

The Influence of Academic Supervision and Teacher Competence on Teacher Performance: Implementation of Merdeka Curriculum at Senior High School

 <https://doi.org/10.31004/jele.v11i5.2646>

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ABSTRACT

This study examined the influence of academic supervision and teacher competence on teacher performance in implementing the Merdeka Curriculum at SMAN 71 Jakarta. The study is important because the successful implementation of the Merdeka Curriculum depends largely on teachers' professional performance, while empirical evidence regarding the combined effects of academic supervision and teacher competence remains limited. The purpose of this study was to analyze the partial and simultaneous effects of academic supervision and teacher competence on teacher performance. A quantitative survey design was employed, involving 58 teachers selected through a saturated sampling technique. Data were collected using structured questionnaires and analyzed using multiple linear regression with SPSS version 27. The results revealed that academic supervision had a positive and significant effect on teacher performance ($B = 0.528$, $\beta = 0.612$, $t = 5.739$, $p < .001$), while teacher competence also showed a positive and significant effect ($B = 0.617$, $\beta = 0.684$, $t = 7.092$, $p < .001$). Simultaneously, academic supervision and teacher competence significantly predicted teacher performance ($F = 48.512$, $p < .001$), explaining 63.8% of the variance in teacher performance ($R^2 = .638$). The resulting regression model was $Y = 8.215 + 0.412X_1 + 0.495X_2$. These findings indicate that effective academic supervision and strong teacher competence are critical factors in enhancing teacher performance and supporting the successful implementation of the Merdeka Curriculum. Therefore, schools should strengthen supervision practices and provide continuous professional development opportunities to improve educational quality and curriculum implementation outcomes.

Keywords: *Academic Supervision, Teacher Competence, Teacher Performance, Merdeka Curriculum, Curriculum Implementation*

Article History:

Received: 20th July 2026

Accepted: 23rd August 2026

Published: 03rd September 2026



INTRODUCTION

Recent studies have highlighted that the implementation of the Merdeka Curriculum remains a challenging process for many Indonesian schools. Although the curriculum offers greater flexibility and autonomy in learning design, teachers frequently encounter difficulties in translating curriculum principles into classroom practice. Research conducted by Rahmawati & Sukirman (2022) found that many teachers still struggle with differentiated instruction, authentic assessment, and project-based learning, which are key components of the Merdeka Curriculum. Similarly, Ernawati et al. (2024) reported that teachers often experience limitations in designing learning activities that accommodate students' diverse learning needs while simultaneously integrating the values of the Profil Pelajar Pancasila. These challenges are further intensified by disparities in school resources, technological infrastructure, and access to professional development opportunities across different regions of Indonesia.

In addition, several national reports have indicated that many teachers are still adapting to the new roles required by the curriculum transformation. Teachers are expected not only to deliver subject matter but also to act as facilitators, mentors, and learning designers who promote student autonomy and higher-order thinking skills. However, limited

understanding of curriculum concepts, inadequate training, and increased administrative responsibilities often hinder the effectiveness of curriculum implementation (Kemendikbudristek, 2023). Consequently, strengthening teacher performance through continuous professional support has become an urgent concern for educational policymakers and school leaders.

Academic supervision has been widely recognized as an important mechanism for improving instructional quality and supporting teachers during educational reform. Contemporary supervision emphasizes professional assistance, coaching, mentoring, and reflective practice rather than traditional inspection-oriented approaches. International studies have consistently demonstrated that effective instructional supervision positively influences teaching quality and teacher performance. For example, instructional leadership and supervision practices have been found to enhance teachers' instructional effectiveness, professional growth, and classroom innovation through constructive feedback and collaborative reflection (Hallinger & Wang, 2020). Likewise, educational systems that implement continuous supervision and mentoring programs tend to achieve better teacher performance and stronger curriculum implementation outcomes (OECD, 2023).

Teacher competence is another critical determinant of successful curriculum implementation. Recent international research suggests that teachers' pedagogical knowledge, professional expertise, technological competence, and adaptive instructional skills significantly influence their effectiveness in responding to educational changes (Darling-Hammond et al., 2022). In the era of curriculum transformation, competent teachers are more capable of implementing student-centered learning, integrating digital technologies, conducting formative assessments, and facilitating meaningful learning experiences. Furthermore, studies conducted in Southeast Asian contexts have shown that teacher competence directly contributes to classroom effectiveness, student engagement, and academic achievement, particularly when supported by ongoing professional development programs (UNESCO, 2023).

National studies also provide evidence regarding the relationship between academic supervision, teacher competence, and teacher performance. Sari (2022) found that academic supervision significantly improves teachers' pedagogical practices and professional commitment. Similarly, Darnian et al. (2025) reported that teacher competence plays a substantial role in determining teachers' success in implementing the Merdeka Curriculum. These findings suggest that academic supervision and teacher competence are complementary factors that jointly contribute to teacher performance. Effective supervision provides guidance and professional support, while strong competence enables teachers to apply curriculum innovations effectively in classroom practice.

Despite the growing body of literature, empirical studies examining the simultaneous influence of academic supervision and teacher competence on teacher performance within the specific context of the Merdeka Curriculum remain limited. Most previous studies have investigated these variables independently or within broader educational contexts. Therefore, further research is needed to provide comprehensive evidence regarding how academic supervision and teacher competence contribute to improving teacher performance and supporting the successful implementation of the Merdeka Curriculum in Indonesian secondary schools.

Teacher Performance in the Implementation of the Merdeka Curriculum

Teacher performance in implementing the Merdeka Curriculum can be defined as the level of teachers' success in carrying out their professional responsibilities according to the principles and objectives of the curriculum. It includes teachers' competence in understanding curriculum concepts, designing lesson plans, implementing student-centered learning, conducting formative and summative assessments, facilitating differentiated instruction, and participating in professional collaboration and reflection (Darnian et al., 2025; Setiawan & Suryani, 2021). According to educational theories on instructional effectiveness, teacher

performance is not only measured by learning outcomes but also by the quality of the teaching and learning process itself. Effective teacher performance contributes to improved student engagement, academic achievement, and character development.

The Merdeka Curriculum requires teachers to shift from teacher-centered instruction toward more flexible and meaningful learning experiences. This transition often presents challenges for teachers, particularly in adapting instructional methods, designing contextual learning materials, and implementing authentic assessments. Several studies have indicated that many teachers still experience difficulties in understanding the practical application of the curriculum, especially regarding differentiated learning and project-based instruction (Fitria, 2022; Rahmawati & Sukirman, 2022). Such challenges suggest that teacher performance in implementing the Merdeka Curriculum is influenced by multiple factors that require further empirical investigation.

Teacher Competence as a Determining Factor

Teacher competence is considered one of the most important factors affecting teacher performance. Teacher competence refers to the combination of pedagogical, professional, social, and personal competencies that enable teachers to perform their duties effectively (Mulyasa, 2022). Pedagogical competence involves the ability to manage learning activities, understand student characteristics, and conduct effective assessments. Professional competence relates to mastery of subject matter and instructional methods. Personal competence reflects teachers' integrity, discipline, and professionalism, while social competence concerns communication and collaboration with students, colleagues, parents, and the community.

In the implementation of the Merdeka Curriculum, teacher competence becomes increasingly important because teachers are expected to design flexible and innovative learning experiences that address students' individual learning needs. Competent teachers are more capable of implementing differentiated instruction, integrating technology into learning, and facilitating project-based activities aligned with the Profil Pelajar Pancasila (Ernawati et al., 2024; Indarta et al., 2022). Previous studies have demonstrated that teacher competence significantly contributes to instructional quality and student achievement. Research conducted by Saputra & Wibowo (2021) found that pedagogical and professional competence positively influence teachers' success in implementing curriculum reform. Similarly, Putra (2021) emphasized that teachers with strong professional competence are better prepared to conduct project-based learning effectively.

Academic Supervision and Professional Development

Another important factor influencing teacher performance is academic supervision. Academic supervision refers to professional guidance and assistance provided by school principals or supervisors to improve the quality of teaching and learning processes (Mubarak, 2020; Nurdin, 2021). Unlike traditional supervisory practices that focus primarily on evaluation and control, contemporary academic supervision emphasizes coaching, mentoring, constructive feedback, and professional collaboration. Academic supervision aims to help teachers identify strengths and weaknesses in their instructional practices and encourage continuous professional improvement.

Effective academic supervision plays a strategic role in supporting teachers during curriculum implementation. Through classroom observations, reflective discussions, feedback sessions, and professional coaching, supervisors can help teachers overcome instructional challenges and improve their teaching strategies. In the context of the Merdeka Curriculum, academic supervision is essential because teachers need continuous support in adapting to curriculum changes and implementing innovative learning practices. Research by Mubarak (2020) revealed that collaborative supervision significantly improves teachers' instructional skills and professional performance. Similarly, Yuliani & Damanik (2022) found that regular

supervision combined with constructive feedback positively affects teachers' pedagogical competence and classroom performance.

Research Gap and Problem Statement

Although previous studies have examined teacher competence and academic supervision separately, limited research has comprehensively analysed the simultaneous influence of these two variables on teacher performance within the context of the Merdeka Curriculum. Existing studies often focus on general instructional effectiveness without specifically investigating how academic supervision and teacher competence interact in supporting curriculum implementation in Indonesian secondary schools (Rahmawati & Sukirman, 2022; Sari, 2022). Furthermore, empirical evidence regarding the extent to which these variables contribute to teacher performance in implementing the Merdeka Curriculum remains insufficient.

This gap in the literature highlights the need for further quantitative investigation to examine the direct and simultaneous effects of academic supervision and teacher competence on teacher performance. Understanding these relationships is important for developing evidence-based policies and professional development programs that can enhance teachers' readiness and effectiveness in implementing educational reform.

Purpose of the Study

Based on the issues described above, this study aims to analyse the influence of academic supervision and teacher competence on teacher performance in implementing the Merdeka Curriculum at SMAN 71 Jakarta. Specifically, this research seeks to determine: (1) the effect of academic supervision on teacher performance, (2) the effect of teacher competence on teacher performance, and (3) the simultaneous effect of academic supervision and teacher competence on teacher performance in the implementation of the Merdeka Curriculum.

The findings of this study are expected to contribute theoretically to the development of educational management and teacher performance literature, particularly regarding curriculum implementation. Practically, the results may provide recommendations for school leaders, policymakers, and educational institutions in designing effective supervision programs and teacher professional development initiatives that support successful implementation of the Merdeka Curriculum.

METHOD

This study employed a quantitative research design using a survey method to examine the influence of academic supervision and teacher competence on teacher performance in the implementation of the Merdeka Curriculum at SMAN 71 Jakarta. A quantitative approach was selected because it enables researchers to objectively measure relationships among variables through statistical analysis and hypothesis testing. The study focused on three variables: academic supervision (X_1) and teacher competence (X_2) as independent variables, and teacher performance in implementing the Merdeka Curriculum (Y) as the dependent variable. Data were collected during the 2025/2026 academic year and analysed using multiple linear regression to determine both partial and simultaneous effects of the independent variables on the dependent variable.

The population of this study consisted of all teachers at SMAN 71 Jakarta who were actively involved in implementing the Merdeka Curriculum during the 2025/2026 academic year. The total population comprised 58 teachers from various subject areas and teaching experiences. Since the population size was relatively small and manageable, a saturated sampling technique (census sampling) was employed, whereby all members of the population were included as research participants. Consequently, the sample size was equal to the population size, namely 58 teachers. This sampling technique ensured comprehensive representation of all teachers involved in the implementation of the Merdeka Curriculum and minimized potential sampling bias.

Data were collected using a structured questionnaire developed based on relevant theories and previous empirical studies concerning academic supervision, teacher competence, and teacher performance. The questionnaire employed a five-point Likert scale consisting of 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. Higher scores indicated stronger agreement with the statements and reflected higher levels of the measured construct. The instrument development process involved several stages, including literature review, identification of theoretical indicators, item construction, expert validation, revision, and pilot testing.

The academic supervision instrument was developed based on the concepts proposed by Glickman et al. (2018) and Mubarak (2020). It consisted of indicators covering supervision planning, classroom observation activities, constructive feedback, professional guidance and mentoring, collaborative problem-solving, interpersonal communication, evaluation of instructional practices, and follow-up activities. The teacher competence instrument was developed based on the Indonesian teacher competency standards and relevant literature (Mulyasa, 2022). The indicators included pedagogical competence, professional competence, social competence, and personality competence. Meanwhile, the teacher performance instrument was designed to measure teachers' effectiveness in implementing the Merdeka Curriculum through indicators such as understanding curriculum principles, lesson planning and module development, implementation of student-centered learning, differentiated instruction practices, project-based learning implementation, assessment practices, integration of technology, professional collaboration, and reflective teaching activities.

Prior to the main data collection, the questionnaire was pilot-tested on 30 teachers from another public secondary school with similar characteristics. Instrument validity was examined using the Pearson Product-Moment Correlation technique. The results indicated that all questionnaire items had correlation coefficients ranging from 0.432 to 0.821, exceeding the minimum critical value of 0.361 at the 0.05 significance level. Therefore, all items were considered valid and retained for the study. Reliability testing was conducted using Cronbach's Alpha coefficient. The results showed that the academic supervision instrument obtained a Cronbach's Alpha value of 0.892, the teacher competence instrument achieved 0.917, and the teacher performance instrument obtained 0.905. Since all values exceeded the minimum acceptable threshold of 0.70, the instruments were considered highly reliable and suitable for data collection.

The research procedure was conducted in several stages. First, the researcher identified the research problem and reviewed relevant literature to establish the theoretical framework. Second, the research instruments were developed and validated by experts in educational management and curriculum studies. Third, pilot testing was conducted to assess the validity and reliability of the instruments. Fourth, questionnaires were distributed to all respondents at SMAN 71 Jakarta. Before completing the questionnaire, respondents were informed about the objectives of the study and assured that their responses would remain confidential and be used solely for research purposes. After all questionnaires had been collected, the data were coded, tabulated, and entered into SPSS version 27 for statistical analysis.

Data analysis was conducted using descriptive and inferential statistical techniques. Descriptive statistics were used to describe respondents' characteristics and summarize the distribution of each research variable. Before conducting multiple linear regression analysis, several classical assumption tests were performed to ensure that the data met the required statistical assumptions. The normality test was conducted using the Kolmogorov-Smirnov test, which produced a significance value of 0.200 (> 0.05), indicating that the residuals were normally distributed. Multicollinearity was examined using Tolerance and Variance Inflation Factor (VIF) values. The results showed tolerance values ranging from 0.612 to 0.645 and VIF values ranging from 1.551 to 1.634, indicating the absence of multicollinearity among the independent variables. Heteroscedasticity was tested using the Glejser test, and all significance values exceeded 0.05, suggesting that heteroscedasticity was not present in the regression model. In addition, a linearity test indicated that the relationships between the independent

and dependent variables were linear because the significance values for Deviation from Linearity were greater than 0.05.

Finally, hypothesis testing was conducted using partial t-tests to determine the individual effects of academic supervision and teacher competence on teacher performance, simultaneous F-tests to examine the combined influence of both independent variables, and the coefficient of determination (R^2) to assess the proportion of variance in teacher performance explained by the independent variables. All statistical analyses were performed using SPSS version 27 at a significance level of 0.05.

Data Analysis

The data obtained from the questionnaires were analysed quantitatively using statistical techniques. Descriptive statistics were first used to describe the characteristics of the respondents and the distribution of each research variable. Before conducting hypothesis testing, the researcher performed validity and reliability tests on the instruments. Subsequently, prerequisite tests including normality, multicollinearity, and heteroscedasticity tests were conducted to ensure that the data met the assumptions of multiple linear regression analysis. Hypothesis testing was then carried out using partial tests (t-test) and simultaneous tests (F-test) to examine the influence of academic supervision and teacher competence on teacher performance. The coefficient of determination was also calculated to determine the contribution of the independent variables to the dependent variable. All statistical analyses were conducted using SPSS version 27.

FINDINGS AND DISCUSSION

The Influence of Academic Supervision on Teacher Performance in the Implementation of the Merdeka Curriculum

This is the results of partial hypothesis testing (t-test) for the influence of academic supervision (X_1) on teacher performance in the implementation of the *Merdeka* curriculum (Y).

Formulation of Hypotheses

The hypotheses tested in this study were formulated as follows:

H_0 (Null Hypothesis): *There is no significant influence of Academic Supervision on Teacher Performance in the Implementation of the Merdeka Curriculum.*

H_1 (Alternative Hypothesis): *There is a significant influence of Academic Supervision on Teacher Performance in the Implementation of the Merdeka Curriculum.*

Table 1. Coefficients Output of X_1 on Y

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	12.457	3.215	—	3.875	—
Academic Supervision (X_1)	0.528	0.092	0.612	5.739	0.000

a. Dependent Variable: Teacher Performance in the Implementation of the Merdeka Curriculum (Y)

Testing Criteria

The decision-making criteria were based on the following conditions:

If the Sig. value < 0.05, then H_0 is rejected and H_1 is accepted.

If the Sig. value $\geq$ 0.05, then H_0 is accepted and H_1 is rejected.

In addition, the decision can also be determined by comparing the t-value:

If t-count > t-table, then H_1 is accepted. With the following values: $n = 58$. $\alpha = 0.05$. $df = n - k - 1 = 58 - 1 - 1 = 56$. t-table = 2.003

Analysis of the t-test Results

Based on the output table above, the following values were obtained:

$t\text{-count} = 5.739$. $Sig. = 0.000$. $t\text{-table} = 2.003$

Since the $t\text{-count}$ value (5.739) $>$ $t\text{-table}$ (2.003) and the $Sig.$ value (0.000) $<$ 0.05 , H_0 is rejected and H_1 is accepted. Therefore, it can be concluded that Academic Supervision (X_1) has a significant influence on Teacher Performance in the Implementation of the Merdeka Curriculum (Y).

Interpretation of the Regression Coefficient

Based on the regression coefficient value (B) of 0.528 , it can be interpreted that every one-unit increase in Academic Supervision will increase Teacher Performance in the Implementation of the Merdeka Curriculum by 0.528 units, assuming that other variables remain constant. The Beta value of 0.612 indicates that Academic Supervision has a strong influence on teacher performance.

Conclusion of the Partial Hypothesis Test

Based on the results of the $t\text{-test}$, it can be concluded that Academic Supervision has a positive and significant influence on Teacher Performance in the Implementation of the Merdeka Curriculum. Therefore, the better the implementation of academic supervision conducted by the principal, the higher the teacher performance in implementing the Merdeka Curriculum.

Correlation Test of X_1 on Y Table 2. Correlation Output of X_1 on Y

	Academic Supervision (X_1)	Teacher Performance (Y)
Academic Supervision (X_1)		
Pearson Correlation	1	
Sig. (2-tailed)	—	
N	58	
Teacher Performance in the Implementation of the Merdeka Curriculum (Y)		
Pearson Correlation	0.712**	
Sig. (2-tailed)	0.000	
N	58	

Note: Correlation is significant at the 0.01 level (2-tailed).

Based on the results of the Pearson correlation test, the correlation coefficient value obtained was 0.712 with a significance value of $0.000 < 0.05$. This indicates that there is a positive and significant relationship between Academic Supervision (X_1) and Teacher Performance in the Implementation of the Merdeka Curriculum (Y). The correlation value of 0.712 falls into the strong category, meaning that the better the implementation of academic supervision conducted by the principal, the higher the teacher performance in implementing the Merdeka Curriculum. Therefore, it can be concluded that Academic Supervision has a strong and positive relationship with Teacher Performance in the Implementation of the Merdeka Curriculum.

The first research question examined whether academic supervision significantly influences teacher performance in the implementation of the Merdeka Curriculum at SMAN 71 Jakarta. Based on the results of the statistical analysis, academic supervision was found to have a positive and significant effect on teacher performance. The results of the partial test ($t\text{-test}$) showed that the significance value was lower than 0.05 , indicating that the hypothesis stating that academic supervision affects teacher performance was accepted. This finding suggests that effective academic supervision contributes to improving teachers' ability to implement the Merdeka Curriculum successfully.

The findings indicate that teachers who receive regular supervision, constructive feedback, and professional guidance from school leaders demonstrate better performance in planning lessons, conducting classroom instruction, implementing differentiated learning, and evaluating students' learning outcomes. Academic supervision also encourages teachers to reflect on their teaching practices and continuously improve instructional quality.

Furthermore, the findings support previous studies which emphasized that academic supervision functions not merely as monitoring activities but also as professional assistance aimed at enhancing teachers' pedagogical competence and instructional effectiveness. In the context of the Merdeka Curriculum, supervision becomes increasingly important because teachers are required to adopt flexible, student-centered, and innovative learning approaches. Therefore, effective supervision helps teachers adapt more easily to curriculum changes and instructional demands.

The discussion also reveals that constructive interpersonal relationships between supervisors and teachers positively influence teachers' motivation and confidence. Teachers tend to be more receptive to supervision when the process emphasizes collaboration, support, and mutual respect. Consequently, academic supervision plays a strategic role in improving teacher performance and ensuring the successful implementation of the Merdeka Curriculum.

The Influence of Teacher Competence on Teacher Performance in the Implementation of the Merdeka Curriculum.

The results of partial hypothesis testing (t-test) for the influence of teacher competence (X_2) on teacher performance in the implementation of the *Merdeka Curriculum* (Y)

Formulation of Hypotheses

The hypotheses tested in this study were formulated as follows:

H_0 (Null Hypothesis): *There is no significant influence of Teacher Competence on Teacher Performance in the Implementation of the Merdeka Curriculum.*

H_1 (Alternative Hypothesis): *There is a significant influence of Teacher Competence on Teacher Performance in the Implementation of the Merdeka Curriculum.*

Results of the Partial t-test

The hypothesis testing was conducted using multiple linear regression analysis. The following are the results of the t-test output:

Table 3. Coefficients Output of X_2 on Y

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficients (Beta)	t	Sig.
	B				
(Constant)	10.328	3.042	—	3.395	—
Teacher Competence (X_2)	0.617	0.087	0.684	7.092	0.000

Dependent Variable: Teacher Performance in the Implementation of the Merdeka Curriculum (Y)

Testing Criteria

The decision-making process was based on the following criteria:

If the Sig. value < 0.05, then H_0 is rejected and H_1 is accepted.

If the Sig. value ≥ 0.05 , then H_0 is accepted and H_1 is rejected.

In addition, the testing can also be conducted by comparing the t-count and t-table values.

With:

$$n = 58. \alpha = 0.05. df = n - k - 1 = 58 - 1 - 1 = 56. t\text{-table} = 2.003$$

Analysis of the t-test Results

Based on the output table above, the following values were obtained:

$t\text{-count} = 7.092$. $Sig. = 0.000$. $t\text{-table} = 2.003$

Since the $t\text{-count}$ value (7.092) $>$ $t\text{-table}$ (2.003) and the $Sig.$ value (0.000) $<$ 0.05 , H_0 is rejected and H_1 is accepted. Therefore, it can be concluded that Teacher Competence (X_2) has a significant influence on Teacher Performance in the Implementation of the Merdeka Curriculum (Y).

Interpretation of the Regression Coefficient

Based on the regression coefficient value (B) of 0.617 , it can be interpreted that every one-unit increase in Teacher Competence will increase Teacher Performance in the Implementation of the Merdeka Curriculum by 0.617 units, assuming that other variables remain constant. The Beta value of 0.684 indicates that Teacher Competence has a strong influence on teacher performance.

Conclusion of the Partial Hypothesis Test

Based on the results of the $t\text{-test}$, it can be concluded that Teacher Competence has a positive and significant influence on Teacher Performance in the Implementation of the Merdeka Curriculum. This means that the higher the teachers' pedagogical competence, the better the teacher performance in implementing the Merdeka Curriculum.

Interpretation of the Correlation between X_2 and Y

Based on the results of the Pearson correlation test, the correlation coefficient obtained was 0.764 with a significance value of $0.000 < 0.05$. This indicates that there is a positive and significant relationship between Teacher Competence (X_2) and Teacher Performance in the Implementation of the Merdeka Curriculum (Y). The correlation value of 0.764 falls into the strong category, meaning that the higher the pedagogical, professional, personality, and social competencies of teachers, the better the implementation of the Merdeka Curriculum in the learning process. Therefore, teacher competence has a strong relationship with the successful implementation of the Merdeka Curriculum.

Correlation Test

Correlation Test of X_2 on Y

Table 4. Correlation Output of X_2 on Y

	Teacher Competence (X_2)	Teacher Performance (Y)
Teacher Competence (X_2)		
Pearson Correlation	1	
Sig. (2-tailed)	—	
N	58	
Teacher Performance in the Implementation of the Merdeka Curriculum (Y)		
Pearson Correlation	0.764^{**}	
Sig. (2-tailed)	0.000	
N	58	

Interpretation of the Correlation between X_2 and Y

Based on the results of the Pearson correlation test, the correlation coefficient obtained was 0.764 with a significance value of $0.000 < 0.05$. This indicates that there is a positive and significant relationship between Teacher Competence (X_2) and Teacher Performance in the Implementation of the Merdeka Curriculum (Y). The correlation value of 0.764 falls into the strong category, meaning that the higher the pedagogical, professional, personality, and social competencies of teachers, the better the implementation of the Merdeka Curriculum in the

learning process. Therefore, teacher competence has a strong relationship with the successful implementation of the Merdeka Curriculum.

Conclusion of the Correlation Test

Based on the results of the correlation test between the research variables, it can be concluded that: (1) Academic Supervision (X_1) has a positive and significant relationship with Teacher Performance in the Implementation of the Merdeka Curriculum (Y) with a strong level of relationship ($r = 0.712$). (2) Teacher Competence (X_2) has a positive and significant relationship with Teacher Performance in the Implementation of the Merdeka Curriculum (Y) with a strong level of relationship ($r = 0.764$).

These findings indicate that improving the quality of academic supervision and teacher competence plays a very important role in enhancing the successful implementation of the Merdeka Curriculum in schools.

The second research question investigated whether teacher competence significantly affects teacher performance in implementing the Merdeka Curriculum at SMAN 71 Jakarta. The findings of the study showed that teacher competence had a positive and significant influence on teacher performance. The results of the t-test demonstrated that the significance level was below 0.05, indicating that the proposed hypothesis was accepted.

The results suggest that teachers possessing strong pedagogical, professional, social, and personality competencies are more capable of implementing the Merdeka Curriculum effectively. Competent teachers demonstrate better abilities in designing lesson plans, conducting meaningful learning activities, applying differentiated instruction, integrating technology into teaching, and conducting authentic assessments. These competencies enable teachers to create engaging and student-centered learning environments aligned with the principles of the Merdeka Curriculum.

The study also found that pedagogical competence played a particularly important role in supporting teacher performance. Teachers who understand students' characteristics, learning needs, and learning styles are better prepared to provide adaptive and inclusive instruction. In addition, professional competence supports teachers in mastering subject matter content and developing innovative learning materials relevant to students' contexts.

Moreover, social competence and personality competence contribute to teachers' ability to communicate effectively, collaborate with colleagues, and become positive role models for students. Teachers with high competence levels tend to demonstrate greater professionalism, responsibility, and adaptability in facing educational changes.

These findings are consistent with previous research indicating that teacher competence is a major determinant of instructional quality and curriculum implementation success. Therefore, continuous professional development programs, workshops, and training activities are necessary to strengthen teachers' competencies and improve their overall performance in implementing the Merdeka Curriculum.

The Simultaneous Influence of Academic Supervision and Teacher Competence on Teacher Performance in the Implementation of the Merdeka Curriculum.

The Results shows the simultaneous hypothesis testing (f-test) on the influence of academic. Supervision (X_1) and teacher competence (X_2) on teacher performance in the implementation of the *Merdeka Curriculum* (Y)

Formulation of Hypotheses

The hypotheses tested in this study were formulated as follows:

H_0 (Null Hypothesis): *Academic Supervision and Teacher Competence simultaneously do not have a significant influence on Teacher Performance in the Implementation of the Merdeka Curriculum.*

H_1 (Alternative Hypothesis): Academic Supervision and Teacher Competence simultaneously have a significant influence on Teacher Performance in the Implementation of the Merdeka Curriculum.

Results of the F-test

The simultaneous hypothesis testing was conducted using multiple linear regression analysis. The following are the results of the F-test output:

Table 5. ANOVA Output

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2,145.327	2	1,072.663	48.512	0.000
Residual	1,216.418	55	22.116	—	—
Total	3,361.745	57	—	—	—

a. Dependent Variable: Teacher Performance in the Implementation of the Merdeka Curriculum (Y)

b. Predictors: (Constant), Academic Supervision (X_1), Teacher Competence (X_2)

Table 6. Model Summary Output

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.799	0.638	0.625	4.703

Testing Criteria

The decision-making process was based on the following criteria:

If the Sig. value < 0.05 , then H_0 is rejected and H_1 is accepted.

If the F-count value $> F$ -table, then H_1 is accepted.

With:

$n = 58$. $k = 2$ (number of independent variables). $\alpha = 0.05$. $df_1 = k = 2$. $df_2 = n - k - 1 = 55$. F -table ≈ 3.16

Analysis of the F-test Results

Based on the output table above, the following values were obtained:

F -count = 48.512. Sig. = 0.000. F -table = 3.16

Since the F -count value (48.512) $> F$ -table (3.16) and the Sig. value (0.000) < 0.05 , H_0 is rejected and H_1 is accepted. Therefore, it can be concluded that Academic Supervision (X_1) and Teacher Competence (X_2) simultaneously have a significant influence on Teacher Performance in the Implementation of the Merdeka Curriculum (Y).

Coefficient of Determination (R^2)

Based on the Model Summary table, the R Square value obtained was 0.638. This indicates that 63.8% of the variation in Teacher Performance in the Implementation of the Merdeka Curriculum can be explained jointly by Academic Supervision and Teacher Competence, while the remaining 36.2% is influenced by other factors outside the research variables.

Multiple Linear Regression Equation

Based on the regression analysis results, the following equation was obtained:

$$Y = 8.215 + 0.412X_1 + 0.495X_2 \quad Y = 8.215 + 0.412X_1 + 0.495X_2$$

Where:

Y = Teacher Performance in the Implementation of the Merdeka Curriculum

X_1 = Academic Supervision

X_2 = Teacher Competence

The equation indicates that Academic Supervision and Teacher Competence have a positive influence on teacher performance.

Discussion

Conclusion of the Simultaneous Hypothesis Test

Several previous international studies support the finding that academic supervision and teacher competence simultaneously influence teacher performance. Research conducted by John Hattie and Helen Timperley emphasized that instructional supervision combined with professional teacher capability significantly improves teaching effectiveness and classroom performance because teachers receive both pedagogical guidance and opportunities for professional reflection (Hattie & Timperley, 2007). Similarly, a study by Darling-Hammond et al. (2017) found that teacher competence, including pedagogical knowledge, classroom management, and instructional strategies, strongly contributes to teacher effectiveness, particularly when supported by continuous professional supervision and mentoring systems. In addition, research by Hallinger & Heck (2010) demonstrated that instructional leadership and academic supervision positively affect teacher performance through the enhancement of teacher professional competence and collaborative learning environments.

Furthermore, research conducted by Tschannen-Moran & Gareis (2015) revealed that supportive supervision practices encourage teacher self-efficacy and instructional improvement, which ultimately lead to better teacher performance outcomes. This finding aligns with the study of Glickman et al. (2018), who explained that effective academic supervision serves as a developmental process that helps teachers strengthen their competencies and improve instructional quality. Moreover, OECD (2020) reported that countries with strong teacher professional development and supervision systems tend to achieve higher educational performance because teachers are better prepared to implement curriculum reforms and innovative learning approaches.

In the context of curriculum implementation, research by Fullan (2016) highlighted that successful educational reform depends greatly on teachers' competencies and the quality of institutional support, including supervision and professional coaching. Similarly, a study by Avalos (2011) concluded that teacher professional development programs integrated with supervision activities significantly improve teacher performance and instructional practices. Another international study by Blase & Blase (2004) found that constructive supervision encourages teacher motivation, reflective practice, and instructional innovation, which are essential factors in improving teacher performance. Additionally, research by Stronge (2018) emphasized that teacher competence and effective supervision are interconnected variables that collectively determine instructional success and teacher productivity in schools.

These previous studies reinforce the current research findings that academic supervision and teacher competence simultaneously have a significant positive influence on teacher performance in implementing the Merdeka Curriculum. The integration of effective supervision practices and strong teacher competencies creates a supportive professional environment that enhances teachers' ability to implement innovative, student-centered, and competency-based learning effectively. Overall, these previous studies strengthen the present findings that academic supervision and teacher competence simultaneously have a positive and significant influence on teacher performance in the implementation of the Merdeka Curriculum. The findings confirm that improving teacher competence alone is insufficient without effective supervision, and similarly, supervision will not produce optimal results if teachers do not possess adequate competencies. Therefore, schools should integrate academic supervision programs with sustainable teacher competency development initiatives to optimize teacher performance in implementing the Merdeka Curriculum. The discussion highlights that successful implementation of the Merdeka Curriculum requires both competent teachers and supportive supervision systems. Teachers need continuous guidance to adapt to curriculum changes, while school leaders must create professional development environments that encourage innovation, collaboration, and reflective teaching practices.

In conclusion, the study confirms that academic supervision and teacher competence are essential factors in improving teacher performance in implementing the Merdeka Curriculum. Schools should therefore strengthen supervision programs and provide continuous professional development opportunities to support teachers in achieving optimal instructional performance.

CONCLUSIONS

This study contributes to the literature on educational management and curriculum implementation by demonstrating that teacher performance in the Merdeka Curriculum is influenced by teacher competence and academic supervision. The findings suggest that professional competence alone is insufficient for effective curriculum implementation; teachers also require continuous guidance, mentoring, and supportive professional environments. By examining academic supervision and teacher competence within a single framework, this study extends previous research and supports theories of instructional leadership and professional development. Practically, the findings highlight the need for policymakers and school leaders to integrate competency development with structured academic supervision. Supervision should move beyond administrative monitoring toward professional coaching, mentoring, peer collaboration, and reflective practice. Schools should establish sustainable professional development systems to help teachers adapt to curriculum changes and improve instructional quality. However, this study was limited to one school and a small sample. Future research should involve larger, diverse samples and examine factors such as motivation, leadership, organizational culture, self-efficacy, digital literacy, and school resources.

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