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The Effects of Formal Instruction on the Acquisition of English Long Vowels

Sukardi Weda and Andi Elsa Fadhilah Sakti

English Department, Universitas Negeri Makassar Makassar, 90224, Indonesia

sukardi.weda@unm.ac.id

Abstract. Indonesian and English vowels reveal different phonetic classification and symbols in the International Phonetic Alphabet (IPA). English has five long vowels: i:, ɜ:, α:, ɔ:, and u:. The difference in phonetic classification and symbol overlooks subsegmental difference in aspiration that exists between the two. In English there are many sounds symbolized by short vowels: i, ɜ, α, ɔ, and u: which are absent in Indonesian phonetic symbol. These sounds make difficulties to Indonesian speakers of English to identify for communication purposes. This study therefore aims to find out whether formal instruction improve the acquisition of English long vowels by Indonesian learners of English and to investigate which long vowels tend to be difficult to be transcribed by the students. The population of this study was the students who attended the English Phonology course of English Literature Study Program Faculty of Languages and Literature Universitas Negeri Makassar Indonesia. The study reveals that formal instruction improved the acquisition of English long vowels by Indonesian learners of English and the majority of subject gave wrong transcriptions on these two words, e.g., for word early, they transcribed like /:ʌrly/, /ierly/, /erli/, /eirly/, e-l-i/, /irli/, /irly/, /e:ly/, /irliy/ and for word girl, they transcribe like /gir:l/, /ger:l/, /ger/, /gael/, /g-e-r-l/, /gerl/, /ge:l/, /ge:l/, /gi:l/.

1. Indonesia

Language learners and linguists strongly agree if we say that either segmental and suprasegmental features of English are difficult to be pronounced, especially for learners of other languages, particularly Indonesian learners of English. Segmental symbol is one of very intriguing elements in the study of phonology and phonetics. The segmental symbols are consonant and vowel sounds which symbolized by a wide variety of symbols. In this present study, I will focus on the vowel sound symbols, especially in long vowels. Those are the vowel sounds: i:, ɜ:, α:, ɔ:, and u:.

The correct pronunciation of those symbols potentially gives mutual understanding in communication maintained by two or more speakers. Based upon the importance of correct pronunciation in communication, the segmental symbols need to be taught intensively to the learners of English as a second language (L2) or foreign language (EFL). This is because, the English teaching – learning process gives very limited time to practice the pronunciation. Cenoz and Lecumberri [1] reported that phonetics is a specialized area which is not worth teaching because of its difficulty and poor outcome and that learners acquire it without specific training.

Such issues as put forward in the previous section give rise to problems specific to this present study. The problems are formulated in the research questions, those are: Does formal instruction exert a positive influence on the acquisition of learners' English long vowels? and Which English long vowels are easily recognized and which are more difficult for Indonesian learners of English?



Relevant to the research questions presented, the specific objective of this study are: to identify whether formal instruction exert a positive influence on the acquisition of learners' English long vowels and which English long vowels are easily recognized and which are more difficult for Indonesian learners of English.

The findings of the study hopefully will give contribution to teachers of English to employ formal setting or instruction in the classroom to improve students' acquisition of segmental phonemes, especially in vowels, long vowels in particular. It is also expected that the findings of the study can give a contribution to language learners about the accuracy of pronunciation. As previously stated that the teaching and practice of pronunciation in the classroom setting are marginalized activity in the language classroom, especially for L2 learning and acquisition. Therefore, to improve the acquisition of learners' pronunciation in a wide variety of sounds and phonetic symbols, there have been some researchers focused on learners' pronunciation improvement through various approach or method, especially formal training or instruction. Those researchers are as follows:

Cenoz and Lecumberri [1] state that training exerts a positive effect on the perception of English vowels and that this effect is also related to the desire to acquire a native accent. Other scholars focusing their studies on the effect of formal instruction to the acquisition of segmental sounds [2-5].

Weda and Sakti [6] reported in their study that formal instruction improved the acquisition of English short vowels by Indonesian learners of English. Accordingly, Weda and Sakti [7] in their study on the acquisition of fricative consonants of Indonesian EFL learners revealed that formal instruction improved the acquisition of English fricative consonants by Indonesian learners of English.

2. Research Method

The method used was preexperimental (one group – pretest – posttest design). The design has one group, a pretest, a treatment (formal instruction), and a posttest. It lacks a control group and random assignment [8]. The participants for the present study were 65 Indonesian learners of English attending English Phonology course at English Literature Study Program Faculty of Languages and Literature State University of Makassar Indonesia. The participants were Indonesian learners of English who have Indonesian as their mother tongue (L1). The students were within the age range of 20-21 years old, and in terms of English proficiency were estimated to be in the range pre-intermediate to intermediate level.

The instrument of the research was test (pretest and posttest). The pretest was used to investigate the students' initial understanding of long vowel symbols in English. Posttest was used to explore the progress of students' long vowel acquisition in English.

3. Results and Discussion

The study reveals that there were 26 or 40% of the subjects did not give correct answer (correct transcription on the long English vowels in pretest. There were 7 or 10.8% of the subjects gave 1 correct transcription on the lists of long English vowels. 11 or 16.9% of the subjects gave 2 correct transcription on the lists of long English vowel tests in pretest. 8 or 12.3% of the subjects gave 3 correct transcription on the long English vowel tests. 6 or 9.2% of them gave 4 correct transcription on the long English vowel test. 5 of them or 7.7% of the subjects gave 5 correct response on the transcription of long English vowel test and only 2 or 3.1% of the subject gave 6 correct transcription on the lists of long English vowel test in pretest.

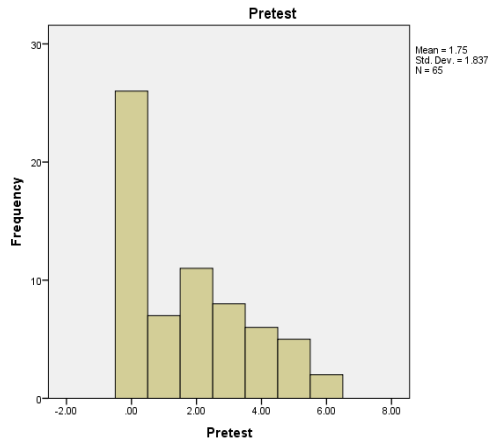


Figure 1. Histogram of students' answers in pretest.

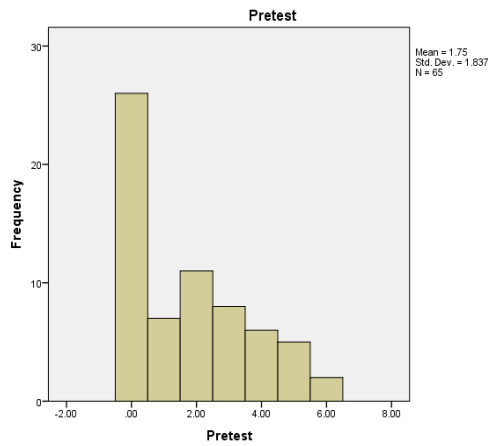


Figure 2. Histogram of students' answers in posttest.

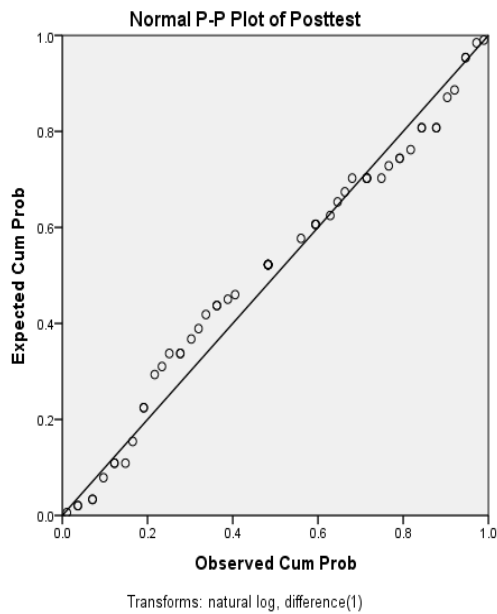


Figure 3. Plot of students' answers in posttest

Figure 1 shows the histogram of the students' response towards the acquisition of English long vowels. As illustrated in the figure 1 that the highest frequency of students' response was on no correct transcription with 26 or 40% of the subjects. In pretest, the majority of subjects could not distinguish between long vowels and short vowels. They transcribed the long vowels as short vowels, e.g., u: becomes u as in food and you: ə: becomes o as in sport and war; a: becomes a as in half and arm; i: becomes i as in seat and mean, and ə: becomes ə or e as in girl and early.

The descriptive statistics of the study shows that there were 3 or 4.6% of the subjects did not give correct transcription of the list of long English vowels. 7 or 10.8% of the subjects gave 1 correct transcription of the list of long English vowels. 10 or 15.4% of the them gave 2 correct transcription. 9 or 13.8% of the subjects gave 3 correct transcription. There were 10 or 15.4% of the students gave 5 correct transcription and 11 of them or 16.9% gave 6 correct transcription. There were 4 subject (6.2%) gave 7 correct transcription of the list of long English vowels in the posttest. There were only 3 or 4.6% and 2 of them or 3.1% gave 8 and 9 correct transcription respectively in the posttest.

The histogram of the posttest was very different with the histogram of the pretest. In posttest, the highest histogram is the 6 correct transcription which means that there were 11 or 16,9% of the subjects gave six correct transcription of the list of English long vowels after the formal instruction in the phonology class in English Literature Study Program Universitas Negeri Makassar, Indonesia. The second dominant subjects' responses were the 2 corret transcription and the 5 correct transcription which means that there were 10 or 15.4% of the subjects gave 2 correct transcription and 5 correct transcription respectively in the posttest. Only 3 or 4.6% of the subject did not give correct transcription in the posttest. This is very different with the frequency and percentage of the subjects' responses in the pretest in which there were 26 or 40% of the subjects did not give correct transcription towards the English long vowels in word lists.

In order to determine the success of formal interaction in the phonology class for the students of English Literature Study Program, Universitas Negeri Makassar, an analysis of infrential statistics was performed with the students' results on long vowel transcriptions as the dependent variable and the pretest in the beginning of the phonology class as the concomitant variable. The statistical results show that formal instruction significantly improved students' acquisition of long English vowels in which the significant difference was 0,00 lower than 0,05.

Table 1 lists the descriptive statistics for subjects of the pronunciation practice in pretest and posttest along with differential scores indicating by mean, SD, skewness, kurtosis, and range. Mean scores for both pretest and posttest were different significantly. On the pretest, the mean score was 1.7538 and the posttest was 4.0615. An independent samples *t* test indicated that the students achievement on the acquisition of English long vowels were significantly different.

Table 1. Mean and standard deviation of pretest and posttest

Code	Description	M	SD	Skewness	Kurtosis	Minimum	Maximum	Range
Pretest	Acquisition of English short vowels.	1.7538	1.83738	.687	-.698	.00	6.00	6.00
Posttest	Acquisition of English short vowels.	4.0615	2.33102	.145	-.823	.00	9.00	9.00

The results of infrential statistics indicate that the formal instruction exerts a significant effect on the improvement of students' acquisition of English long vowels transcription in posttest in which the Sig. (2-tailed) was .000 and the mean difference was 1.75385 in pretest and 4.06154 in posttest.

As seen in the scatter diagram in figure 3, all the points in the scatter diagram were close to the straight line. This scatter diagram of students' transcription on lists of English long vowels in posttest illustrates the strong positive effect of formal instruction on the students' English long vowels.

The results of this study reveal that the Indonesian speakers of English (ISE) as the students of the university level felt difficulties in identifying or determining the English long vowel transcriptions in

the lists of words as tested in the pretest. The fact that the most difficult transcriptions are the words which present the English long vowel “ə” as in girl and early. Some of the majority of subject gave wrong transcriptions on these two words, e.g., for word early, they transcribed like /:ʌrly/, /ierly/, /erli/, /eirly/, e-l-i/, /irli/, /irly/, /e:ly/, /irliy/ and for word girl, they transcribe like /gir:l/, /ger:l/, /ger/, /gael/, /g-e-r-l/, /gerl/, /gerl/, /ge:l/, /ge;l/, /gi:l/.

The most important thing to note here from the data analysis is that the formal instruction improves students’ acquisition of long English vowels by presenting a wide variety of activities and routine exercises in the phonology subject at English Literature Study Program of Universitas Negeri Makassar, Indonesia.

4. Conclusion

Some conclusions can be taken from this study. Firstly, the formal instruction with multimodal activities relates significantly to the improvement of students’ acquisition of English long vowels. As stated in the procedure of formal instruction that this formal instruction is potentially improve students’ achievement because there are a wide variety of students’ routine exercises offered by the instructor in the classroom setting ranging from individual tasks to group presentation tasks. The finding of this study hopefully gives new insight and method to teachers at tertiary level and secondary level to employ this such teaching methodology in the classroom. Therefore, the majority of subject gave wrong transcriptions on these two words, e.g., for word early, they transcribed like /:ʌrly/, /ierly/, /erli/, /eirly/, e-l-i/, /irli/, /irly/, /e:ly/, /irliy/ and for word girl, they transcribe like /gir:l/, /ger:l/, /ger/, /gael/, /g-e-r-l/, /gerl/, /gerl/, /ge:l/, /ge;l/, /gi:l/.

The students felt difficult to transcribe the long vowels as short vowels, e.g., u: becomes u as in food and you: ɔ: becomes o as in sport and war; ɑ: becomes a as in half and arm; i: becomes i as in seat and mean, and ə: becomes ə or e as in girl and early.

The language practitioners are also recommended to promote this kind issue in the teaching learning policy for countries in which English used as a foreign language (EFL) or as a second language (L2).

Acknowledgements

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