



## RESEARCH ARTICLE



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## TEACHING ENGLISH SOUNDS VIA MINIMAL PAIRS: THE CASE OF YEMENI EFL LEARNERS

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### ABSTRACT



Many foreign language learners encounter difficulties in pronouncing English language sounds, which potentially leads to misunderstanding in oral communication. The pronunciation teaching strategy of minimal pairs has long been considered as an effective technique that may address this issue. This study, therefore, investigates the extent to which minimal pairs can improve the pronunciation of English consonants among Yemeni learners of English as a foreign language (EFL). Five English phonemes were selected (i.e., /p/, /v/, /z/, /tʃ/ and /ŋ/), which are commonly found to be problematic among most Yemeni EFL learners. A pretest-posttest quasi-experimental research design was adopted in the study involving ten male undergraduate students in an experimental group. Drills on minimal pairs were applied throughout a period of five weeks' intervention. The results showed significant improvement in the pronunciation of problematic English sounds, with the percentage of pronunciation difficulties being decreased from the pre-test to post-test results. It was concluded that the teaching strategy of minimal pairs is an effective way that could solve to some extent the pronunciation problems among Yemeni EFL learners. The findings have some pedagogical contributions in pronunciation teaching and learning, particularly dealing with English sounds in foreign language settings.

**Keywords:** *English Language Teaching, English as a Foreign Language, Minimal Pairs, Pronunciation Teaching and Learning, Yemeni Learners of English.*



## INTRODUCTION

Speaking skills are the primary ability in the process of learning English as a foreign language (EFL) or a second language (ESL). In fact, oral communicative competence is highly critical in the teaching and practice of a target language (Li, 2016). In this aspect, pronunciation is essential for the success of a speaker. Celce-Murcia, Brinton and Goodwin (2010) state that successful communication involves correct pronunciation, especially in the EFL context. EFL learners, therefore, need to put more efforts in pronunciation in order to communicate appropriately and fluently.

Nevertheless, many EFL learners encounter certain difficulties in pronouncing English language sounds. Ehrlich and Avery (2013) consider learners' first language as one of the sources of these difficulties. That is, learners fail to produce certain sounds that are absent in their mother tongue. The current study focuses on some pronunciation issues among Yemeni EFL learners, particularly with regard to consonant sounds that are unavailable in their first language, i.e., the Arabic language. According to Altamimi (2015), most Arab learners of English have some difficulties in five consonants, i.e., /p/, /v/, /z/, /tʃ/ and /ŋ/, which are the target sounds selected in the present study. In most cases, Arab learners usually replace these sounds with the closest sounds that exist in Arabic: /p/ is replaced with /b/, /v/ with /f/, /z/ with /dʒ/, /tʃ/ with /ʃ/, /ŋ/ with /n/ or /k/ (Altamimi, 2015). The minimal pair strategy has been suggested as one of the effective pronunciation teaching strategies in EFL classrooms (e.g., Wright, 2010). The current study, therefore, aims to explore the degree to which minimal pairs would improve Yemeni EFL learners' production of five problematic consonants in English. The next section will highlight some previous studies on minimal pairs.

## PREVIOUS STUDIES

Wright (2010) defines minimal pairs as a technique to differentiate between words and phrases by using only one sound, such as "pig" versus "big". Several empirical studies have examined the effectiveness of using minimal pairs as a teaching technique in addressing pronunciation difficulties among English language learners. Gierut (1989), for

example, found that minimal pairs are effective in improving children's pronunciation. Similarly, Barlow and Gierut (2002) discovered that minimal pairs are a power remedy for children facing phonological delays. According to Hayes-Harb (2007), minimal pairs may increase children's awareness and sensitivity in finding contrasting phonemes and, therefore, improve their pronunciation.

A quasi-experimental approach on minimal pairs has been employed in many previous studies. Tajima, Rothwell and Munhall (2002), for instance, examined the English consonants /r/ and /l/ among Japanese learners; the findings revealed that most participants improved their pronunciation of /r/ and /l/ in the post-test, lending evidence that the minimal pair strategy was able to enhance the pronunciation among Japanese speakers of English. In Vietnam, Tuan (2010) examined whether the use of minimal pairs was effective in enhancing the pronunciation of Vietnamese learners of English; the study concluded that the participants, including teachers, obtained remarkable benefits from the minimal pair strategy.

Minimal pairs are also a powerful teaching strategy for speakers who suffer from speech problems such as speech apraxia, as reported by Wambaugh, Doyle, Kalinyak and West (1996). Na'ama (2011) added that using minimal pairs would improve not only learners' pronunciation but also their word recognition. Given the findings shown in the literature, the current study aimed to investigate whether minimal pairs could be employed to enhance the pronunciation of English sounds for Yemeni EFL learners. The following section will provide the methodology employed in this study.

## METHODOLOGY

The current study employed a quasi-experimental design with a pre-test and a post-test. It involved one experimental group in which they were exposed to an intervention in a classroom. A convenient sampling technique was used to select the experimental group who made up of ten male Yemeni EFL learners. At the time of the experiment, the participants were all undergraduate students who were studying English in an intensive course at the Language Centre of Universiti Utara Malaysia, Kedah, Malaysia. They were students in different



specialisations. Their age ranged between 20 to 25 years old. All of them were Arab native speakers and classified into one experimental group. They had no

experience of staying in any native English-speaking country before. All of them had prior exposure to EFL in primary and secondary schools back in Yemen.

Table 1 - Research procedures

Weeks	Procedures
Week 1	Pre-test and Intervention (1 session)
Week 2	Intervention (2 sessions)
Week 3	Intervention (2 sessions)
Week 4	Intervention (1 session)
Week 5	Post-test

Table 2 - Minimal pairs in the pre-test and post-test

Sounds	Word-initial	Word-medial	Word-final
/p/-/b/	pace-base	rapid-rabid	cap-cab
/v/-/f/	veil-fail	rival-rifle	five-fife
/ʒ/-/dʒ/	-	vision-vegan	massage-message
/tʃ/-/ʃ/	chair-share	watcher-washer	match-mash
/ŋ/-/n/	-	hanger-henna	bang-ban

Table 1 shows the procedures conducted in the current study. Firstly, a pre-test was conducted in which the participants' pronunciations of minimal pairs were recorded with an audio recorder. Thirteen minimal pairs were used in the test, as shown in Table 2. Each pair consisted of sounds in word-initial, word-medial and word-final positions, except for /ʒ/-/dʒ/ and /ŋ/-/n/ (word-medial and word-final positions only).

After the pre-test, the intervention was conducted through minimal pair activities. The second author was directly involved in the intervention in the classroom. The target consonants used in the pre-test were integrated into drill exercises for the participants to practise. For each intervention, exercises and minimal pair drills were used. Each intervention lasted for 30 minutes. The

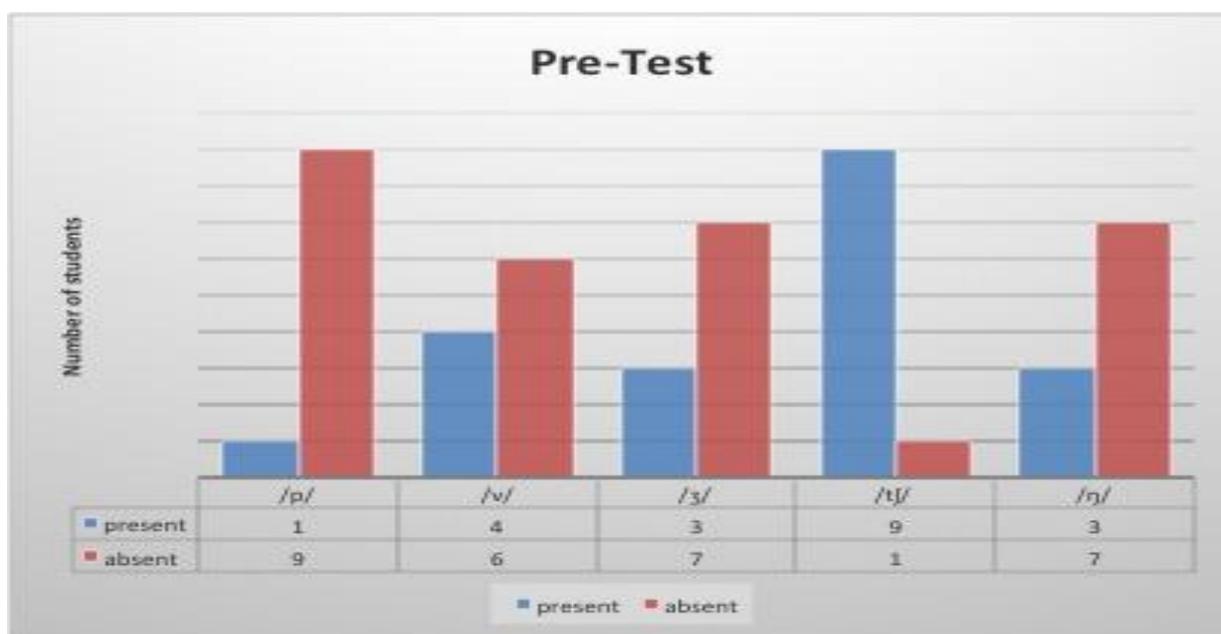
intervention period consisted of six sessions, which was distributed into four weeks.

In the first session of Week 1, a pre-test was conducted. In the second session of the same week, general lessons were presented on how five consonant sounds were articulated by using some phonetic pictures and graphs that indicated clearly the place of articulation for each sound. In Week 2 (first session), minimal pair drills and activities of the /p/ sound were practised. In the second session of Week 2, the exercises and activities of the /v/ sound were given. In Week 3 (first session), the training of the /z/ sound was practised. Next, in the second session of Week 3, the minimal pair activities focusing on the /tj/ sound were conducted.

In Week 4, the minimal pair exercises of the /ŋ/ sound were practised in the first session only. Finally, in Week 5, a post-test was conducted using the same minimal pairs employed in the pre-test (see Table 2).

Using auditory and impressionistic evaluation, we evaluated the participants' pronunciations by analysing and classifying them into two categories: correct pronunciation (the target consonants were present) and incorrect pronunciation (the target consonants were absent). The results are presented in percentages in terms of the presence/absence of the target consonants using bar charts.

Figure 1- The results of the pre-test (1=10%, etc.)



## FINDINGS AND DISCUSSIONS

The result of the pre-test is illustrated in Figure 1 above. It can be observed that the participants had great difficulties in the English pronunciation of most consonants. Firstly, the /p/ sound seems to be the most difficult sound to pronounce with 90% of the participants being unable to articulate it properly (see the "absent" row in Figure 1).

On the contrary, the /tj/ sound was the least difficult sound as only 10% of the learners are unable to pronounce it correctly. The /z/ and /ŋ/ sounds share the same percentage, i.e., 70%, on the difficulty faced by the participants. Lastly, more than half of the participants (60%) encounter difficulties in producing the /v/ sound accurately.

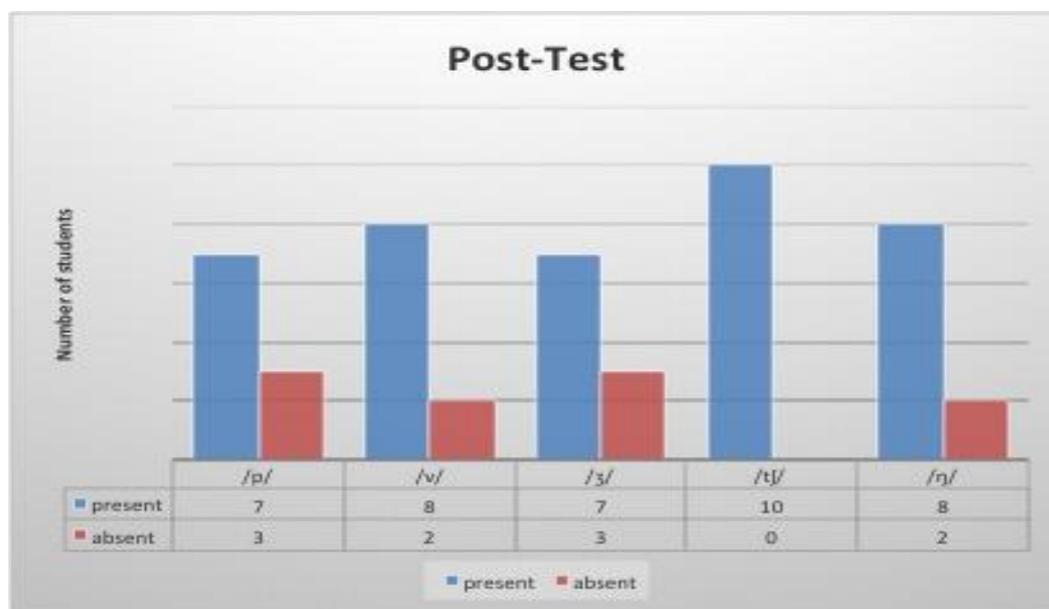


Figure 2- The results of the post-test (7=70%, etc.)

With regard to the post-test results (see Figure 2), there was a remarkable improvement in the participants' English pronunciation on all target sounds. It can be seen that the participants were more confident to pronounce the English consonant /t/ (100% correct; see the "present" row in Figure 2). Moreover, the participants' abilities to pronounce both /v/ and /ŋ/ increased to 80% after the intervention, while 70% of the participants were able to articulate both /p/ and /z/ accurately. In short, it can be summed up that the minimal pair strategy succeeded to some extent to improve the English pronunciation among the participants in this study.

The positive progress shown in this study accords well with the previous empirical studies on minimal pairs (e.g., Attamimi, 2015; Barlow & Gierut, 2002; Hayes-Harb, 2007; Tajima et al., 2002; Tuan, 2010; Wambaugh et al., 1996). All the reviewed studies support the outcome of this study in which the effectiveness of using minimal pairs in improving pronunciation is evident among Yemeni EFL learners. Although the reviewed studies used different target consonants, it still provides strong evidence that the employment of the minimal pair strategy as a teaching method is reliable and effective.

## CONCLUSIONS

This study aimed to assess the effectiveness of minimal pairs as a teaching method to address the English pronunciation difficulties among Yemeni EFL learners. It was generally found that minimal pairs are an effective teaching strategy in improving the pronunciation of English consonants /p/, /v/, /z/, /t/ and /ŋ/. However, the study has several limitations. First, for cultural reasons, it was limited to male participants only. Future researchers should extend this research by including female participants and also adding a larger number of participants to further establish the effectiveness of minimal pairs. Second, the study was limited to only one experimental group. Future studies should include a control group to compare minimal pairs with other teaching strategies. Third, the study was limited to only five consonants. It is recommended that future researchers should include more target sounds in English, which also includes vowels and diphthongs. Fourth, the statistical treatment was absent in the current study. Thus, future research needs to employ appropriate statistical analyses in order to confirm the effectiveness of minimal pairs in a more scientific way.



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