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The Correlation between Extraversion and Speaking Achievement in Indonesian EFL Senior High School Students

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ABSTRACT

Speaking achievement is influenced by various psychological factors that shape learners' confidence and willingness to communicate in English. Among these factors, extraversion has been recognized as a personality trait associated with language learning success. Therefore, this study investigated the relationship between extraversion and speaking achievement among EFL senior high school students. A quantitative correlational research design was employed. The participants consisted of 117 tenth-grade students enrolled in the 2025/2026 academic year, selected through purposive sampling. Data were collected using the Eysenck Personality Inventory (EPI) and an English-Speaking performance test. The data were analyzed using Spearman's Rank Correlation Coefficient. The findings revealed no significant correlation between extraversion and speaking achievement ($r = 0.134$, $p = 0.150$). Descriptive analysis also indicated that participants generally exhibited a fairly extroverted personality and very good speaking achievement. These findings suggest that students with higher levels of extraversion did not necessarily achieve higher speaking scores. Therefore, personality should be considered one of several factors influencing speaking achievement in English Language teaching.
Keywords: correlational research, EFL learners, extraversion, speaking achievement

Introduction

Speaking is one of the most important skills in language learning, as it enables individuals to express their thoughts, ideas, and feelings orally. As stated by Suharja (2020) and Uzer (2017), speaking is not merely about producing sounds but also about conveying meaning clearly and appropriately. Without adequate speaking skills, misunderstandings may easily occur (Paradilla et al., 2020). As a productive skill, speaking reflects a learner's ability to convey meaning appropriately, coherently, and fluently within a given context (Febrianti et al.). Its primary purpose is communication, which involves sending and receiving messages between two or more people to ensure that the intended meaning is understood. Therefore, effective communication requires speakers to have a clear understanding of what they intend to convey and to express their messages in a clear, coherent, and appropriate manner. Overall, speaking plays a crucial role in language learning because it enables learners to communicate their intended meanings effectively in various contexts.

Through speaking, students can share opinions, offer suggestions, and ask questions verbally (Putra, 2018). According to Mulyanto et al. (2022), speaking functions as a form of "nutrition" for communication, enabling individuals to understand and interact with others, including strangers and speakers of foreign languages. Thus, developing speaking skills is essential for meaningful interaction and effective communication. Kadamovna (2021) emphasizes that speaking enables individuals to communicate their ideas effectively while also understanding others, highlighting its crucial role in language learning. Moreover, effective conversational skills matter in both academic and professional environments because they allow individuals to articulate ideas clearly, participate actively in meaningful discussions, and build self-efficacy and confidence, particularly in second-language contexts (Nasution & Nissa, 2024). In other words, speaking skills are essential not only for successful language learning but also for enabling individuals to communicate confidently and effectively in various social, academic, and professional contexts.

Clear self-expression improves teamwork and collaboration. It reflects a person's cultural values and identity. These elements help strengthen social cohesion. From a cognitive perspective, speaking also promotes higher-order thinking, as verbalizing ideas can enhance articulation, critical thinking, and problem-solving skills (Harkusha, 2023). Thus, speaking serves not only as a means of communication but also as a vital component of cognitive development, language proficiency, and social interaction. In conclusion, developing speaking skills can contribute to learners' ability to think critically, interact effectively with others, and participate confidently in various social and academic contexts.

Preliminary observations at SMA Negeri 1 Tanjung Raja indicate that many tenth-grade students are interested in learning English and actively participate in speaking activities; however, their speaking performance varies considerably. Some students speak confidently and fluently, whereas others tend to be shy, anxious, or reluctant to speak even when they understand the material. These personality differences may influence students' willingness to communicate and, consequently, their overall speaking performance.

One important personality factor that may influence students' speaking performance is extraversion, a trait associated with sociability, talkativeness, and comfort

in social interactions. Extraversion refers to the degree to which individuals engage with the external world and encompasses characteristics ranging from outgoing and socially active behavior to more reserved tendencies (Redelmeier et al., 2021). Research has also highlighted the role of extraversion in oral communication. According to Raamkumar et al. (2024), individuals with high levels of extraversion tend to be sociable and outgoing. This trait has been positively associated with engagement, enjoyment, and achievement in the language learning process. Moreover, students with higher levels of extraversion tend to demonstrate stronger verbal abilities and greater self-confidence during social interactions (Akyldiz & Kaya, 2023; Hermagustiana et al., 2021). These findings suggest that extraversion may play an important role in shaping students' participation and performance in speaking activities.

Extraversion is commonly characterized by a strong tendency toward sociability, with extraverted individuals generally enjoying interaction with others, feeling energized in group settings, and displaying talkative and gregarious behaviors (Smillie et al., 2015). These social tendencies may also contribute to their experience of more positive emotions and greater overall happiness. In addition to sociability, assertiveness is another important component of extraversion. Extraverted individuals are generally confident communicators who are willing to express their opinions and comfortable taking the lead in social situations. Such characteristics may encourage them to participate more actively in classroom interactions and express their ideas more confidently when speaking English. Therefore, understanding the relationship between extraversion and speaking performance is important for identifying how students' personality traits may contribute to differences in their English-speaking abilities.

Recent studies have also explored how extraversion contributes to various aspects of communication and performance. Researchers have found that extraverted individuals often perform well in collaborative and interactive settings, using their communication strengths to foster effective team dynamics (Darr et al., 2018). Beyond classroom interactions, extraversion has also been found to play a role in public speaking (Bahtera & Ribhan, 2025). In addition, extraverted individuals tend to manage anxiety more effectively, which may result in more positive speaking experiences (Jackson et al., 2017). Overall, these findings suggest that extraversion can contribute to greater confidence and more effective performance across various communication contexts. Thus, the characteristics associated with extraversion may provide learners with advantages when participating in speaking activities that require active interaction and verbal expression.

Research also indicates that assertive behaviors associated with extraversion may contribute to leadership roles and positive social influence (Green et al., 2018). In broader contexts, extraverted individuals also tend to be more active participants in workplace and community environments. They frequently engage in cooperative tasks, contribute enthusiastically to group activities, and participate in social or community programs (Hanif, 2019). These tendencies demonstrate that extraversion extends beyond individual communication preferences and influences how individuals interact and participate in social environments. In the educational context, understanding extraversion can therefore help teachers recognize differences in how students participate, interact, and communicate during speaking activities.

Although previous studies have examined the relationship between extraversion and speaking performance, their findings remain inconclusive. Some studies have reported

that extraverted learners tend to demonstrate better speaking performance because of their greater willingness to communicate and higher levels of confidence, whereas others have found weak or insignificant relationships between personality traits and speaking achievement. Furthermore, research focusing specifically on Indonesian EFL senior high school students remains limited. Therefore, further investigation is needed to clarify the relationship between extraversion and speaking achievement in this context. Therefore, this study aims to investigate the correlation between extraversion and speaking achievement among Indonesian EFL senior high school students. By examining this relationship, the study is expected to provide a clearer understanding of whether students' levels of extraversion are associated with their achievement in English speaking.

Methods

The research method used in this study was a quantitative method with a correlational research design. The study examined two variables: extraversion and speaking achievement. Extraversion served as the predictor variable, while speaking achievement served as the criterion variable. The population of this study consisted of all tenth-grade students at SMA Negeri 1 Tanjung Raja in the 2025/2026 academic year. The sample was selected from the same population and consisted of students from classes X.6, X.7, X.8, and X.9, with a total of 117 students. Thus, the study focused on examining the relationship between students' levels of extraversion and their English-speaking achievement.

In this study, a purposive sampling technique was employed, which involves selecting participants based on specific criteria (Sugiyono, 2019). The participants were selected based on their enrollment as tenth-grade students at SMA Negeri 1 Tanjung Raja who were taking English lessons and had been taught recount texts. Based on these criteria, classes X.6, X.7, X.8, and X.9 were selected as the sample. The total number of participants involved in this study was 117 students. Therefore, the selected participants were considered appropriate for investigating the relationship between extraversion and speaking achievement in the context of English language learning.

The instruments used for data collection consisted of an extraversion questionnaire and an oral speaking test. The first instrument was the Eysenck Personality Inventory (EPI), which was adapted from Sangkala (2012) to measure students' levels of extraversion. The second instrument was an oral test in the form of a performance task designed to assess students' speaking achievement. In this test, students were asked to deliver a spoken recount text. Their speaking performance was evaluated using an analytical scoring rubric adapted from Ismalia (2021). These instruments were selected to obtain quantitative data on both students' extraversion levels and their speaking achievement.

The validity of the extraversion questionnaire was established based on a previously developed and validated instrument. Meanwhile, the validity of the speaking test was established through content validity. To ensure the content validity of the speaking test, the English syllabus and table of specifications were used as references to ensure that the test content was relevant to the learning objectives and the students' level of proficiency. The reliability of the speaking assessment was examined using the Intraclass Correlation Coefficient (ICC), which is used to measure the degree of agreement, consistency, and reliability among ratings (Bujang & Baharum, 2017). Therefore, the validity and reliability

procedures were conducted to ensure that the instruments were appropriate for collecting accurate and consistent data.

The collected data were analyzed using correlation analysis to determine the relationship between extraversion and speaking achievement. Before conducting the correlation analysis, the data were tested to determine whether the assumptions of correlation analysis were satisfied, including the normality of each variable and the linearity of the relationship between the variables. The results showed that the data were not normally distributed. Therefore, Spearman's rank-order correlation was used to analyze the relationship between extraversion and speaking achievement. This statistical procedure was appropriate because Spearman's correlation does not require the data to meet the assumption of normality and can be used to determine the strength and direction of the relationship between two variables.

Findings and Discussion

Based on the data collected through the questionnaire, the findings of the study are presented in Table 1. The questionnaire was administered to the selected sample using a yes/no response format.

Table 1. The Results of Data Collection Using a Questionnaire

No.	Statements	Yes	No
1.	Are you a talkative person?	48.7%	51.3%
2.	Are you a cheerful Person?	85.5%	15.5%
3.	Do you make friends easily?	79.5%	20.5%
4.	Do you know how to get people to have fun?	82.9%	17.1%
5.	Are you an energetic person?	68.4%	31.6%
6.	Do you enjoy meeting new people?	82.1%	17.9%
7.	Do you enjoy social gatherings?	73.5%	26.5%

To determine the level of extraversion among the tenth-grade students, the Eysenck Personality Inventory (EPI) questionnaire was administered to 117 students. The questionnaire was used to identify the students' levels of extraversion based on their responses to the items provided. The results were then categorized into five levels: extremely introverted, fairly introverted, balanced, fairly extraverted, and extremely extraverted. The frequency and percentage of students in each category are presented in Table 2.

Table 2. The Results of Extraversion (N=117)

Score Interval	Level of Extraversion	Frequency	Percentage
0-1	Extremely Introvert	10	8.5 %
2-3	Fairly Introvert	13	11.1 %
4	Balance	5	4.3 %
5-6	Fairly Extrovert	58	49.6 %
7	Extremely Extrovert	31	26.5 %
	Total	**117**	**100 %**

Based on Table 2, 10 students (8.5%) were categorized as extremely introverted, while 13 students (11.1%) were categorized as fairly introverted. In addition, 5 students

(4.3%) were classified as balanced. Meanwhile, 58 students (49.6%) were categorized as fairly extraverted, representing the highest proportion of the sample. Furthermore, 31 students (26.5%) were categorized as extremely extraverted. Overall, 89 students (76.1%) were classified as either fairly extraverted or extremely extraverted. These findings indicate that the majority of tenth-grade students at SMA Negeri 1 Tanjung Raja tended to have extraverted personalities.

To provide a more detailed description of the students' extraversion levels, descriptive statistical analysis was conducted on the questionnaire data obtained from the 117 participants. The analysis presents the minimum and maximum scores, mean, median, standard deviation, and other relevant descriptive statistics of students' extraversion scores. The descriptive statistics are presented in Table 3.

Table 3. Descriptive Statistics of Students' Extraversion (N=117)

	N Statistic	Min Statistic	Max Statistic	Mean Statistic	Std. Deviation Statistic	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
Extraversion	117	.00	7.00	5.21	1.96	-1.238	.224	.407	.444
Valid N (listwise)	117								

As shown in Table 3, the mean score of students' extraversion was 5.21, with a standard deviation of 1.96. The scores ranged from a minimum of 0.00 to a maximum of 7.00. These findings indicate that, on average, the students tended to demonstrate extraverted characteristics.

To determine the students' speaking achievement, an oral speaking test was administered to students in which the students were asked to deliver a recount text. Their performances were assessed using an analytical scoring rubric covering relevant aspects of speaking performance. The students' speaking scores were then categorized according to the predetermined score intervals. The frequency and percentage of students in each category are presented in Table 4.

Table 4. The Results of Speaking Achievement (N=117)

Category	**Score Interval**	**Frequency**	**Percentage**
Excellent	91 – 100	2	1.7 %
Very Good	81 – 90	69	59.0 %
Good	71 – 80	46	39.3 %
Fair	61 – 70	0	0 %
Poor	50 – 60	0	0 %
Total		**117**	**100 %**

Table 4 presents the distribution of students' scores based on achievement categories. The data show that 2 students (1.7%) were classified in the excellent category. Furthermore, 69 students (59.0%) were categorized as very good, while 46 students (39.3%) fell into the good category. Meanwhile, no students were classified in the fair category (0%), and no students were categorized as poor (0%).

These findings indicated that the students generally demonstrated high achievement levels, as all of them were categorized as good, very good, or excellent, with no students falling into the lower achievement categories.

To provide a more detailed overview of the students' speaking achievement, descriptive statistical analysis was conducted on the speaking test scores obtained from the 117 participants. The analysis presents the minimum and maximum scores, mean, standard deviation, and other relevant descriptive statistics. The descriptive statistics of the students' speaking achievement are presented in Table 5.

Table 5. Descriptive Statistics of Speaking Achievement

	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
Speaking	117	75.70	94.40	82.3	3.70	.602	.224	.256	.444
Valid N (listwise)	117								

Table 5. shows that the highest score among all participants was 94.4, and the lowest was 75.7. The cumulative mean for 117 participants was 82.3 with a standard deviation of 3.70, which could generally be categorized as very good.

After presenting the descriptive statistics of students' extraversion and speaking achievement, the researcher conducted a correlation analysis to determine whether a relationship exists between the two variables. Because the data were not normally distributed, Spearman's rank-order correlation was used to examine the strength and direction of the relationship between students' extraversion and speaking achievement. The results of the correlation analysis are presented in Table 6.

Table 6. Correlation between Extraversion and Speaking Achievement

			Extraversion	**Speaking**
Spearman's rho	**Extraversion**	Correlation Coefficient	1.000	.134
		Sig. (2-tailed)	.	.150
		N	117	117
	Speaking	Correlation Coefficient	.134	1.000
		Sig. (2-tailed)	.150	.
		N	117	117

Based on the result of Spearman's rho correlation analysis in Table 6, the correlation coefficient between extraversion and speaking achievement was 0.134. This value indicates a very weak positive correlation between the two variables. The significance value (p) was 0.150, which was higher than 0.05. Therefore, the correlation between extraversion and speaking achievement was not statistically significant. This means that students with higher levels of extraversion did not necessarily achieve higher speaking scores. In conclusion, there was no significant correlation between extraversion and speaking achievement among the tenth-grade students at SMA Negeri 1 Tanjung Raja.

This finding supports the results of previous studies. Chen et al. (2015) found no significant correlation between introversion–extraversion and oral English performance among 117 participants. Arniatika (2020) also reported that extraversion did not significantly predict students' speaking achievement. Similarly, Putri et al. (2023) found that extroversion did not have a significant effect on students' speaking performance. Recent research by Astuti et al. (2024) also showed that extroversion and introversion did not significantly influence students' speaking skills. These findings indicate that extraversion alone is not a strong factor in determining speaking achievement.

This result is consistent with Dörnyei and Ryan (2015), who explained that personality traits are only one part of individual differences in second language learning. They argued that language achievement is influenced by the interaction of several factors, including motivation, learning strategies, emotions, and learning environments. Similarly, De Raad and Mlačić (2020) emphasized that personality traits may affect learners' behavior and preferences, but they do not directly determine learning outcomes.

Recent studies also support the view that personality has a limited effect on second language performance. Chen et al. (2022), through a meta-analysis of Big Five personality traits and second language learning, found that the relationship between personality traits and language achievement was relatively complex. The effect of personality varied depending on learning contexts, language skills, and other learner factors. In addition, Kosyakova et al. (2024) found that personality traits contributed to language proficiency, but their influence depended on social experiences and opportunities to use the target language.

Although extroverted students tend to participate more actively in social interactions, this characteristic does not automatically improve their speaking performance. According to MacIntyre et al. (2019), willingness to communicate is influenced by several factors, such as confidence, language ability, anxiety, and the communication context. Therefore, students with high speaking self-efficacy and stronger language competence may perform better even if they are not highly extroverted.

Furthermore, Xu et al. (2025) highlighted that personality interacts with other cognitive and psychological factors in second language acquisition. Their review showed that personality should not be considered as an independent predictor of language success because learning outcomes are shaped by multiple factors, including intelligence, motivation, and learning experiences.

Therefore, the present finding suggests that extraversion should not be viewed as the main determinant of students' speaking achievement. Extroverted students may have more opportunities for communication practice, but successful speaking performance requires a combination of factors, including speaking self-efficacy, language proficiency, motivation, learning strategies, and supportive learning environments.

Conclusion

This study explored the correlation between extraversion and speaking achievement. The findings indicate that there was no significant correlation between the two variables. In conclusion, students with higher extraversion did not necessarily achieve higher speaking scores. This indicates that extraversion alone is not a significant predictor of students' speaking achievement. Based on the findings of the study, the researcher would like to give several suggestions.

First, English teachers should help students build confidence in speaking activities. Teachers can provide more opportunities for students to practice speaking in pairs, groups, or classroom discussions. Teachers should also create a supportive classroom atmosphere so that students feel comfortable when expressing their ideas in English.

Second, students should practice speaking more often to improve their confidence and speaking ability.

They should not feel afraid of making mistakes because speaking skills improve through practice and experience. Students also need to increase their vocabulary, pronunciation, and grammar knowledge to support better speaking performance.

Third, future researchers can conduct similar studies with different populations, larger samples, or different variables related to speaking achievement. Future studies can also examine other psychological factors that may influence students' speaking ability, such as motivation, anxiety, or learning strategies.

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