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Organizational Climate and Vocational High School Teachers' Performance: The Mediating Role of Organizational Commitment in Batam, Indonesia

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Abstract: Teacher performance in vocational high schools is crucial in preparing students to meet the demands of the workforce. However, empirical evidence regarding the influence of organizational factors on teacher performance in vocational education remains limited. Therefore, this study examines the influence of organizational climate on teacher performance, with organizational commitment as a mediating variable. A quantitative survey design was used to collect data from 174 vocational high school teachers in Batam, Indonesia. The collected data were then analyzed using Structural Equation Modeling with LISREL 8.8 software. The statistical findings of the study (Path coefficients: $OCL \rightarrow OCO = 0.91$, $t=14.88$; $OCO \rightarrow VTP = 0.32$, $t = 4.29$; $OCL \rightarrow VTP = 0.63$, $t = 7.43$; mediation effect = 0.29, $t = 4.16$), indicate that organizational climate has a significant positive influence on both organizational commitment and teacher performance. Furthermore, organizational commitment was found to act as a partial mediator. Among the variables studied, organizational climate had the most dominant direct effect on teacher performance. The novelty of this study lies in the role of organizational commitment as a partial mediator of organizational climate in enhancing teacher performance at vocational schools in industrial and free trade zones. These findings offer practical insights for school administrators to foster an organizational climate, specifically a school environment that provides a sense of security to strengthen teacher commitment and improve teacher performance.

Keyword: Organizational Commitment, Organizational Climate, Vocational Teacher Performance, Vocational High School.

INTRODUCTION

Vocational High Schools play a crucial role in supporting human resource development. The implementation of “link and match” programs is necessary to ensure that the industrial sector can absorb vocational high school graduates (Pohan et al., 2023). The implementation of these “link and match” programs will require vocational high school teachers to adapt to industry needs, thus necessitating an organizational climate that supports their performance. The role of vocational high school teachers in preparing human resources

who meet industry needs is strategic and must be supported to enable them to perform at their best.

Performance refers to the results of a teacher's work in carrying out their professional duties, which consist of planning, implementing, and evaluating learning outcomes to achieve learning objectives (Afriansyah & Sabandi, 2026). Meanwhile, teacher performance in vocational high school education is the result of carrying out their professional duties to create a high-quality learning process so that students can prepare themselves to face an ever-changing world of work (Habibi et al., 2025).

It is important to understand the factors that influence the performance of vocational high school teachers in determining the success of the teaching and learning process. As indicated by research (Sucheri & Kartiwi, 2026), the performance of vocational teachers remains a key determinant of educational quality, and the learning environment influences it. In vocational education, such as at vocational high schools, teacher performance is determined not only by organizational factors but also by individual factors, which play a significant role. Organizational and individual factors work in an integrated manner, directly influencing the performance of vocational teachers (Liuting & Jamil, 2026). As indicated by the study by (Muazza, 2021) compensation, teachers' professional competence, motivation, and work climate are factors that influence teacher performance. A positive work climate has been shown to motivate teachers to improve their performance. Meanwhile, (Nurtanto et al., 2025) investigated vocational teachers' performance, noting that it is influenced, in part, by work commitment, which plays a crucial role in enhancing vocational teachers' performance.

There is a strong relationship between organizational climate and organizational commitment (Oleksa-Marewska & Springer, 2025). The more positively organizational members perceive the organizational climate, the higher their commitment to the organization will be. Organizational climate has a significant influence on teacher performance (Saefuddin et al., 2025; Kartini et al., 2017). Organizational climate can shape employees' attitudes and work outcomes (Tsoni et al., 2025). A conducive organizational climate can help teachers carry out their duties, thereby optimizing their performance. Organizations with a supportive work environment will foster greater employee loyalty. Organizational commitment does not arise spontaneously but develops in response to organizational conditions that members perceive as positive (Rai et al., 2025). Organizational commitment influences the performance of vocational high school teachers (Teresia et al., 2022). Organizational members who are committed to their organization are those least likely to leave it (Allen & Meyer, 1990).

If the organizational climate is applied to the field of education, specifically to vocational high school teachers, it will foster a conducive organizational climate, resulting in a positive relationship with teachers' innovative behavior. In this context, teachers will feel supported through recognition, clear job descriptions, and opportunities for innovative participation in the learning process (Izzati, 2018). However, the study (Izzati, 2018) only examined the influence of organizational climate on innovative behavior; there are no findings yet to support improvements in teacher performance, particularly among vocational high school teachers.

A study (Shanker et al., 2017) examined the effect of organizational climate on organizational performance, mediated by innovative work behavior, using company managers as research subjects. Therefore, this study will examine the effect of organizational climate on individual performance, mediated by organizational commitment, among vocational high school teachers. The study (Ramadhan et al., 2026) focuses on innovative work behavior in vocational high school education; therefore, further research on such behavior is needed. However, this study will focus on behavioral commitment as a predictor of teacher performance. Organizational commitment can improve vocational high school

teachers' performance, with career development commitment based on years of service being the most dominant indicator (Ru'yat & Pogo, 2022). Since the study by (Grund & Titz, 2022) focused solely on affective commitment, this study will examine organizational commitment across all components, including affective, continuance, and normative commitment.

Research studies (Ru'yat & Pogo, 2022; Saefuddin et al., 2025; Mailool et al., 2020) found a direct and significant effect of organizational climate on teacher performance; however, they examined the relationship between organizational climate and teacher performance separately, without considering organizational commitment. A study (Adewoye & Mavhandu-Mudzusi, 2025) examined the relationship between school climate and organizational commitment using a qualitative approach in secondary schools. However, it did not test its implications for teacher performance. Therefore, our study will examine these implications using a quantitative approach and treat organizational commitment as an intervening variable, specifically in the context of vocational high schools in industrial and free-trade zones, where such schools remain limited in number.

The organizational climate affects teacher performance not only directly but also indirectly through organizational commitment as a moderating variable (Muhibbuddin et al., 2025). Therefore, this study will examine commitment not as a moderating variable but as a mediating variable. When the organizational climate is conducive, teachers become more committed to their school, and that commitment motivates them to improve their performance. Therefore, this study will examine the role of organizational commitment as a mediating variable in the relationship between organizational climate and the performance of vocational high school teachers.

The location selected was a vocational high school in Batam City, as Batam is an industrial area and Free Trade Zone (FTZ) that offers a unique dynamic between the worlds of education and work. This is where vocational high school teachers in Batam play a crucial role in bridging the gap between industry and education, ensuring that graduates are well-prepared for the workforce. This presents a specific challenge for vocational high school teachers in the Free Trade Zone: aligning teaching content with industry needs. This challenge will require vocational high school teachers to adapt their performance in terms of teaching methods, preparing instructional materials, updating their knowledge of the industry, and strengthening vocational technical competencies in line with industry needs. This will encourage vocational high school teachers to pay closer attention to their performance. Given these circumstances, research on the performance of vocational high school teachers is urgent, and it is hoped that the results of this study can contribute to improving the performance of vocational high school teachers.

This study will develop and test a model that posits organizational commitment comprising affective, normative, and continuance commitment as a mediator between organizational climate and teacher performance. The study will examine vocational schools in Batam, an industrial and free-trade zone where these schools face the challenge of aligning their educational programs with workforce needs.

The purpose of this study is to investigate the impact of organizational climate on organizational commitment, the relationship between organizational commitment and performance, the effect of organizational climate on teacher performance, and the role of organizational commitment in these outcomes.

METHOD

This is a quantitative, associative study aimed at identifying the cause-and-effect relationship between organizational climate and organizational commitment, as well as the relationship between organizational commitment and the performance of vocational high school teachers. Organizational commitment (OCO) serves as the intervening variable,

organizational climate (OCL) as the exogenous variable, and vocational teacher performance (VTP) as the endogenous variable. To analyze and interpret the direct and indirect effects among the variables, conduct confirmatory factor analysis, and test hypotheses, the Structural Equation Modeling (SEM) technique was employed.

Based on the phenomena and theoretical reviews, the research model was developed as the following conceptual framework.

1. H₁: Organizational climate has a significant impact on organizational commitment.

Social exchange theory posits that the relationship between individuals and organizations develops through a process of social exchange based on the norm of reciprocity; thus, favorable treatment by the organization will encourage individuals to reciprocate with positive attitudes and behaviors (Cropanzano & Mitchell, 2005). Organizational climate reflects shared perceptions of organizational policies and procedures that shape their work experiences (Schneider et al., 2013). Therefore, when teachers perceive a positive organizational climate, they will reciprocate by developing a higher level of organizational commitment.

2. H₂: Organizational commitment has a significant impact on vocational teacher performance.

Organizational commitment is an individual's positive response to an organization (Meyer et al., 2002), state that affective commitment, in particular, is positively correlated with job performance. Teachers with high organizational commitment will perform better. Social exchange theory serves as the theoretical foundation for explaining how organizational commitment influences the performance of vocational high school teachers.

3. H₃: Organizational climate has a significant impact on vocational teacher performance.

Social exchange theory is based on a reciprocal mechanism. When teachers perceive the organizational climate to be supportive and conducive, they will reciprocate the organization's treatment by putting greater effort into performing their duties. Empirical studies (Saefuddin et al., 2025; Mailool et al., 2020) show that the organizational climate positively influences teacher performance.

4. H₄: Organizational climate has an indirect and significant effect on vocational teacher performance through organizational commitment.

Organizational commitment acts as a mediating variable between organizational climate and vocational high school teachers' performance (Teresia et al., 2022). A supportive organizational climate fosters teachers' commitment to their organization; when that commitment is strong, teachers' performance is maximized.

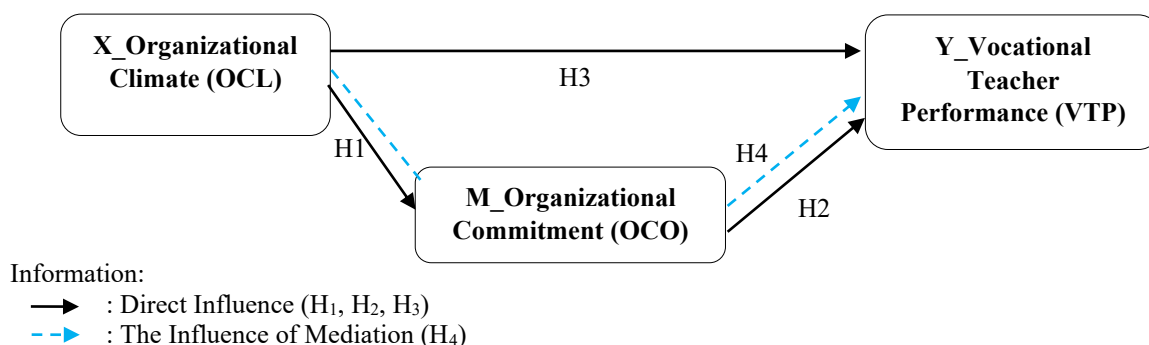


Figure 1. Conceptual Framework

The population for this study consisted of vocational high school teachers in Batam. The sampling technique used was non-probability sampling with a voluntary response approach. The respondents were active teachers who were teaching at vocational high schools in Batam at the time the study was conducted. The questionnaire was distributed online using

Google Forms, which was shared through a vocational high school teachers' group with the assistance of school coordinators. Respondents were not selected individually from a sampling frame but participated voluntarily after receiving information about the study's objectives. Respondents who met the criteria of being active teachers in Batam City during the data collection period, were willing to participate voluntarily, and having completed the questionnaire in full were deemed eligible for analysis. Respondents who did not meet the criteria or whose responses were incomplete were excluded from the analysis. The submitted questionnaires were checked for respondent eligibility and the completeness of the responses. After the verification process, a total of 174 responses that met the criteria and were complete were used for the analysis phase. Participation was voluntary, and the confidentiality of the data provided by the respondents was guaranteed. Consequently, 174 vocational high school teachers were selected as the sample for this study.

A universally applicable minimum threshold does not determine the sample size in SEM but depends on the characteristics of the model (Wolf et al., 2013). Therefore, the adequacy of the sample size of 174 must be assessed in light of the characteristics of the research model. As a practical guideline, the sample size should be 5–10 respondents for each indicator. In this study, there are 11 indicators and 27 statement items, so the required sample size is 135–270 respondents. In this study, the sample size was 174 respondents, which fell within the required range of 135–270.

The research instrument for the organizational climate (OCL) indicators was adapted from (Barnová et al., 2022) and includes the following indicators: frustrated teacher behavior (OCL1), engaged teacher behavior (OCL2, OCL3), intimate teacher behavior (OCL4, OCL5), supportive principal behavior (OCL6, OCL7), and directive principal behavior (OCL8, OCL9). The indicators for organizational commitment (OCO) were adapted from (Allen & Meyer, 1990; Erdheim et al., 2006) consisting of affective commitment (OCO1, OCO2, OCO3), normative commitment (OCO4, OCO5, OCO6), and continuance commitment (OCO7, OCO8, OCO9). The indicators of vocational high school teacher performance (VTP) were adopted from (Fakhrurrazi et al., 2025) moreover, include indicators for lesson planning (VTP1, VTP2, VTP3, VTP4), the implementation of the learning process and classroom management (VTP5, VTP6, VTP7), and the assessment of learning outcomes (VTP8, VTP9).

Data collection was conducted using a questionnaire with a Likert scale consisting of: 4 (Always), 3 (Often), 2 (Sometimes), and 1 (Never). The questionnaires were distributed, and after the data were collected, they were tabulated and analyzed using LISREL 8.8. The SEM procedures were adapted from (Shi & Maydeu-Olivares, 2020; Oamen, 2026), where the steps for SEM analysis using LISREL consist of data input, data assumption testing, construct reliability testing, confirmatory factor analysis, goodness-of-fit analysis, measurement model evaluation, model structure analysis, hypothesis testing, mediation analysis, and interpretation of results.

Common Method Bias was assessed using Harman's Single Factor Test with IBM SPSS version 27, yielding a % Variance value $> 50\%$ ($75.39\% > 50\%$), indicating the presence of common method bias. However, (Podsakoff et al., 2003) explain that Harman's single-factor test is not an adequate approach for detecting or controlling common method bias because it does not statistically control for the influence of the method. Therefore, further analysis was conducted to evaluate validity and reliability using confirmatory factor analysis.

Model modification, using a post-hoc model modification approach in CFA that employs modification indices to identify correlated residual error terms (Pan et al., 2017). In this study, model modification was based on the modification index from LISREL; if the

model fit was poor, the model was modified by correlating the error terms to obtain a better-fitting model.

Multivariate normality testing using skewness and kurtosis indicates that if the p-value is > 0.05 , the data are normally distributed. In this study, the p-value was < 0.05 ($0.000 < 0.05$), indicating that the data are not normally distributed. Although there was a violation of multivariate normality in this study, CFA could still be conducted. As noted by (Gomez, 2006), who identified multivariate non-normality in his research data but still conducted CFA using LISREL with maximum likelihood, this study proceeded with the CFA to evaluate the fit of the measurement model.

RESULT AND DISCUSSION

Result

After collecting data through a Google Forms questionnaire administered to vocational high school teachers in Batam City, a total of 174 respondents were surveyed, with the respondent characteristics shown in Table 1.

Table 1. Respondent Characteristics

Characteristics	Classification	Number of Respondents	
		Quantity	%
Gender	Male	62	35.63
	Female	112	64.37
	Total	174	100
Respondent Age	21–30 years	41	23.56
	31–40 years	73	41.95
	41–50 years	50	28.74
	51–60 years	10	5.75
	Total	174	100
Length of Service	< 5 years	41	23.56
	5–10 years	67	38.51
	11–16 years	49	28.16
	17 years older	17	9.77
	Total	174	100
Education	Bachelor's Degree	145	83.33
	Master's Degree	27	15.52
	Doctorate	2	1.15
	Total	174	100

Source: Processed primary data (2026)

For the SEM analysis, it is necessary to conduct CFA tests both stepwise for each variable and for the full model. The CFA results for the variables of teacher performance, organizational commitment, and organizational climate are presented in Table 2.

Table 2. CFA for Each Variable

Variable	Item Statements	SLF	CR	AVE	Description
Vocational Teacher Performance (VTP)	VTP1	0.89	0.988	0.906	Valid and Reliable
	VTP2	0.97	0.988	0.906	Valid and Reliable
	VTP3	0.97	0.988	0.906	Valid and Reliable
	VTP4	0.96	0.988	0.906	Valid and Reliable
	VTP5	0.95	0.988	0.906	Valid and Reliable
	VTP6	0.96	0.988	0.906	Valid and Reliable
	VTP7	0.95	0.988	0.906	Valid and Reliable
	VTP8	0.95	0.988	0.906	Valid and Reliable
	VTP9	0.97	0.988	0.906	Valid and Reliable
Organizational	OCO1	0.96	0.972	0.799	Valid and Reliable

Variable	Item Statements	SLF	CR	AVE	Description
Commitment (OCO)	OCO2	0.95	0.972	0.799	Valid and Reliable
	OCO3	0.99	0.972	0.799	Valid and Reliable
	OCO4	0.96	0.972	0.799	Valid and Reliable
	OCO5	0.95	0.972	0.799	Valid and Reliable
	OCO6	0.86	0.972	0.799	Valid and Reliable
	OCO7	0.90	0.972	0.799	Valid and Reliable
	OCO8	0.68	0.972	0.799	Valid and Reliable
	OCO9	0.74	0.972	0.799	Valid and Reliable
Organizational Climate (OCL)	OCL1	0.29	0.984	0.895	Excluded due to low factor loading
	OCL2	0.36	0.984	0.895	Excluded due to low factor loading
	OCL3	0.93	0.984	0.895	Valid and Reliable
	OCL4	0.94	0.984	0.895	Valid and Reliable
	OCL5	0.96	0.984	0.895	Valid and Reliable
	OCL6	0.97	0.984	0.895	Valid and Reliable
	OCL7	0.91	0.984	0.895	Valid and Reliable
	OCL8	0.96	0.984	0.895	Valid and Reliable
	OCL9	0.93	0.984	0.895	Valid and Reliable

Source: Lisrel 8.8 Output (2026)

The Standardized Loading Factor (SLF) values are greater than 0.4, 0.5, or 0.7 (Cheung et al., 2024). Based on Table 2, the Standardized Loading Factor (SLF) values for all items in the VTP variable are greater than 0.7, indicating that all items are suitable for use. For the OCO variable, the statement item OCO8 has an SLF of 0.68; however, it remains suitable for use because the SLF is greater than 0.5. All statement items in the OCO variable are still suitable for use. Meanwhile, for the OCL variable, two statement items were below 0.7 (OCL1 and OCL2); therefore, these two items were excluded, and the remaining items, all with values greater than 0.7, were included in the subsequent analysis. OCL1 (Feeling burdened by working as a vocational high school teacher) is an indicator of frustrated teacher behavior, and OCL2 (Lack of autonomy in the school's work system) is an indicator of engaged teacher behavior; this implies that OCL1 and OCL2 do not accurately measure the organizational climate. This is due to the imprecise wording of the statement items, which led to inconsistencies in the respondents' answers.

A good CR (Composite Reliability) value is greater than 0.7 or 0.8 (Cheung et al., 2024). Regarding the CR (Composite Reliability) values for all items in the VTP, OCO, and OCL variables, the CR values (0.988, 0.972 and 0.984) are all greater than 0.70, indicating that all items are reliable.

A good AVE (Average Variance Extracted) value is greater than 0.5 (Cheung et al., 2024). For the AVE values of all items in the VTP, OCO, and OCL variables, the AVE values are greater than 0.5, indicating that all items demonstrate good convergent validity.

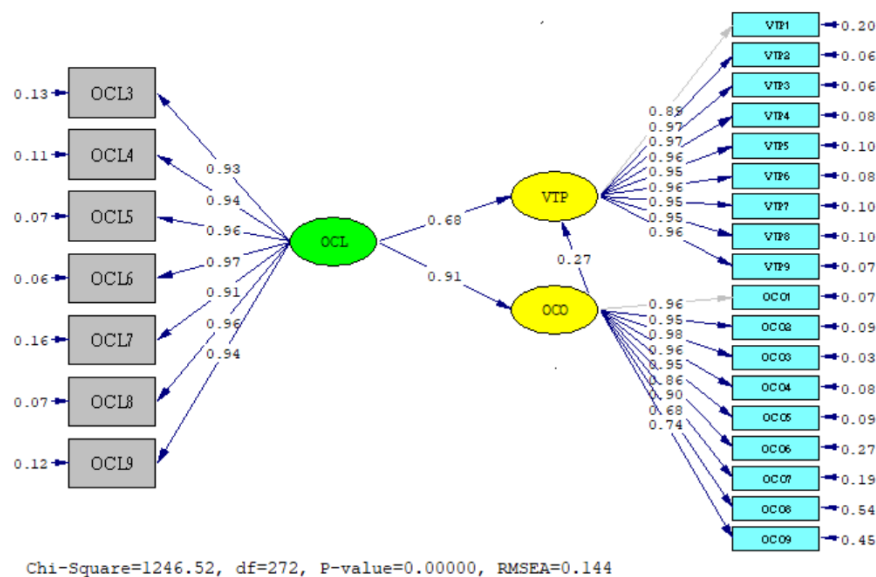
For the full CFA model, an evaluation of the goodness of fit was conducted based on the test criteria, results, and conclusions, as shown in Table 3 and Figure 2.

Table 3. Evaluation of Goodness of Fit for the Full Model

GOF	Criteria	Results	Notes
RMSEA	≤ 0.08	0.144	Poor Fit
NFI	≥ 0.90	0.97	Good Fit
NNFI	≥ 0.90	0.97	Good Fit
CFI	≥ 0.90	0.97	Good Fit
RFI	≥ 0.90	0.96	Good Fit
GFI	≥ 0.90	0.63	Poor Fit

GOF	Criteria	Results	Notes
IFI	≥ 0.90	0.97	Good Fit
AGFI	≥ 0.90	0.56	Poor Fit

Source: Lisrel 8.8 Output (2026)


Figure 2. Standardized Solution Full Model Evaluation

Based on Table 3 and Figure 2, where the RMSEA, GFI, and AGFI fall into the “Poor Fit” category, the model will be modified to improve its fit by incorporating correlations among the indicator errors, in accordance with the guidelines provided in the “Modification Indices Suggest Adding and Error Covariance” section.

An RMSEA value of 0.144 indicates a high degree of model misfit; therefore, the model was modified by adjusting the indices to unlink the covariances between errors for certain parameters. This reduced model misfit, bringing the RMSEA down to 0.078. This procedure is a post-hoc modification commonly used in CFA (Pan et al., 2017).

After evaluating the measurement models, the best model was identified, as shown in Table 4, Figure 3, and Figure 4.

Table 4. Goodness of Fit for the Full Model

GOF	Criteria	Result	Description
RMSEA	≤ 0.08	0.078	Good Fit
NFI	≥ 0.90	0.99	Good Fit
NNFI	≥ 0.90	0.99	Good Fit
CFI	≥ 0.90	0.99	Good Fit
RFI	≥ 0.90	0.98	Good Fit
GFI	≥ 0.90	0.81	Marginal Fit
IFI	≥ 0.90	0.99	Good Fit
AGFI	≥ 0.90	0.75	Marginal Fit

Source: Lisrel 8.8 Output (2026)

Based on Table 4, it can be seen that the SEM model in this study has a good goodness-of-fit, as the RMSEA, NFI, NNFI, CFI, RFI, and IFI values fall into the “Good Fit” category, while the GFI and AGFI fall into the “Marginal Fit” category; thus, overall, the SEM model in this study is suitable for use.

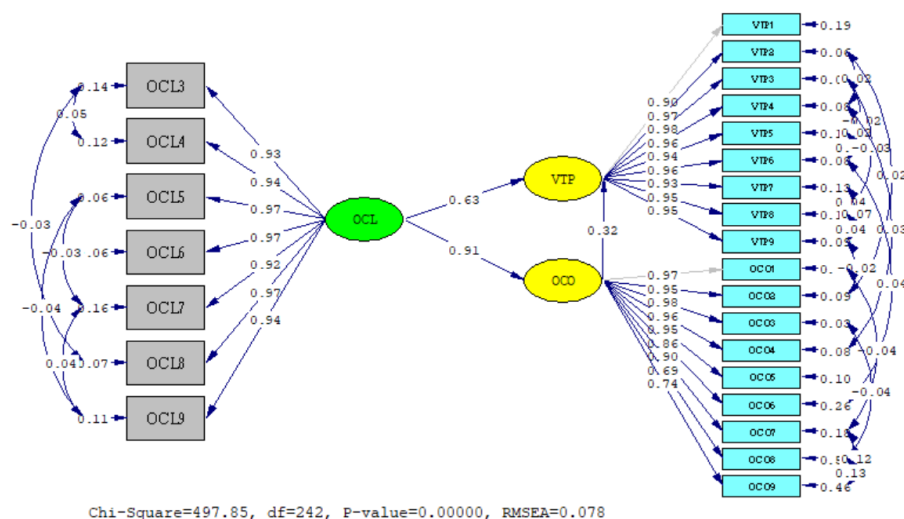


Figure 3. Standartized Solution Full Model

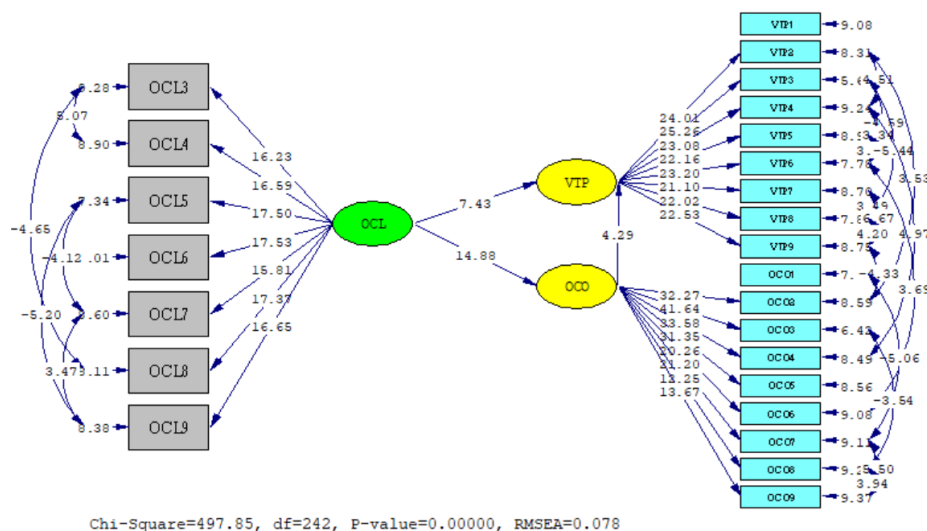


Figure 4. T Values Full Model

Structural Equations:

$$\text{OCO} = 0.91 \cdot \text{OCL}, \text{Errorvar.} = 0.17, R^2 = 0.83 \quad \text{Structural Equation 1}$$

(0.061) (0.022)

14.88 8.09

$$\text{VTP} = 0.32 \cdot \text{OCO} + 0.63 \cdot \text{OCL}, \text{Errorvar.} = 0.14, R^2 = 0.86 \quad \text{Structural Equation 2}$$

(0.074) (0.085) (0.019)

4.29 7.43 7.44

From Structural Equation 1, the contribution of Organizational Climate (OCL) to Organizational Commitment (OCO) has a path coefficient of 0.91 (91%), with a calculated t-value of 14.88. The coefficient of determination is 0.83, or 83%, meaning that other variables account for 17% of the variance. In Structural Equation 2, the contribution of Organizational Commitment (OCO) to teacher performance (VTP) is 0.32 or 32%, with a t-value of 4.29, and the contribution of Organizational Climate (OCL) to teacher performance (VTP) is 0.63 or 63%, with a t-value of 7.43. This means that the most dominant factor influencing vocational high school teachers' performance is organizational climate. Furthermore, the

coefficient of determination is 0.86, meaning that 14% of the variation is attributed to other variables not examined in this study.

Table 5. Hypothesis Test Results

Hypothesis	Description	Path Coefficients	T-values	Notes	Statistical Conclusions
H ₁	OCL → OCO	0.91	14.88	H ₁ Accepted H ₀ Rejected	Significant
H ₂	OCO → VTP	0.32	4.29	H ₂ Accepted H ₀ Rejected	Significant
H ₃	OCL → VTP	0.63	7.43	H ₃ Accepted H ₀ Rejected	Significant
H ₄	OCL → OCO → VTP	0.29	4.16	H ₄ Accepted H ₀ Rejected	Significant

Source: Lisrel 8.8 Output (2026)

Discussion

The T-value for OCL relative to OCO is $14.88 > 1.96$; therefore, OCL has a positive and significant effect on OCO, with a contribution of 0.91 (91%). These findings are consistent with studies conducted by (Teresia et al., 2022; Lotulung & Wullur, 2019), which indicate that the school's organizational climate can enhance teachers' commitment. This implies that if the organizational climate improves, organizational commitment will also increase; therefore, attention should be paid to the item that contributes most significantly to the organizational climate, namely OCL6 (the school environment provides a sense of security), which is an item under the supportive principal behavior indicator. Based on the CFA results, OCL6 is the dominant factor because its SLF value of 0.97 is higher than the SLF values of the other items in the organizational climate variable. By creating a school environment that provides a sense of security, teachers will be psychologically committed to remaining at that school.

The OCO T-value for VTP is $4.29 > 1.96$; therefore, it can be concluded that organizational commitment has a positive and significant effect on vocational high school teachers' performance, with a contribution of 0.32 (32%). These findings are consistent with those of studies conducted by (Asih et al., 2023; Mailool et al., 2020). This implies that if organizational commitment increases, the performance of vocational high school teachers will also improve. Therefore, attention should be paid to the most dominant contributor to organizational commitment, namely OCO3 (the school's problems are my problems), which is an indicator of affective commitment. Based on the CFA results, OCO3 is the dominant factor in the organizational commitment variable because its SLF value of 0.99 is higher than the SLF values of the other statement items. A study (Ibrahim & Aljneibi, 2022) showed that affective commitment was the highest compared to continuance and normative commitment. The consistency of these findings indicates that teachers' emotional attachment and sense of belonging to the school, such as viewing the school's problems as their own, are important aspects of teachers' commitment to their school. Fostering concern for the school's problems will strengthen teachers' commitment to the school, which in turn will improve the performance of vocational high school teachers.

The T-value of OCL relative to VTP is $7.43 > 1.96$; therefore, it can be concluded that organizational climate has a positive and significant effect on VTP, with a contribution of 0.63 (63%). These findings are consistent with those of studies conducted by (Saefuddin et al., 2025; Kartini et al., 2017). This implies that if the organizational climate improves, the performance of vocational high school teachers will also improve; therefore, attention should be paid to OCL6 (the school environment provides a sense of security), which can maximize

improvements in the performance of vocational high school teachers as reflected by VTP3 (formulating teaching materials based on the latest references).

Organizational commitment plays a significant role in mediating the influence of organizational climate on vocational high school teachers' performance, with a path coefficient of 0.29 and a T-value of 4.16. This implies that organizational climate can enhance vocational high school teachers' performance both directly and indirectly through the school's organizational commitment. The path coefficient for $OCL \rightarrow VTP$ (0.63) is greater than the path coefficient for the indirect effect $OCL \rightarrow OCO \rightarrow VTP$ (0.29); therefore, it can be concluded that organizational commitment plays a partial mediating role. This implies that the improvement in vocational high school teachers' performance is driven not only by teachers' commitment to the school, which arises from the organizational climate, but also by a safe work environment that catalyzes their performance. Thus, it can be concluded that vocational high school teachers' performance will improve if efforts are focused on enhancing organizational commitment; consequently, the influence of organizational climate on vocational high school teachers' performance will be more effective.

The golden thread of this study lies in its aim to improve the performance of vocational high school teachers, as reflected by VTP3 (developing teaching materials based on the latest references), and organizational commitment, as reflected by OCO3 (school issues are their own issues). Therefore, it is necessary to improve the organizational climate, as reflected by OCL6 (the school environment provides a sense of security). Organizational climate is a key variable that can enhance organizational commitment and the performance of vocational high school teachers. Organizational climate factors are the most dominant variables influencing the performance of vocational high school teachers; this is because a safe school environment enhances teachers' comfort, and organizational climate serves as a direct resource for teachers to carry out their duties. This is also supported by social exchange theory, according to which teachers act based on the norm of reciprocity; thus, the organization's provision of a safe work environment will encourage teachers to reciprocate with positive attitudes and behaviors in carrying out their teaching duties, thereby increasing their commitment and performance.

From a theoretical perspective, the novelty of this study lies in its expansion of social exchange theory as applied to vocational education in industrial and free-trade regions by demonstrating that perceptions of support and workplace safety at school shape teachers' organizational commitment, which in turn enhances their performance. Therefore, the practical implications for vocational high schools in Batam City to improve teacher performance should be directed toward enhancing the organizational climate and strengthening organizational commitment. Specifically, improving the organizational climate involves creating a comfortable work environment, such as recognizing teachers' contributions and providing learning resources aligned with industry needs. To strengthen affective commitment, it is important to foster a sense of belonging and emotional engagement, for example, by involving teachers in industry projects and providing opportunities for them to enhance their professional competencies.

CONCLUSION

Conclusion

Organizational climate significantly affects the organizational commitment of vocational high school teachers in Batam City. Both organizational commitment and organizational climate significantly affect the performance of vocational high school teachers in Batam City. Organizational climate is the dominant variable influencing the performance of vocational high school teachers, while organizational commitment serves as a mediating

variable linking climate to their performance. The practical contribution of this study is that its findings can help improve the performance of vocational high school teachers; thus, the managerial implication is that, to improve their performance, it is necessary to enhance the organizational climate and organizational commitment.

The theoretical contribution of this study is to strengthen social exchange theory with respect to the variables of organizational climate, commitment, and teacher performance, particularly in vocational education within industrial and free-trade zones. In addition, it demonstrates the partial mediating role of organizational commitment.

Limitations

This study has limitations regarding its research subjects, which were restricted to vocational high school teachers in the city of Batam; therefore, the results cannot be generalized to teachers at the elementary, junior high, or senior high school levels. In terms of variables, the results indicate that other variables account for 14% of the variation in vocational high school teachers' performance that were not examined in this study. Another limitation is that this study shows signs of common method bias, so measurements need to be taken at different times.

Recommendation

The managerial recommendations from this study regarding the vocational high school teachers' performance variable are to align teaching modules with the needs of the industrial sector and to moderate assessments through peer review or discussions among subject teachers. Regarding the organizational commitment variable, it is recommended that incentives, both financial and non-financial, be increased to prevent teachers from leaving the school. Recommendations regarding the organizational climate variable include increasing support for teachers from superiors so that teachers perceive themselves as an integral part of the school. Recommendations for education policymakers include formulating policies to strengthen the organizational climate in schools, conducting periodic surveys on the organizational climate, and strengthening collaboration between schools and the industrial sector.

Future research is recommended to expand the model by including variables such as managerial skills, organizational citizenship behavior, digital competence, and teacher well-being, and to conduct the study by separating the research subjects into public and private schools with a broader scope at the provincial level.

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