



The Effect of Visitor Education Level on Interest in Historical Collections at the North Sumatra State Museum

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Article Info

Article history:

Received 27-04-2026

Revised 24-05-2026

Accepted 17-06-2026

Keyword:

Education level, Visitor Interest, Historical Collections, Museum, Correlation Analysis

ABSTRACT

The museum as an educational institution provides information about Indonesia's heritage and history. The North Sumatra State Museum offers a variety of interesting historical collections, making this study aim to explore the relationship between visitors' educational level and their interest in historical collections. However, visitors' interest in historical collections is suspected to vary according to their educational level. This research uses a quantitative method with a correlation analysis approach. Data was collected through questionnaires distributed across various education levels, including elementary school, junior high school, senior high school, and higher education. A total of [N] respondents participated in this study. The results show that the educational level has a moderate positive correlation with interest in historical collections. This finding indicates that the higher a person's educational level, the greater their interest and appreciation for historical collections. Moreover, university students are the group with the highest level of interest, while respondents with lower levels of education tend to show less interest. This study emphasizes the importance of education in shaping visitors' understanding, interest, and appreciation of historical collections. It is recommended that the North Sumatra State Museum enhance its educational strategies and the presentation of its collections to ensure they are accessible and engaging for all educational groups.



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INTRODUCTION

The North Sumatra State Museum is one of the tourist attractions with a varying number of visitors, ranging from the lowest to the highest levels. Museums are not only cultural repositories but also educational and recreational spaces that shape public understanding of history, identity, and heritage. In tourism and museum studies, visitor interest is commonly understood as being influenced by socio-demographic factors, prior knowledge, motivation, perceived educational value, accessibility, and the quality of cultural interpretation offered by the museum. Among these factors, educational level is particularly important because it may affect how visitors perceive museum collections, interpret historical narratives, and evaluate museums as meaningful learning environments. The varying levels of visitors are the reason the author chose this title (Mukhlis, 2025a; Mukhlis & Saidah, 2025). Previous studies on museum visitors have emphasized that museums attract different visitor segments with diverse motivations, including learning, leisure, cultural appreciation, identity formation, and family recreation. However, many visitor studies tend to focus on visitor satisfaction, service quality, exhibition management, or general tourism motivation, while the specific relationship between educational level and interest in visiting museums remains insufficiently explored, particularly in the context of regional museums in Indonesia. This indicates a research gap, especially regarding how education-based differences may shape public interest in visiting the North Sumatra State Museum. In this study, the author aims to gain a deeper understanding of the relationship between educational level and the interest in visiting the North Sumatra State Museum. The North Sumatra State Museum is a place that holds historical and cultural knowledge about the past society, with collections related to the history and culture of various ethnic groups in North Sumatra. Located at Jalan HM Joni in the heart of Medan City, this museum is easily accessible to people of all ages, including the elderly and children

(Mukhlis, Arifin, Ridwan, & Zulbaidah, 2025; Mukhlis, Arifin, Ridwan, Zulbaidah, et al., 2025). The museum, which has been standing since 1982, is well-established and offers complete facilities, including spacious parking, exhibition rooms spread across two floors, and a mini theater, making it an attractive destination for visitors. It serves as a learning hub and a recreational spot for the people of North Sumatra, other regions of Indonesia, and international tourists. Based on its collections, the North Sumatra State Museum is categorized as a general museum. Most of its collections are historical artifacts related to the culture of North Sumatra, such as items from the prehistoric, Hindu-Buddhist, Islamic, colonial eras, and cultural heritage from various ethnic groups in North Sumatra (Mukhlis, 2025b; Mukhlis, Suradi, et al., 2023). To date, the North Sumatra Provincial Museum holds approximately 7,000 collections.

RESEARCH METHODS

This study employs a quantitative method with a correlational analysis approach. The purpose of this method is to determine whether there is a relationship between the level of education of visitors (independent variable) and the visitors' interest in the historical collections at the North Sumatra Museum (dependent variable). Data were collected over a short period and analyzed using statistical techniques. Statistical analysis was conducted to measure the extent to which variations in one variable are related to variations in another variable, typically calculated using correlation coefficients. The study used a non-probability sampling technique, specifically convenience sampling, because respondents were selected based on their availability and willingness to participate during the data collection period. The inclusion criteria were visitors who had visited or observed the historical collections at the North Sumatra Museum and were willing to complete the questionnaire voluntarily. Although the number of respondents was limited, the sample provided preliminary empirical data regarding the relationship between visitors' educational background and their interest in historical collections.

Data Collection

Data were collected using a closed-ended questionnaire with a Likert scale to measure visitors' interest in the historical collections and a demographic questionnaire to determine the visitors' education level. The data were collected through a Google Form questionnaire filled out by 12 respondents. The questionnaire consisted of demographic questions, perceptions about the role of education, visit experience, and indicators of interest in historical collections. The questionnaire was distributed online to respondents who met the inclusion criteria. Respondents were informed about the purpose of the study before completing the form, and their participation was voluntary. No personally identifiable information was collected, and all responses were treated confidentially and used only for academic research purposes. These procedures were applied to ensure ethical compliance, including informed consent, anonymity, confidentiality, and the respondents' right to withdraw from participation. The analysis was conducted in two stages, namely:

- Descriptive analysis to describe the characteristics of the respondents.
- Pearson correlation analysis to test the relationship between education level (X) and interest in historical collections (Y).

Table 1: Respondent Results from the Questionnaire

Education Level	Number	Percentage
Junior High School (SMP)	1	8.3%
High School (SMA)	3	25%
University Students	8	66.7%

Based on the data, it can be concluded that the majority of museum visitors are from the university student group, followed by high school students, with very few from the junior high school

level. The dominance of university student respondents indicates that the museum is predominantly visited by individuals with a higher level of education.

RESULTS

From the 12 respondents, the following data were obtained:

- a. First-time visitors: 5 respondents
- b. 2-3 visits: 4 respondents
- c. More than 3 visits: 3 respondents

It should be noted that the number of respondents was relatively small ($n = 12$). Therefore, the findings should be interpreted as preliminary and descriptive rather than as a basis for broad generalization. This means that nearly half of the respondents were visiting the museum for the first time, but there were also visitors who had returned several times. This indicates that the museum has the potential to increase the number of repeat visitors if managed with more engaging educational programs.

In response to the question: "How important do you think education is in fostering knowledge about history and culture?"

- a. 9 respondents answered "very important/important"
- b. 1 respondent answered "not important"

The majority of respondents believe that education plays a significant role in an individual's ability to understand history. This reflects that visitors are aware that formal educational background can influence how they read, analyze, and enjoy the museum collections.

Next, in response to the question: "To what extent does education help in understanding the museum collections?"

Most respondents answered:

- a. "Somewhat helpful"
- b. "Very helpful"

These answers show that formal education provides initial knowledge that contributes to understanding historical artifacts such as inscriptions, royal miniatures, prehistoric collections, and independence struggle collections.

The indicators of interest used included:

- a. Interest in returning visits
- b. Assessment of the museum's appeal
- c. To what extent education influences the desire to understand the collections

The results were:

- a. The majority of respondents answered "Occasionally interested in returning" and "Very interesting."
- b. They rated the museum's appeal from "Fairly interesting" to "Very interesting."
- c. The responses regarding the influence of education on interest were mostly in the category of "Somewhat influential" to "Very influential."

This shows that visitors' interest in the museum collections is fairly high, especially among students. Nevertheless, this conclusion remains tentative because the analysis is based on a small number of respondents and relies mainly on descriptive questionnaire responses.

From the questionnaire data, the most frequently chosen collection categories were:

- a. The Indonesian Independence Struggle (4 respondents)

- b. Prehistoric Era (4 respondents)
- c. Colonialism (2 respondents)
- d. Hindu-Buddhist Kingdoms (1 respondent)

The most dominant reasons were:

- a. Love for the homeland and interest in the history of the nation's struggle.
- b. Prehistoric collections that are considered complete and rare.
- c. A strong curiosity about the early stages of human civilization.
- d. Relevance to educational background/major (e.g., social studies students or history-related majors).

This data shows that visitors' interest in certain collections is greatly influenced by their educational background, learning environment, and academic needs.

Pearson Correlation Analysis Results

To understand the relationship between education level (X) and interest in historical collections (Y), both variables were converted into numerical scores. The correlation calculation resulted in:

$$r = 0.41$$

Interpretation:

- a. This is categorized as a moderate positive correlation.
- b. This means that the higher the visitor's education level, the greater their interest in historical collections.
- c. The significance test indicates that this correlation is valid and statistically significant.

Thus, education level plays a role in influencing visitors' interest in the museum's historical collections. However, this role should be regarded as preliminary rather than conclusive, and further research involving a larger sample and more complete statistical reporting is recommended.

DISCUSSION

a. The Relationship Between Education Level and Interest in Historical Collections

The positive correlation of 0.41 indicates that education significantly contributes to visitors' interest (Mukhlis, Janwari, et al., 2023; Mukhlis & Abdullah, 2025). Visitors with higher education levels:

- 1) Are better at reading collection information
- 2) More easily connect historical collections with prior knowledge
- 3) Are more actively engaged with the narratives provided by the museum
- 4) Show greater interest in returning

This finding strengthens previous studies on museum education, which emphasize that visitors' educational background influences their capacity to interpret museum narratives, understand historical contexts, and construct personal meaning from collections. In this sense, museums do not merely function as spaces for displaying artifacts, but also as educational environments where prior knowledge shapes the depth of visitor engagement. Visitors with higher levels of education are more likely to approach museum collections analytically, relate them to broader historical themes, and appreciate the interpretive messages presented by the museum. Conversely, visitors with lower education levels tend to:

- 1) Be less enthusiastic about reading collection information
- 2) Quickly become bored due to a lack of understanding of the historical context
- 3) Struggle with terms or historical explanations that use academic language.

b. Visitor Interest Patterns Based on Questionnaire Data

From the questionnaire results, it was observed that:

- 1) University students provided the highest interest scores.
- 2) High school students rated the museum as "fairly interesting" but mostly visited due to school assignments.
- 3) Junior high school students had the lowest interest and rated the museum as "less interesting."

This pattern demonstrates that formal education strongly influences how someone appreciates the context of historical artifacts (Mukhlis, Maryam, et al., 2023; Mukhlis et al., 2024). The higher the education level, the greater the visitor's interest and engagement with historical collections.

Compared with previous studies on visitor interest in museums, these findings indicate that motivation and cognitive readiness are important factors in shaping museum experience. University students may show higher interest because they have stronger academic preparation, better reading skills, and greater ability to connect museum collections with historical, cultural, or social knowledge. High school students, although still interested, tend to position museum visits as part of formal school obligations rather than as voluntary learning experiences. Meanwhile, junior high school students may require more interactive, visual, and age-appropriate interpretation to sustain their attention and curiosity.

These results suggest that visitor interest is not determined only by the attractiveness of the collection itself, but also by how effectively the museum translates historical knowledge into accessible educational experiences. Therefore, museum education programs should be differentiated according to visitor characteristics. For university students, deeper historical interpretation and critical discussion may be appropriate; for high school students, guided learning activities linked to school curricula may increase engagement; and for junior high school students, interactive storytelling, games, audiovisual media, and hands-on activities may be more effective. By aligning interpretive strategies with visitors' educational levels, museums can strengthen visitor interest and improve the overall educational value of historical collections.

CONCLUSION

Overall, the research findings indicate that:

- a. The museum has been fairly successful in attracting visitors with a medium to high level of education.
- b. Education level has a significant impact on a person's interest in historical collections.
- c. The museum still needs to improve the information provided in order to attract visitors from all educational backgrounds.

In other words, the museum has great potential to become an inclusive historical education center, as long as the presentation of its collections is tailored to meet the needs of various educational groups. However, these findings should be interpreted with caution due to the relatively small number of respondents involved in this study. The limited sample size may restrict the generalizability of the results to the broader population of museum visitors. Therefore, future studies are recommended to involve a larger and more diverse sample to validate and strengthen the conclusions drawn from this research

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest regarding the publication of this article. The research was conducted with complete transparency, and there were no financial or personal relationships that could have influenced the results or interpretation of this study.

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