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# TEACHING ENGLISH PRONUNCIATION BY APPLYING DIFFERENT MODELS IN INTERMEDIATE EFL LEARNER-CENTERED CLASSROOMS

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#### **ABSTRACT**

The current study attempts to determine the effect of rubber band, stress and meaning, stress matching game, and visual effects on teaching English pronunciation in Iranian intermediate EFL learner-centered classrooms. This study was done by using sixty intermediate EFL learners that they were chosen through Oxford Placement Test (OPT) of Tonekabon's high schools. These students were divided into two equal groups randomly, Control and Experimental groups. One of Suprasegmental features, word stress and sentence stress pre-test, was administrated of the two groups. A Seven session treatment was administrated for experimental group. This teaching included finding the stressed words individually, finding the stressed words in a sentence, finding the stressed syllable in a word, and finding the unstressed words individually or in a sentence. After that, post-test was done of those two groups. The content of post-test was the same as pre-test but the order of items was different. The obtained data was analyzed through ANCOVAs and *t*-test and finally led to reject the null hypothesis. So applying different models in teaching English pronunciation in Iranian intermediate EFL learner-centered classrooms will be effective.

Keywords: Pronunciation, Segmental, Suprasegmental, Stress, ANCOVA, T-test

#### INTRODUCTION

Pronunciation is an integrated and integral part of second/foreign language learning since it directly affects learners' communicative competence as well as performance to a substantial extent. Teaching EFL pronunciation have received varied treatment from having no room in the synthetic syllabus and the Grammar Translation Method to being the cardinal focus in the situational syllabus and the Audio-Lingual Method in which emphasis is put on the traditional notions of pronunciation, minimal pairs, drills, and mini- conversation.

But now with the shift from specific linguistic competences to broader communicative competences as goals for both the teacher and the learner (Morely, 1991), the need for the integration of pronunciation with oral communication is clearly realized. Many EFL teachers now agree that explicit pronunciation teaching is an essential part of language courses. Also confidence with pronunciation allows learners the interaction with native speakers that that is so essential for all aspects of their linguistic development.

This can have many advantages: because learner's focus is on the listener's experience of their speech and it can reduce nervousness and the expectation of failure and gives learners a sense that accents are nice. It also changes the goal of pronunciation from mimicking a native accent to one of creating intelligible messages.

The rules of English can be defined in terms of what listeners need in order to understand a message correctly and easily, which makes them more meaningful and easier to relate to real speech. Another area in which miscommunication between teachers and learners is syllables and word stress. The number of syllables people think they are producing can be quite different from the phonetic reality, because the level of insight people have into the phonetics of their pronunciation is generally very poor. This study found that learning tools also have the potential to be integrated within other communicative activities in the classroom environment including reflexive learning activities and integrated learner-centered activities to develop Meta cognitive awareness. The teacher also needs adequate training and support to develop the necessary pedagogical skills and confidence to be able to integrate pronunciation into curriculum. Some of Iranian English teachers make little attempts to teach pronunciation. Most teachers

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do not provide instruction at all. In most of EFL classrooms little attention is paid to teaching pronunciation.

### The Role of Mother Tongue

Learners will probably have problems with pronunciation because some phonemes are similar to their mother tongue. Florez (1998) adds that interference or negative transfer from the first language is likely caused errors in aspiration, intonation, and rhythm in the target language. Some errors cannot be ignored because they can interrupt the flow of communication. In English, the primary stress occurs on the first syllable while in Persian the final syllable receives the primary stress. This cross linguistic difference causes Iranian learners misplace word stress of English words (Yarmohammadi, 2005). Since Persian is syllable-timed language, Persian learners of English may have difficulty producing English words and sentences. This difficulty is because of two reasons: a) there is no short or reduced vowel equivalent to English 'shwa 'and b) In a syllable -timed language like Persian, each syllable is assigned an equal amount of weight, regardless of whether the syllable is stressed or unstressed. Iranian students have difficulty in producing and receiving the characteristic stressed pattern (Bakhtiarvand, 2006). Persian words of more than one syllable always follow the 'CV' syllable sequence which is different from those of English (Reiney and Anderson-Hsich, 1993). In English consonants clusters can occur in both syllable – initial and syllable – final positions. Example: ('Tree' and ' pant' ' pants' ' stamp') but the syllable structure of Persian is, however, different. In Persian there are just three syllable types like "CV as in /ba/" " CVC as in /tu:p/ " " CVCC as in / sætr/". Persian syllable cannot be started with vowels; those words that seem to initiate with a vowel include the glottal stop /? /. In Persian Consonant clusters are impossible. In additional syllable, final consonant clusters in Persian normally take no more than two consonants in their structure. Many Iranian EFL learners insert the vowel /e/ in many mono syllabic English words (Bakhtiarvand, 2006). One of the problems in pronunciation that may EFL learners have is the accurate perception and production of word stress. Word stress errors are very usual among EFL learners and have a great effect on students' pronunciation intelligibility and their perception skills (Celce-Murcia et al., 1996). These errors have led to some difficulties in keeping communications through telephone.

# Age Factor

Kenworthy (1990) states that if learners start learning as second language in adulthood, they will never have a native like accent although they may have progress in syntax or vocabulary. Based on the finding, it is necessary to begin teaching pronunciation in childhood because children can obtain near native –like pronunciation with ease. Krashen (1982) claim that learning a foreign language is impossible after critical period to achieve natural pronunciation because the brain is more flexible. Florez (1998) claims that pronunciation is more difficult for adults than children, but experiences with language learning and the ability to self monitor, which come with age, can offset some limitation to some degree. According to Florez (1998), learners who use ethnicity markers into the target language consciously or unconsciously will never achieve native like pronunciation. Learners' positive feelings towards the target language help to a development of comprehensible pronunciation. Intermediate EFL learners have different pronunciation levels. Some students with excellent pronunciation and some students with terrible pronunciation (Machackiva, 2012). Maybe this is caused because of the fact that teachers usually focus on making their students to study grammar and lexis, and reading comprehension. Teaching pronunciation to multilingual Iranian EFL learners is hard working for English teachers. So designing a sufficient teaching method is very necessary for teachers. Word stress is an important aspect of vocabulary knowledge (Nation, 2001). EFL learners that have adequate control on word stress placement will be better L2 listeners (Gilbert, 1994). Young infants store the stress information about the words in which the position of stressed syllable occurs in the memory (Curtin, 2010). Pronunciation learning is affected by some variables such as first language (L1), level of education, age on arrival, amount of use of L1 and L2, motivation for learning L2, etc. (Piske et al., 2001). These variables are different in different persons and they are not controlled by teachers. There are other variables that affect pronunciation learning. These are Input, Output, and Feedback. Language is used for communication. It has three components such as grammar, vocabulary, or lexis, and pronunciation. Grammars or structures are the patterns can be seen.

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Words that carry meaning are vocabulary or lexis. Sound, stress, and intonation patterns combine to each other to make pronunciation. If you want to be able to understand spoken language and to be understood, you will need all these three components, so communication is a two- way process. Syllable- timed and Stress timed languages. Languages have traditionally been classified as either stress timed or syllabletimed. In stress- timed languages such as British and American English, German, Dutch, Thai, stress syllables fall at regular intervals throughout an utterance (Crystal, 2003), and rhythm is organized according to regularity in the timing of the stressed syllables. That is the time between stressed syllables is equal because unstressed syllables are spoken more quickly and vowel reduction occurs. For example the sentence "Tom runs fast." is made up of three stressed syllables. The sentence "Meredith can run fast." is made up of six syllables, but only three of them are stressed. The unstressed syllables 'me', 'dith', and 'can' are spoken quickly and vowel reduction occurs, so the time between the stressed syllables tends to be equal, and both sentences take approximately the same amount of time to say. In syllable - timed languages (e.g., some native varieties of English, and languages Singapore and Malaysian English and Languages such as Tamil, Spanish, and French, syllables are said to be equal in timing (Crystal, 2003). All syllables are nearly equally stressed, vowel reduction does not occur, and all syllables appear to take the same amount of time to utter. In the sentence " Bob can swim " the words 'Bob', and ' swim' are content words and have major stress and 'can' which is unstressed is pronounced /kIn/ - its weak form. Knowing of whether the first language of someone is stress based or syllable based will help teachers plan appropriate pronunciation exercises.

# Motivation and Exposure

Having personal or professional goal for learning English can effect on the need and desire for nativelike pronunciation (Bernaus et al., 2004; Gutbonten et al., 2005). Positive orientation to the language is an important factor in developing native- like pronunciation (Moyer, 2007). Shively (2008) found that accuracy in the production a language based on the age of learners is related to exposure to the language. So in addition to focusing on pronunciation and accent in class, teachers should encourage learners to speak English outside the classroom and provide them with assignments that make these interactions. The main aim of this research was to investigate the effect of applying different models in teaching pronunciation especially suprasegmental feature called word stress and sentence stress for Iranian EFI learner- centered classrooms in intermediate level. The data carried positive results. Based on the analysis of chapter four and significant difference between control and experimental groups during pre-test to post-test, using different models not traditional ways is very useful. Also it will be applied in learnercentered classrooms. Teachers provide just some information but they involve the students. Teachers must be aware of the advantages of using different teaching aids and group work. Teachers and students must be aware of the changes in meaning that occurs by the changes in the place of stress in another word or syllable. They must also be aware of the changes in stress may result in differences in grammatical category. For example in Persian, stress can change the noun 'ketabi' into adjective if pronounced as ' ketabi' with the last syllable stressed; or it can change into abstract nouns to indefinite nouns. For example the abstract noun ' mardi' can be indefinite noun if pronounced as ' mardi '. This function is used in English too. For example the verb ' import 'will turn into a noun if the stress is placed on the first syllable and pronounced it as 'import'. Basically stress in English has been studied and researched since a long time ago but stress in Persian has been discussed by the French scholar, Aleksander Chodzko for the first time in his book "Persian Stress" (1852, cited in kahnemuypour, 2003). The first pioneer in Iran studying Persian stress was doctor Foadi and the first researcher using the term "tekye" was Parviz Natele Khanlari. Some scholars who have contributed to stress studied in Iran are Ekhtiyar, Khanlari, Sepanta, Yarmohammadi, Samare, Hagh shenas, Samei, Tohidi, and Rassekh. Many researchers have studied about English stress. They believe that stress can be studied in two ways: one is regarding words outside of sentences, and without any psychological impact and another is regarding words inside the sentences. The overall results of this study leads to the discussion, which is related to the research question. This discussion began with teaching pronunciation especially word stress and sentence stress by applying rubber band, stress and meaning, stress matching game, and visual effects in Iranian EFL learner-

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centered classrooms, the H0 was "applying different models does not effect on teaching pronunciation". Based on the differences between stress in English and Persian, in which English is stress-timed and Persian is syllable-timed language, there are many problems among Iranian learners in learning English. According to the results of this study, it can be concluded that three obstacles that were found from students' pronunciation. They are ability to discriminate sounds, fossilized pronunciation, and L1 interference. Therefore Iranian students can improve their pronunciation abilities if they have more time. Yangklang (2006), also pointed motivation was important for learning pronunciation by using computer assisted instruction. Sirwisut (1994) believed that language experience had an effect on pronunciation ability. Students that had opportunities to use English language in daily lives, they had more pronunciation ability than students with less experience.

# Significance and Purpose of the Study

Although there are thousands of languages all over the world, many people speak English as their mother tongue. Besides many other people use English as their second language or an international language when they communicate with people all around the world. English is crucial part of our lives in travelling, studying abroad as members of the European Union. Pronunciation as a dependent part of a language has a great effect on our successful communication but it is still overlooked by many teachers. They pay attention to teach grammar and lexis (Machackova, 2012). Two main features of pronunciation should be noticed, the segmental and suprasegmental features. Segmental features are sets of distinctive sounds of special language and suprasegmental features are related to intonation, stress, and change of sounds in connected speech (Kelly, 2002). As pronunciation is a complex and main part of learning and teaching process, teachers should identify their goals. In this thesis, one of the suprasegmental features, stress, will be focused. Since English is used for interactional communication, it is important for native or non-native speakers to be able to exchange meaning effectively. It is not important for learners to sound speak native like but they should achieve:

- a. Intelligibility (the speaker produces recognizable sound patterns).
- b. Comprehensibility (the listener should understand the meaning of what is said).
- c. Interpretability (the listener can understand the purpose of what is said).

Clear pronunciation is very crucial in spoken communication. People can have effective communication by good pronunciation and intonation even they produce inaccurate words and grammars (Burns and Claire, 2003). The most important part of suprasegmental features is word stress. Burns &Claire (2003) also state that the word stress relates to the prominence given to particular words in an utterance). These words are stressed (made long and loud to convey the all rhythm of the utterance. For example: Can YOU take the scissors/? (Not someone else) and Can you take the SCISSORS? Not the knife). Norton (2003) believes that focusing on suprasegmental features of pronunciation causes students not to see pronunciation activities as stand- alone, but rather as an integral part of lessons. Beginning in 1980, there is a greater emphasis a teaching suprasegmental features than isolated sounds. The primary stress is indicated by bolding, underlining, capitalizing the corresponding syllable or by putting different sized circles on the stressed and unstressed syllables (Kenworthy, 1987). Iranian students often have problems with English pronunciation when they speak or read. Teachers should use effective techniques to improve students' pronunciation and stress recognition. Rubber band, Stress and meaning, Stress matching game, and Visual effect are believed to have direct influence on the pronunciation skills (Ratnasari, 2007). In Iran teaching pronunciation has been and still is marginalized. Based on the past teaching pronunciation, minimal pair's exercises and certain problematic sounds was important (Smith, 2005). This part of pronunciation does not effect on communication ability of speakers. In learner- centered approach communicative opportunities are provided. Almost all Iranian English teachers know the major problems of pronunciation instruction (Ghorbani, 2006). According to (Namaghi, 2006), first since teachers cannot provide a suitable text book that is based on their students' needs, the input is controlled by the prescribed curriculum. Second the output is controlled by mandated national testing scheme, and teachers cannot produce tests with positive wash back on teaching or learning. Third, since high score is culturally equal to higher achievement, the process of teaching and learning is controlled by the grade pressure from

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students, parents, and school principles. There are tools that help Iranian students overcome the problems of English pronunciation, so they can reach to fluency. Recently as English teaching has led to language functions, and communicative competences, teaching pronunciation has arisen (Gilbert, 1994). Rubber band is a simple tool that provides a visual image of variable length of the syllables as well as a kinesthetic tool that mimics the actual effort involved in lengthening a stressed syllable (Gilbert, 1994). The teaching point is to help students avoid pronouncing each syllable at the same length. Stress and meaning have students work in pairs. Student1 says sentence (a) or (b). Notice that stress in (a) and (b) is put in different places. Student 2 has to identify a stressed syllable and makes an intelligible guess and then chooses an appropriate answer. This activity helps students to understand the relationship between stress and meaning (Gilbert, 1993). Example:

Is it elementary? No, it is advanced.

Is it a Lemon tree? No, an orange tree

Visual effects emphasize the stressed syllable by using thicken, capitalize, underline, circle, or color the stressed syllable. Besides the teacher can put a dot for unstressed syllable and a line for the stressed one under the word to indicate that the stressed one needs to be lengthened; or he can put a small dot for unstressed syllables and a big dot for the stressed one under the word to indicate that the stressed one has a stronger beat. Using visual effects can help students notice the place of stress in each word and avoid misusing word stress [Today today]. Stress and matching game have students work in groups. One member in the group taps or rhythms of a word from the vocabulary list, and the others have to find out which word has the same rhythm as they hear. Examples: artist, manager, cashier, musician, photographer. Though pronunciation is overlooked in the syllabus, material and even classroom activities, it does have an inseparable link to communication through listening and speaking (Gilbert, 1984; Celce-Muria, 1987). "If learners cannot hear well, they are cut off from language. If learners cannot be understood easily, they are cut off from conversation with native speakers" (Gilbert, 1995). Morely (1991) states that "intelligible pronunciation is an essential component of communicative competence". Teachers should include pronunciation in the courses and expect their learners to do well in them. Native or non-native speakers should be able to exchange meaning effectively. The realistic idea that learners should sound and speak like native speakers is fast disappearing, because English increasingly is becoming the language for international communication (Burns, 2003). Native like accent is not important because just faulty production of word stress decrease intelligibility significantly Garrigues, 1999; Field, 2005). Learners with good pronunciation in English are more likely to be understood because the way learners speak immediately carry about themselves to the people around them. If learners' grammar is perfect and has bad pronunciation, such learners avoid speaking English and they experience social isolation, many adult learners have difficulties in pronunciation and need explicit help from the teacher (Morely, 1994; Fraser, 2000). Stretching wide, heavy, rubber bands while practicing the lengthened vowels can provide students with a kinesthetic focusing tool to reinforce the continue in duration (ba **na** na). Continue this kinesthetic practice of stress, but with a variety of physical markers for the stressed syllable (e.g., hand raising, head raising, eyebrow raising) which is difficult but amusing. Have students volunteer other vocabulary for this kind of practice. Some teachers actually have students up on their feet marching in a circle and dipping or standing letter for the stress (Acton, 2002). Based on Doan (2013), over the last few years many different studies have shown the importance of explicit pronunciation lessons in the classroom. In order for students to achieve the goals of communication, pronunciation is an essential skill. The foundation of effective spoken communication is good pronunciation (Garrigues, 1999). Misunderstanding in many cases may occur when words are not correctly pronounced or stressed (Yangklang, 2006). Celce-Murcia et al., (2010) have stated 'acquiring a threshold level of pronunciation" for non-native speakers of English. Many studies reveal the lack of patience that native speakers have when facing non-native speakers with poor pronunciation (Mulac et al., 1974). All of these studies show the importance of intelligible pronunciation. Suprasegmentals have the greatest effect on intelligibility (Derwing and Rossiter, 2003). In pronunciation teaching, focus on suprasegmentals issues is more than segmentals. According to Herbert (2002), the importance of

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suprasegmentals versus segmentals can be shown by the following example: "If a speaker says, '/ dis iz di kæt/' instead of / ð is iz ðə kæt/, the learner's intelligibility will not be affected but if she says the former with a rising intonation counter to impact information, the listener will encounter some problems in understanding her meaning. The use of visual prompts supports students' learning processes both segmental and suprasegmental aspects of pronunciation learning (Hardison, 2003). Providing clear visual cues such as underlining, using bold or capitals, circling or using ticks may be routine (Lin *et al.*, 1995). Clapping or tapping the relevant word stress by the teacher or in student led small groups has also been described (Lin *et al.*, 1995). This is when a piece of elastic is stretched by the teacher when modeling to emphasize the strengthen syllable which additionally adds a kinesthetic dimension to learning the process. Levis (2007) noted that teachers should be aware of computerized assisted language learning (CALL) but the evidence for CALL and word stress acquisition is very limited. Using wave surfer for students causes to make long— term acquisition of particularly difficult words including polysyllabic words. Wave surfer program allows acoustic visualization of sounds, but this practice was not generalizable to large amount of vocabulary and is time- consuming (Hincks, 2002).

## Research Question

This research will investigate the effect of teaching English pronunciation by using different models and tools such as rubber band, stress and meaning, visual effect, and stress matching game in Iranian intermediate EFL learner- centered classrooms.

Q: Is Teaching English Pronunciation by Applying Different Models Effective for Intermediate EFL Learner- Centered Classrooms?

#### MATERIALS AND METHODS

#### Method

Design of the Study

This research strategy includes a framework that shows the study's goals, objectives, and questions. In this part the overall study design is summarized. In this Quasi- experimental study, pre and post- tests are designed with both a control group and experimental group. The pre- test is done before treatment and post – test is done after treatment of experimental group. The control group is taught under the traditional and teacher- centered method but the experimental group is taught under some models such as rubber band, stress and meaning, stress matching game, and visual effects and also in learner- centered classrooms.

Subjects

Based on Oxford Placement Test (OPT), Students were placed in intermediate level. Their mother tongue or language background was Persian. Although the sex of subjects is not significant, but it is better to be mentioned that all students were female. In this research sixty students were chosen out of two hundred students. The sixty students were divided into two- thirty people groups randomly, one group was as a Control group and the other one was as an Experimental group. They were between 16 to 17 years old. At first all intermediate students were going to be chosen among the students of Imam high school but all of them could not receive the accepted score and the students received OPT. It is necessary to mention that these two high schools are located in Ramsar, Iran. After gathering all the data, the results of the test indicated that in terms of educational background, level of English mastering and vocabulary knowledge, the subjects were homogeneous for intermediate level. Then they were divided randomly into two thirty people groups: a Control group and an Experimental one in the intermediate level.

## Measuring Instruments

For the purpose of this study and to investigate hypothesis, several materials were utilized. To obtain the research data, the researchers used of the OPT proficiency test. The participants were not allowed to use dictionaries or chat during the exams. In fact the study started by conducting the Oxford Placement Test consisted of some sections including vocabulary, grammar, and reading comprehension. The students were asked to answer in the specific answer sheet. The answers were then collected and scored by the researcher. The test is available in Appendix A. In this study, the placement test, the pre and post -tests,

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voice recorded, some papers including tests for treatments were used. 200 students in grade two and three Tonekabon high school took part in placement test. It was used in order to ascertain the homogenous regarding the students' English general proficiency. Sixty students were selected based on the accepted marks. They were placed in Intermediate level. These sixty students were placed in two groups randomly, Control group and Experimental group. A pre-test was administrated after OPT. The main purpose of Pre-test was to obtain detailed information about the rules of word stress and sentence stress in English versus Persian. The test was designed by the researcher. It was included four parts of finding the correct answers and underlying the correct options in according to which item was stressed or unstressed and also which syllable of a word was stressed or unstressed. The scores were ranged from zero to twenty, with each item received one mark for the correct answer. The orders of the items in Post-test were not the same as Pre-test. The models of this study was rubber band, Stress and Meaning, Stress matching game, and visual effects. At first the teacher explained about the rules of English word stress and sentence stress by stretching rubber band, showing some examples of stress based on meaning, tapping for stressed words or syllables, underlying or bolding the stress words individually or in a sentence. Post- test like pre- test included four parts. This test was a parallel test.

#### Procedure

Since this study was examined the effect of some models in teaching pronunciation, Experimental and Control groups were in intermediate level and the procedures used for the purpose of the study were the same for two groups. The research was organized in nine sessions during two months, from October to December. In order to collect data for this study several steps were taken: Before administrating pre-test, students were asked to take part in Oxford Placement Test to verify groups' initial homogeneity. OPT was used to ascertain learners' current level of language proficiency. This multiple- skill test placed learners into one of the four proficiency level - elementary, lower intermediate, intermediate, and upper intermediate. The time allotted was 30 minutes. Having assessed the groups' initial homogeneity, the researcher assigned them randomly as the experimental group (received seven sessions of treatments), and the Control group (received no treatment. The participants were sixty Iranian intermediate EFI students in Ramsar high schools. Before starting instructions, Pre-test was given to both groups. It was written form. The purpose of this test was to know the students' level in pronouncing English words before they took the program. After that, teaching the word stress and sentence stress to the experimental group by applying rubber band, stress and meaning, stress matching game, and visual effects in learner- centered classroom was done. The treatment was done during a seven session course, each session lasted thirty minutes. At first the teacher explained the rules of stress by different models then the learner practiced them in twenty minutes out of thirty minutes. Finally at the end of the course, to see the effectiveness of instructions by applying different models versus traditional teaching of pronunciation, the post- test was given to both groups. Post- test was the same as Pre- test. The only difference was the order of items. This test ascertained how the group receiving treatment, differed from the other group. The scores obtained by the Pre-test and Post- test were statistically analyzed.

## Data Analysis

The data was collected from Iranian Intermediate EFL learners of two public high schools in Ramsar, Iran. After gathering data, it was analyzed by using Statistical Package for the Social science (SPSS) to calculate the means, standard deviation and variance. At first a treatment was done by a tape recorder to identify which parts of pronunciation the students faced more problems. After doing OPT test and making them homogenous, the two groups, Control and Experimental groups, were selected randomly. Both two groups took Pre- test and Post- test. Then the statistical analysis was done. The post-test provided valuable information about how learners' knowledge of pronunciation improved during the period of the study. In order to answer research question and to see whether or not the two groups' performance will be significantly different from pre- test to post- test, the researcher used two one- way ANCOVAs (Analysis of Covariance) for the control and experimental groups.

ANCOVA1: It analyzed the changes in performance from pre- test to post- test of Control group. ANCOVA 2: It analyzed the changes in performance from pre- test to post- test of Experimental group.

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Independent samples T-Test were done for analysis the changes in post- tests of both Experimental and Control groups. It was a statistical examination of two population means. T- Test was used to determine whether the population means differ. The T-test is one of a number of hypothesis tests.

#### RESULTS AND DISCUSSION

# Results and Interpretations

The main aim of this study was to identify the extent to which applying rubber band, stress and meaning, stress matching game, and visual effects in teaching one of suprasegmental features (stress) was helpful for the participants in improving their pronunciation. The students' productive skills should not be limited to listen and repeat drills of separated decontextualized sounds as in the case of minimal pairs that merely based on the sheer mechanical, articulatory aspects of pronunciation and achieving accuracy in controlled practice. In this type, practice does not necessarily lead to actual conversation (Jones, 1997). Varied practice materials should be chosen that stimulate student's motivation and participation. Material should be based on different individual cognitive styles (Rubin 1987; Morley, 1991; Wharton, 2000). This chapter discussed the results of the data collection from both pre-test and pos-test tasks. Such a descriptive analysis was done using the SPSS soft ware. In order to study different models in the area of L2 pronunciation in Intermediate EFL Learner- centered Classrooms. This study tried to prove the following null hypothesis which is formulated as: H0): Teaching English Pronunciation by Applying Different Models is not effective in Iranian Intermediate EFL Learner- Centered Classrooms. Here the researcher tried to show whether there was any significant difference in teaching pronunciation especially word stress and sentence stress by applying rubber band, stress and meaning, stress matching game, and visual effect in learner-centered classrooms in experimental group, the results of the descriptive analysis were analyzed as table 1.1:

Table 1.1: Descriptive analysis of the group's statistics

Mean		N	Mean	Std. Deviation	Std. Error		
Pronunciation	Ex Group Pre	30	13.21				
	Co Group Pre	30	12.14				
Pronunciation	Ex Group Po	30	16.566	2.128	.388		
	Co Group Po	30	11.133	3.224	.588		

The sixty subjects representing two groups (control and experimental groups) participated in this study. At first by means of SPSS, the Means of pre-test in the two groups were compared to check the homogeneity between two groups. At the time of pre-test, there nearly appeared to be no significant difference between these two groups but at the time of post- test, after doing treatment there appeared to be a large difference between the results obtained by two groups. As has been indicated in table (1.1), the number of participants in the experimental group and control group of the study was 30 ( $N_E$ =30;  $N_C$ =30). The Means of the posttests of experimental group and control group were 16.566 ( $X_{ex}$ = 16.566) and 11.133 ( $X_{con}$ = 11.133), respectively. Apparently, the means of the posttests of the two groups were significantly different; however, the significance of the difference between the Means had to be determined when the t value could be calculated. The standard deviations for the experimental group of the study and the control group of the study were 2.128 and 3.224, respectively.

Independent Samples T- test

**Table 1.2: Independent Samples T-test** 

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Levene's Test For Equality of Variances 95% Confidence Interval of the Difference									
	$\mathbf{F}$	Sig.	t	df	Sig	Mean	Std.	Lower	Upper
		Ü			Ü		Error		
Pronunciation	1.577	.214	7.703	58	.000	5.43333	.70534	4.02143	6.84523
Equal variances									
Assumed									

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An independent t-test was run to compare the mean scores of the experimental and control groups. As indicated in table (4.1.2), the t-observed value of the study was calculated between the posttests of pronunciation the participants in the experimental and control groups. The observed t value calculated as to be 7.703 ( $t_{obs}$ = 7.703) and the degree of freedom was 58 (df=58). The t-observed value was higher than the critical value of t, that is, 2.000. It can be concluded that there was a significant difference between the two groups mean scores in the posttest. In other words, the using techniques such as rubber band, stress and meaning, stress matching game, and visual effect had significant impact on the performance of the participant's pronunciation on the posttest. Finally, the level of significance was calculated as to be 0.000 has been used in interpreting the data for the rejection or support of the hypothesis in the next section.

# Inferential Analysis of the Data

This section focuses on the inferential analysis of the obtained data of this study. Such analysis was done using SPSS (Statistical Package for Social Science)

Table 2: The Inferential analysis of the data of the study (One-Way ANCOVA)

Source	Type III	df	Mean	F	Sig	Partial Eta		
	Sum of	<b>?</b>	Square			Squared		
	Squares							
Corrected	841.450(a)	2	420.725	701.209	.000	.961		
Model								
Intercept	105.207	1	105.207	175.346	.000	.755		
Pre	398.633	1	398.633	664.389	.000	.921		
pronunciation								
Model	221.938	1	221.938	369.897	.000	.866		
Error	34.200	57	.600					
Total	12385.000	60						
Corrected	875.650	59						
Total								

According to Table (4.2), the Sig. value for independent variable (model) was .000 which is less than .05. It indicates that the two groups of the current study differ significantly. In other words, there was a significant difference in the pronunciation scores for subjects in the experimental group (treated by models) and control group. To know whether there is a significant relationship between the covariate (pre pronunciation) and the dependent variable (post pronunciation), the Sig. value for the covariate (pre pronunciation) was .000. This is less than .05, so pre pronunciation is significant. In fact, it explained 92.1 percent of variance in the post pronunciation (the dependent variable).

## Suggestions for Further Research

It is hoped that the findings of this research set of general ideas about the possible problems and the stress errors that Farsi speakers of English may encounter in pronunciation of the suprasegmental features. Furthermore teachers should be aware of the likely problems to be happened by the learners' lack of familiarity with certain rules of word stress and sentence stress. Teachers should devote more time to focus on suprasegmentals in the classrooms and help learners to receive more listening practice and expose to English language. Also researchers should not ignore other procedures of analyzing learners' errors such as error analysis, Inter-language and Discourse Analysis. Additionally, this study could be expanded to include different areas of pronunciation, different methods of teaching the participants how to learn foreign pronunciation. A learner-based approach gives us the ability to meet the language student right where they are in their development and help them to take the next step in their language development more quickly and efficiently. There were some obstacles to carrying out this plan in a large classroom. But as much as possible every effort should be made by language instructors to notice English word stress and sentence stress in their students and improve their intelligible speaking English.

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#### Conclusion

The null hypothesis for the independent t-test is that the population means from the two unrelated groups are equal:

 $H_0$ :  $u_1 = u_2$ 

In most cases, we are looking to see if we can show that we can reject the null hypothesis and accept the alternative hypothesis, which is that the population means are not equal:

 $H_A$ :  $u_1 \neq u_2$ 

To do this, we needed to set a significance level (alpha) that allows us to either reject or accept the alternative hypothesis. Most commonly, this value was set at 0.05. ANCOVAs and Independent T- test were done and showed using different models in teaching word stress and sentence stress was very significant in Iranian EFL intermediate learner-centered classrooms.

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