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The Use of Minimal Pairs to Improve Pronunciation of the Tenth Grade Students of SMA Negeri 2 Sigi

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*Cindhy Qirana Cinta Mentari, Rofiqoh, Hastini, Abd. Kamaruddin[abcd]

[1234]Tadulako University, Indonesia.
Corresponding Author: inkasariindhy@gmail.com

A B S T R A C T

This research aims to prove whether the use of minimal pairs can improve pronunciation of fricative sounds of the tenth grade students of SMA Negeri 2 Sigi. This research used a pre experimental design. The population of this research was 266 tenth grade students of SMA Negeri 2 Sigi. The sample was selected by employing a purposive sampling technique. The sample was 34 students of Class XC. To collect the data, a pronunciation test was used as the research instrument. The data were analyzed using SPSS 30. The findings revealed that the students' pronunciation improve after getting the treatment. Based on the calculation, the mean score of posttest (72.73) is higher than the mean score of pre-test (43.07). It is supported by the data analysis using paired sample t-test. It showed that the value of Sig.(2-tailed) is lower than the chosen alpha level (0.000 < 0.05). Therefore, the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected. It can be concluded that the use of minimal pairs can improve pronunciation of the tenth grade students of SMA Negeri 2 Sigi. The implication of the finding to the teaching practice is that the teachers need to use minimal pairs in teaching pronunciation to make students' pronunciation better.

Keywords: *Improving, Minimal Pairs, Pronunciation, Pre-Experimental*

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INTRODUCTION

Pronunciation is one of the most important components in English as a Foreign Language (EFL) that needs to be mastered in order to develop speaking skills and achieve effective communication. Clear and accurate pronunciation helps speakers convey their messages in a way that listeners can easily understand. As Kobilova (2022) stated, accurate pronunciation is a crucial part of learning English, while incorrect pronunciation often leads to misunderstanding, even if a learner's grammar is correct.

In the teaching and learning of English, pronunciation is taught to enhance students' speaking ability. According to Kurikulum Merdeka, one of the goals in speaking is for students to use English to verbally convey ideas, thoughts, and feelings in social interactions. For communication to be effective, it is essential that students speak with fluency and accurate pronunciation so that their intended messages are clearly understood by their listeners.

However, pronunciation remains one of the common problems faced by EFL learners, particularly senior high school students. Many of them struggle with speaking and expressing their ideas due to poor pronunciation skills. A significant factor is their difficulty in differentiating sounds that do not exist in Indonesian, which results in incorrect pronunciation of English words.

This issue is also supported by Tarmina (2014), who argued that one of the main difficulties for non-native speakers is that their tongue is not accustomed to producing certain English sounds. Since the phonological system of Indonesian differs from that of English,

students often fail to produce specific sounds accurately, which in turn hinders their oral communication.

Given these challenges, it is necessary to find effective techniques that can help students improve their pronunciation. One interesting method that has been widely used is the minimal pairs technique. Celce-Murcia, Brinton, and Goodwin (1996) defined minimal pairs as words that differ by only one sound in the same position, such as "ship" and "sheep." In language teaching, minimal pairs are often employed to train learners to recognize and produce distinctive sounds more accurately.

Khairunnisa (2023) also emphasized the usefulness of minimal pairs, stating that the technique helps learners easily identify the differences between words that sound similar. By presenting learners with word pairs such as "she" and "see" for the /ʃ/ and /s/ sounds, teachers can assist students in developing both their listening discrimination and pronunciation accuracy. This approach is particularly effective in drawing students' attention to subtle sound differences.

Several previous studies have demonstrated the effectiveness of the minimal pairs technique in improving students' pronunciation. For example, Tarmina (2014) found that minimal pairs were effective in helping students pronounce alveopalatal sounds correctly. Similarly, Putri (2015) reported that drills using minimal pairs significantly improved students' ability to pronounce similar sounds, while Putra and Rochsantiningsih (2018) found that minimal pair practice could generally enhance students' pronunciation performance.

Based on these findings, the present study was conducted with tenth grade students at SMA Negeri 2 Sigi to investigate whether the use of minimal pairs can improve their pronunciation. This research specifically focused on fricative sounds: /θ/, /ð/, /z/, /ʒ/, /f/, and /v/. By applying the minimal pairs technique, the study aimed to help students overcome their pronunciation difficulties and achieve clearer and more accurate English speaking skills.

METHOD

This research used a quantitative research method. It involves examining a sample from population, collecting data using research instruments, and statistically analyzing data to test predetermined hypothesis. It used a pre-experimental research design because the researcher wanted to focues on one class. It enforces that only one group as an experimental class, and there is no control group. The Population of this research was the tenth-grade students of SMA Negeri 2 Sigi. They were divided into eight parallel classes: XA, XB, XC, XD, XE, XF, and XG. Each class consisted of 32-34 students. The total number of the population of this research was 266 students. Due to the number of the populations is many, the sample is needed. In selecting the sample, the technique used was a purposive sampling technique. The class XC was chose because this class had lowest English score in the tenth grade.

There are two variables in this research; dependent and independent variable. According to Creswell (2012), a dependent variable is an attribute or characteristic that is dependent on or influenced by the independent variable while an independent variable is an attribute or characteristic that influences or affects and outcome or dependent variable. In this research, the dependent variable is improving students' pronunciation and the independent variable is the use of minimal pairs.

The instrument that the writer used in this research was pronunciation test to collect the data. The test was given to the students twice as pre-test and post-test. The test consists of 24 items about pronouncing words in pair. The total score for the test is 48 with 2 point for each item. The researcher used Statistical Package for the Social Sciences (SPSS) version 30 to calculate the data analysis. The paired sample t-test was used to examine the data in this research.

Before giving the treatment, the students was gave the pre-test to measure their knowledge, ability, and performance. Students were recorded during the pronunciation test. After that, the researcher did the treatment. The students were taught to pronounce sounds [θ], [ð], [z], [ʒ], [f] and [v] by using minimal pairs technique. The treatment was conducted on

August 22nd –September 12th 2024. After giving the treatment for six meetings, the researcher gave post-test to the students to see the improvement of their pronunciation after the treatment was given.

FINDINGS AND DISCUSSION

The findings of this research were examined using SPSS version 30. To analyze the data, the researcher collected the results of the pre-test and the post-test. And then, the researcher calculated the mean score of the pre-test and the post-test. After that, the normality and homogeneity test was required. At last, the paired sample t-test was used to test the hypothesis.

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Pre-test Experimental	34	20.83	68.75	43.07	13.32
Post-test Experimental	34	45.83	95.83	72.73	12.36
Valid N (listwise)	34				

Based on the calculations of the descriptive analysis above, it indicates that the mean score of the pre-test is 43.07 and the mean score of the post-test is 72.73. It shows that the mean score of the post-test is higher than the mean score of the pre-test.

Table 2. Result of Normality Test

	Class	Shapiro-Wilk		
		Statistic	df	Sig.
Students Learning Outcome	Pre-test Experimental	.960	34	.240
	Post-test Experimental	.987	34	.955

a. Lilliefors Significance Correction

The normality test was used to determine whether the data is normally distributed or not. If the significant value of the mean is more than 0.05, it is considered that the data is normally distributed. Based on the normality test using SPSS version 30 with Shapiro-Wilk test, the Sig. value of data on each student's learning outcome is greater than 0.05 (Sig. > 0.05). It could be concluded that the data was normally distributed.

Based on the normality test using SPSS version 27 with both Kolmogorov-Smirnov and Shapiro-Wilk tests, the post-test data on the ability to recognize number symbols among children was normally distributed (Sig. > 0.05). The Shapiro-Wilk test was used because the sample size was less than 50. In the Shapiro-Wilk test, the post-test W_counted value was 0.888, which is greater than the W_table value of 0.842. Thus, the post-test W value was greater than W_table, indicating that the data was normally distributed.

Table 3. Results of Homogeneity Test

		Levene Statistic	df1	df2	Sig.
Students Learning Outcome	Based on Mean	.677	1	66	.413
	Based on Median	.674	1	66	.415
	Based on Median and with adjusted df	.674	1	65.636	.415
	Based on trimmed mean	.683	1	66	.412

The homogeneity test was used to determine the homogeneity value. If the significant value of the mean is more than 0.05, the sample is considered homogenous. Based on the Homogeneity Test above, the Sig. value of the mean is 0.413, which is greater than 0.05. This means that the sample is considered homogenous.

The hypothesis test was used to determine whether or not using the minimal pairs technique is effective in improving students' pronunciation. Because the normality and the homogeneity of the data were both fulfilled, therefore Paired Sample t-test was carried out to examine the findings of the study. The criteria for the Paired Sample t-test are:

Ho is accepted if $t_{counted} \leq t_{table}$ *or Sig. (2-tailed) > 0.05*

Ho is rejected if $t_{counted} > t_{table}$ *or Sig. (2-tailed) ≤ 0.05*

While the hypothesis proposed is as follows:

Ho = The Use of Minimal Pairs cannot improve pronunciation of the tenth grade students of SMA Negeri 2 Sigi.
Ha = The Use of Minimal Pairs can improve pronunciation of the tenth grade students of SMA Negeri 2 Sigi.

Table 3. Results of Paired Sample t-Test Test

					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	Df	Sig.(2-tailed)
Students Learning Outcomes	Post-test – pre-test	29.65647	5.96047	1.02221	31.73618	27.57676	29.012	33	.000

Based on the paired sample t-test above, it shows that the mean paired differences value is 29.65647. This value shows the difference between the mean score of post-test and pre-test (72.73-43.07) and the difference is between 31.73618 and 27.57676 (95% Confidence Interval of the Difference Lower and Upper). Then, the data shows that the value of Sig. (2-tailed) is 0.000. It is clear that the Sig. (2-tailed) value is lower than the chosen alpha level (0.000 < 0.05). As a result, null hypothesis (Ho) is rejected, and alternative hypothesis (Ha) is accepted. Based on the finding, it can be concluded that the minimal pairs technique is effective in improving students' pronunciation ability of SMA Negeri 2 Sigi.

The purpose of this research is to find out if the use of minimal pairs technique can improve students' pronunciation. By analyzing the data, the results showed that the pre-test scores was equally low. It was found that the students got low scores due to most of them had difficulties to pronounce the words given, especially the words contain sounds /θ/, /ð/, /z/, /ʒ/, /f/ and /v/. They also had difficulties to pronounce sounds that have almost the same sound.

To solve the problem, the researcher introduces minimal pairs as a technique to practice the students' pronunciation. During the treatment, the students was gave some exercise sheets to practice their pronunciation. The students faced many difficulties. First, many words were mispronounced which cause misunderstanding. It was because they were not used to pronounce the sounds given, because these sounds do not exist in Indonesian. Then, the students got difficulties to distinguish words that had almost the same sound. Therefore, by doing the exercise, the students can practice a lot to pronounce the sounds, so their pronunciation can improve. There are several pronunciation features that improved through the use of minimal pairs technique. These features primarily revolve around the fricative sounds and the ability to distinguish between similar sounds, which are often challenging for students. Firstly, Fricative sounds are not present in the Indonesia language, making them particularly difficult for students to pronounce correctly. The minimal pairs technique allows students to practice these sounds in pairs of words that differ only by one sound, thereby helping students to focus on the articulation of these challenging fricative sounds.

The ability to distinguish between words that have similar sounds is another critical feature that improved. For instance, students often confuse words like "sip" and "zip" or "fan" and "van". Therefore, by practicing with minimal pairs, students learn to hear and produce the subtle differences in sound that can change the meaning of words. Next, the use of minimal pairs enhances students' phonemic awareness, which is the ability to recognize and manipulate the individual sounds in words. This awareness is crucial for developing accurate pronunciation skills. As students practice minimal pairs, they become more attuned to the sounds of English, which can lead to improved listening skills as well.

In the other hand, as students practice and improve their pronunciation, their confidence in speaking English also increases. This psychological aspect is significant, as students who feel more confident are likely to engage more in speaking activities, further reinforcing their pronunciation skills. Lastly, the research indicates that by improving their

pronunciation, students can reduce instances of miscommunication. This improvement is particularly important in a language learning context, where clear communication is essential for effective interaction. The ability to pronounce words correctly ensures that students can convey their intended meaning without confusion.

The factor that makes the students' pronunciation shows an improvement because by using minimal pairs technique, the students more motivated and make it easier for them to learn pronunciation. The students practice their pronunciation using minimal pair words that contain fricative sounds. In addition, they also learn to distinguish between one sound and another. This aims to prevent mispronunciation which can change the meaning of a word and result in miscommunication when speaking with other people. It is supported by Marpaung (2023) who argues that minimal pairs technique can help to improve students' pronunciation because students will practice their pronunciation more often because if the pronunciation is wrong then the meaning will also be wrong, and students who analyse difficulties will understand the speaker's intent.

The result of this finding is inline with the findings from the previous study by Tarmina (2014) finding that minimal pairs technique can be used to help the students increase their English pronunciation, especially in distinguishing two words. The next previous study inline with this finding is Putri (2015) finding that the use of minimal pair practice significantly effect the students' ability in pronouncing similar sounds of words. The other previous study by Putra and Rochsantiningsih (2018) found that the minimal pairs exercises can be used to provide additional practice in pronouncing particularly difficult phonemes. They help students because they can focus their pronunciation efforts on the difficult areas. Next, the previous study by Arifuddin (2020) finding that the use of minimal pairs technique is very effective in teaching English pronunciation. From those studies, the findings show that the use of minimal pairs can improve the students' pronunciation in almost all level of study.

From the previous studies, the research on the use of minimal pairs to improve students' pronunciation was conducted at the junior high school and senior high school levels. This research was also conducted at the senior high level. Therefore, the researcher suggests to other researcher to conduct research at the elementary level to see whether the use of minimal pairs can improve students' pronunciation at the elementary.

CONCLUSIONS

In conclusion, the specific pronunciation features that improved through the use of the minimal pairs technique include the articulation of fricative sounds, the ability to distinguish between similar sounds, enhanced phonemic awareness, increased confidence in speaking, and a reduction in miscommunication. These improvements not only contribute to better pronunciation but also facilitate more effective communication in English. The findings underscore the importance of targeted pronunciation practice in language learning, particularly for sounds that are not present in the students' native language.

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