enhancing teachers' job satisfaction through headteachers' instructional leadership and teachers' competency: Insights from rural Chinese elementary schools. *Multidisciplinary Reviews*, *9*(9), e2026436. https://doi.org/10.31893/multirev.2026436

Lushaj, M., & Shatri, V. (2026). Contemporary leadership models and collaboration in primary schools: A mixed-methods study on school quality. *Frontiers in Education*, *11*, 1741935. https://doi.org/10.3389/feduc.2026.1741935

Montgomery, H. R., & Shriner, M. (2025). Collaborative leadership structures: Conduits to instructional coaching success. *Journal of Education and Training Studies*, *13*(1), 25–37. https://doi.org/10.11114/jets.v13i1.7295

Muslihah, E., Ma'mur, I., & Mubarok, A. S. (2025). Prophetic leadership and teacher competence: A quantitative study in Indonesian secondary Islamic and public schools. *Munaddhomah*, *6*(4), 710–722. https://doi.org/10.31538/munaddhomah.v6i4.2168

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Reintjes, C., Kaiser, T., Winter, I., & Bellenberg, G. (2025). Buffer or boost? The role of job resources in predicting teacher work engagement and emotional exhaustion in different school types. *Education Sciences*, *15*(6), 708. https://doi.org/10.3390/educsci15060708

Tinoca, L., Santos, S., & Piedade, J. (2025). Teacher professional development in learning communities: Pathways to inclusive education. *Revista Lusofona de Educacao*, *66*(66), 121–154. https://doi.org/10.24140/issn.1645-7250.rle66.dt07

Tran, V. D. (2025). Impact of principals' transformational leadership on school culture: A case of Vietnam. *International Journal of Interdisciplinary Educational Studies*, *20*(1), 179–202. https://doi.org/10.18848/2327-011X/CGP/v20i01/179-202

Weyers, J., Thomas, K., & König, J. (2026). Teacher professional competence as a multidimensional construct: Evaluating the effectiveness of university teacher education. *Educational Assessment, Evaluation and Accountability*. https://doi.org/10.1007/s11092-026-09500-4

Wright, S. (1921). Correlation and causation. *Journal of Agricultural Research*, *20*(7), 557–585.

Zibenberg, A., & Da'as, R. (2026). School culture and creativity-fostering teacher behavior: The mediating role of implicit leadership theories and the moderating role of teacher seniority. *Thinking Skills and Creativity*, *61*, 102150. https://doi.org/10.1016/j.tsc.2026.102150

Özdoğru, M., Doğuş, Y., & Akyürek, M. İ. (2025). The mediating role of the principal–teacher relationship in innovative school leadership and teacher professional learning according to Turkish teachers' perceptions. *Behavioral Sciences*, *15*(4), 450. https://doi.org/10.3390/bs15040450