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The Role-Playing Method in English Language Learning to Reduce Speaking Anxiety Among First-Semester Students at APIKES Talitakum Medan

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ABSTRACT

This study employed a quasi-experimental pretest-posttest design to examine the effectiveness of the role-playing method in reducing speaking anxiety among first-semester students in English speaking skills courses. The experimental class consisted of 32 first-semester students from the Radiology study program. The data analysis technique used was quantitative descriptive analysis, supported by a t-test statistical procedure. The results of the t-test showed a significance value (2-tailed) of 0.00. Since the significance value is less than 0.05, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted. This indicates that the implementation of the role-playing method, particularly through drama-based learning activities, is effective in reducing students' speaking anxiety in English classes.

Keywords: Role-Playing Method, Speaking Anxiety, English Speaking Skills

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INTRODUCTION

In the context of globalization and internationalization, English has emerged as the most important foreign language in Indonesia. Its pervasive influence is visible not only in educational institutions—from elementary schools to doctoral programs—but also across sectors such as tourism, government, business, and media (Karim, 2025). English is now embedded in daily life through its widespread use in films, advertisements, digital products, clothing, literature, and academic materials, reflecting its growing sociolinguistic presence within Indonesian society.

Among the core competencies in second language acquisition—listening, reading, writing, and speaking—speaking is often regarded as the most critical yet challenging skill. It is not merely a matter of pronunciation or grammar accuracy but a complex ability involving real-time interaction, sociocultural competence, and communicative fluency (Samonova, 2025). For many language learners, the ability to speak English fluently serves as the principal indicator of language mastery (Fitriansyah, 2025). In contrast, a learner with strong passive knowledge of English who lacks speaking ability is often perceived as linguistically deficient in practical contexts.

Mastery of spoken English has become essential for both academic and professional success. In academic settings, speaking enables students to engage in classroom discussions, deliver presentations, and participate in seminars, particularly within international or English-medium institutions. Professionally, English speaking skills are crucial for interviews, business negotiations, and global teamwork (Helvira et al., 2025). However, a major psychological barrier in achieving spoken fluency is speaking anxiety—a prevalent affective issue in second language classrooms. Speaking anxiety is characterized by fear, nervousness, or apprehension when communicating orally, especially in front of others. It is often rooted in low self-confidence, fear of negative evaluation, or past experiences of failure (Wei, 2025; Paguay & Abad, 2025).

If not addressed, speaking anxiety can hinder oral performance, reduce classroom participation, and ultimately impair language development (Permatasari, 2025). Traditional teacher-centered pedagogies, such as lecture-based instruction and rote memorization, frequently exacerbate this anxiety by failing to provide learners with a supportive environment for authentic communication (Rahmah, 2025). Thus, innovative, learner-centered approaches are required to foster engagement and reduce the psychological pressure associated with speaking. One such promising approach is the role-playing method, an interactive instructional strategy where learners adopt roles in simulated scenarios. This technique offers a safe space to practice language in context, shifting the focus from error avoidance to communicative effectiveness (Saparta, 2025). Role-playing not only improves students' oral proficiency and vocabulary acquisition but also builds confidence and reduces language-related stress (Perwitasari, 2025). Furthermore, it fosters collaborative learning and critical thinking, encouraging learners to respond spontaneously in real-life situations.

Given these benefits, role-playing is increasingly recognized as a powerful pedagogical tool in English language teaching. Nevertheless, empirical validation is necessary to examine its effectiveness within specific educational contexts. Therefore, this study investigates the impact of the role-playing method on reducing speaking anxiety and enhancing speaking performance among students at APIKES Talitakum Medan.

METHOD

This study was conducted over the course of five sessions, comprising one pre-treatment session (pretest) and four experimental treatment sessions. Prior to the intervention, the experimental class was given a pretest in the form of the Foreign Language Classroom Anxiety Scale (FLCAS) questionnaire to measure students' initial level of speaking anxiety. The same FLCAS questionnaire was administered again during the final session (Session 4) as a posttest to assess any changes in speaking anxiety after the treatment.

During the implementation of the role-playing method, the researcher conducted continuous observations using a structured observation checklist prepared in advance.

Data Analysis Techniques

Data analysis was performed after all data were collected from each session. The following steps were followed in the analysis process:

1. Data Validation.
   The researcher verified the completeness of the collected data, which included verifying participant identity, data collection instruments, and response consistency.
2. Categorization of Speaking Anxiety Levels
   Students' levels of speaking anxiety were categorized based on their responses to the 33-item FLCAS questionnaire. Each item used a Likert scale ranging from 1 to 5, yielding a total possible score range of 33 to 165. The classification of anxiety levels was determined using the class interval method, as follows:
   Interval=Maximum score−Minimum scoreNumber of categories=165−333=44\text{Interval} = \frac{\text{Maximum score} - \text{Minimum score}}{\text{Number of categories}} = \frac{165 - 33}{3} = 44Interval=Number of categoriesMaximum score−Minimum score=3165−33=44
   Therefore, the categories of speaking anxiety were defined as:
   - Low: 33 – 76
   - Moderate: 77 – 120
   - High: 121 – 165
3. Scoring and Tabulation
   The responses were scored according to the Likert scale, and the total scores were entered into a table for each participant.
4. Statistical Analysis
   The following statistical techniques were employed:

a. Descriptive Statistics

Used to summarize the data and calculate mean, median, mode, standard deviation, frequency, and percentage of each anxiety level category.

b. Normality Test

The Kolmogorov-Smirnov (K-S) test was used to determine whether the data followed a normal distribution. The criteria were as follows:

- If the p-value > 0.05, the data were considered normally distributed.
- If the p-value < 0.05, the data were considered not normally distributed.

c. Comparative Analysis (t-test)

A Paired Sample t-Test was conducted to compare students' pretest and posttest scores in the experimental class. This test assessed whether there was a statistically significant difference in speaking anxiety before and after the application of the role-playing method.

d. Significance Testing (Hypothesis Testing)

A p-value significance test was applied to determine the effectiveness of the intervention. A result was considered statistically significant if the p-value < 0.05, indicating a meaningful reduction in speaking anxiety following the treatment.

FINDING AND DISCUSSION

Data Overview

This study employed both qualitative and quantitative data to assess the effect of the role-playing method on reducing students' speaking anxiety.

1. Qualitative data were collected through classroom observations of students' speaking performance during the intervention sessions.
2. Quantitative data were obtained from the Foreign Language Classroom Anxiety Scale (FLCAS) questionnaire administered as both a pre-test and post-test to measure changes in anxiety levels before and after the treatment.

Pre-Test Analysis

Table 1 presents the results of the students' speaking anxiety levels prior to the intervention. The average speaking anxiety score was 97.09, with a total of 32 students participating.

Anxiety Category	Score Range	Frequency	Percentage
Low	33–76	7	21.88%
Moderate	77–120	19	59.38%
High	121–165	6	18.75%

These findings indicate that the majority of students experienced moderate to high levels of speaking anxiety before the implementation of the role-playing method.

Post-Test Analysis

Table 2 shows the post-test results after four sessions of the role-playing intervention. The average score dropped to 85.66, indicating a notable reduction in speaking anxiety levels.

Anxiety Category	Score Range	Frequency	Percentage
Low	33–76	10	31.25%
Moderate	77–120	18	56.25%
High	121–165	4	12.50%

The data show a significant shift from high anxiety levels to lower categories, especially with the increase in students reporting low anxiety after the intervention.

Comparative Data (Pre-Test vs Post-Test)

Table 3 compares individual pre-test and post-test scores. The average speaking anxiety level decreased by 11.43 points, or approximately 11.77%, after the intervention.

Metric	Pre-Test	Post-Test	Difference
Mean Score	97.09	85.66	-11.43
Minimum Score	74	64	-10
Maximum Score	124	121	-3

This data supports the hypothesis that the role-playing method has a positive impact on reducing speaking anxiety.

Statistical Analysis
Descriptive Statistics

Metric	Pre-Test	Post-Test
N	32	32
Mean	97.09	85.66
Standard Deviation	17.56	16.32
Score Range	74–124	64–121

These results indicate a decrease in both mean and range, supporting the observed reduction in anxiety levels following the role-playing sessions.

Normality Test

A Kolmogorov-Smirnov (K-S) test was performed to test the normality of the data:

Test	Pre-Test	Post-Test
N	32	32
p-value	0.160	0.085
Conclusion	Normal	Normal

Since both p-values are greater than 0.05, the data are normally distributed, justifying the use of parametric tests.

Paired Samples t-Test

The Paired Samples t-Test compared pre-test and post-test scores:

Mean Difference	Std. Deviation	t-value	df	p-value
11.438	12.110	5.343	31	0.000

The p-value < 0.05 confirms that the decrease in speaking anxiety after the role-playing intervention is statistically significant.

Hypothesis Testing (Regression Analysis)

Regression analysis was conducted to determine the impact of pre-test scores (independent variable) on post-test scores (dependent variable):

Regression Equation:

Post-test=18.280+0.694(Pre-test)\text{Post-test} = 18.280 + 0.694(\text{Pre-test})Post-test=18.280+0.694(Pre-test)

Variable	B Coefficient	Std. Error	t-value	Sig.
Constant	18.280	11.127	1.643	0.111
Pre-test	0.694	0.113	6.150	0.000

The significance value ($p < 0.05$) indicates a strong relationship between pre- and post-test scores. The positive coefficient suggests that as pre-test anxiety scores increase, post-test scores also tend to increase, albeit at a lower level, showing residual anxiety despite treatment.

Discussion

The findings of this study align with previous research indicating the effectiveness of role-playing in lowering speaking anxiety and enhancing communicative competence (Karim, 2025; Samonova, 2025; Helvira et al., 2025). Role-playing provides a low-pressure, interactive environment that helps learners shift focus from accuracy to fluency and confidence building.

This method encourages students to take on roles and simulate real-life speaking contexts, which appears to desensitize anxiety triggers and improve their verbal expression. The notable drop in average scores and redistribution of anxiety levels across categories further confirms its pedagogical value. The statistical tests validate that this improvement is not by chance, but the result of a structured intervention strategy.

These outcomes also reinforce the psychological link between language performance and self-confidence. As students engaged more frequently in speaking tasks through role-play, they became more comfortable expressing themselves and less fearful of making mistakes—an important step in developing communicative competence in English.

CONCLUSIONS

As stated by Arikunto, a conclusion is not a narrative, nor is it derived from others' opinions or shaped by the researcher's preferences. A valid conclusion must be based entirely on the data collected throughout the research process. Any conclusion that manipulates data to satisfy expectations rather than reflect the truth is considered invalid.

Based on the data analysis presented in the previous chapter, this study draws the following conclusions:

1. At the beginning of the study, the speaking anxiety levels of students in the Radiology A class at APIKES Talitakum Medan were distributed as follows: 18.75% (6 students) experienced high anxiety, 59.38% (19 students) experienced moderate anxiety, and 21.88% (7 students) experienced low anxiety. The mean anxiety score was 97.09.
2. After implementing the role-playing teaching method, there was a measurable reduction in speaking anxiety levels: the percentage of students with high anxiety decreased to 12.50% (4 students), moderate anxiety to 56.25% (18 students), and low anxiety increased to 31.25% (10 students). The mean anxiety score also decreased by 11.43 points, from 97.09 to 85.66.
3. Based on the paired sample t-test, the difference between students' speaking anxiety before and after the role-playing intervention was found to be statistically significant, thereby

rejecting the null hypothesis (H_0) which stated that there was no significant difference in anxiety levels.

4. The hypothesis test showed a significance value of $p < 0.05$, indicating that the independent variable (teaching intervention) has a significant impact on the dependent variable (speaking anxiety level). Therefore, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted, confirming that role-playing significantly reduces speaking anxiety in students.
5. The role-playing method may be considered an effective alternative instructional strategy in English language teaching, particularly for reducing students' speaking anxiety and improving their oral communication confidence.
6. However, some students did not experience a decrease in anxiety levels despite the use of role-playing. This may be attributed to their lack of active participation in the role-playing activities during the sessions.

Based on the findings and conclusions of this study, the following suggestions are proposed:

1. For Students:
   It is recommended that students increase their effort and commitment to practicing English speaking more actively—either independently or with peers. Regular speaking practice will help reduce anxiety and nervousness when speaking in public, and gradually build self-confidence in using English effectively.
2. For English Instructors:
   English language lecturers are encouraged to continuously improve their pedagogical knowledge and teaching competencies, especially in designing and implementing engaging and student-centered learning strategies. Creating a positive and enjoyable learning atmosphere can increase students' motivation and interest, thus reducing anxiety and improving learning outcomes.
3. For APIKES Talitakum Medan:
   The institution is encouraged to invest more in educational facilities and infrastructure, including language learning media, audiovisual tools, and language laboratories, to support more interactive and anxiety-reducing language learning environments.

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