

THE THE EFFECT OF THE HISTORICAL THINKING APPROACH ON STUDENTS' CRITICAL THINKING SKILLS IN HISTORY LEARNING AT SMAN 1 RONGGA

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ABSTRACT

This study was motivated by the dominance of memorization-oriented history instruction, which limits the development of students' critical thinking skills. This study aimed to analyze the effect of the historical thinking approach on students' critical thinking skills in history learning at SMAN 1 Rongga. The conceptual framework linked three dimensions of historical thinking, namely Use of Primary Source Evidence, Cause and Consequence, and Historical Perspective-Taking, with four dimensions of critical thinking: interpretation, analysis, evaluation, and inference. This study used a quantitative approach with a survey method. The sample consisted of 127 tenth-grade students selected through proportionate stratified random sampling. Data were collected using a Likert-scale questionnaire and analyzed through multiple linear regression. The results showed that the historical thinking approach had a significant simultaneous effect on students' critical thinking skills, with an F value of 211.270 and a significance value of <0.001. The Adjusted R Square value of 0.834 indicated that 83.4% of the variation in critical thinking skills was explained by the three historical thinking dimensions. Partially, Cause and Consequence and Historical Perspective-Taking had significant effects, while Use of Primary Source Evidence did not. Historical Perspective-Taking was the dominant dimension. Therefore, school curricula should strengthen perspective-based history learning to develop students' critical reasoning.

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INTRODUCTION

History learning in the modern educational system occupies a unique as well as strategic position. On one hand, history functions as a means of transmitting collective identity and national memory; on the other hand, history

is an academic discipline that requires a complex intellectual process based on evidence analysis. In the recent development of history education studies, there is a paradigm shift from content-based learning to historical thinking competency-based learning. This shift is driven by the awareness that merely memorizing past facts is not enough to equip learners to face 21st-century challenges characterized by information complexity, technological disruption, and social polarization.

However, various international studies show that history learning practices in many countries are still dominated by transmissive approaches. Thorp & Persson (2020) assert that “history teaching too often presents the past as a finished narrative rather than as an interpretative and evidence-based inquiry”. Criticism of traditional history learning is also delivered by Wineburg (2010) who states that historical thinking is not a natural process, but rather the result of systematic intellectual practice. He asserts that “historical thinking involves sourcing, contextualizing, and corroborating historical documents rather than memorizing historical facts”. This phenomenon reinforces the urgency of strengthening critical thinking skills through evidence-based history learning.

Critical thinking conceptually has been widely discussed in educational literature. Facione (2015) defines critical thinking as “purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference”. Morton & Seixas (2013) developed The Big Six Historical thinking concepts framework which consists of historical significance, evidence, continuity and change, Cause and Consequence, historical perspectives, and ethical dimension. Theoretically, there is a strong alignment between historical thinking and critical thinking.

In the context of SMAN 1 Rongga, the urgency of this study is also related to the real challenges of history learning at the school level. As a senior high school located in West Bandung Regency, SMAN 1 Rongga faces the need to strengthen students’ higher-order thinking skills in history learning, especially because history lessons are often still perceived by students as a subject that emphasizes memorization of names, dates, events, and chronological facts. This condition can limit students’ ability to analyze historical evidence, compare different perspectives, and construct arguments based on sources. Therefore, SMAN 1 Rongga becomes a relevant research location because it represents the practical challenge of transforming history learning from factual recall toward evidence-based reasoning and critical interpretation.

The development of studies regarding historical thinking in the last decade shows a significant shift in history education, from content transmission-based learning to disciplinary thinking competency-based learning. Anis (2021) examined the application of the Historical thinking Learning Model (MPBH) Based on Issue Centered History on History Education students at Universitas Lambung Mangkurat. The results of the study showed a significant increase in critical thinking skills in the experimental group. Nurjanah (2020) examined the relationship between historical thinking skills and critical thinking skills in the context of Indonesian history education. Umamah et al. (2023) conducted research on high school students in Indonesia with a focus on improving historical thinking skills through the inquiry-based learning model. Soininen (2022) examined historical thinking teaching practices in AP and IB History teachers in the United States through a qualitative approach based on class observation and in-depth interviews. Thorp and Persson (2020) examined historical thinking from a philosophical and epistemological perspective. Luis and Rapanta (2020) in their integrative study on historical reasoning competence concluded that “historical reasoning competence encompasses both the process and the outcomes of reasoning”. Meral, Eret, and Öztürk (2022) examined the development of historical thinking through project-based learning in Turkey with a quasi-experimental approach. López-García (2023) examined the use of primary source-based digital materials to improve high school students’ HOTS. Burgos-Videla, Sáiz-Serrano, and López-Facal (2025) examined the application of the critical history approach in social education. Duquette (2015) in her study regarding critical historical consciousness asserted that the main goal of history education is to form critical historical consciousness.

Overall, the synthesis of these ten studies shows that the historical thinking approach is consistently associated with the development of students’ analytical and reflective skills. Thus, the novelty of this research lies in

the explicit integration between the historical thinking and critical thinking frameworks in one empirical model based on a quantitative survey. Unlike previous studies that tend to examine historical thinking as a learning approach or critical thinking as a separate outcome, this research places both constructs in a single analytical framework. Historical thinking is positioned as the independent variable that represents students' ability to work with historical evidence, context, causality, continuity, change, and perspective, while critical thinking is positioned as the dependent variable that reflects students' ability to interpret, analyze, evaluate, infer, and make reasoned judgments. Therefore, the novelty of this study is not only located in the research location, but also in its attempt to empirically test the theoretical connection between historical thinking and critical thinking in the context of senior high school history learning.

The Influence of Historical Thinking Approaches on Students' Critical Thinking Skills

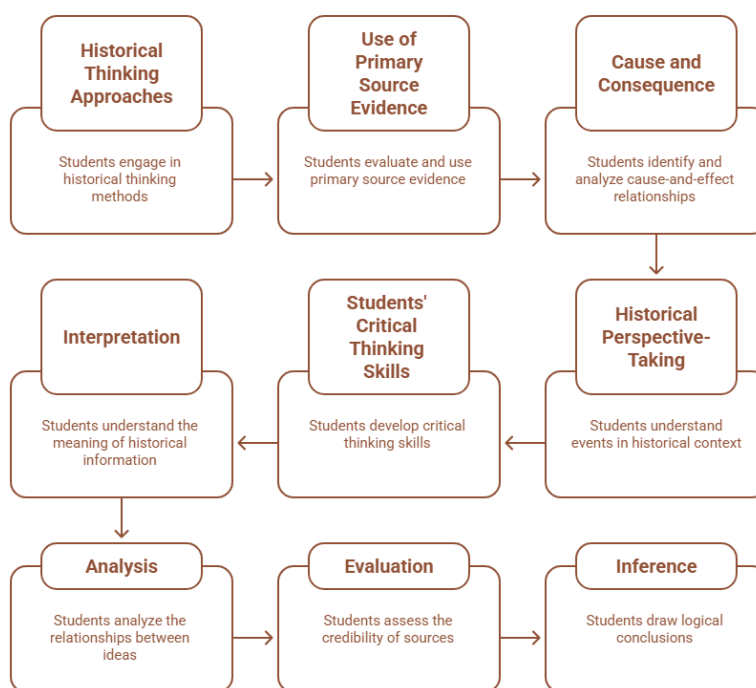


Figure 1. Research Conceptual Framework

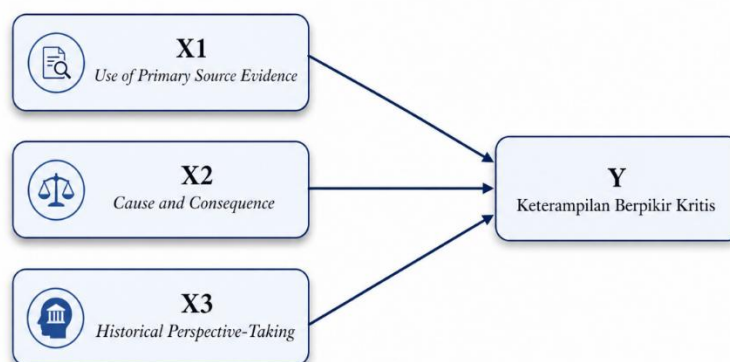
Generally, the objective of this research is to analyze and measure the magnitude of the effect of the historical thinking approach on students' critical thinking skills in history learning at SMAN 1 Rongga.

METHOD

The research object is the aspect that becomes the focus of scientific study and explains specifically what is studied, where the research is conducted, and in a certain time context. In this research, the object studied is the effect

of the historical thinking approach on students' critical thinking skills in history learning at SMAN 1 Rongga. Location-wise, this research was carried out at SMAN 1 Rongga, West Bandung Regency. This research uses a quantitative approach. The method used in this research is the survey method. This research uses a quantitative design with a correlational survey approach that is explanatory (explanatory research) in nature. This research uses a survey design with multiple regression analysis.

Model Regresi Linear Berganda



Gambar. Model konseptual pengaruh dimensi *historical thinking* terhadap keterampilan berpikir kritis

Figure 2. Conceptual model of the effect of historical thinking dimensions on critical thinking skills

The population in this study is all tenth-grade students, totaling 186 students. The population is distributed into six classes, namely classes X-A, X-B, X-C, X-D, X-E, and X-F.

Table 1. Research Population

No.	Class	Male	Female	Total Students
1	X-A	12	21	33
2	X-B	13	19	32
3	X-C	11	20	31
4	X-D	12	18	30
5	X-E	14	16	30
6	X-F	12	18	30
	Total	74	112	186

The determination of the number of samples in this study uses the Slovin formula. Thus, the number of samples in this research is 127 tenth-grade students. The sampling technique used in this research is proportionate stratified random sampling or proportional stratified random sample technique.

Table 2. Allocation of Research Samples Proportionally

No.	Class	Population Size	Calculation	Results	Sample Size
1	X-A	33	$\frac{33}{186} \times 127$	22,53	23
2	X-B	32	$\frac{32}{186} \times 127$	21,85	22
3	X-C	31	$\frac{31}{186} \times 127$	21,17	21
4	X-D	30	$\frac{30}{186} \times 127$	20,48	21
5	X-E	30	$\frac{30}{186} \times 127$	20,48	20
6	X-F	30	$\frac{30}{186} \times 127$	20,48	20
Jumlah		186			127

The instrument in this research is in the form of a closed questionnaire based on a Likert scale designed based on the operationalized variable indicators. In this research, the instrument is in the form of a closed questionnaire with a 5-point Likert Scale measurement scale. Before being distributed to the 127 research respondents, the questionnaire instrument was first tested through validity and reliability testing. The validity test was conducted to determine whether each statement item accurately measured the intended indicators of historical thinking and critical thinking skills. Item validity was tested using item-total correlation with the help of IBM SPSS Statistics 31.0. Items that met the validity criteria were retained, while items that did not meet the criteria were revised or eliminated. Furthermore, the reliability test was conducted using Cronbach's Alpha to examine the internal consistency of the questionnaire. An instrument was considered reliable if it showed a Cronbach's Alpha value above the acceptable threshold. Through this process, the questionnaire used in the main study was expected to provide accurate and consistent data in measuring students' thinking skills.

The data analysis technique in this research uses a quantitative approach. In this research, data analysis was carried out with the help of IBM SPSS Statistics 31.0 software. The transformation of ordinal data into interval data was carried out using the Method of Successive Interval (MSI). The classical assumption test in this research includes the residual normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. Hypothesis testing in this research uses multiple linear regression.

RESULTS AND DISCUSSION

General Overview of the Location and Research Object

This research was conducted at SMA Negeri 1 Rongga, West Bandung Regency, West Java Province. The population in this study is all tenth-grade students of SMA Negeri 1 Rongga in the 2025/2026 academic year. The total population is 186 students. The number of samples used in this study is 127 students from a total population of 186 students.

Research Data Description

The data of this study were obtained through a questionnaire with a Likert scale, so the initial data produced are ordinal in nature. Therefore, before the data are used for further statistical analysis that requires an interval scale, the ordinal data are first converted into interval data using the Method of Successive Interval or MSI.

Table 3. Average Score per Item on Ordinal and Interval Data

No.	Variabel/Dimensi	Jumlah Butir	Rata-rata Ordinal per Butir	Rata-rata Interval per Butir
1.	Use of Primary Source Evidence (X1)	9	4,18	4,12
2.	Cause and Consequence (X2)	8	4,13	4,31
3.	Historical Perspective-Taking (X3)	9	4,08	4,10
4.	Pendekatan Historical Thinking (X)	26	4,13	4,17
5.	Kemampuan Berpikir Kritis Murid (Y)	36	3,98	3,91

Based on the overall results of data processing, it can be concluded that the ordinal data from the questionnaire results have been successfully converted into interval data using the MSI method.

Descriptive Statistical Analysis

Table 4. Descriptive Statistics of Interval Data from MSI Transformation Results

No.	Variabel	N	Minimum	Maximum	Mean	Std. Deviation
1.	X1	127	25,86	46,80	37,09	5,62
2.	X2	127	21,94	43,99	34,44	5,04
3.	X3	127	24,59	47,35	36,86	5,80
4.	X_Total	127	72,39	138,14	108,39	15,67
5.	Y	127	99,51	185,42	140,77	23,13
6.	Valid N (listwise)	127				

Based on the descriptive statistics table, it is known that all variables have a valid data amount of 127 respondents. The Use of Primary Source Evidence (X1) dimension has a mean value of 37.09 with a standard deviation of 5.62. The Cause and Consequence (X2) dimension has a mean value of 34.44 with a standard deviation of 5.04. The Historical Perspective-Taking (X3) dimension has a mean value of 36.86 with a standard deviation of 5.80. Overall, the Historical Thinking Approach (X_Total) variable has a mean value of 108.39 with a standard deviation of 15.67. The Student Critical Thinking Skills (Y) variable has a mean value of 140.77 with a standard deviation of 23.13.

Residual Normality Test

Table 5. Kolmogorov-Smirnov Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
	N	127
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	9.32363447
Most Extreme Differences	Absolute	.104

	Positive	.080	
	Negative	-.104	
	Test Statistic	.104	
	Asymp. Sig. (2-tailed) ^c	.002	
Monte Carlo Sig. (2-tailed) ^d	Sig.	.002	
	99% Confidence Interval	Lower Bound	.001
		Upper Bound	.003

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.

Thus, because the significance value is $0.002 < 0.05$, it can be concluded that the residual in the regression model of this study is not normally distributed statistically.

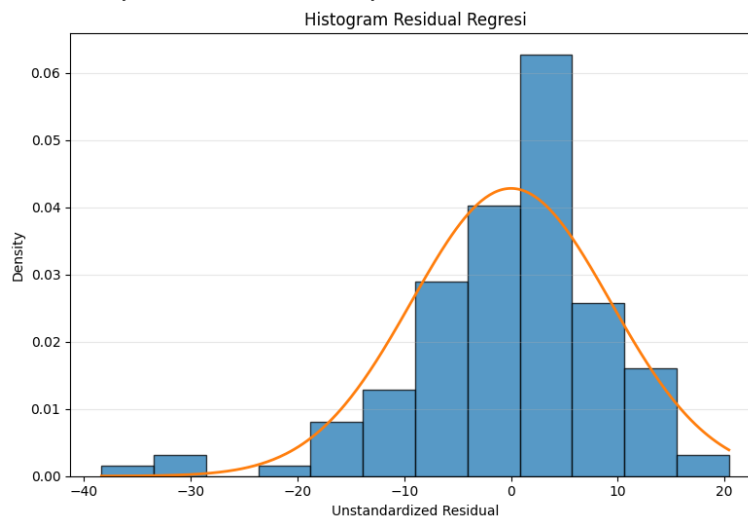


Figure 3. Regression Residual Histogram

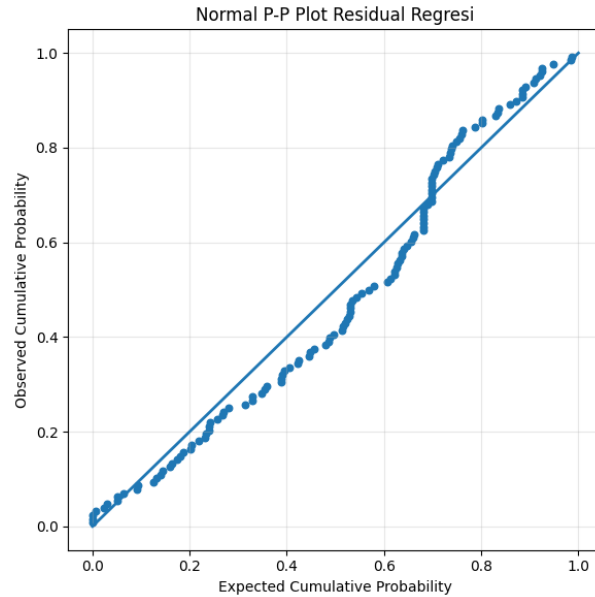


Figure 4. Normal P-P Plot of Regression Residual

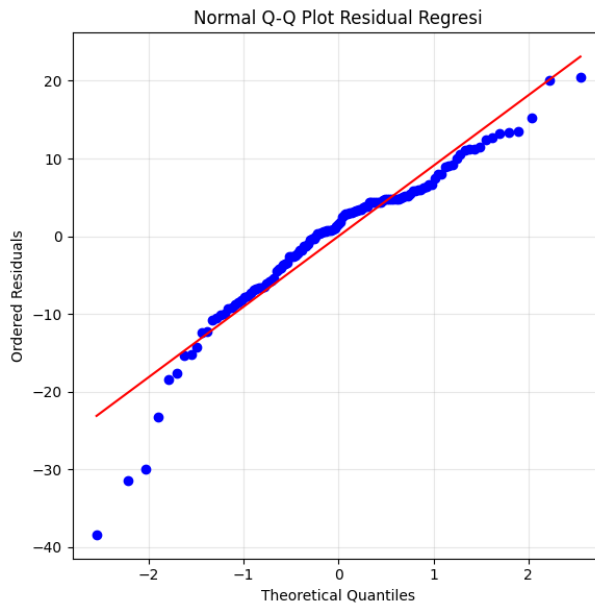


Figure 5. Q-Q Plot of Regression Residual

Based on the three diagrams, it can be concluded that the residual of the regression model is not fully normally distributed. Although the Kolmogorov-Smirnov test shows that the residuals are not statistically normally distributed, the regression analysis can still be continued with careful interpretation. This is because the sample size in this study

is relatively large, namely 127 respondents. In large samples, normality tests such as Kolmogorov-Smirnov tend to be very sensitive, so even small deviations from normality can produce significant results. In addition, in regression analysis, minor deviations from normality generally do not seriously disturb the stability of the regression model as long as the sample size is adequate and other classical assumptions are still acceptable. Therefore, the analysis was continued because the model still provides meaningful statistical information for explaining the relationship between historical thinking dimensions and students' critical thinking skills.

Multicollinearity Test

Table 6. Multicollinearity Test Results Based on Tolerance and VIF

Coefficients ^a		
Model		Collinearity Statistics
		Tolerance VIF
1	X1	.242 4.126
	X2	.195 5.135
	X3	.169 5.919

a. Dependent Variable: Y

Table 7. Collinearity Diagnostics

No.	Variabel	Tolerance	VIF	Keterangan
1.	X1	0,242	4,126	Tidak melewati batas kritis
2.	X2	0,195	5,135	Indikasi multikolinearitas sedang
3.	X3	0,169	5,919	Indikasi multikolinearitas sedang

Thus, the multicollinearity test results indicate that the regression model does not experience extreme multicollinearity based on the Tolerance and VIF values. However, there is an indication of moderate to fairly strong multicollinearity, especially between X2 and X3.

Hypothesis Testing

Table 8. Model Summary Results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.915 ^a	.837	.834	9.436652

a. Predictors: (Constant), Historical Perspective-Taking, Use of Primary Source Evidence, Cause and Consequence

The Adjusted R Square value of 0.834 means that 83.4% of the variation in Critical Thinking Skills can be explained by the three independent variables, namely Use of Primary Source Evidence, Cause and Consequence, and Historical Perspective-Taking.

Table 9. Regression Coefficients

Coefficients ^a				
Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.

	B	Std. Error	Beta		
(Constant)	-3.351	5.970		-.561	.576
1 Use of Primary Source Evidence	.329	.304	.080	1.081	.282
Cause and Consequence	1.730	.378	.377	4.577	<.001
Historical Perspective-Taking	1.963	.352	.492	5.568	<.001

a. Dependent Variable: Berpikir Kritis

Based on the Unstandardized Coefficients B value, the multiple linear regression equation can be written as follows:

$$Y = -3.351 + 0.329X_1 + 1.730X_2 + 1.963X_3.$$

Table 10. F Test / ANOVA Results

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	56441.100	3	18813.700	211.270	<.001 ^b
	Residual	10953.200	123	89.050		
	Total	67394.300	126			

a. Dependent Variable: Berpikir Kritis

b. Predictors: (Constant), Historical Perspective-Taking, Use of Primary Source Evidence, Cause and Consequence

Thus, Use of Primary Source Evidence, Cause and Consequence, and Historical Perspective-Taking simultaneously have a significant effect on Critical Thinking Skills.

Table 11. Summary of Hypothesis Testing Results

Variabel	Koefisien B	Sig.	Kriteria	Kesimpulan
X1 → Y	0,329	0,282	Sig. > 0,05	Tidak berpengaruh signifikan
X2 → Y	1,730	<0,001	Sig. < 0,05	Berpengaruh positif signifikan
X3 → Y	1,963	<0,001	Sig. < 0,05	Berpengaruh positif signifikan
X1, X2, X3 → Y	F = 211,270	<0,001	Sig. < 0,05	Berpengaruh signifikan secara simultan

Based on the summary table, it can be concluded that partially only the Cause and Consequence and Historical Perspective-Taking variables have a significant effect on Critical Thinking Skills. Meanwhile, the Use of Primary Source Evidence variable does not have a significant effect partially. The insignificant partial effect of Use of Primary Source Evidence on Critical Thinking Skills needs to be interpreted critically. Conceptually, the use of primary sources should support students' critical thinking because it trains them to examine evidence, identify bias, compare information, and construct historical arguments. However, in this study, X1 did not show a significant partial effect when tested together with Cause and Consequence and Historical Perspective-Taking. This may indicate that students'

engagement with primary sources has not yet become a strong independent predictor of critical thinking. One possible reason is the limited availability of primary historical sources in school learning, such as archives, historical documents, old photographs, newspapers, or local historical records that can be accessed directly by students.

Another possible explanation is that the teaching method for using primary sources is still developing. If primary sources are only presented as reading materials or illustrations, students may not yet be trained to analyze them deeply through sourcing, contextualization, and corroboration. As a result, the use of primary sources may not directly improve critical thinking unless it is accompanied by structured inquiry activities, guiding questions, document analysis worksheets, and classroom discussion. In contrast, Cause and Consequence and Historical Perspective-Taking may be more familiar to students because these dimensions are more often practiced in history lessons through explanation of events, discussion of historical actors, and interpretation of different viewpoints. Therefore, the non-significant result of X1 does not mean that primary source evidence is unimportant, but rather shows that its pedagogical implementation needs to be strengthened.

CONCLUSION

Based on the results of the study, it can be concluded that the historical thinking approach has a strong and significant effect on students' critical thinking skills in history learning at SMAN 1 Rongga. The three dimensions analyzed, namely Use of Primary Source Evidence, Cause and Consequence, and Historical Perspective-Taking, simultaneously contribute to students' ability to interpret, analyze, evaluate, and draw conclusions in history learning. However, the most dominant dimension is Historical Perspective-Taking, with a Beta value of 0.492, which is higher than Cause and Consequence and Use of Primary Source Evidence. This shows that students' ability to understand historical events from different perspectives, avoid anachronistic judgments, and interpret the context of historical actors plays the strongest role in developing critical thinking skills.

Therefore, history teachers are advised to give greater emphasis to Historical Perspective-Taking in classroom practice. Teachers can design learning activities that encourage students to compare different viewpoints, analyze the motives of historical actors, discuss the social context of past events, and reflect on how historical decisions were shaped by the conditions of their time. This strategy can help students move beyond memorizing historical facts toward deeper and more critical historical understanding.

This study also has limitations. First, the research was conducted only at SMAN 1 Rongga, so the findings cannot be generalized to all schools. Second, this study used a quantitative survey design, so it did not explore students' reasoning processes in depth. Third, the Use of Primary Source Evidence dimension was not significant partially, which indicates the need for further research on the availability of historical sources, teaching methods, and students' experience in analyzing primary documents. Future researchers are encouraged to use mixed methods and involve broader research locations.

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