

THE INFLUENCE OF LEARNING MOTIVATION AND ANXIETY LEVELS ON STUDENTS' SPEAKING PERFORMANCE

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Abstract

The purpose of this study is to investigate the influence of learning motivation and speaking anxiety on students' speaking performance. The participants of this study are 40 postgraduate students in the English Education Master's Program at the University of Makassar. This research was designed in the form of a quantitative study using multiple linear regression analysis to examine the effect of the two independent variables on the speaking performance of the students. The data were collected using questionnaires for each variable, with learning motivation based on Self-Determination Theory and anxiety levels based on the Foreign Language Classroom Anxiety Scale (FLCAS). The results of this research showed that learning motivation and anxiety levels are simultaneously able to explain around 31.1% of the variation in speaking ability. Learning motivation was found to have a significant positive effect, where greater enthusiasm correlates with improved speaking ability. In contrast, language anxiety has a significant negative effect, where the higher the anxiety, the lower the speaking ability.

1. INTRODUCTION

Speaking is one of the fundamental skills in English. The initial element evaluated in English language proficiency is speaking (Mei and Masaoumeh, 2017). It is the ability to communicate information orally in a manner comprehensible to the audience (Kusumawati, 2019). According to Martynyuk and Ponikaryova (2021), speaking ability is considered the most challenging skill for learners of a foreign language, as it requires simultaneous proficiency in pronunciation, grammar, vocabulary, fluency, and comprehension (Normawati et al. 2023). Selimovic-Korjenic (2025) argues that, unlike receptive skills such as listening or reading, speaking is a productive skill that requires simultaneous processing and immediate output. Therefore, it can be concluded that speaking is an essential skill and a difficult aspect of English language proficiency. However, speaking performance can be affected by various factors, including learning motivation and anxiety levels.

Numerous elements can influence students' oral performance. One factor which can influence speaking is motivation to learn. According to Alfiana and Wijirahayu (2024), learners with high motivation are more likely to engage and persist in speaking activities, thereby improving their speaking skills. This aligns with the statement by Purwaningsih and Harahap (2025) that high learning motivation is often associated with effective communication and active participation in classroom speaking activities. Besides that, another factor that can affect speaking performance is anxiety. This psychological phenomenon in speaking often occurs and becomes a significant barrier to language learning, especially in the context of English as a Foreign Language (Suparlan, 2021). According to Nuridzdzati and Akhiriyah (2023), this happened when speaking comprehension, anxiety test, and fear of negative evaluation frequently refer to physical symptoms such as rapid heartbeats, stuttering, and reluctance to speak. Therefore, speaking skills can be influenced by factors such as learning motivation and anxiety.

Numerous studies have examined learning motivation and anxiety levels. Some focus on motivation in speaking performance, others on students' speaking anxiety. Sutarsyah (2017) found that anxiety negatively influences junior high students' speaking performance. Students with high anxiety scored lower (62.37) than those with low anxiety (83.81). The main factors were nervousness, worry, and tension. Menggo (2018) found a correlation between motivation and speaking ability. Both intrinsic and extrinsic motivation are key psychological factors in speaking success.

A study that combined motivation and anxiety was also conducted by Ritonga, Nasmilah, and Rahman (2010). This research was conducted with semester 5 students at Dayanu Ikhsanuddin University who take a speaking class. The findings showed that anxiety and motivation worked in opposite ways. Anxiety makes students not convey their ideas, while motivation helps them to become more focused and reduce anxiety. They also highlighted the contextual factor, such as the traditional teaching method, which more emphasized the accuracy rather than fluency in English speaking. The previous studies showed that anxiety has a negative effect on junior high school students' speaking performance (Sutarsyah, 2017), while motivation shows a positive role in increasing the speaking skill of senior high school students (Menggo, 2018), and the combination of motivation and anxiety influences the speaking performance in college students (Ritonga et al., 2020). However, a study that simultaneously examines the influence of motivation and anxiety among undergraduate students remains rare. Although undergraduate students are required to have complex speaking ability, such as seminar presentations, scientific discussions, and more. Thus, this research offers a novel investigation of the relationship between learning motivation and anxiety regarding the speaking performance of undergraduate students.

Based on the considerations above, this study examines the significance of learning motivation and anxiety levels to students' speaking performance, particularly among undergraduate students in the English Department at the State University of Makassar, who serve as participants in this research. This study is also possible because researchers had access to the respondents and did not require high costs.

2. THEORETICAL BASIS

2.1 Speaking Performance

Speaking performance is widely recognized as a complex and multidimensional construct in English as a Foreign Language (EFL) learning, involving the integration of linguistic competence, cognitive processing, and socio-cultural interaction. Fundamentally, speaking performance refers to the ability of learners to produce meaningful oral communication with appropriate fluency, accuracy, pronunciation, vocabulary, and comprehension. According to

recent literature, speaking is considered one of the most difficult language skills because learners must simultaneously process ideas, organize language structures, and deliver messages in real time within social contexts (Mingyan et al., 2025). Theoretically, speaking performance is often grounded in communicative competence and sociocultural theory, where interaction plays a central role in language acquisition. Key components typically used to assess speaking include grammar, pronunciation, vocabulary, fluency, and comprehension, which collectively determine how effectively a speaker conveys meaning (Ilham et al., 2024). Moreover, speaking performance is influenced by various factors, including linguistic limitations, psychological aspects such as anxiety and confidence, and environmental exposure to the target language (Anggraini et al., 2025).

A study by Ma et al. (2025) in *Humanities and Social Sciences Communications* examined the use of AI-powered mobile applications to improve EFL students' speaking performance. The findings indicate that technology-enhanced learning significantly improves fluency and accuracy by providing more opportunities for practice outside the classroom, addressing one of the main challenges in EFL contexts, namely limited exposure to authentic communication. Ilham et al. (2024) in *Innovative: Journal of Social Science Research* analyzed five components of speaking performance among Indonesian students and found that pronunciation was relatively strong, while vocabulary remained the weakest aspect, which negatively affected fluency and comprehension. This highlights the importance of vocabulary development in improving overall speaking ability. Sulhah and Oktaviana (2024) in *Foremost Journal* investigated the effect of peer assessment on students' speaking performance and reported a significant improvement in students' scores after implementing peer feedback, suggesting that collaborative learning strategies can enhance speaking skills effectively.

Speaking performance is a multifaceted skill influenced by linguistic competence, affective factors, and learning environments. Contemporary research emphasizes the importance of interactive approaches, technological support, and collaborative strategies in improving learners' speaking abilities. These findings suggest that effective speaking instruction should integrate multiple components and provide meaningful opportunities for practice and feedback to achieve optimal outcomes.

2.2 The Relationship Between Learning Motivation and Self-Determination Theory

Learning motivation is a central construct in educational psychology, referring to the internal and external forces that initiate, direct, and sustain students' engagement in learning activities. Within contemporary theoretical frameworks, Self-Determination Theory (SDT) provides one of the most influential explanations of how motivation operates in learning contexts. SDT posits that human motivation spans a spectrum that ranges from intrinsic motivation (participating in learning for its own rewarding experience) to extrinsic motivation (influenced by external factors or demands), and motivation (absence of intent to engage). A core assumption of SDT is that optimal learning motivation emerges when three basic psychological needs are fulfilled: autonomy, competence, and relatedness. These needs shape the quality rather than merely the quantity of motivation, meaning that learners who feel autonomous, capable, and socially connected are more likely to demonstrate deeper engagement and better performance. Recent theoretical developments also emphasize that motivation is dynamic and context-dependent, influenced by instructional design, social interaction, and technological environments. Furthermore, integrating SDT with learning processes highlights that students are more motivated when they perceive learning activities as meaningful and aligned with their personal goals, reinforcing the strong conceptual relationship between learning motivation and SDT as a framework for understanding educational outcomes (Osei dan Bjorklund, 2024).

A study by Li et al. (2025) published in *npj Science of Learning* explored students' motivation to learn artificial intelligence using an SDT perspective. The findings revealed that intrinsic motivation and the satisfaction of basic psychological needs significantly influence students' willingness to engage in complex learning tasks, suggesting that SDT-based motivation structures can predict learning engagement and persistence. Chiang (2024) in *Frontiers in Education* developed a self-determination motivation scale for English learners and found that interest and perceived value, which are closely related to intrinsic motivation, strongly affect students' learning behaviors. The study confirms that SDT constructs can be operationalized to measure learning motivation and highlights the importance of autonomy-supportive learning environments. Alturki and Aldraiweesh (2024) in *Humanities and Social Sciences Communications* investigated the role of SDT in educational settings involving social media and found that learning motivation mediates the relationship between technology use and student satisfaction and performance. The study demonstrates that when students' psychological needs are supported, their motivation increases, leading to improved engagement and academic outcomes.

The relationship between learning motivation and Self-Determination Theory is both theoretically and empirically robust. SDT provides a comprehensive framework for understanding how different types of motivation influence learning behaviors and outcomes, emphasizing the importance of fulfilling basic psychological needs. Contemporary research consistently shows that learning environments that support autonomy, competence, and relatedness can enhance students' intrinsic motivation, engagement, and achievement. Therefore, integrating SDT principles into educational practice is essential for fostering sustainable and meaningful learning motivation in modern educational contexts.

2.3 Anxiety Levels Measured Using the Foreign Language Anxiety Scale (FLCAS)

Foreign language anxiety is a specific form of situation-based anxiety that emerges in language learning contexts, particularly when learners are required to communicate using a non-native language. It is conceptually defined as a complex construct involving self-perceptions, beliefs, feelings, and behaviors related to classroom language learning. One of the most widely used theoretical and measurement frameworks for examining anxiety levels in this field is the Foreign Language Classroom Anxiety Scale (FLCAS), originally developed by Horwitz et al. and still dominant in recent research. The FLCAS conceptualizes anxiety through three main components: communication apprehension, fear of negative evaluation, and test anxiety, which collectively capture learners' emotional responses during language use. As a self-report instrument, it typically consists of Likert-scale items that allow researchers to quantify anxiety levels in measurable terms (Ghorbanpoor et al., 2025).

Contemporary studies emphasize that FLCAS is not merely a measurement tool but also a theoretical lens that frames foreign language anxiety as a situation-specific phenomenon distinct from general anxiety. This distinction is important because foreign language anxiety has been found to directly influence language performance, participation, and willingness to communicate. Furthermore, recent theoretical discussions highlight that anxiety levels fluctuate over time and across contexts, indicating that foreign language anxiety is dynamic rather than static. Researchers also argue that psychological, pedagogical, and social factors such as teacher behavior, classroom environment, and peer interaction play crucial roles in shaping learners' anxiety levels, reinforcing the relevance of FLCAS in capturing these multidimensional experiences (Ghorbanpoor et al., 2025).

Botes et al. (2022) in *Applied Linguistics* validated a short-form version of the FLCAS (S-FLCAS), aiming to improve efficiency while maintaining reliability. The study demonstrated that the shorter scale retained strong validity and could effectively measure foreign language anxiety with fewer items, making it more practical for large-scale educational research. A study

published in *Research Methods in Applied Linguistics* (2023) examined the reliability of FLCAS using generalizability theory and found that while traditional reliability measures such as Cronbach's alpha may overestimate consistency, the scale still demonstrates acceptable reliability when multiple measurement conditions are considered. This research highlights the importance of evaluating not only internal consistency but also the stability of anxiety measurements over time. Crosby (2025) in *International Journal of English Language, Education and Literature Studies* critically revisited the FLCAS and identified several limitations, including its reliance on self-reported data and its limited ability to capture the dynamic and evolving nature of anxiety. The study suggests integrating additional methods such as behavioral observation and longitudinal analysis to better understand anxiety levels in language learning contexts.

Anxiety levels in foreign language learning can be effectively analyzed through the framework of the Foreign Language Classroom Anxiety Scale, which remains a foundational tool in both theoretical and empirical research. While recent studies confirm its validity and adaptability, they also highlight the need for refinement to better capture the dynamic and contextual nature of anxiety. Overall, the integration of FLCAS with evolving research approaches provides a comprehensive understanding of how anxiety influences language learning processes and outcomes, emphasizing its continued relevance in modern educational research.

3. RESEARCH METHODS

This study employed a quantitative correlational research design using multiple linear regression analysis to examine the influence of learning motivation and anxiety levels on students' speaking performance. A quantitative approach was selected because it allows objective measurement of variables and enables statistical analysis to determine the strength and direction of relationships between the independent variables and the dependent variable. Multiple linear regression was used to analyze the simultaneous and partial effects of learning motivation and anxiety levels on speaking performance.

The population of this study targeted postgraduate students currently pursuing studies in the English Education Master's Program at the University of Makassar. A total of 40 postgraduate participants were chosen as research participants using a purposive sampling technique. The sampling criteria required that the participants were actively enrolled in the program and had completed or were currently attending speaking-related courses. These criteria were applied to ensure that the participants had sufficient experience in academic English speaking activities relevant to the focus of the study. The number of participants was considered adequate for conducting multiple regression analysis within an educational research context.

Data were collected using three instruments. Learning motivation was measured using a questionnaire adapted from motivation scales based on Self-Determination Theory, designed to capture students' intrinsic and extrinsic motivation toward learning English. Anxiety levels were assessed utilizing a survey modified from the Foreign Language Classroom Anxiety Scale (FLCAS), which measures students' speaking-related anxiety, including nervousness, fear of negative evaluation, and communication apprehension. Students' speaking performance was measured through a speaking test assessed by the course lecturer using a standardized scoring rubric that evaluated pronunciation, fluency, grammar, vocabulary, and comprehension.

Before data collection, the questionnaires were tested for validity and reliability, and the results indicated acceptable reliability coefficients. Data collection was conducted during the second semester of the academic year. After obtaining informed consent, the questionnaires were distributed to the participants and completed during scheduled sessions. Speaking

performance scores were obtained from regular classroom assessments conducted as part of the instructional process.

The collected data were analyzed using Jeffreys's Amazing Statistics Program (JASP). Descriptive statistical analysis was conducted by calculating the mean, median, and standard deviation to describe the distribution of learning motivation, anxiety levels, and speaking performance. Although Likert-scale data are ordinal in nature, they were treated as interval-level data, as supported by methodological literature indicating that Likert scales with five response categories can be analyzed using parametric statistics. To examine the effects of motivation and anxiety degrees on performance in speaking, multiple linear regression analysis was performed. Before regression analysis, the assumptions of normality, linearity, multicollinearity, and homoscedasticity were tested and met. Ethical considerations were maintained throughout the study, and participants' confidentiality was ensured.

4. RESULTS AND DISCUSSION

4.1 Descriptive Analysis

4.1.1 Learning Motivation

Table 1. Descriptive Analysis

Median	36.00
Mean	36.83
Std. Deviation	3.842
Minimum	31.00

The analysis of the Learning Motivation variable, which was measured through a questionnaire of 40 participants, shows that the minimum score is 31, while the maximum score is 48. The average score is 36.83, and a median of 36.00 indicates that most of the respondents had a level of learning motivation that was relatively close to the average. The standard deviation is 3.842, which indicates the distribution of participants' scores is quite homogeneous, varying only slightly from the average. Overall, these findings showed that the students' levels of learning motivation are in the moderate to high range, with a consistent distribution of scores among the participants.

Table 2. Frequency and Percentage

Learning Motivation Scores (X1)	Frequency (N)	Percentage (%)
31 – 34	9	22.5
35 – 36	12	30.0
37 – 39	10	25.0
40 – 41	6	15.0
42 – 48	3	7.5
Total	40	100.0

The analysis of the Learning Motivation variable shows that from 40 respondents, the scores obtained are 31 to 48. The most dominant group score is 35 to 36 with a frequency of 12 participants (30%), followed by a score of 37 to 39 with the amount of 10 respondents (25%). Most of the participants are in the range of 31 to 41, while only a small number of participants reach the highest score, which is 42 to 48. The mean score of 36.83 and the median of 36.00

show that most of the participants have a learning motivation level that falls into the moderate to high category. With the standard deviation of 3.842, the data distribution can be said to be similar, which means that most respondents have motivation scores that are not very different from one another.

Based on the categorized learning motivation scores, most participants (52.5%) are in the low category with scores of 31 to 36. A total of 40% respondents is in the moderate category with scores 37 to 42, while only 7.5% of students reached the high category with scores 43 to 48. This indicates that, in general, the learning motivation of the students tends to remain at low to moderate levels. This result is important as low learning motivation can affect students' speaking performance, in accordance with Self-Determination Theory, which highlights the role of intrinsic motivation in developing language skills.

4.1.2 Anxiety Levels

Table 3. Descriptive Analysis

Median	29.00
Mean	29.80
Std. Deviation	8.106
Minimum	16.00
Maximum	44.00

The result of the anxiety levels questionnaire, which measured 40 participants, shows that the minimum score stands 16, whereas the maximum score reaches 44. The average score is 29.80, and the median is 29.00, implied that most of the respondents have anxiety levels in that score range. The standard deviation of 8.106 indicates a considerable variation among participants, so the anxiety levels are not completely homogeneous. Overall, this result shows that anxiety levels of the students are in the low to moderate category, with a small number of participants in the high category. This finding is crucial because relatively high anxiety can affect the speaking performance, in line with the theory of the Foreign Language Classroom Anxiety Scale (FLCAS), which emphasizes that language anxiety becomes an obstacle to language skills.

Table 4. Frequency and Percentage

Anxiety Levels Scores (X2)	Frequency (N)	Percentage (%)
16 – 20	8	20.0
21 – 26	9	22.5
27 – 31	7	17.5
32 – 37	8	20.0
38 – 44	8	20.0
Total	40	100.0

The result of the anxiety levels variable shows that from 40 respondents, the anxiety levels fall in the score range 16 to 44. The frequency distribution indicates that the group score of 21 to 26 is the most dominant with 9 respondents (22.5%), which is followed by the score 16-20 of 8 participants (20%), as well as scores 32 to 37 and 38 to 44, each with 8 respondents (20%). A score of 27 to 31 was achieved by 7 respondents (17.5%).

Overall, this finding shows that the anxiety levels of students are distributed relatively evenly in most of the score ranges, without one category dominating. However, the majority

of the participants are in the low to moderate category, which means they have low to moderate anxiety. This finding suggests that although some students have fairly high anxiety, their anxiety levels are still at moderate levels, so it remains manageable in the context of language learning.

4.1.3 Speaking Performance

Table 5. Descriptive Analysis

Median	32.50
Mean	33.05
Std. Deviation	5.208
Minimum	25.00
Maximum	44.00

Descriptive analysis of the Speaking Performance variable in 40 respondents shows the minimum score is 25, while the maximum score is 44. The average score of the result is 33.05, and the median is 32.50, showing that most of the participants have speaking ability in that score range. The standard deviation of 5.208 shows that there is a moderate variation among the respondents. That means the speaking performance levels are not entirely the same but still oriented around the average score. Overall, it can be inferred that students' speaking skill is in the moderate category, with a small part of participants who have the lowest as well as the highest performance in speaking. This finding is essential as it shows that, despite there are individual variations, the majority of the students have relatively stable speaking skills and are sufficient to support language learning.

Table 6. Frequency and Percentage

Speaking Performance	Frequency (N)	Percentage (%)
25 – 29	13	32.5
30 – 34	11	27.5
35 – 39	11	27.5
40 – 44	5	12.5
Total	40	100.0

Among 40 participants, the speaking score is in the range of 25 to 44. This distribution shows that the group score of 25 to 29 dominates with 13 respondents (32.5%), followed by scores of 30 to 34 and 35 to 39, each of which is filled with 11 participants (27.5%). Meanwhile, only 5 respondents (12.5%) reached the high score of 40 to 44. The mean of 33.05 and the median of 32.50 show that most of the students have moderate speaking skills.

Based on the categorization, the majority of the participants (47.5%) are in the moderate category, showing that the speaking skill of the respondents is relatively good but still not optimal. With a total of 40% respondents still in the low category, this indicates that there is still a group of students who need improvement in their speaking skills. Only 12.5% of respondents reached a high level, which emphasizes that a small number of students already have great speaking skills. Altogether, this result demonstrates the speaking ability of the participants tending to concentrate on moderate levels, with the main obstacle placed on the improvement of the group, still in the low category.

4.2 Assumption Regression Test

4.2.1 Normality Test

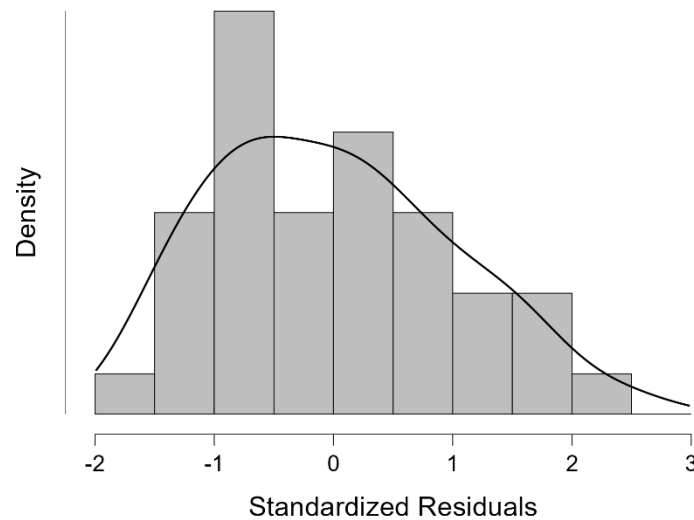


Figure 1. Standardized Residuals Histogram

The normality test using histogram standardized residuals shows the linear regression residual data has relatively normal distribution, with little skewness to the right. This deviation is still in the tolerance limit, so the normality assumption in this model can be considered achieved. Therefore, multiple regression analysis can be conducted validly to measure the influence of learning motivation (X1) and anxiety levels (X2) to speaking performance (Y).

4.2.2 Linearity Test

Partial Regression Plots

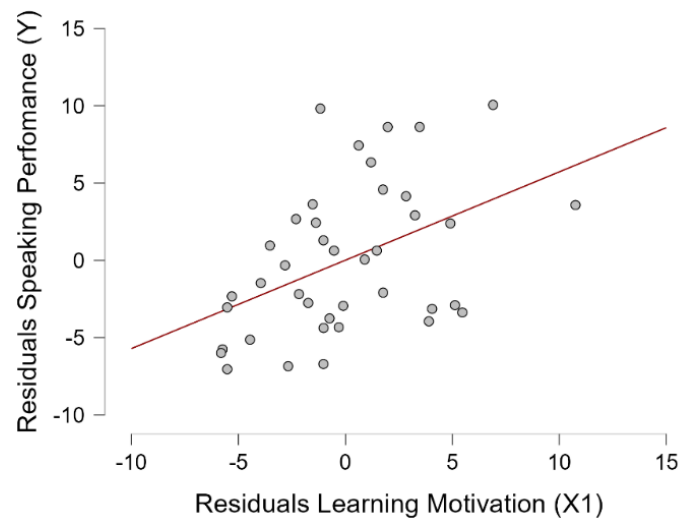


Figure 2. Speaking Performance (Y) vs. Learning Motivation (X1)

The linearity test uses partial regression plots to see the relationship between the independent variable and the dependent variable after controlling for the other variables. The plot result between speaking performance (Y) and learning motivation (X1) shows a positive correlation. The shaped regression line indicates that the higher the students' motivation to learn, the better their speaking performance. This emphasizes that the linearity assumption is achieved for X1. Therefore, the learning motivation can be seen as a significant predictor of speaking performance.

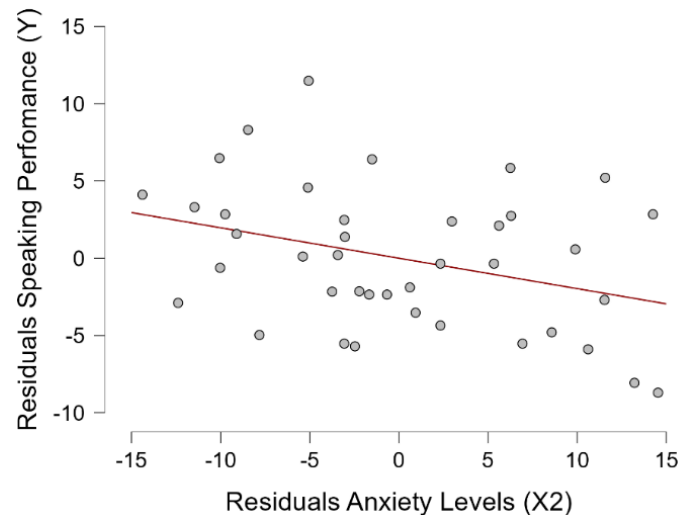


Figure 3. Speaking Performance (Y) vs. Anxiety Levels (X2)

Meanwhile, the plot result between speaking performance (Y) and anxiety levels (X2) shows a negative correlation. The regression line indicates that the higher the anxiety levels, the lower the students' speaking performance. This pattern is consistent with the FLCAS theory, which says that language anxiety can interfere with speaking ability. Because of that, the linearity assumption is also fulfilled for the X2 variable, and the anxiety can be seen as a negative factor that can affect speaking performance.

Overall, the linearity test shows that both independent variables, which are learning motivation (X1) and anxiety levels (X2), have a linear relationship with the dependent variable (Y). This means that the multiple regression model used in this research is valid to analyze the effect of learning motivation and anxiety levels toward the students' performance of speaking.

4.2.3 Multicollinearity Test

Table 7. Coefficients

Coefficients								
							Collinearity Statistics	
Model	Predictor	Unstandardized	Standard Error	Standardized	t	p	Tolerance	VIF
M ₀	(Intercept)	33.050	0.823		40.134	< .001		
M ₁	(Intercept)	17.868	7.780		2.297	.027		
	Learning Motivation (X1)	0.572	0.187	0.422	3.053	.004	0.977	1.024
	Anxiety Levels (X2)	-0.197	0.089	-0.306	-2.218	.033	0.977	1.024

The multicollinearity test is used to determine that the independent variables in the multiple regression model are not excessively correlated. The analysis results show that the tolerance score for both independent variables, which are learning motivation (X1) and anxiety levels (X2), is 0.977, while the Variance Inflation Factor (VIF) is 1.024. Methodologically, a tolerance scores close to 1 and a VIF value close to 1 indicate that there is no multicollinearity. The general limit used was Tolerance >0.10 and VIF <10. Therefore, both variable independents in this research can be assumed free from multicollinearity, so both were able to make a unique contribution to the dependent variables.

Besides that, the result of the significant coefficient showed that learning motivation (X1) had a positive influence and was significant to speaking performance ($\beta = 0.422$, $p = 0.004$),

while the anxiety levels (X2) had a negative impact and were significant to speaking performance ($\beta = -0.306$, $p = 0.033$). This emphasizes the result that both independent variables can be analyzed simultaneously without multicollinearity.

4.2.4 Heteroskedasticity Test

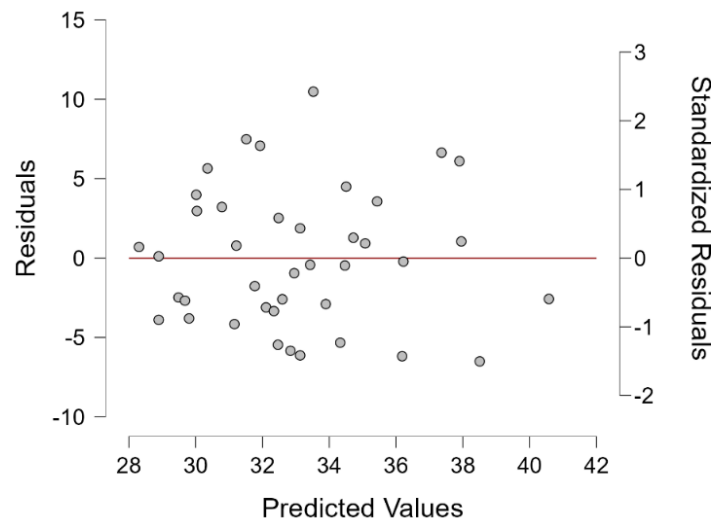


Figure 4. Residuals vs. Predicted

The heteroskedasticity test was used to ensure that the residual variance in the multiple regression model is constant (homoscedasticity). In the residual plot, the residual points seemed to be scattered randomly around the horizontal zero line without shaping any specific pattern, such as a narrowing or wavy pattern. The random distribution pattern implies that the residual variance is relatively stable across the entire range of predicted values. Therefore, the homoskedasticity assumption is achieved, and there was no heteroskedasticity indication problem in the regression model. This meant that the multiple regression model used was valid for inferential analysis, since the prediction errors were not influenced by the magnitude of the predicted values.

4.3 Multiple Linear Regression Test

Table 8. Model Summary

Model	R	R ²	Adjusted R ²	RMSE
M ₀	0.000	0.000	0.000	5.208
M ₁	0.557	0.311	0.274	4.439

Note. M₁ includes Learning Motivation (X1), Anxiety Levels (X2)

Multiple regression analysis resulted in two models. The first model (M0) without predictor variable shows score $R = 0.000$, $R^2 = 0.000$, and Adjusted $R^2 = 0.000$ with $RMSE = 5.208$. This means that a model without an independent variable is not able to describe variations in speaking performance. While the second model (M1), which includes variable independent learning motivation (X1) and anxiety levels (X2), indicates a significant improvement. The value of $R = 0.557$ shows there is a significant moderate correlation between the prediction model and the actual value. $R^2 = 0.311$ means that there are around 31.1% variations in speaking performance, which can be explained by the combination of learning motivation and anxiety levels. The value of Adjusted $R^2 = 0.274$ suggests that after adjusting for the number of predictors, the model still explained 27.4% variations. Besides that, the value of RMSE is

lower from 5.208 (M0) to 4.439 (M1), which shows that the model with two predictors is more accurate in predicting speaking ability. The Adjusted R² value indicates the magnitude of the contribution of both variables simultaneously.

Table 9. ANOVA

ANOVA						
Model	Source	Sum of Squares	df	Mean Square	F	p
M ₁	Regression	328.8	2	164.38	8.341	.001
	Residual	729.1	37	19.71		
	Total	1,057.9	39			
Note. M ₁ includes Learning Motivation (X1), Anxiety Levels (X2)						
Note. The intercept model is omitted, as no meaningful information can be shown.						

The ANOVA analysis was used to measure whether multiple regression models are significant in explaining the independent variables. The test result shows that the value of $F = 8.341$ with $p = 0.001$. Because the value of p is far smaller than the specified significance level ($\alpha = 0.05$), the multiple regression model, which includes variables of learning motivation (X1) and anxiety levels (X2) proven significant simultaneously in predicting speaking performance (Y). The value of the Sum of Squares Regression = 328.8, compared to the Sum of Squares Residual = 729.1, shows that the model is able to explain some variations in students' speaking performance. In other words, the contribution of X1 and X2 to Y is not a coincidence, but statistically significant.

The T-test in coefficient regression shows that learning motivation (X1) has a significant positive effect on speaking performance, with a value of $p = 0.004 < 0.005$ and a regression coefficient of 0.572. That means, every single unit increases in learning motivation will improve speaking scores by 0.572 points. It can be said that if the value of variable X1 increases, then variable Y also increases, and the same goes for the other variables. Meanwhile, anxiety levels (X2) have a significant negative effect on speaking performance with a value of $p = 0.033 < 0.05$ and a regression coefficient of -0.197. That means, each one-unit increases anxiety and reduces the speaking ability by 0.197 points. In other words, if the variable X2 increases, then the Y variable decreases, and vice versa.

4.4 Discussion

4.4.1 Learning Motivation and Self-Determination Theory (SDT)

Based on the findings', learning motivation has been shown to have a positive impact on students' speaking performance. This is in line with the Self-Determination Theory (Ryan & Deci, 2000), that emphasized the importance of the need for basic psychological needs, which are autonomy, competence, and relatedness, in encouraging intrinsic motivation. When students feel that they have control of their learning process, confidence in their ability, and have moral support, their learning motivation is increased and has a direct impact on their speaking performance. As has been shown by Almer et al. (2025), motivation, which is explained by SDT, has a strong correlation with second language acquisition, including speaking skills. This finding asserted that intrinsic motivation is the essential foundation for developing oral communication skills.

Furthermore, Noels (2023) emphasized that healthy motivation regulation increases the involvement and language learning outcomes, especially in oral communication skills. Their study emphasized that motivation is not only an internal factor, but also influenced by a good learning environment, such as teaching quality, interaction with peers, and teachers' support.

When the learning environment can fulfill the needs of autonomy, competence, and relatedness, students are more encouraged to participate actively in speaking activities. This shows that learning motivation not only supports academic achievement but also shapes a positive attitude toward the language learning process. Thus, the findings of this research strengthen the evidence that learning motivation is the key factor in students' success in oral communication.

The result of this study is also supported by the research conducted by Pramadianti (2024). They showed that learning motivation mediates self-efficacy and anxiety effect toward speaking skills, emphasizing the role of motivation as a determining factor of oral communication. This finding showed that motivation can function as a buffer in decreasing the negative effect of anxiety on speaking performance. When students have high motivation, they are more capable of overcoming the psychological obstacles and are more confident in speaking. In line with this, Halfmann (2021) stated that intrinsic motivation can increase psychological resilience in dealing with communication challenges.

4.4.2 Anxiety Levels and Foreign Language Classroom Anxiety

The findings of this study indicate that the anxiety levels have a negative significance to students' speaking performance. The result of this study is consistent with the concept of Foreign Language Classroom Anxiety (Horwitz, 1986), which was measured through FLCAS, where language anxiety is considered the main obstacle to speaking skills. Students who have high anxiety tend to feel nervous, afraid of making mistakes, and worried about other people's thoughts, which leads to a decline in their speaking performance. The study conducted by Kulsum and Ridwan (2025) also supported the result of this study, where they emphasized that speaking anxiety has a strong negative correlation with EFL students' speaking performance in Indonesia, showing that this phenomenon is relevant in the local context. Therefore, the result of this research can add more evidence that language anxiety is a significant affective factor in decreasing speaking performance.

Besides that, the study carried out by Crosby (2025) stressed that FLCAS is still relevant as instrument to measure language anxiety, even after more than three decades used in academic research. This instrument is consistent in showing that language anxiety has a negative impact on speaking skill, both in formal and informal context. Learners with high anxiety often had trouble in remembering their vocabulary, which hinders their communication. This is consistent with the research conducted by Botes, Dewaele, and Greiff (2020) that found language anxiety has a stable negative relationship in foreign language achievement. Thus, this research finding not only supports the FLCAS theory but also reinforces the global empirical evidence of the impact of speaking performance.

Another previous research that supported the result of this research was conducted by Luo and Xiong (2025). They highlight the difference between facilitating anxiety and debilitating anxiety. At a low level, anxiety can function as a motivational driver to try harder, however when in high level, anxiety weakens the speaking performance. The findings of this study showed that the students' anxiety tends to be debilitating, which reduces their speaking performance significantly. This means that language teaching strategy should pay attention to the affective factors, to create a learning environment which supports, safe, and unrestricted from excessive pressure. Through this way, students can lessen their anxiety and boost their confidence in speaking. These outcomes enhance the literature highlighted the importance of managing language anxiety to improve oral communication skills.

4.4.3 Learning Motivation and Anxiety Levels toward Speaking Performance

Based on the findings of this study, learning motivation and anxiety have a significant impact on students' speaking anxiety simultaneously. The multiple regression model showed around 31.1% variations in speaking skills, which emphasized that affective factors played a crucial role in speaking skill achievement. The research conducted by Sim et al. (2025)

indicated that high motivation can suppress negative impact, so that students can still speak with confidence.

In addition, the study performed by Asterina et al. (2025) emphasized that language anxiety can decrease speaking performance, but the negative effect can be minimized by a strong learning motivation. This is in line with the SDT (Self-Determination Theory), which stressed that intrinsic motivation increases psychological resilience, as well as the FLCAS theory, which highlighted that language anxiety can obstruct communication. In other words, motivation and anxiety have a complex mutual relationship, where motivation can enhance speaking performance, while anxiety can reduce it.

The research of Zhang (2021) and Mok and Rahmat (2025) also supported this study. They accentuate that the success of oral communication does not depend exclusively on linguistic ability, but also on the students' psychology. The findings of this study showed that learning motivation functioned as a protective factor in helping learners overcome the negative effects of anxiety. This result stressed that teaching strategy should focus on intrinsic motivation as well as reducing language anxiety so the students can achieve speaking performance optimally.

5. CONCLUSION AND SUGGESTIONS

5.1 Conclusion

It can be concluded that both learning motivation and anxiety levels have a crucial role in determining students' speaking skills. Learning motivation has been shown to have a significant positive effect; the higher the motivation, the better the speaking performance. In contrast, language anxiety has a significant negative effect, where the higher the anxiety, the lower the speaking ability. Simultaneously, both variables are able to explain around 31.1% of the variation in speaking ability, so affective factors cannot be ignored in language learning. This result is in line with Self-Determination Theory (SDT), which emphasizes the importance of intrinsic motivation in increasing language skills, as well as the Foreign Language Classroom Anxiety Scale (FLCAS), which stresses the negative impact of anxiety on speaking performance. In other words, the success of oral communication depends not only on linguistic proficiency, but also on learners' psychological state.

5.2 Suggestions

Based on the findings, language teaching strategies should strengthen students' intrinsic motivation while reducing excessive language anxiety. Learning environments should support autonomy, competence, and relatedness and should be supportive, safe, and free from excessive pressure so that students can participate more confidently in speaking activities.

REFERENCES

- Abrar, A. E. Y., Syam, A. F., Amri, R. A., & Sakkir, G. (2024). The Use of Wattpad to Improve Students' Reading Comprehension at SMA Negeri 7 Bulukumba. *Journal of Language Teaching Innovation*, 1(1), 50-61.
- Afifah, M., Ningrum, A., Wahyuni, S., & Syaifulloh, B. (2024). Self-Efficacy, Anxiety, and Emotional Intelligence: Do They Contribute to Speaking Performance? *Journal of Languages and Language Teaching*. <https://doi.org/10.33394/jollt.v12i2.10798>
- Alamer, A., Robot, E. S., Shirvan, M. E., & Ryan, R. (2025). Self-Determination Theory and Language Learning: A Multilevel Meta-Analysis. *Educational Psychology Review*.

- Alfiana, E., & Wijirahayu, S. (2024). The Relationship of Students' Learning Motivation and Their Speaking Performance. Scripta: English Department Journal. <https://doi.org/10.37729/scripta.v11i1.5169>
- Alturki, U., & Aldraiweesh, A. (2024). The impact of self-determination theory: the moderating functions of social media (SM) use in education and affective learning engagement. *Humanities and Social Sciences Communications*, 11(1), 1-16.
- Anggraini, D., Andriani, D., & Afersa, M. (2025). An Analysis of Speaking Difficulties Among University EFL Students. *Jurnal Ilmiah Langue and Parole*, 9(1), 58-66.
- Armilah, A., Syahfitri, N., Harahap, N., & Nasution, J. (2024). Evaluasi Pembelajaran Berbicara di Kelas Tinggi. *JISPENDIORA Jurnal Ilmu Sosial Pendidikan Dan Humaniora*. <https://doi.org/10.56910/jispendiora.v3i2.1506>
- Asterina, V., Tahir, M., & Fitriyani. (2025). An Analysis of Language Anxiety on Students' Academic Speaking Performance. *ELS Journal*. 8(2).
- Azzahara, T., Muliati, A., & Sakkir, G. (2023). The effect of using the Duolingo application as a medium in improving students' vocabulary mastery. *Journal of Technology in Language Pedagogy (JTechLP)*, 2(3), 523-539.
- Botes, E., Dewaele, J.-M., & Greiff, S. (2020). The Foreign Language Classroom Anxiety Scale and Academic Achievement: A Meta-Analysis. *Language Learning*.
- Botes, E., Van der Westhuizen, L., Dewaele, J. M., MacIntyre, P., & Greiff, S. (2022). Validating the short-form foreign language classroom anxiety scale. *Applied linguistics*, 43(5), 1006-1033.
- Carifio, J., & Perla, R. J. (2008). Resolving the 50-year debate around using and misusing Likert scales. *Medical Education*, 42(12), 1150–1152. <https://doi.org/10.1111/j.1365-2923.2008.03172.x>
- Chiang, J. (2024, July). Developing a self-determination motivation scale for English learners with Chinese background. In *Frontiers in Education* (Vol. 9, p. 1412746). Frontiers Media SA.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Crosby, A. (2025). Fostering Engagement Through Imagined Identities: Exploring the Role of Aspirational Goals in Japanese University Students' participation in English Language Classrooms. *INTERNATIONAL JOURNAL*, 4(01), 95-103.
- Crosby, A. (2025). Revisiting the Foreign Language Classroom Anxiety Scale. *IJEEL*. 4(1).
- Farahdiba, A., & Sakkir, G. (2026). LANGUAGE COMBINATION IN EFL BILINGUAL INSTRUCTION: A DISCOURSE-ANALYTIC STUDY OF TEACHER CODE-SWITCHING. *JURNAL VIDYA CAKRA*, 2(1), 49-57.
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.
- Ghorbanpoor, M., Mathew, B. P., Al Ofi, A. H. A. N., & Khattak, Z. I. (2025). The development and validation of the English-as-a-Foreign-Language Listening Test Anxiety Scale. *Language Testing in Asia*.
- Gravetter, F. J., & Wallnau, L. B. (2017). *Statistics for the behavioral sciences* (10th ed.). Cengage Learning.
- Halfmann, A. (2021). Digging Deeper into the Reasons for Self-Control Failure: Both Intrinsic and Extrinsic Motivations to Use Mobile Communication Shape Self-Control Processes. *Mass Communication and Society*, 24, 843 - 866.
- Hartini, R. D., Sakkir, G., & Sally, F. H. S. (2025). STUDENTS'PERCEPTION ON USING ICE BREAKING TO INFLUENCE THEIR CONFIDENCE IN ENGLISH CLASS. *Jurnal Vidya Cakra*, 1(1), 79-90.

- Ilham, M., Nurwati, A., & Helingo, A. (2024). A closer look at five components of speaking performance in Indonesian EFL students. *INNOVATIVE: Journal of Social Science Research*, 4(6), 6685-6697.
- Khabbazzbashi, N. (2017). Topic and background knowledge effects on performance in speaking assessment. *Language Testing*, 34, 23 - 48. <https://doi.org/10.1177/0265532215595666>
- Kulsum, E. M., & Ridwan, R. N. (2025). Exploring the Relationship between Foreign Language Classroom Anxiety and Speaking Performance. *Journal on Education*.
- Kusumawati, T. (2019). KOMUNIKASI VERBAL DAN NONVERBAL., 6.
- Lee, K., & Ye, Y. (2023). Investigating the reliability of foreign language classroom anxiety scale (FLCAS): An application of generalizability theory. *Research Methods in Applied Linguistics*, 2(1), 100036.
- Li, J., Zhang, J., Chai, C. S., Lee, V. W., Zhai, X., Wang, X., & King, R. B. (2025). Analyzing the network structure of students' motivation to learn AI: a self-determination theory perspective. *npj Science of Learning*, 10(1), 48.
- Luo, Z., & Xiong, Y. (2025). Is Anxiety Always Harmful? An Exploration of the Impact of Language Anxiety. *BMC Psychology*.
- Manurung, A. (2020). Optimization of Speaking Ability in Early Childhood., 2, 58-63. <https://doi.org/10.23917/ecrj.v2i2.7465>
- Martynyuk, A., & Ponikaryova, A. (2021). Rhetorical functions of suggestion as a means of verbal influence. *The Journal of V. N. Karazin Kharkiv National University Series: Foreign Philology. Methods of Foreign Language Teaching*. <https://doi.org/10.26565/2227-8877-2021-94-03>
- Mei, L., & Masoumeh, A. (2017). An Analysis of Factors Influencing Learners' English Speaking Skill. *International Journal of Research*, 2, 34-41. <https://doi.org/10.18869/acadpub.ijree.2.1.34>.
- Menggo, S. (2018). English Learning Motivation and Speaking Ability. *Journal of Psychology and Instruction*. 2(2), 64-69.
- Mingyan, M., Noordin, N., & Razali, A. B. (2025). Improving EFL speaking performance among undergraduate students with an AI-powered mobile app in after-class assignments: an empirical investigation. *Humanities and Social Sciences Communications*, 12(1), 1-15.
- Mok, S. S., & Rahmat, N. H. (2025). Investigating Students' Motivation Through Self-Determination Theory. *IJRISS*.
- Muhayyang, M., Sakkir, G., Ariyani, A., & Nappu, S. (2023). Lecturer eye contact on the students' English learning motivation: Motivated or demotivated. *EduLine: Journal of Education and Learning Innovation*, 3(1), 96-106.
- Norman, G. (2010). Likert scales, levels of measurement and the "laws" of statistics. *Advances in Health Sciences Education*, 15(5), 625–632. <https://doi.org/10.1007/s10459-010-9222-y> (doi.org in Bing)
- Normawati, A., Nugrahaeni, D. A., Manggolo N. S. K. H., & Susanto, A. I. F. (2023). EFL Learners' Difficulties in Speaking English. *English Language and Education Spectrum*.
- Nur, S., & Sakkir, G. (2022). EFL students' anxiety in oral presentation in thesis examination during COVID-19 pandemic era: Factors and strategies. *ARRUS Journal of Social Sciences and Humanities*, 2(2), 144-159.
- Nur, S., Sakkir, G., & Nurfadhilah, A. S. (2025). The Motivational Core of L2 Academic Writing: A Systematic Review of Theory, Research, and Pedagogy. *Tamaddun*, 24(2), 297-310.
- Nuridzdzati, R., & Akhriyah, S. (2023). Exploring Students' Speaking Anxiety. *JELITA*.

- Osei, P. C., & Bjorklund, D. F. (2024). Motivating the learning process: integrating self-determination theory into a dynamical systems framework. *Educational Psychology Review*, 36(3), 89.
- Pramadanti, R. (2024). Learning Motivation Mediates the Influence of Self-Efficacy and Speaking Anxiety on English Speaking Ability. *Journal of English Literacy Education*.
- Purwaningsih, S., & Harahap, A. (2025). Exploring EFL Students' Willingness to Communicate: The Role of Motivation in English Learning. *EduInovasi: Journal of Basic Educational Studies*. <https://doi.org/10.47467/edu.v5i2.8422>
- Rambe, R., Syahfitri, A., Humayroh, A., Alfina, N., Azkia, P., & Rianti, T. (2023). Upaya Meningkatkan Keterampilan Berbicara di Depan Umum. *Jurnal Pendidikan dan Sastra Inggris*. <https://doi.org/10.55606/jupensi.v3i2.1966>.
- Rifdhah, N., & Sakkir, G. (2025). EXAMINING TURN-TAKING AND NONVERBAL INTERACTION IN ENGLISH YOUTUBE VIDEOS. *JURNAL VIDYA CAKRA*, 1(2), 154-167.
- Ritonga, S. N. A., Nasmilah, Rahman, F., (2020). The Effect of Motivation and Anxiety on Students' Speaking Performance: A Study at Dayanu Ikhsan University. *ELS Journal on Interdisciplinary Studies on Humanities*. 3(2), 198-213.
- Sahril, S., Rosmini, R., & Sakkir, G. (2022). EFL students' anxiety in oral presentation in thesis examination during Covid-19 pandemic era: Factors and strategies. *ARRUS Journal of Social Sciences and Humanities*, 2(2), 144-159.
- Selimović-Korjenić, S. (2025). Challenges Faced by High School, University, and Adult Language Learners While Speaking English. *MAP Education and Humanities*.
- Sim, M. S., & Rahmat, N. H. (2025). Exploring the mediating roles of motivation and boredom in EFL learning. Springer.
- Sulfitriani, L., Korompot, C. A., & Sakkir, G. (2025). Students' learning styles and their speaking proficiency: Evidence from MAN 1 Makassar. *Journal of Teaching and Education for Scholars*, 2(2), 140-150.
- Sulhah, S., & Oktaviana, F. (2024). Peer-Assessment's Effect on Improving EFL Students' Speaking Performance. *Foremost Journal*, 5(2), 112-118.
- Suparlan, S. (2021). FACTORS CONTRIBUTING STUDENTS' SPEAKING ANXIETY., 9, 160-169. <https://doi.org/10.33394/joltt.v9i2.3321>
- Sutarsyah, C. (2017). An Analysis of Students' Speaking Anxiety and its Effect on Speaking Performance. *Indonesian Journal of English Language Teaching and Applied Linguistics*. 1(2).
- Tabachnick, B. G., & Fidell, L. S. (2019). Using multivariate statistics (7th ed.). Pearson.
- Wahyuni, I. Y., Ariyani, A., Sakkir, G., Amaliah, S., & Mansyur, M. (2025). Enhancing first-year English education students' speaking skills through storytelling training at State University of Makassar. *ARRUS Journal of Social Sciences and Humanities*, 5(4), 1110-1118.
- Wahyuni, S., Atmowardoyo, H., & Sakkir, G. (2026). AN ANALYSIS OF TEACHERS' STRATEGIES IN TEACHING READING COMPREHENSION. *JURNAL VIDYA CAKRA*, 2(1), 14-36.
- Zhang, X. (2021). Foreign Language Speaking Anxiety and Classroom Participation. *System Journal*.
- Zuhri, N. A., Salija, K., & Sakkir, G. (2022). THE IMPACTS OF SPEAKING ANXIETY ON STUDENTS' LEARNING PROCESS. *Journal of Technology in Language Pedagogy (JTechLP)*, 1(3).