



IMPLEMENTING THE SHADOWING TECHNIQUE TO ENHANCE PRONUNCIATION LEARNING AMONG INDONESIAN EFL UNDERGRADUATES

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Abstract

Effective pronunciation plays a crucial role in achieving communicative competence in English as a Foreign Language (EFL). However, Indonesian learners often experience difficulties in producing accurate English sounds due to limited exposure to authentic input and lack of systematic pronunciation training. This study aimed to investigate the effectiveness of the shadowing technique in enhancing pronunciation mastery and to explore students' perceptions of its use in pronunciation learning. Employing a mixed-method design, the study involved fifteen undergraduates from the English Education Study Program at UIN Raden Intan Lampung. Data were collected through a pre-experimental one-group pre-test and post-test design and a descriptive survey. Quantitative results showed a significant improvement in students' pronunciation scores ($t = 7.421, p < 0.05$), with the mean increasing from 55.40 to 78.07. Survey results further revealed highly positive perceptions, highlighting increased motivation, engagement, and confidence. The findings confirm that the shadowing technique effectively improves segmental and suprasegmental pronunciation features while promoting learner autonomy.

Keywords:

shadowing technique, pronunciation, EFL learners, Indonesian undergraduates

A. INTRODUCTION

Effective pronunciation is essential for oral communication because it helps listeners understand what is being said. Pronunciation errors can cause message distortion and miscommunication between speakers and listeners (Yates, 2002; Fraser, 2001). Fraser (2001) highlighted that a key element of speaking skill is pronunciation. He claimed that whereas poor pronunciation can make a speaker hard to understand even when they use language correctly, strong pronunciation enables a speaker to be understood even when grammatical or lexical errors occur. This suggests that pronunciation is the essential component of understandable communication in English as a Foreign Language (EFL) contexts rather than a supplementary aspect of speaking.

Recognizing the importance of pronunciation, teachers are encouraged to integrate pronunciation practice into English instruction, motivating students to develop their phonological awareness and sound production accuracy (Gilakjani, 2012; Derwing & Munro, 2015). According to Suwartono (2014), pronunciation is an essential component of language because “the nature of language is spoken.” Similarly, Yates (2002) defined pronunciation as the process of producing sounds that convey meaning within a language system. Therefore, pronunciation represents not only the articulation of sounds but also the ability to convey intended meaning effectively through prosodic features such as stress, rhythm, and intonation.

In order to tackle this issue, a variety of pronunciation pedagogy techniques have been investigated, including imitation and listen-and-repeat strategies, which motivate learners to replicate target segmental and suprasegmental features to exposure to native or near-native auditory models. Research endeavors such as Improving English Pronunciation mastery Using Imitation Technique in mmmenglish.com and Implementing Listen and Imitate Technique to Improve Pronunciation Skill have substantiated that imitation-centered methodologies markedly enhance learners' pronunciation accuracy through increased exposure to audiovisual stimuli. Nevertheless, these investigations predominantly concentrated on surface-level articulation and secondary school populations, thereby constraining their applicability to contexts pertaining to higher education.

Moreover, preliminary evaluations from students revealed that the conventional technique for pronunciation instruction, which often emphasized the repetition of isolated phonemes or syllables, resulted in a decline in both interest and engagement. Conversely, the implementation of the Shadowing Technique, which required students to frequently listen to and replicate sentences articulated by native speakers, led to a marked enhancement in student engagement and enthusiasm during instructional

sessions. Empirical research suggests that imitation activates diverse sensory modalities and cognitive mechanisms, thereby augmenting the effectiveness and interactivity of pronunciation training (Foote & McDonough, 2017; Surayya, 2024).

Empirical evidence also indicates that many learners struggle to differentiate similar vowel and consonant sounds. A study by Isnani et al. (2020) at SMP Negeri 2 Pontianak revealed that approximately 85% of students made pronunciation errors, particularly when distinguishing between minimal pairs such as [meet /mi:t/] vs. [mitt /mit/], [least /li:st/] vs. [list /list/], and [live /laɪv/] vs. [life /laɪf/]. Such patterns demonstrate that Indonesian learners often experience difficulty perceiving and producing distinct phonemes, which negatively affects their oral intelligibility and communicative confidence.

Recent scholarly discourse has increasingly focused on the shadowing technique, a method characterized by its dynamic nature and high cognitive demands, wherein learners concurrently listen to and replicate spoken language. This pedagogical approach has been empirically demonstrated to facilitate superior fluency, rhythm, and intonation control in comparison to conventional imitation methods (Hamada, 2019; Yavari & Shafiee, 2019). For example, an investigation titled *The Effectiveness of Using Shadowing Technique Toward Students' Pronunciation Skill at Twelfth Grade Students in Senior High School Number 02 Muaro Jambi* revealed that the implementation of shadowing significantly improves pronunciation outcomes at the secondary educational level. However, there exists a paucity of empirical research regarding the systematic integration of the shadowing technique within tertiary-level English as a Foreign Language (EFL) pronunciation courses. Furthermore, prior studies have infrequently explored the dimensions of student engagement and motivation in the context of employing shadowing within organized classroom environments.

Therefore, there is a clear need to investigate how the shadowing technique can be implemented to improve pronunciation learning among Indonesian EFL undergraduates, particularly within formal academic settings. The present study addresses this gap by examining the effectiveness of the shadowing technique in enhancing pronunciation mastery and exploring students' perceptions of its use in pronunciation learning."

B. RESEARCH METHOD

This study employed a **mixed-method design** combining a **quantitative pre-experimental approach** and a **descriptive survey** to obtain comprehensive data regarding both the effectiveness of the shadowing technique and students' perceptions

toward its use in pronunciation learning. According to **Creswell (2014)**, mixed-method research integrates quantitative and qualitative data collection and analysis to provide a more complete understanding of a research problem than either approach alone. In this study, the quantitative component adopted a **one-group pre-test and post-test pre-experimental design**, which, as **Fraenkel, Wallen, and Hyun (2012)** explain, is useful for determining whether a treatment produces measurable changes in a single group without a control group. The design involved administering a pronunciation pre-test to measure students' initial competence, implementing the shadowing technique as treatment, and then conducting a post-test to identify improvement after the intervention. The difference between pre-test and post-test scores was analyzed using a paired-sample *t*-test to determine the statistical significance of the improvement.

Complementing the experimental component, a **descriptive quantitative survey** was conducted to gather data on students' perceptions of learning pronunciation through the shadowing technique. Following **Sugiyono (2019)**, descriptive research aims to describe phenomena as they are, based on respondents' experiences and opinions. A structured questionnaire using a Likert-scale format was distributed to participants after the intervention to evaluate their engagement, motivation, and attitudes toward the use of the shadowing technique. The survey results were analyzed using percentage analysis to categorize responses into levels of agreement. By integrating both effectiveness testing and perceptual analysis, this research design provides a holistic understanding of how the shadowing technique supports pronunciation learning among Indonesian EFL undergraduates.

The subjects of this study were **first-semester students of the English Education Study Program, Faculty of Tarbiyah and Teacher Training, UIN Raden Intan Lampung, academic year of 2020/2021**. The participants were selected from among students who were enrolled in the Pronunciation Practice Class. In total, there were **seven classes** in the program, and one class consisting of **15 students** was chosen as the sample for this study.

C. FINDINGS AND DISCUSSION

1. The Effectiveness of the Shadowing Technique to Improve Students' Pronunciation mastery

This research aimed to determine the effectiveness of Shadowing in improving students' pronunciation mastery. The analysis involved students' score classifications in the pre-test and post-test, the mean scores, the significance of the differences between the pre-test and post-test scores, and hypothesis testing using a paired sample *t*-test.

a. Classification of Students' Pre-test and Post-test Scores

The researchers used a pronunciation scoring rubric to measure students' pronunciation performance in the pre-test and post-test. The results are presented below.

Table 1. Score Categorization and Percentage of Students' Pronunciation Ability in the Pre-test

Score Range	Category	Frequency (F)	Percentage
80–100	Excellent	3	20%
66–79	Good	1	7%
56–65	Fair	2	13%
41–55	Poor	6	40%
30–39	Bad	3	20%
Total		15	100%

Table 1 shows the pre-test results of 15 students. Three students (20%) were classified as excellent, one student (7%) as good, two students (13%) as fair, six students (40%) as poor, and three students (20%) as bad.

Table 2. Score Categorization and Percentage of Students' Pronunciation Mastery in the Post-test

Score Range	Category	Frequency (F)	Percentage
80–100	Excellent	6	40%
66–79	Good	5	33%
56–65	Fair	4	27%
40–55	Poor	0	0%
30–39	Bad	0	0%
Total		15	100%

Table 2 shows that in the post-test, 6 students (40%) were classified as excellent, 5 (33%) as good, and 4 (27%) as fair. No students were categorized as poor or bad. Comparing Table 1 and Table 2, it is clear that students' pronunciation ability improved after the treatment using the Shadowing technique. The number of students achieving excellent and good scores increased significantly.

b. Mean Score and Standard Deviation of Pre-test and Post-test

The mean score increased from **55.40** in the pre-test to **78.07** in the post-test, demonstrating an improvement of more than 22 points. The standard deviation decreased slightly, indicating more consistent performance across the group after the treatment. This improvement suggests that the shadowing technique not only enhanced pronunciation accuracy but also contributed to more uniform outcomes among students. It can be seen in this table:

Table 3. Mean Score and Standard Deviation of Pre-test and Post-test

Test	Mean	N	Std. Deviation	Std. Error Mean
Pre-test	55.40	15	20.969	5.414
Post-test	78.07	15	16.434	4.243

Table 3 shows that the mean pre-test score was 55.40, while the mean post-test score was 78.07, indicating a substantial improvement after treatment. The difference between these means suggests that the Shadowing technique positively affected students' pronunciation mastery.

c. Significant Differences Between Pre-test and Post-test Scores

Table 4. Paired Samples Correlation

Pair	N	Correlation	Sig.
Pre-test & Post-test	15	0.827	0.000

As shown in Table 4, the correlation between pre-test and post-test scores is 0.827 with a significance value of 0.000 (< 0.05). This indicates a significant relationship between students' performance before and after the treatment.

Table 5. Hypothesis Testing of Paired Sample T-test

Pair	Mean Difference	Std. Deviation	Std. Error Mean	95% Confidence Interval (Lower-Upper)	t	df	Sig. (2-tailed)
Pre-test - Post-test	-22.667	11.830	3.055	-29.218 - -16.115	-7.421	14	0.000

The paired sample t-test results in Table 5 show that the calculated t-value (tcount) is 7.421, which exceeds the t-table value of 2.145 ($df = 14$, $\alpha = 0.05$). Since $t\text{-count} > t\text{-table}$, the alternative hypothesis (H_a) is accepted. This means there is a

statistically significant difference between the pre-test and post-test results. Consequently, the use of the Shadowing Technique effectively improved students' pronunciation mastery.

2. Students' Perception of Using the Shadowing Technique in Teaching Pronunciation

The second part of the research investigated students' perceptions of learning pronunciation through the Shadowing Technique. The findings are summarized in the following table.

Table 6. Percentage of Students' Responses

No.	Statement Summary	%	Category
1	The Shadowing Technique helps me learn pronunciation clearly.	83%	Very High
2	Audiovisual media make pronunciation learning easier.	77%	High
3	Learning pronunciation is important for understanding English lessons.	68%	High
4	Pronunciation can be learned without audiovisual media.	63%	High
5	The mmmenglish.com website provides varied audiovisual materials.	89%	Very High
6	I could pronounce silent consonants correctly before treatment.	93%	Very High
7	I had difficulty pronouncing silent consonants before using the Shadowing technique	84%	Very High
8	I better understand how to pronounce silent consonants after using Shadowing technique	79%	High
9	The mmmenglish.com website makes learning pronunciation fun and easy.	89%	Very High
10	The Shadowing Technique motivates me to keep practicing pronunciation.	77%	High
11	Using imitation techniques increases my confidence in pronouncing English words.	80%	High
12	Shadowing technique is more interesting than learning with songs.	73%	High

From Table 6, it can be seen that 42% of the students showed very high responses (scores between 81–100%) and 58% showed high responses (scores

between 61–80%). This indicates that students' perceptions of the use of the Shadowing Technique were highly positive. Most students agreed that imitation through audiovisual media made pronunciation learning easier, clearer, and more enjoyable.

The results of the paired-sample t-test showed a significant difference between pre-test and post-test scores ($t = 7.421, p < 0.05$). Therefore, the null hypothesis was rejected, and the alternative hypothesis was accepted, confirming that the shadowing technique had a statistically significant effect on students' pronunciation mastery.

These findings align with previous studies emphasizing the benefits of shadowing in enhancing learners' phonological accuracy and fluency. Hamada (2018, 2019) and Murakami (2019) found that shadowing training helps EFL learners improve their control of rhythm, stress, and intonation, thereby achieving more natural speech patterns. Similarly, Foote and McDonough (2017) demonstrated that using mobile-based shadowing activities increases learners' pronunciation accuracy and self-monitoring ability. The present findings corroborate these results, showing that systematic exposure to authentic models, such as a video, facilitated learners' improvement in both segmental and suprasegmental pronunciation aspects.

Moreover, the improvement supports Hussain's (2020) argument that imitation-based training activates multiple cognitive processes, auditory, visual, and motor, leading to better pronunciation retention. In this study, the audiovisual shadowing tasks required students to listen attentively, imitate immediately, and self-correct based on feedback, a process that reinforced phonetic awareness and automaticity.

The results of this study are consistent with Kelly (2004), who stated that pronunciation teaching often occurs only when teachers respond to students' in-class pronunciation errors and is rarely planned systematically. This study, however, demonstrates that when pronunciation learning is intentionally structured using an appropriate technique so students can achieve substantial improvement.

Furthermore, Brown (2004) defines a teaching technique as a set of exercises, activities, or tasks used in a language classroom to achieve specific learning objectives. The Shadowing Technique exemplifies this by engaging students in active listening and repetition, thus enhancing their pronunciation accuracy and confidence.

The survey findings demonstrated overwhelmingly positive student perceptions toward the use of shadowing in pronunciation learning. As shown in Table 6, 42% of respondents indicated *very high* agreement and 58% showed *high* agreement with the statements regarding the effectiveness and engagement of the technique. Most students agreed that audiovisual media and imitation practice helped them pronounce English sounds more accurately and made learning more enjoyable.

These results are consistent with Putri (2023), who found that the shadowing technique enhanced students' pronunciation and increased their motivation to practice English sounds independently. Similarly, Rahmawati (2022) reported that shadowing helped EFL learners overcome anxiety in speaking and improved their self-confidence. The present study supports these conclusions, as students expressed that the use of *video* made pronunciation practice interactive and less intimidating.

From a pedagogical perspective, this supports Derwing and Munro's (2015) claim that learners' attitudes toward pronunciation instruction significantly influence learning outcomes. When pronunciation activities are engaging, contextualized, and multimodal as in shadowing, students are more likely to sustain effort and practice regularly. The integration of audiovisual media also aligns with Wen and Li's (2022) findings that multimodal imitation enhances learners' awareness of articulatory movements, thereby improving both perception and production.

Overall, this study suggests that the shadowing technique is an effective pedagogical tool for improving pronunciation learning among Indonesian EFL undergraduates. The significant score gains and positive perceptions indicate that shadowing not only supports phonetic accuracy but also fosters learner autonomy and motivation. These outcomes are congruent with Hamada's (2019) assertion that shadowing promotes automatic speech processing and enhances the integration of listening and speaking skills.

Furthermore, compared with traditional listen-and-repeat methods, shadowing requires real-time imitation, demanding higher cognitive engagement (Shiki et al., 2010). This simultaneous listening and speaking process likely contributed to the students' improved rhythm and fluency. The use of authentic materials also exposed students to natural pronunciation models, supporting Celce-Murcia et al.'s (2010) recommendation that authentic auditory input is crucial for developing accurate pronunciation.

The combination of quantitative improvement and qualitative feedback underscores that shadowing can serve as a holistic pronunciation pedagogy. It trains learners not only to produce sounds correctly but also to perceive, process, and reproduce speech more naturally. This study thus contributes to the growing body of research advocating for interactive and multimodal pronunciation instruction in higher education (Foote & McDonough, 2017; Wen & Li, 2022; Surayya, 2024).

D. CONCLUSION

Based on the statistical analysis and students' perceptions, it can be concluded that the Shadowing Technique is effective in improving students' pronunciation mastery. Students not only showed significant progress in their pronunciation scores but also demonstrated positive attitudes and motivation toward learning pronunciation through audiovisual imitation methods. In summary, shadowing is not merely a repetition exercise but a cognitively and affectively rich approach that transforms pronunciation learning into an active, engaging, and meaningful process. Its implementation in Indonesian EFL classrooms can bridge the gap between theoretical pronunciation instruction and real communicative performance, ultimately contributing to learners' intelligibility and global communicative competence.

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