

The Effect of Letter-Sound Correspondence Instruction on Iranian EFL Learners' English Pronunciation Improvement

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Abstract

This study aims to investigate the effect of letter-sound correspondence instruction on improving Iranian EFL learners' pronunciation. Due to the disparity or non-correspondence between spelling and pronunciation in English, it is obvious that Iranian EFL learners often mispronounce English words. To this end, sixty male and female EFL learners were chosen through convenience sampling. The participants' age group ranged from 18 to 22. They were divided randomly in equal size and gender into two groups of experimental and control. The experimental group was exposed to letter-sound correspondence training during sixteen weeks. One of the salient characteristics of the instruction was the use of transcribed scripts along with scripts and their audios. To collect the data, a part of Core Phonics Survey was applied. The result of the *t*-test revealed that as developing letter-sound awareness, Iranian EFL learners pronounced the words and pseudo words more accurately. The results for experimental groups in pronunciation improvement were statistically significant as compared to those of the control group.

Keywords: letter-sound correspondence, pseudo words, transcription, pronunciation improvement

INTRODUCTION

Many of EFL learners masters the elements of language such as syntax, morphology, or even semantics to the levels of almost native-like competence but often fail to master phonology. In a society as Iran, English is not the second language. However, when considering language learning in an academic setting, teaching pronunciation is a must. According to H.J Jones (2012) the listener may not be understand the speaker, if the production of speech in unclear grammatically, semantically or phonetically. In Iran the importance of pronunciation teaching is minimize, the pronunciation skill is not explicitly taught. Nonetheless, either English is first, second or foreign, pronunciation is the biggest thing that people notice when a person talks. In learning English

pronunciation, in Iran the learners are introduced to English orthography from the beginning. Alphabetic spelling is assumed to represent the pronunciation of words. But it is often meant to be case that the sounds of the words in language are rather unsystematically represented by orthography –that is, by spelling. In cases such as English one can find fairly regular relationship is quite complex and needs to be discovered and formulated. . The discrepancy between spelling and sounds gave rise to movements by English or Persian “spelling reformers”. “They wanted to revise the alphabetic so that one letter would correspond to one sound, one sound to one letter, thus simplifying spelling to one sound, one sound to one letter, thus simplifying spelling” (Yarmohammadi & Pour Etedal, 1996. p.48).

EFL learners often are required to pronounce a word from its written form. This task is a matter of matching graphemes with phonemic correspondences. What we are attempting in this study is that how help EFL learners how to pronounce a word if they have never heard it or seen its spelling. In this study, we are investigating a foreign language speakers’ development of roman script. It should be noted that there is no evidence that any research has ever been conducted to the pronunciation improvement of Farsi speakers of English according to increasing awareness of letter sound correspondences. Two important elements make the present study significant, to increase awareness of difference in sound systems and orthographical system is currently limited and more research is needed to improve the problematic areas that are responsible for pronunciation errors of Farsi speaker of English. Secondly, there is no evidence that any study has ever been conducted explicitly that examines the effect of letter-sound instruction on pronunciation improvement of English. As mentioned earlier, due to the lack of research in this field on Farsi speakers of English by focusing on letter- sound awareness. It is hoped that the finding of this research present to EFL teachers, a set of general idea about designing materials which helps Farsi learners of English in pronunciation improvement.

LITERATURE REVIEW

The problem of how to represent spoken language in writing has historically been solved in different ways (Daniels & Bright, 1996; Gaur, 1992). The writing systems of Serbo-Croatian, Finnish, Welsh, Spanish, Dutch, Turkish, and German are on the whole much more regular in symbol-sound correspondences than those of English and French. The former are referred to as transparent or shallow orthographies in which sound-symbol correspondences are highly consistent, while the latter are referred to as opaque or deep orthographies that are less consistent because each letter or group of letters may represent different sounds in different words (Ellis, et. al., 2004).

The orthographic depth hypothesis predicts that the more transparent the orthography, the faster children will learn to read aloud (Ellis, et al, 2004). English is at one end of the continuum of orthographic depth, with inconsistent G-P correspondences (Aro, 2004). Different writing systems can be classified according to the levels of linguistic information that is coded in the script (Aro, 2004) The numbers of grapheme is much higher and many graphemes consist of multiple letters (Aro, 2004). According to

Defrancis (1989), correspondence of spoken and written English is complex. Lack of standardization of the spelling until the middle of the eighteen century is the major factor resulting in a gulf between spoken and written language (Aro, 2004). It is an example of orthography in which scripts does not fully represent the phonemic structure of spoken language (Joshi, 1991). Deep orthography making learning English as one of the most difficult languages to learn to read. (Danielsson, 2003). As reported in Danielsson (2003), a number of studies have found systematic differences across languages in the reading processes of readers of alphabetic scripts, i.e. comparison between Turkish and American English (Oney & Goldman, 1984) English and German (Lander & Metzler, 1997). Evident differences have been revealed in terms of the complexity of the relationship between graphemes and phonemes.

Some languages, such as Italian, Turkish, Greek, German and Arabic, have high correspondences between graphemes and phonemes, and thus they exemplify shallow orthography. On the other hand, other languages, such as French and English, qualify as an example of a typically deep orthography. To elaborate, Frost (1987), indicate, orthographies can be categorized according to the complexity of their letter to sound correspondences. In a transparent orthography, the phonemic and orthographic codes are isomorphic; the phonemes of the spoken word are represented by the graphemes in a direct and unequivocal manner. In a deep orthography, in contrast, the relation of spelling to sound is opaque. Comparison of English and Arabic orthographic systems exemplifies the distinction. The Arabic spelling system directly represents the phonology of the word; each grapheme represents a single phoneme, unlike English in which a phoneme can be realized in different graphemes.

According to the "orthographic depth hypothesis" (Frost & Katz, 1992), there is a high correlation between orthographic depth and reading or pronunciation in the sense that "shallow orthographies are thought to easily support word recognition processes (Danielsson, 2003.). On the other hand, opaque orthographies have a deep impact deterring pronunciation or triggering errors.

In fact, the orthographic depth hypothesis has been based on the reading of single words, and it's possible that in the reading of connected text, additional factors, such as context factors, might interfere (Danielsson, 2003). The relationship between spoken and written English is complex. It has been shown that written symbols do not represent speech itself but only some aspect of it. Similarly, written language is not simply spoken language written down (Cruttenden, 1979). According to Celce-Murcia, Brinton & Goodwin (1996) teachers should understand the correspondences between English phonology and English orthography so that they can teach their students how to predict the pronunciation of a word given its spelling.

METHODOLOGY

Participants

Participants who took part in the study were 60 Iranian EFL beginner learners. The participants were chosen by convenience sampling. They were 30 males and 30 females. The participants were English beginner learners. The researcher needed to take some points into consideration; therefore, she was after participants with the general characteristics as follows:

1. Participants who had no familiarity with English phonetic symbols.
2. Participants who had had no formal exposure to English phonetic symbols.

Instruments and materials

This study has two parts: letter -sound instruction and letter -sound review sessions. In letter - sound instruction which was consisted of six sessions the participants were instructed sounds and their corresponding letters. In the first and second sessions the instruction was concerned with the consonant sounds and their corresponding letters. In session three consonant digraphs with their corresponding letters were instructed. In session five, short vowel sounds with their corresponding letters were instructed. Session four dealt with long vowel sounds as well as their corresponding letters. The last session vowel sounds influenced by r and their corresponding were instructed. In the ten remaining sessions the participants were asked to listen to ten short stories each story was transcribed and placed on the top of the page. The stories' manuscripts were placed at the second part. The participants had to listen to the audio files twice. First, they had to listen to the audio files as company with the transcribed texts, second they had to listen to the audio files as company with the manuscripts.

The participants were given a checklist which consisted of three columns and one-hundred rows. They had to mark as they finished the stories. The estimated time for ten stories was forty-five minutes. Letter and sounds flashcards had also given to the participants in order to give them more opportunity to review the letters and sounds to assess the pronunciation accuracy, decoding skill subsets of Core Phonics Survey was administered. This subsets includes eight subtests. In each category, participants are to read both real words and pseudo words. The categories include (a) short vowels in CVC words; (b) consonant blends with short vowels; (c) short vowel, digraphs, and -tch trigraph; (d) r-controlled vowels; (e) long vowels spellings; (f) variant vowels; (g) low frequency vowel and consonant spellings; and (h) multisyllabic words.. It typically takes about 10 minutes to administer it to one participant.

Procedure

This piece of research was done with a pretest, treatment, posttest, quasi-experimental design in which the collected data were analyzed quantitatively. The participants were selected based on convenience sampling from among five classes. This study was

conducted within 6 weeks. It started in the first week of July and finished in September 2014. As earlier mentioned convenience sampling was used to choose right participants who did not have sufficient knowledge or awareness in English language sound and writing systems

Before formal instruction started, the participants administered just some subsets of the Core Phonics Survey When the participant's homogeneity came clear, they divided to two groups: experimental and control groups. In the study the focused was on the experimental group. Therefore, formal letter-sound correspondence instruction was not given to control group. On the contrary, the researcher provided the experimental group with instruction in letter - sound correspondences.

RESULTS

After collecting data, the SPSS software (version 21) was used and descriptive statistics such as means, standard deviations, and variances were calculated. Moreover, inferential data statistics such as paired sample *t*-test was employed to analyzed the data and to find whether letter-sound correspondence awareness improved the pronunciation of Iranian EFL learners or not. Figure 1 reflects the total differences between the mean scores of control and experimental groups.

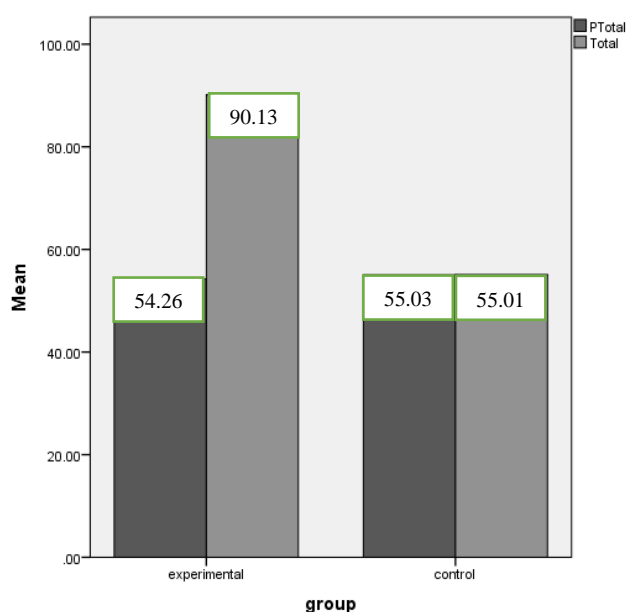


Figure 1. Descriptive statistics for total pronunciation improvement of experimental and control groups

As figure 1 shows the mean scores for pronunciation improvement in the experimental group are 54.26 and 90.13 in pre and posttests, while the mean scores in the control groups is 55 in the pre and posttest.

To answer the research questions, paired samples *t*-tests were conducted to compare pronunciation improvement at the result of letter-sound instruction.

Table 1. The Mean Differences of Total Pronunciation Improvement of Experimental and Control groups

Group		N	Minimum	Maximum	Mean	Std. Deviation
experimental	P Total	30	51.00	58.00	54.2667	1.74066
	Total	30	88.00	93.00	90.1333	1.63440
Control	P Total	30	51.00	59.00	55.0333	2.41380
	Total	30	49.00	59.00	55.1000	2.61758

As it is illustrated in table.1 the means of scores for pronunciation improvement in the experimental group on pre and posttests are 54.26 and 90.13 respectively. The maximum scores for the experimental group are 58 to 93, while the mean scores in the control group for pronunciation improvement is 55 in the pre and posttest.

Table 2. Paired Samples Test for pronunciation Improvement of Control Group

Paired Differences					t	Df	Sig. (2-tailed)
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
			Lower	Upper			
-.06667	1.11211	.20304	-.48193	.34860	-.328	29	.745

According to table 2, there is not a significant difference in the participants' scores in pretest (M= 55.03, SD= 2.41380) and posttest (M= 55.03, SD= 2.41), $t(29) = -328$, $p \geq .05$.

Table 3. Paired Samples Tests for pronunciation Improvement of Experimental Group

Paired Differences					t	Df	Sig. (2-tailed)
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
			Lower	Upper			
35.86667	2.41380	.47790	-36.6677	-35.0656	.000	29	.000

According table 3, there was a significant difference in the scores before (M=90.1333, SD= 1.63440) and after (M= 54.2667, SD= 1.74066) letter- sound instruction; $t(29) = 0$, $p \leq 0.05$.

DISCUSSION

The purpose of this research was raising Iranian English learners' awareness of lack of consistency between English written and spoken forms. According to pair samples t -test, this part concludes the study with a restatement of the research question and its response.

Does sound letter correspondence awareness have a role in improving pronunciation of Iranian EFL learners?

The result of paired-samples test revealed that the difference between the experimental and control groups was significant. It should be reminded that the experimental group was taught letter-sound correspondence explicitly. The control and experimental groups were equal in all condition, so the difference between them was due to letter-sound awareness. Participants in the experimental group had significantly the highest performance in pronunciation. Table 1 and 3 Showed pronunciation improvement. It can be said that due to the instruction on letter-sound correspondence awareness English pronunciation of Iranian EFL has improved.

The results are the results are consistent with Szabo (2010). In her study it was found that more phonemic awareness instruction was needed to help their older limited English proficient language learners gain the necessary graphophonemic skills needed to become successful readers.

By the study The National Reading Panel (2002) concluded decoding, a critical behavior associated with the alphabetic principle, is the skill of matching sounds to letters in words and blending those sounds together to form a whole word (Ehri & Roberts, 2006). Students who are unable to distinguish the individual sounds in spoken words are, consequently, unable to form connections between these sounds and their symbolic representations and to use those connections to decode words. Without firmly established letter-sound correspondences, the processes of phonological memory and phonological naming are limited by the reduced availability of accurate phonological information stored in long-term memory (Troia, 2004).

CONCLUSION AND IMPLICATIONS

The findings of the present study suggested that the Iranian EFL learners' pronunciation improved due to letter-sound correspondence instruction. In other word, the letter-sound awareness improved the pronunciation of Iranian EFL participants in the present study. The other contribution made by the present study was to address the importance of letter-sound instruction. The study provided that Iranian EFL learners need to teach about theories of sound production and perception. This study was an attempt to make the learners' pronunciation more native-like, and was suited for intermediate learners. The other salient feature of the study was use of phonetic transcription, as representation between written text and speech, use of phonetic transcription helped learners to gain knowledge of lack of consistency between English orthographic and phonological systems.

In EFL settings, where the learners have little opportunity for exposure to target language, the burden falls on the teachers to provide an adequate model of target language. Teachers should maximize the learners' exposure to target language and encourage them to acquire all aspects of language. The teacher should know whether an explicit or implicit instruction is suitable according to learners' characteristics. Teachers should consider the degrees of the similarities and differences of phonological systems of target and mother languages. There are definitely some universal in the acquisition of

phonology which can help the teachers gain the insights into students' pronunciation of the target language.

According to Celce-Murcia, Brinton & Goodwin (1996) teachers should understand the correspondences between English phonology and English orthography so that they can teach their students how to predict the pronunciation of a word given its spelling.

The present study was an attempt to investigate some questions related to letter-sound knowledge. Nonetheless, future research would be useful to give more insight into the matter. To this end, this topic can be further explored in these areas.

1. Another piece of research can be conducted that includes the effect of letter-sound knowledge on spelling improvement.
2. The effect of explicit phonics instruction on pronunciation improvement can be a good subject for study.
3. The relation between English orthography knowledge and pronunciation improvement can be a good topic for investigation.
4. The effect of Farsi phonological system transfer on the English phonological system would be a good point to study.
5. The study of synthetic phonics on Iranian EFL learners 'pronunciation improvement can be carried out.
6. The efficacy of jolly phonics instruction on Iranian EFL learners 'pronunciation improvement is a good subject to study.

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