

THE CORRELATION BETWEEN STUDENTS' LEARNING STYLES AND STUDENTS' SPEAKING ACHIEVEMENT

Firdathun Jannah¹, Slamet Asari², Nirwanto Maruf^{*3}
^{1,2,3} Universitas Muhammadiyah Gresik, East Java, Indonesia
firdathunj@gmail.com¹

Abstract: Language learning is a multifaceted process influenced by various individual factors, including learning styles. Understanding the potential correlation between students' learning styles and their language proficiency is crucial for developing effective language teaching strategies. The primary objective of this research is to investigate whether there is a significant correlation between students' learning styles and their speaking achievement. To examine the correlation between learning styles and speaking achievement, a comprehensive speaking proficiency test was administered to 43 students. The VARK questionnaire was used to identify the prevalent learning style preferences among the participants, including Kinesthetic, Auditory, and Visual learning styles. Pearson's correlation coefficient was employed to analyze the relationship between learning styles and speaking achievement. Surprisingly, the analysis revealed no significant correlation between learning styles and speaking achievement ($r = -0.12$, $p > 0.05$). Further examination of specific learning style categories indicated that there was no significant correlation between speaking achievement and the Kinesthetic, Auditory, or Visual Learning Style preferences. These findings highlight the importance of considering multiple factors, beyond learning styles, that influence language proficiency. Language educators should adopt a comprehensive approach, incorporating diverse instructional strategies to cater to the unique needs of each student. Future research should explore the relationship between learning styles and other language skills and delve deeper into individual differences in language learning..

Keywords: Learning styl;, Students' speaking achievement; Speaking proficiency.

INTRODUCTION

In the realm of education, understanding how students learn and acquire language skills is of paramount importance to educators and researchers alike. Among the essential language skills, oral communication, particularly speaking proficiency, plays a pivotal role in students' ability to express themselves effectively and engage in meaningful interactions (Humaira, 2023; Wagner, 2019; Raju et al., 2020). The correlation between students' learning style and their speaking achievement has been an intriguing subject of inquiry, as it has the potential to offer valuable insights into tailoring language instruction to individual

students' needs, ultimately enhancing their language learning outcomes.

Language learning is a dynamic and multifaceted process influenced by numerous factors, with learning style being a prominent aspect that shapes the way students absorb and process information (Ayu, 2020; Rahwanda, Yufrizal, 2017; Rachma et al., 2015; Setiowati, 2019). By identifying the dominant learning styles among students, educators can develop more effective and personalized language teaching methods that align with students' preferences (Parwati et al., 2014; Aprilia et al., 2022; Hadi et al., 2021; Anwar et al., 2023). Additionally, understanding the correlation between learning style and speaking achievement can assist in providing targeted support to

struggling students and maximizing the potential of students with specific learning preferences (R. Aboe, 2019; Halim et al., 2021; Sari & Teaching, 2018; Udiyono & Yuwono, 2018; Arifin et al., 2022).

The current state of research in this field suggests that individuals have diverse learning styles, encompassing visual, auditory, kinesthetic, and other modalities. The literature has highlighted that when instruction caters to learners' preferred styles, students tend to be more engaged and motivated, resulting in improved language learning outcomes (Aboe, 2018; Agusta, 2019; Judul et al., 2015; Maruf & Helingo, 2022). However, the extent to which learning style impacts students' speaking achievement remains a subject of debate and warrants further exploration (Ghorbani, 2012; Gunawardena & Boverie, 1993; Ling et al., 2017; Mahshid et al., 2013; Zapalska & Brozik, 2006).

Numerous studies have examined the relationship between learning style and language learning outcomes across different educational settings. The research conducted by (Rahmawati et al, 2021) entitle the effect of learning style bases activities on reading achievement of nursing students. It aimed to examine the impact of learning styles-based activities on the reading achievement of nursing academy students and the congruence between post-test results and questionnaire responses. The participants were fourth-semester students at Bunda Delima nursing academy in Bandar Lampung, selected purposefully based on their learning style preferences using a questionnaire and reading test. Data were collected from three post-tests and

questionnaires. The results indicated that there was no significant difference in students' reading achievement after being taught using activities tailored to a specific learning style. However, it was observed that conducting activities based on students' learning style preferences helped them better comprehend the material. Additionally, the study found congruence between the post-test results and the questionnaire responses. The weakness in this study lies in the sample size and the limited focus on only one nursing academy. Generalizing the findings to a broader population of nursing students may be challenging. Additionally, the study could have benefited from a control group to better assess the effectiveness of learning styles-based activities on reading achievement. Furthermore, the research did not delve deeper into the specific types of learning styles or the methods used in the activities, which could have provided more insights into their impact on reading achievement. Overall, while the study provides valuable information about the impact of learning styles-based activities, it would benefit from further refinement to strengthen its generalization and depth of analysis.

Another research conducted by (Setiowati, 2019) entitle Identifying Students' Learning Styles on Reading Comprehension Achievement. This study aimed to investigate the relationship between students' learning styles and their reading comprehension achievement. It adopted a descriptive quantitative research design with a case study approach. The research sample consisted of 20 students from the second semester reading class at IAIN Metro. Data collection involved the use of a learning style questionnaire and a

reading comprehension test. The researcher categorized the learning styles based on the questionnaire responses and compared the mean scores of the reading comprehension test manually using percentages. The findings revealed that the students had three types of learning styles: visual (45%), auditory (30%), and kinesthetic (25%), with visual being the most dominant. The mean scores of the reading comprehension test were 79.2 for visual, 70.8 for auditory, and 65 for kinesthetic learners. The weakness of the study is the use of a single reading comprehension test as the only measure of reading achievement. Reading comprehension is a complex skill that involves various cognitive processes and strategies. Relying on a single test might not fully capture the students' overall reading abilities and may not reflect their true comprehension skills accurately.

Additionally, the study did not consider other potential confounding variables that could influence the relationship between learning styles and reading comprehension. Factors such as prior reading experience, language proficiency, and teaching methods could also play a significant role in students' reading comprehension achievement. Ignoring these variables may limit the validity and generalizability of the findings. Furthermore, the research only focused on students from a single institution and a specific semester. The results may not be applicable to students from other educational settings or different academic levels. A more diverse and representative sample could enhance the external validity of the study.

This current study aims to investigate the prevalent learning styles among 8th-grade

students at SMP Muhammadiyah 4 Giri Gresik, and explore whether a significant correlation exists between their learning styles and speaking achievement. Through this study, the researchers aim to shed light on the diverse learning styles exhibited by students at SMP Muhammadiyah 4 Giri Gresik and explore how these styles may influence their oral communication skills. By understanding these relationships, educators can better design instructional strategies that cater to individual preferences, ultimately leading to enhanced speaking proficiency and more engaged language learners.

In conclusion, this research delves into the intriguing interplay between learning style and speaking achievement, contributing to the broader field of language education. The findings of this study provide valuable insights for educators, curriculum designers, and policymakers in creating learner-centered language programs that optimize students' language learning experiences. Moreover, it contributes to the ongoing discussions regarding the practical implications of incorporating learning style considerations in language instruction.

METHOD

Research Design and Participants

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discussions regarding the practical implications of incorporating learning style considerations in language instruction.

Participants in this study were randomly selected 8th-grade students from SMP Muhammadiyah 4 Giri Gresik. A diverse sample was ensured to represent various learning style preferences among the students.

Data Collection

To assess students' learning styles, the VARK questionnaire was employed. The questionnaire measured individuals' preferences for information processing and learning modalities, categorizing them into visual, auditory, reading/writing, and kinesthetic learners.

In addition to learning style preferences, students' speaking achievement was evaluated through a comprehensive speaking proficiency test. This test included tasks that assessed fluency, pronunciation, vocabulary usage, and overall communicative competence.

Data collection occurred in two phases. In the first phase, the VARK questionnaire was administered to all participating students in a supervised classroom setting. Students were given ample time to complete the questionnaire. In the second phase, each student underwent an individual speaking proficiency test, which was administered by trained language teachers to ensure consistency and reliability. The speaking test sessions were recorded for later analysis. The data obtained from the VARK questionnaire and speaking proficiency test were subjected to rigorous analysis. The frequencies of learning style preferences were calculated,

identifying the prevalent learning styles among the 8th-grade students at SMP Muhammadiyah 4 Giri, Gresik.

Data Analysis

Furthermore, the scores from the speaking proficiency test were analyzed using descriptive statistics, such as mean and standard deviation, to gain insights into the students' overall speaking performance. To investigate the correlation between students' learning styles and speaking achievement, a correlational analysis was conducted. Pearson's correlation coefficient was utilized to determine the strength and direction of the relationship between these variables. Additionally, statistical tests were employed to assess the significance of the correlation. In cases where controversial or diverging hypotheses emerged from the literature review, subgroup analyses were conducted to explore potential differences in speaking achievement among students with different learning style preferences.

RESULTS

Prevalent Learning Styles Among 8th Grade Students at SMP Muhammadiyah 4 Giri Gresik.

The prevalence of learning styles among the 8th-grade students at SMP Muhammadiyah 4 Giri Gresik sheds light on the diverse ways in which these students process information and engage with the learning material. Understanding these preferences is crucial for educators as it enables them to tailor their teaching approaches to accommodate the individual needs of each student, ultimately optimizing the learning

experience.

Table 1. Students' learning styles prevalence

Learning Style	Percentage of Students
Kinesthetic	48%
Auditory	30%
Visual	22%

The Kinesthetic Learning Style emerged as the most dominant preference among the participants, with 48% of the students exhibiting a preference for this modality. Kinesthetic learners thrive when they can physically engage with the subject matter, making use of their body movements and hands-on experiences to grasp and retain information. These students are often characterized as active learners who benefit from interactive activities, role-playing, and real-life simulations.

The second most dominant learning style preference was the Auditory Learning Style, with 30% of the students expressing a preference for auditory-based learning. Auditory learners excel when information is presented through verbal means, such as lectures, discussions, and audio recordings. They are skilled listeners who can absorb information effectively through verbal instructions and explanations.

The Visual Learning Style was the third most common preference among the students, with 22% of the participants demonstrating a preference for visual learning methods. Visual learners learn best when information is presented through images, graphs, diagrams, and visual aids. They have a strong capacity for visualizing concepts and patterns, making connections between ideas through visual representation.

Students' Speaking Achievement.

The students' speaking achievement was evaluated using a comprehensive speaking

proficiency test. The assessment covered four key aspects: fluency, pronunciation, vocabulary usage, and overall communicative competence. The scores ranged from 1 (poor) to 5 (excellent), representing different levels of proficiency in oral communication. Below is the recapitulation table summarizing the data on students' speaking achievement:

Table 2. Recapitulation of students' speaking achievement.

Aspect	Mean Score	Min. Score	Max. Score	Std.
Fluency	3.6	2.0	5.0	0.84
Pronunciation	3.6	2.0	5.0	0.89
Voc. Usage	3.3	2.0	5.0	0.92
Communicative Competence	3.6	2.0	5.0	0.86
Overall Score	3.5	2.5	4.7	0.67

The recapitulation table provides a comprehensive overview of the data collected from the comprehensive speaking proficiency test conducted among 43 students from the 8th grade of SMP Muhammadiyah 4 Giri Gresik. The table presents valuable insights into students' speaking achievement in various aspects, including fluency, pronunciation, vocabulary usage, and overall communicative competence.

The mean scores reveal that, on average, the students obtained a moderate level of proficiency in their speaking abilities. The fluency and pronunciation mean scores of 3.6 suggest that students

generally expressed themselves coherently and articulated words with reasonable accuracy. The average vocabulary usage score of 3.3 indicates that students demonstrated a diverse range of words in their communication. Additionally, the mean score of 3.6 for overall communicative competence reflects a satisfactory level of language proficiency in real-life communication situations.

The range of scores, represented by the minimum and maximum values, highlights the diversity of students' performance. The minimum scores of 2.0 indicate that some students scored at the lower end of the proficiency scale in specific aspects, while the maximum scores of 5.0 indicate that other students excelled in certain areas, achieving an excellent level of performance.

The standard deviation values offer insights into the consistency of students' scores. Higher standard deviations suggest greater variability in performance, indicating that some students displayed more diverse proficiency levels across the assessed aspects. On the other hand, lower standard deviations suggest more consistent scores, with students demonstrating similar levels of proficiency in specific areas.

Overall, the data in the table portrays a well-rounded picture of students' speaking abilities, providing educators and researchers with valuable information to guide instructional decisions. It indicates that the students possess a reasonable level of speaking proficiency, but there is variation in their performance across different aspects. This data serves as a foundation for further analysis and targeted language interventions

to support students in areas where improvement is needed, ultimately enhancing their overall language proficiency and communication skills.

Correlation Between Learning Styles and Speaking Achievement.

This study also investigated the potential correlation between students' learning styles and their speaking achievement using a Pearson's correlation coefficient. Surprisingly, the analysis demonstrated no significant correlation between learning styles and speaking achievement ($r = -0.12$, $p > 0.05$).

Further examination of the specific learning style categories yielded the following results: (1) Kinesthetic Learners: For students who preferred the Kinesthetic Learning Style, no significant correlation was found between their learning style preference and their speaking achievement ($r = -0.07$, $p > 0.05$). This result implies that a preference for learning through physical engagement and hands-on activities did not significantly impact their speaking proficiency. (2) Auditory Learners: Similarly, there was no significant correlation observed between students who favored the Auditory Learning Style and their speaking achievement ($r = 0.09$, $p > 0.05$). This finding suggests that students who excel in auditory-based learning, such as through lectures and oral explanations, did not necessarily demonstrate higher speaking proficiency. (3) Visual Learners: Likewise, no significant correlation was identified between students with a preference for the Visual Learning Style and their speaking achievement ($r = -0.05$, $p >$

0.05). This result indicates that students who learn best through visual aids, did not exhibit a significant advantage in their speaking abilities.

Table 3. Correlation between students' learning styles and their speaking achievement.

Learning styles	Correlation coefficient (r)	Significance level (p-value)
Visual	0.05	> 0.05
Auditory	0.09	> 0.05
Kinesthetic	0.07	> 0.05

DISCUSSION

The purpose of this study was to explore the potential correlation between students' learning styles and their speaking achievement among 8th-grade students at SMP Muhammadiyah 4 Giri Gresik. Surprisingly, the analysis using Pearson's correlation coefficient revealed no significant correlation between learning styles and speaking achievement ($r = -0.12, p > 0.05$). These findings contradict some earlier studies that suggested a possible relationship between learning styles and language learning outcomes (Colley & Comber, 2016; Naiman et al., 1978). However, they align with more recent research that also found limited or no association between learning styles and language proficiency (Pashler et al., 2008; Rogowsky et al., 2015).

Further examination of specific learning style categories yielded similar results. There was no significant correlation

between speaking achievement and the Kinesthetic Learning Style ($r = -0.07, p > 0.05$), Auditory Learning Style ($r = 0.09, p > 0.05$), or Visual Learning Style ($r = -0.05, p > 0.05$). These findings indicate that students' speaking abilities were not significantly influenced by their preferred learning styles.

The lack of significant correlations between learning styles and speaking achievement may be attributed to the complexity of language learning. Language proficiency involves multiple cognitive processes and skills beyond individual learning style preferences. The results align with cognitive theories (Kirschner et al., 2018; Schunk & DiBenedetto, 2020) that propose limited influence of learning styles on academic performance, including language learning outcomes. Additionally, they support constructivist theories of language acquisition (Vygotsky, 2019), suggesting that language development is shaped by social interaction and cultural context rather than individual learning style preferences.

Moreover, the findings resonate with the socio-educational model proposed by Gardner (1985), which emphasizes the role of motivation, language aptitude, and attitudes toward language learning in language learning outcomes. Individual differences may play a more significant role in language proficiency than learning style preferences.

Practically, the results suggest that tailoring language instruction solely based on students' learning style preferences may not significantly impact their speaking proficiency. Instead, educators should adopt a more comprehensive approach that considers various factors influencing

language learning, such as learner motivation, language exposure, and individual differences (Maruf & Anjely, 2020; Zuhri et al., 2021).

While the study provides valuable insights, it has limitations. The research was conducted in a specific context with a limited sample size, and generalizability to other populations or educational settings may be limited. Additionally, the study focused only on speaking achievement, and further research is needed to explore potential correlations with other language skills.

In conclusion, the study did not find a significant correlation between students' learning styles and their speaking achievement. The results challenge the notion that learning style preferences strongly influence language learning outcomes. The discussion explored theoretical aspects to interpret the findings, highlighting the dynamic and multifaceted nature of language acquisition. The results underscore the importance of considering various factors beyond learning styles in language instruction and contribute to discussions on effective language teaching methodologies. Further research can explore individual differences, language learning strategies, and language proficiency to provide more comprehensive insights for language educators and researchers.

CONCLUSION

The primary objective of this study was to investigate the potential correlation between students' learning styles and their speaking achievement among 8th-grade students at SMP Muhammadiyah 4 Giri Gresik. The analysis, utilizing Pearson's

correlation coefficient, revealed no significant correlation between learning styles and speaking achievement. Specifically, there was no significant correlation between speaking achievement and the Kinesthetic Learning Style, Auditory Learning Style, or Visual Learning Style.

The study's findings contribute to the existing literature on the relationship between learning styles and language learning outcomes. Contrary to some earlier studies (Gonzalez & Rivas, 2021) that suggested a possible connection between learning styles and language proficiency, the results of this research align with more recent studies that found limited or no association between learning styles and academic performance, including language proficiency. This indicates that students' speaking abilities are not significantly influenced by their preferred learning styles.

This study suggests that language proficiency is a complex process influenced by various factors beyond learning style preferences. Constructivist theories of language acquisition emphasize the role of social interaction and cultural context in language development, while the socio-educational model underscores the significance of motivation, language aptitude, and attitudes toward language learning. Therefore, educators should adopt a comprehensive approach that considers multiple factors influencing language learning outcomes.

While this study provides valuable insights, it is not without limitations. The research was conducted in a specific educational setting with a limited sample size, which may impact the generalizability

of the findings to other populations or contexts. Moreover, the study focused solely on speaking achievement, and future research should explore potential correlations with other language skills, such as listening, reading, and writing.

In conclusion, the results of this study indicate no significant correlation between students' learning styles and their speaking achievement. This highlights the need for a more holistic approach to language instruction, taking into account individual differences, language exposure, motivation, and other influential factors. Language educators should consider diverse instructional strategies that cater to the unique needs of each student, rather than relying solely on learning style preferences.

Looking to the future, further research should delve deeper into individual differences in language learning, the impact of language learning strategies on language proficiency, and the effectiveness of tailored language interventions. Additionally, exploring the relationship between learning styles and other language skills will contribute to a more comprehensive understanding of language development.

In conclusion, this study contributes to the field of language education by shedding light on the complexities of language learning and emphasizing the importance of considering a range of factors beyond learning styles. The findings serve as a stepping stone for future research and the development of more effective language teaching methodologies to enhance language proficiency and communication skills among students.

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