

***Let's See if Learners' Level of Proficiency in English Affects their Production of Segmentals and Suprasegmentals: A Case of Iranian EFL Learners***

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This study was conducted to examine some error-provoking areas of English pronunciation for Iranian EFL learners. More specifically, it was meant to determine if there was any difference among learners of different proficiency levels in the areas of problematic *consonantal* features, the vowel *schwa*, and *suprasegmental* features. Thirty male learners ranging in age from 14 to 21 at the three levels of proficiency participated in this study. The instrument used to gather the data was an oral test based on some passages containing the problematic pronunciation areas. The passages were extracted from the learners' course books. The learners were individually asked to read the texts aloud. The recorded learners' voices were scored on a five rating scale. The analysis of data revealed that learners' level of proficiency was a determining factor regarding their production of consonantal features ( $\theta$ ,  $\delta$ ,  $w$ , initial consonant clusters) and the vowel schwa ( $\text{ə}$ ), but it did not have any impact on the production of stress patterns, and intonation contours. The researchers provide some suggestions to improve the pronunciation ability of EFL learners in general and Iranian EFL learners in particular.

**Key words:** pronunciation, consonants, schwa, suprasegmental features

## **BACKGROUND TO THE STUDY**

Pronunciation has been described as a sub-component of speaking; in other words, as an oral sub-component that supports language learning or language use. It has also been treated as a language sub-skill that supplements the oral skills, listening and speaking.

On the other hand, the concept of language proficiency has always been eluding. Richards and Schmidt (2002) define language proficiency as “the degree of skill with which a person can use a language, such as how well a person can read, write, speak, or understand a language” (p. 292). Early frameworks for describing language proficiency (Lado, 1961) distinguished skills (listening, speaking, reading, and writing) from components of knowledge (grammar, vocabulary, and phonology). Other researchers have defined the construct of language proficiency as comprising different components or sub-categories one of which is pronunciation (see Bachman, 1990; Canale, 1983; Canale & Swain, 1980).

Furthermore, it is taken for granted that learners of higher proficiency levels are better than those of lower proficiency levels with respect to all skills and sub-skills. However, the researchers of the present study are dubious about such a claim at least in the area of L2 pronunciation. Therefore, in order to solve the problem, some of the challenging aspects of English language pronunciation (both segmental and suprasegmental) were identified and the performances of the learners, as far as the production of these features is concerned, were tested. But first, to shed more light on the issue, the literature on the error-provoking aspects of English pronunciation for Iranian EFL learners and other EFL learners is touched upon.

Two of the segmental aspects which cause problems for the learners of different language backgrounds are /θ/ and /ð/. Nilsen and Nilsen (1971) list the sounds which are substituted for these sounds by speakers of different language backgrounds.

Another sound which poses difficulty not only for Iranian learners of English but also for Bulgarian, Chinese, German, Turkish, Danish, Arab, and

other learners of English is the /w/ sound (Nilsen & Nilsen, 1971). Regarding this sound in the Persian language, Yarmohammadi (2005, p. 53) stated:

It should be added that in the informal spoken style, /w/ may appear as a glide word-medially or cross-morphemically between two vowels one of which is the vowel /u/. By the above statement, one can conclude that /w/ can be considered as an allophone of the phoneme /v/ and can be eliminated from the Persian phonemic inventory.

The next problematic issue concerning consonants is consonant clusters and especially initial consonant clusters. The sequence of consonants can present a challenge for speakers of languages that have a strict CV pattern with no clustering (Celce-Murcia, et al., 1997). And, interestingly enough, Persian is among such languages.

Another sound segment, which has always been the subject of research and has received much attention from phoneticians, is the mid-central reduced vowel schwa (ə). This sound should be among the first sounds to which Iranian teachers of English draw learners' attention, either through imitation and correction, or perception tasks because it is a big problem for Iranian EFL learners. There is not such a sound in Persian; hence, it is replaced by other vowels. Depending upon the context and due to the influence of spelling, it can be pronounced /a/, /æ/, /e/, or even /o/ (Yarmohammadi, 2005).

In addition to the segmental elements mentioned, some of the suprasegmental features, namely, stress and intonation, are difficult to deal with. There is no reliable rule available to determine the stress pattern of a word in English but to look it up in a good dictionary (Gordon, 1974). The stress pattern of English words spoken by speakers of other languages is very much influenced by their L1 (Celce-Murcia, 1997).

Still another suprasegmental feature which has attracted attention in the field is intonation. The importance of English intonation, both as a source of difficulty for the foreign learners and as a challenge to theory and description has been approved in a number of classic studies (Bolinger, 1972; Cruttenden,

1986; Crystal, 1969; Halliday, 1970; Lieberman, 1967; O'Connor & Arnold, 1973; Pike, 1945).

Having introduced some of the features which are error-provoking for EFL learners in general and Persian learners of English in particular, we can now examine some studies conducted on the comparison between English phonetics and phonology and those of other languages. The literature yields a handful of research with regard to the pronunciation problems of Japanese EFL learners. Mimatsu (2000) first investigated the pronunciation issues of his students. He provided six students with a piece of English text and a model pronunciation produced by a native speaker. The study showed that students had both segmental errors (vowel substitution and consonant substitution, consonant deletion) and suprasegmental errors (wrong pause insertion and wrong places of pitch falls).

Yuzawa (2007) classified the causes of pronunciation problems into four categories: vowels, consonants, connected speech, and prosody or suprasegmentals. Yuzawa found out that Japanese learners have problems in pronouncing English consonant sounds in the pairs such as /θ/ versus /s/ (e.g., 'thick' versus 'sick'). In addition, Japanese speakers subconsciously add vowels to prevent consonant clusters when speaking in English (see Dorji, 2009). With regard to the suprasegmental features, Dorji (2009) and Yuzawa (2007) described that Japanese syllables are pronounced monotonously and with equal stress. There are also other researchers who investigated Japanese and English in contrast (see also Ohata, 2005 and Dorji, 2009). In addition to Japanese, other languages like Brazilian Portuguese (hereafter Portuguese) have received attention from some researchers. Bond (2001) analyzed three students' transcriptions and recordings and found out areas such as vowels and diphthongs, consonants, intonation, stress, rhythm, and connected speech are challenging for Portuguese EFL learners. For example the variety of consonant clusters in Portuguese is far fewer than that of English. Clusters such as *skr*, *spr*, *spl*, and *str* do not exist in Portuguese, which is due to the syllable structure of this language and there is, in fact, a tendency towards a consonant vowel pattern. Moreover, according to Schutz (2000), stress is

quite predictable as in 70% of words it falls on the penultimate syllable. Also, Portuguese speakers use a narrow pitch range compared with English speakers using extreme high and extreme low pitch range. For instance, Wh-questions end in a rising tone in Portuguese but in English they have a falling tone.

Persian language and the possible problematic areas of English language pronunciation for Iranian learners have been addressed by some researchers, too (Ghadessy, 1988; Mirhassani 1983; and Sohrabie, 2007; Yarmohammadi, 1969). Power (n. d.) enumerates twenty four common English pronunciation problems for Iranian learners in his website. He suggests that 18 common mistakes made by Iranian learners of English are made in the areas of vowels and diphthongs. Among the troublesome consonants for Iranian EFL learners, he mentions (/w/ versus /v/), /θ/, (/ð/ versus /d/ and /z/), and (/ŋ /+ /k/ versus /ŋ + /g/). Hayati (1998) also pointed out that Iranian EFL learners have difficulty in learning some English consonants. He advocated the idea that learners substitute /s/ or /t/ for /θ/ and /z/ or/d/ for /ð/. With regard to stress pattern, he believed that Iranians pronounce most of the English words with the primary stress on the final syllable. In the case of intonation contours, there is no specific problem with the production of affirmative sentences, i.e. both have a falling intonation. Moreover, with respect to normally-uttered yes/no questions, there is not any difference (*ibid.*). English vowels and their prospective learning problems for Iranians have been investigated by Yarmohammadi (1969). Some other contrastive studies have been conducted regarding stress patterns of words and intonation contours of phrases and sentences of English as produced by Iranian learners of English (Ahmad Soltani, 2007; Ghadessy, 1988; Hayati, 1998; Shiri, 1987).

### **Purpose of the Study**

The present study examined some of the problematic areas of English pronunciation for Iranian learners. These aspects which were chosen from among the elements that do not exist in the learners' first language (i.e., Persian) repertoire or do exist but with subtle differences that will cause

greater difficulty based on Sjöholm (1995), were presented to the learners of the three levels of language proficiency, i.e., beginning (here interchangeably *elementary*), intermediate, and advanced to see whether any sort of difference suggesting a higher level of ability in pronunciation can be observed in the production of the students. To be more precise, this study tried to show whether there is any difference among learners of different language proficiency levels in the areas of problematic consonants, initial consonant clusters, the vowel schwa, and suprasegmentals.

### Research Questions and Hypotheses

As already mentioned, some words or sentences create difficulty for learners with specific language backgrounds because they contain pronunciation features which do not exist in their mother tongues. These features are among error provoking aspects for Iranian learners (Kenworthy, 1990; Nilsen & Nilsen, 1971; Yarmohammadi, 2005):

- |                                |                     |
|--------------------------------|---------------------|
| 1- Voiceless dental fricative: | (θ)                 |
| 2- Voiced dental fricative:    | (ð)                 |
| 3- Voiced glide:               | (w)                 |
| 4- Initial consonant clusters: | (sp..., fr..., etc) |
| 5- Mid-central reduced vowel:  | (ə)                 |
| 6- Word stress:                | (tecNOLOGY, deSIGN) |

- 7- Intonation contour:  (I don't want it)

To achieve the purpose of the study, the following research questions are suggested:

1. Do the learners of higher levels of proficiency produce problematic consonants (θ, ð, w) and initial consonant clusters better?
2. Do the learners of higher levels surpass the production of the vowel schwa?

3. Are the learners of higher levels better in the production of suprasegmentals?

## **METHOD**

### **Participants**

Thirty Iranian EFL learners in a prestigious language institute in Shiraz, Iran took part in this study. They were selected randomly from a pool of 120 students. The learners were from the three levels of language proficiency, i.e., 10 beginning, 10 intermediate, and 10 advanced students. Their levels of language proficiency were determined through administering Oxford Placement Test 1 (OPT) (Allen, 1992). Beginning group corresponded to elementary (band 3) level of OPT while intermediate and advanced groups associated with lower intermediate (band 4) and upper intermediate (band 5) levels. The learners were all males and their ages ranged from 14 to 21. They were mostly from Shiraz and none of them majored in English. In the course of some friendly talks between the learners and one of the researchers, the learners showed their interest toward correct pronunciation. They expected the teacher to correct their pronunciation problems in class and it was obvious that accurate pronunciation mattered to them. However, they honestly confessed that seldom did they listen to the CDs accompanying their books at home. They also stated that they did not listen to any English outside the classroom. Last but not least, they were not in the habit of checking the pronunciation of unknown words in the dictionary either.

### **Instruments**

The language institute where the researchers collected the data teaches different textbooks to the learners of different age groups. For example, *Let's go* (Nakata, Frazier, Hoskins, and Graham, 2006), *True Colors* (Maurer & Schoenberg, 1999), and *Top notch Fundamentals* (Saslow & Ascher, 2006a)

are taught to beginning learners considering their age-brackets. *Top notch 1, 2, 3* (Saslow & Ascher, 2006b) are used at intermediate levels and *Summit 1, 2* (Saslow & Ascher, 2006c) together with *Gold* (Acklam & Burgess, 2001) are studied by the students of advanced levels. All the books are accompanied by CDs for the learners' out-of-class practice. The CDs contain native speakers' voices. For the sake of homogeneity, participants were randomly chosen from the classes in which *Top notch* and *Summit* series were taught. To reiterate, the participants' level of proficiency was determined by the OPT and the index of reliability obtained for the placement test, using KR-21 formula was 0.82

The testing instrument was an oral test based on some passages from the learners' textbooks. The passages were selected from the books *Top notch Fundamentals A*, *Top notch 2A*, and *Summit* for the beginning, intermediate, and advanced levels, respectively. Use was made of reading-aloud tasks because such tasks are quite appropriate for checking pronunciation (Brown, 2001). The beginners read a short passage about the American actor, Will Smith. The intermediate learners were asked to read a paragraph of a passage on "Body Talk" and the advanced learners of our sample read two paragraphs of a passage on "Globalization". All the passages contained the problematic features mentioned before. The number of voiced and voiceless dental fricatives together with the voiced glide, consonant clusters, schwa, and the stress pattern of words which were at the center of attention, were the same for the three proficiency levels. The intended words were also the same for all learners of each level. The passage assigned to the beginning learners only contained one and two-syllable words. Moreover, the passage was composed of six sentences which were considered appropriate to check the intonation of the readers. All the six sentences were declarative and there was no interrogative sentence. "Body Talk" passage contained a lot of one and two-syllable words together with a few multi-syllabic (three, four, and five) words. In addition to the four declarative sentences which should have been read with a falling tone, there was a question in the passage which demanded a rising intonation. The other passage, "Globalization" contained a lot of multi-

syllabic words which needed great knowledge of pronunciation and stress patterns. There was also a question in the passage eliciting the learners' knowledge of intonation contours of sentences. Except for this question, there were four declarative sentences in the passage which should have been read with a falling intonation. Table 1 below shows the words which learners of each level were supposed to produce correctly.

**TABLE 1**  
**Intended Words in the Texts to Elicit the Knowledge of the Learners' Pronunciation**

Features	Beginning	Intermediate	Advanced
θ	<i>Smith</i>	<i>Thirty</i>	<i>Thing</i>
ð	<i>Clothe</i>	<i>Other</i>	<i>There</i>
W	<i>Will, wife</i>	<i>Well, when</i>	<i>Work, world</i>
Cc	<i>Smith, clothe</i>	<i>Speaking, from</i>	<i>Transforming, created</i>
ə	<i>Famous, actor, singer, boxer</i>	<i>Communicate, other, people, matter</i>	<i>Over, market, advance, challenge</i>
Word stress	<i>Famous, singer, design</i>	<i>Communicate, percent, expert</i>	<i>Economy, technology, transforming</i>

All participants had covered the books and the passages before. So, they were not unfamiliar with the passages and the topics. That is, they mostly knew the words and their meanings but they were careless about the pronunciation of even known words. Another justification for not using unfamiliar passages is that if such texts were used, probable cases of mispronunciation could be attributed to the students' total lack of knowledge of the words. To put it differently, one cannot expect students to pronounce words which are quite new to them correctly.

## Procedures

The participants were asked to read some passages in order to assess their

pronunciation accuracy. The passages contained those error-provoking features for the Iranian EFL learners. The second researcher interviewed the participants individually in an isolated room. Initially, he asked the participants some general questions about their views toward pronunciation and how much they weigh it during their speaking activities. They were also asked how much time they spend on listening to native speakers through the CDs accompanying their books, through movies, through news, or other sources. The researcher also asked them if they check the pronunciation of an unknown word when they encounter it for the first time. After this informal talk in Persian, the participants were given some time to have a look at the materials before the researcher asked them to read them aloud. In order to increase the reliability of data collection and data analysis on the one hand, and to avoid the pitfall of the researcher's bias on the other, the learners' voices were recorded and analyzed by the first researcher and a native speaker later on. Both the Native American rater and the researcher were experts in the areas of language teaching and language testing. The Native American rater is an IELTS scorer and has been teaching English for more than five years in Iran. The non-native rater holds PhD in TEFL and teaches English phonetics and phonology to undergraduate and graduate students for so many years. Moreover, they were both familiar with the interval scaling procedure. Since it is difficult to decide whether pronunciation is correct or incorrect and it is all a matter of degree, the two raters judged the pronunciation of the intended words and features mentioned above on a rating scale ranging from 1 (very poor pronunciation ) to 5 (very good pronunciation). Each participant was scored three times; i.e., based on their production of consonantal features ( $\theta$ ,  $\delta$ ,  $w$ , and  $CC$ ); based on their production of suprasegmental features (stress and intonation); and based on their production of the vowel schwa ( $\text{ə}$ ). Table 2 below shows the scores given to the participants of the elementary level.

**TABLE 2**  
**Beginners' Scores from 1 to 5**

Participants	Consonants (θ, ð, w, CC)	Suprasegmental (Stress & intonation)	Schwa (ə)
S1	1	1	1
S2	2	3	2
S3	1	2	1
S4	3	1	3
S5	1	2	1
S6	1	1	1
S7	2	1	3
S8	2	2	2
S9	1	1	1
S10	1	1	1

As it is obvious in the table, the 10 participants of this level were scored based on their pronunciation of the intended features. The lowest score given was 1 which corresponded to a very poor pronunciation of the feature or to put it in Flege's (1988) term, the most notable degree of foreign accent while the score 5 showed the least degree of foreign accent, i.e. native-like.

Table 3 illustrates the scores given to the learners of the intermediate levels on the before-mentioned scale again from 1 to 5.

**TABLE 3**  
**Intermediates' Scores from 1 to 5**

Participants	Consonants (θ, ð, w, CC)	Suprasegmental (Stress & intonation)	Schwa (ə)
S11	2	2	3
S12	3	2	1
S13	2	1	2
S14	2	3	2
S15	4	2	3
S16	3	1	2
S17	4	2	3
S18	2	1	1
S19	1	2	2
S20	3	3	2

The above scores for the intermediate level students on the interval scale were assigned by the same couple of raters. These scores for the adult learners of our sample (14 to 21 years of age) show their pronunciation ability and the degree of foreign accent in their L2 pronunciation. It is worth mentioning here that scores assigned to the readers, whether in this study or others, are based on the degree of *perceived* foreign accent (Southwood & Flege, 1999).

Table 4 shows the advanced learners' degree of perceived foreign accent represented in the form of scores on an interval scale.

**TABLE 4**  
**Advanced Learners' Scores 1 to 5**

Participants	Consonants (θ, ð, w, CC)	Suprasegmental (Stress & intonation)	Schwa (ə)
S21	3	2	3
S22	4	1	3
S23	4	2	2
S24	2	2	1
S25	5	1	4
S26	3	3	3
S27	4	1	2
S28	3	2	2
S29	5	1	3
S30	4	2	3

It should be pointed out that for the suprasegmental features, rising tones at the end of yes/no questions and falling tones at the end of affirmative statements (declarative sentences) were carefully checked by the two raters. The two sets of scores given by the two raters were also compared using correlational procedures to determine the degree of consistency between the two measures and the coefficients of correlation obtained turned out to be 0.91 for the elementary group, 0.86 for the intermediate group, and 0.89 for the advanced group. These measures, in fact, function as indices of inter-rater reliability. James Flege also pointed out that native and non-native ratings of perceived foreign accent largely agree (*personal communication*). Both British and American accents (mostly used by Iranian EFL learners) were acceptable.

However, due to some intricacies of British pronunciation almost every participant in the sample preferred the latter, namely, American pronunciation. This holds true not only for many EFL learners in Iran but also for some other countries like Sweden (see Pettersson (2008) and Thörnstrand (2008)). Anyhow, the participants' obtained scores on each of the three sections (consonantal, suprasegmental, and schwa) were calculated. Finally, using One-Way ANOVA, the mean scores of the three groups were compared. In addition, Post Hoc analysis of the data showed the between-group variations and the Scheffe test revealed the mean difference between each two groups.

In order to answer the first research question, the researcher calculated the participants' scores on consonantal features ( $\theta$ ,  $\delta$ ,  $w$ ,  $CC$ ) in the three proficiency levels and compared the mean of their scores. To answer the second and third research questions, we did the same procedures for the score of the participants on the vowel schwa and then for the two suprasegmental features (stress and intonation).

## DATA ANALYSIS AND RESULTS

Since the data for this research consist of a categorical variable that has three independent groups (beginning, intermediate, and advanced) and a continuous variable which is considered the dependent variable (scores), the researchers resorted to One-Way ANOVA to compare the means. SPSS statistical package was used for this purpose. As mentioned above, in order to answer the research questions, the means of the three groups of beginning, intermediate, and advanced learners on each of the three sections of consonantal, suprasegmental, and the vowel schwa were compared. In case of the first research question, the results of the ANOVA indicated a main effect for the proficiency level ( $F = 15.55, p < 0.01$ ).

Moreover, multiple comparisons of the groups showed significant differences between elementary and intermediate learners ( $p < 0.05$ ), intermediate and advanced learners ( $p < 0.05$ ), and elementary and advanced

learners ( $p < 0.01$ ) in the production of consonantal features.

**TABLE 5**  
**Post Hoc Tests for Consonantal Features**

	Sig.
Elementary vs. Intermediate	0.03
Intermediate vs. Advanced	0.03
Elementary vs. Advanced	0

With regard to the second research question, the ANOVA results proved a significant effect for the proficiency level ( $F = 3.81, p < 0.05$ ).

However, the post hoc analysis of the results did not show any significant difference between elementary and intermediate learners ( $p > 0.05$ ) and intermediate and advanced learners ( $p > 0.05$ ) for the production of the vowel schwa. But, the two groups of elementary and advanced learners produced this vowel with a significant difference ( $p < 0.05$ ).

**TABLE 6**  
**Post Hoc Tests for Schwa**

	Sig.
Elementary vs. Intermediate	0.39
Intermediate vs. Advanced	0.39
Elementary vs. Advanced	0.03

Finally, the three proficiency groups did not show a significant difference in the production of the two suprasegmental features ( $F = 0.80, p > 0.05$ ).

Moreover, the post hoc analysis of the data did not show any significant difference between any two groups of proficiency.

**TABLE 7**  
**Post Hoc Tests for the Suprasegmentals**

	Sig.
Elementary vs. Intermediate	0.46
Intermediate vs. Advanced	0.82
Elementary vs. Advanced	0.82

## DISCUSSION

### **Voiceless Dental Fricative (θ), Voiced Dental Fricative (ð), Voiced Glide (w), Initial Consonant Clusters (cc)**

The first two sounds are examples of the consonants which do not exist in Persian and create problems for Iranian learners. Voiceless and voiced dental fricatives are substituted with different sounds by Persian learners. /θ/ sound was replaced by /f/, /t/, and /s/ sounds in the beginning and intermediate classes; The word “Smith” was produced as /smi:t/ by almost every learner. Intermediate learners pronounced the word /θ3rti/ wrongly as either /t3rti/ or /s3rti/. In addition, just one of the learners said the word as /f3rti/ which sounded weird to the researchers. This /f/ substitution was in line with Nilsen and Nilsen’s (1971) claim.

The other dental fricative sound posed the same difficulty for the Iranian EFL learners. Consider the mispronunciations among the sample learners of different levels:

S1: /klouz/ versus /klouð/

S2: /ʌder/ versus /ʌðər/

However, the advanced students had a better performance. One or two learners made a mistake with regard to this sound.

The mentioned two sounds pose difficulty for the EFL learners in Japan and China, too. Chinese EFL learners make the same substitutions as those of Iranians (Zhang & Yin, 2009; see also Yuzawa, 2007 for Japanese EFL learners). It should be pointed out that the aforementioned substitutions are completely justifiable based on the rules of phonetics and phonology. On the one hand /θ/ is a voiceless, dental fricative sound; on the other hand, the sounds produced instead of this sound were /f/ that is a voiceless, labio-dental fricative, /t/ that is a voiceless, alveolar stop and /s/ which is a voiceless, alveolar, fricative. Paying attention to these sounds, one can easily discern

that they have similar features to the original sound (/θ/). They are different from it with regard to the place or manner of articulation. Interestingly enough, the learners who knew the correct pronunciation tried to exaggerate the production of this sound in order to show that they knew the correct pronunciation. This overemphasis was also true of the /ð/ sound. As mentioned before, many other learners who could not produce it correctly replaced /z/ and /d/ sounds for this sound. For example, /dɛɪ/ or /zɛɪ/ could be heard instead of /ðɛɪ/ in the corresponding context. Nilsen and Nilsen (1971) have mentioned that /ʒ/ sound instead of /θ/ sound and /v/ sound instead of /ð/ sound are expected to be pronounced by Persian learners of English; however, no instance of the aforementioned mispronunciations was observed by the researchers in the sample of data collected. As far as the extant review of literature is concerned, this expectation is not well-founded at all because not only in this sample but nowhere else this mispronunciation has been observed or reported by other researchers or teachers concerned with pronunciation problems of Iranian learners of English.

Another consonant sound investigated in this study was the voiced glide, /w/. Since this sound does not exist in Persian language, the learners who were unfamiliar with the sound replaced it with the nearest sound, namely, /v/ in their native language. Learners usually produced /vɛl/ instead of /wɛl/. More examples are given below:

S3: /ven/ versus /wen/ or /hwen/

S4: /vaif/ versus /wife/

S5: /v3rld/ versus /w3rld/

The participants were actually expected to do so because /w/ can be considered an allophone of the phoneme /v/ and can be eliminated from the Persian phonemic inventory (Yarmohammadi, 2005). To reiterate, learners of higher proficiency levels had a better performance with regard to the production of this sound, too.

Not only consonants, but also consonant clusters, especially initial

consonant clusters have been problematic for Iranian learners. Phonotactically speaking, the syllable structure of Persian can be represented as (C) V (C) (C) but that of English as (C) (C) (C) V (C) (C) (C) (C). Since the sequence of consonants at the beginning of a word does not exist in Persian, learners usually insert extra vowels in order to simplify the production of such consonant clusters. Linguists call this kind of insertion “*epenthesis*” (Yule, 2006). Look at some of the pronunciations of the learners in different levels:

S6: /ferʌm/ versus /frəm/

S7: /espi:k/ versus /spi:k/

S8: /gereit/ versus /greit/

S9: /terænsform/ versus /trænsform/

The Japanese EFL learners, like Iranians, insert extra vowels in these clusters (see Dorji, 2009). Consonant clusters are also problematic for Brazilian EFL learners (Bond, 2001).

The three sounds together with initial consonant clusters were viewed as consonantal features in this study. The results of the study show that the learners of higher levels produced these features more accurately than those of the lower levels. In other words, higher proficiency learners had a better performance on consonantal features than lower proficiency learners.

### **The Vowel Schwa (ə)**

The accuracy of the produced vowel was really difficult to judge by the researchers. As a matter of fact, since Persian language lacks this sound, a higher percentage of wrong production of this sound was expected. The performance of advanced learners with regard to this error-provoking sound was noticeably better than that of the elementary learners who had big problems. Consider some of the mispronunciations:

S10: /feimu:s/ versus / feiməs/

S11: /æktɔr/ versus /æktər/

S12: /sɪŋgər/ versus /sɪŋəɹ/

In the last case (S 12), the researchers were looking for the correct production of the schwa vowel and they were not concerned with the pronunciation of the angma (ŋ) sound. Moreover, these incorrect pronunciations produced by the elementary learners showed the influence of spelling on the pronunciation. In fact, they produced the sound as it was written; i.e. /u:/ for ou, /o/ for o, and /e/ for e. However, intermediate learners produced the vowel with somehow the same problem.

S13: /mæteɹ/ versus /mætər/

S14: /kəmju:nɪ.keɪt/ versus /kəmju:nəkeɪt/

The following wrong pronunciations were also evident among advanced learners:

S15: /mɑ:kɪt/ versus /mɑ:kət/

S16: /ædvæns/ versus /ədʌvæns/

But, the state of production of the vowel in the three levels was different. In fact, the results of the study show that there is no significant difference between elementary vs. intermediate, and intermediate vs. advanced learners. However, advanced learners produced the vowel significantly better than the elementary learners.

### **Stress and Intonation**

In the three texts which were planned for the learners to read out aloud, three words, mentioned before, were chosen by the researchers to represent the learners' knowledge of the correct stress pattern of the words. Two-syllable words were chosen for the beginners. The intended words for the

intermediates contained two or three syllables while advanced learners were tested on four-syllable words. It should be pointed out that word stress, rather than sentence stress was the focus of this aspect of the research. Moreover, the criterion for determining the correct stress pattern was the primary stress of the words; i.e. secondary stress and tertiary stress were not taken into consideration. Learners in our sample usually pronounced the words with the stress on the first syllable:

S17: **PER**cent versus per**CENT**

S18: Economy versus e**KON**omy

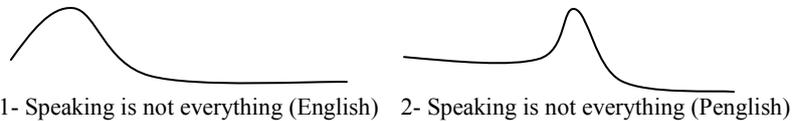
However, Shiri (1987) concluded that Persian learners put the primary stress on the final syllables of the words. In addition to Iranians, Portuguese speakers of English have problems with assigning stress patterns to words. According to Schutz (2000), stress is predictable in quite 70% of words because it falls on the penultimate syllable. This predictability makes English language stress patterns difficult to learn because there is not one predominant pattern.

Furthermore, there are many various intonation contours possible in the production of each phrase or sentence in English. It is possible to say that each EFL learner has their own intonation contour. As mentioned before, to assess the intonation contours of the learners, the tone of voice was scrutinized carefully. The learners in each level read a passage. There were six affirmative statements in the first passage designed for the elementary learners. All the six sentences demanded falling tones. The other passages for the intermediate and advanced learners each had five sentences; i.e. four affirmative sentences which required falling tones together with a question which demanded the learners to read it with a rising tone. To reiterate, rising intonation for the yes/no questions and falling intonation for the affirmative statements were acceptable to the researchers. This point was not noticed by many learners who used inappropriate intonation patterns:

S19: Is economic globalization good for all?

S20: Right?

Having scrutinized word stress patterns and intonation contours of all learners in the three levels, the researchers found out that they were so close to each other. The learners were not significantly different in the production of these two suprasegmental features. Since the materials learners read were from their books and they were somehow familiar with them, the percentage of correct responses obtained was expected to be higher. Almost every intermediate and advanced learner read out the sentences with falling tone. The learners who read the materials with wrong intonation contour applied an idiosyncratic tone which was between Persian and English, or “Penglish” to use Yarmohammadi’s (2005) term. Compare the following two sentences produced in intermediate classes:



This tone occurred because in Persian, the negative markers such as /næ/ bear the primary accent and cause the pitch change over negation prefixes (Hayati, 1998). (For more information on contrastive analysis of English-Persian intonation (see Ahmad Soltani, 2007). The results show that learners did not produce the suprasegmentals (stress and intonation) differently. A closer look at Tables 2, 3, and 4 reveal that their performance was not satisfactory at all regarding the production of suprasegmentals. However, whether learners can be taught how to produce the phrases and sentences with correct intonation is still open to question. Some scholars in the field believe that students will never master all the suprasegmental features through formal instruction because some of these features are not teachable

and the only remedy is extensive amount of non-pedagogic exposure (Dalton & Seidlhofer, 1994; Jenkins, 2000; Lucini, 2005; Nelson, 1998; Roach, 1983). These statements lend support to the findings of the present study.

## CONCLUSIONS AND IMPLICATIONS

The present study started with some definitions of pronunciation and language competence or language proficiency. It also tried to test the hypothesis based on which learners of higher levels were expected to have better command of pronunciation. So, the major aim of the study was to show whether Iranian learners of English at different language proficiency levels differed significantly from each other in the areas of some problematic consonants, initial consonant clusters, the vowel schwa, and the suprasegmental elements, i.e., stress and intonation. The results of the study indicated that the students' level of proficiency was a determining factor regarding some difficult consonants for Iranian learners of English; here, /θ, ð, w/, initial consonant clusters, and the vowel schwa, but it did not have anything to do with the appropriate production of stress patterns and intonation contours. The findings of this study, especially the results obtained from the analysis of suprasegmental features, can contribute to the development of effective strategies and tactics for the teaching of these elements in the classroom. Teachers of English should spend much more time to make learners cognizant of these features. They had better start teaching the phonetic alphabet as soon as the learners' cognitive capacity affords. Moreover, teachers should encourage the learners to make use of phonemic transcriptions of dictionaries in general and to check the stress patterns of words in particular. Furthermore, the very few correct productions of voiceless and voiced dental fricatives among the beginners and intermediate students participating in this study suggest that teachers should direct their attention towards these elements in the classroom. They can, in fact, use different techniques to effectively teach them in the classroom. For example,

they can use “phonetic training” (see Catford, 1988) or they can also make a comparison between L1 and L2 sound systems. Dalton and Seidlehofer (1994) suggest some activity types to improve the learners' pronunciation ability; i.e. elicited mechanical production, listen and repeat, discrimination practice, etc. Furthermore, Maniruzzaman (2008) has provided a relatively long list of techniques and activities applicable to EFL classes such as, modeling and individual correction, written versions of oral presentations, reading aloud, etc.

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