

# Comparison of Iranian Monolingual and Bilingual EFL Students' Listening Comprehension in Terms of Watching English Movie with Latinized Persian Subtitles

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Received: February 28, 2016 Accepted: April 2, 2016 Online Published: April 5, 2016

doi: 10.5539/elt.v9n5p65

URL: <http://dx.doi.org/10.5539/elt.v9n5p65>

## Abstract

The main concern of the present study was to compare Iranian monolingual and bilingual EFL students' listening comprehension in terms of Latinized Persian subtitling of English movie to see whether there was a significant difference between monolinguals and bilinguals on immediate linguistic comprehension of the movie. Latinized Persian subtitling was representing Persian language in Latin script. To achieve this end, an ex post facto design was employed. The homogenized participants of this study were 24 Persian monolingual students and 22 Azeri-Persian bilingual students. One listening comprehension test which was based on the linguistic information of the movie was administered to both groups of monolinguals and bilinguals. The results of Mann-Whitney U test revealed a significant difference between two groups; that is, monolinguals outperformed bilinguals on immediate linguistic comprehension of the movie. Finally, the study concludes with some pedagogical implications and recommendations for further research.

**Keywords:** bilingual, English movie, Latinized Persian subtitling, listening comprehension, monolingual

## 1. Introduction

Listening comprehension is one of the most complex skills in language learning (Oxford, 1993), especially in the case of an unidirectional listening mode where the listener is unable to interact with the speaker as in the case of watching a movie to comprehend its content (Graham, 2006). So, in this context, the listener must process the input in real time (Vandergrift, 2007), which puts much pressure on the learner and leads to anxiety in the learner (Arnold, 2000). Also, the learner cannot control the speed of the input (Hulstijn, 2007). This may cause a series of processing problems (Goh, 2000) for second and especially foreign language learners (Ghasemboland & Nafissi, 2012). Studies on unidirectional listening comprehension and its problems can be one of the rationales for using on screen text (e.g., subtitles) (Perez, Noortgate, & Desmet, 2013) as a means to overcome listening problems, while at the same time, exposing the learner to the verbal and visual information (Winke, Gass, & Sydorenko, 2010). Many factors can influence in processing of audiovisual materials as subtitled movies. Some of these factors are linked to the characteristics of the audience members as their monolingual or bilingual statuses and others to the various versions of one movie as the type of subtitles presented on the screen (Bairstow & Lavour, 2011).

Subtitled movies contain two types of information which is visual and verbal information (Mayer, 2014). These two types of information can be either linguistic or nonlinguistic (Bairstow & Lavour, 2011). Bilinguals may show a disadvantage in remembering linguistic information relative to monolinguals, which may be due to bilinguals having a deficit in certain linguistic processes (Kharkhurin, 2010; Schroeder & Marian, 2012). In contrast, bilinguals may be advantaged in remembering nonlinguistic information and that better nonverbal recall in bilinguals maybe due to their better executive control (Schroeder & Marian, 2012). Subtitled movies can modify the viewer's audio and visual integration processes as a result of competition between these two types of information (Bairstow & Lavour, 2011). The competition between these two types of information can occur particularly if the information is considered "disparate but simultaneous" (Mottonen & Sams, 2008) as is the case with audio information in one language (e.g., English in this study) and written information in another (e.g.,

Latinized Persian subtitles of this study).

Nowadays a large number of Iranians use some sort of Latin-based transliteration instead of Persian writing system for sending SMS, email, and chatting on the Internet (Maleki, 2003). Therefore, the Latinized Persian subtitles were used as onscreen text of movie, which have never been applied in Iran. The Latinized Persian subtitles are the presentation of Persian language in Latin script. On the same level as the type of subtitles presented onscreen, studies must focus on the characteristics of the students as their monolingual and bilingual status in the context of Iran. To the best knowledge of the researcher, there are no studies that have been conducted to compare the Iranian Persian monolingual with Azeri-Persian bilingual learners of English in terms of their linguistic processing of English movie with Latinized Persian subtitles. So, this study aimed to compare the Iranian monolingual and bilingual students' listening comprehension in terms of watching English movie with Latinized Persian subtitles.

## 2. Review of the Related Literature

A review of literature on the use of movie as multimedia material in English language teaching revealed that movies are highly useful resources in EFL classrooms (Ismaili, 2013; Peng, 2012). The principle of multimedia learning refers to the learner's construction of knowledge from words and pictures (Mayer & Moreno, 2003). The words of this principle refer to the material which is represented in verbal form such as printed text or spoken text and by pictures, it means that the material is presented in pictorial form, such as static graphics, including illustrations, graphs, diagrams, maps, or photo, or dynamic graphics, including animation or video as movie (Mayer, 2014). Based on the cognitive theory of multimedia learning (Mayer, 2014), the human information processing system includes dual channels for visual/pictorial and auditory/verbal processing. The auditory/verbal and visual /pictorial channels in our working memory are separated and can be used for processing information (Baddeley, 1992; Mayer, 2014; Paivio, 1986). Learning is better when information is processed through both channels instead of only one (Spector, Merrill, Elen, & Bishop, 2013). Although information enters the human information system via one channel, learners may be able to convert the representation for processing in the other channel (Mayer, 2009; Mayer, 2014). For example, on screen texts or subtitles may initially be processed in the visual channel because it is presented to the eyes, but an experienced reader may be able to mentally covert images into sounds, which are processed through the auditory channel (Mayer, 2001; Mayer, 2009).

### 2.1 Bilingualism and Monolingualism in Listening Comprehension

Language is exquisitely tied to memory and to the functions that encode and store information as well as to those assist us in retrieving information (Heredia & Altarriba, 2013). For the bilingual person, the linguistic aspects of encoding and retrieval can occur in one or two languages (Schroeder & Marian, 2012). The bilingual experience can positively and negatively affect various cognitive and linguistic processes, which, in turn, leads bilinguals to show enhanced memory in certain situations and impaired memory in other situations (Heredia & Altarriba, 2013).

Gorjian and Mahmoudi (2012) investigated the effect of monolingualism and bilingualism on listening comprehension of Arabic-Persian bilingual and Persian monolingual students. The homogenised participants of these two groups were taught the listening strategies in 12 sessions. In each session after strategies, a listening task was given to the students and they were asked to answer the listening comprehension questions. Finally, both groups were given the post test. The bilinguals outperformed the monolinguals on listening comprehension as well as their strategy use. The main reason was that bilinguals in general have control over the system of two different languages simultaneously and this could help them to make use of the listening strategies more effectively than monolinguals.

Bairstow and Lavour (2011) examined the effects of subtitles on film comprehension, depending on the viewers' fluency level in both the spoken and written languages on the screen. French monolinguals and French-English bilinguals of this study watched the extract of one movie with two versions, first time with English soundtrack and without subtitles and second time with English soundtrack and with French subtitles. Then, they replied the multiple choice comprehension questions which were based on the visual and audio information. The results showed that with the non-subtitled version, the bilinguals obtained higher comprehension scores than the monolinguals for both visual and dialogue data, whereas with the subtitled version, monolinguals achieved higher level of comprehension than the bilinguals for both visual and dialogue information. In other words, subtitles had the facilitating effects for the monolinguals and inhibitory effects for bilinguals.

Legac (2007) explored the listening comprehension in monolingual and bilingual primary school students of English as a foreign language. The participants of both groups had been equally exposed to English. They took a

listening comprehension test from the Cambridge Preliminary English Test. The results of the study showed that bilingual students performed significantly better than monolingual students in listening comprehension test. A possible reason for the bilingual advantage was that their experience with two languages would reduce general foreign language anxiety and their listening anxiety in learning a new foreign language.

### *2.2 Bilingualism Differentially Affects Linguistic and Nonlinguistic Memory*

According to Schroeder and Marian (2012), the linguistic aspects are encoded in a different way than nonverbal aspects. The bilingual experience affects the ability to remember linguistic and nonlinguistic episodes (Schroeder & Marian, 2013). Specially, it has been suggested that bilinguals may show a disadvantage in remembering linguistic information relative to monolinguals, which may be due to bilinguals having a deficit in certain linguistic processes (Fernandes, Craik, Bialystok, & Kreuger, 2007). In contrast, the bilinguals may be advantaged in remembering nonverbal information and that better nonverbal memory in bilinguals may be due to their better executive control which plays a key role in encoding and retrieval (Schroeder & Marian, 2012).

In a study examining the effect of bilingualism on linguistic aspects of memory, Fernandes, Craik, Bialystok, and Kreuger (2007) had younger and older monolingual and bilingual adults perform a word recall task. In this task, participants listened to a series of words, and then verbally reported all of the words they remembered hearing. Bilinguals recalled fewer words than their monolingual peers. The results suggested that bilinguals may be at a disadvantage when remembering event or aspect of an event that is linguistic in nature. In a similar study, Schroeder and Marian (2012) compared bilingual and monolingual adults in picture recall. The participants of the study were monolingual speakers of English and bilingual speakers of English as well as another language. English was the second acquired language for all bilinguals. Bilinguals recalled more pictures than monolinguals.

### *2.3 Subtitling and Listening Comprehension*

Intermediate EFL learners' perspectives on watching movies with subtitles have been investigated by Tsai (2009). Two criteria were used to select the participants of the study. All participants had similar listening proficiency and they had not watched the movie chosen for the study before. The participants of the study were divided into two groups. Group 1 watched the movie with the presence of the English soundtrack and the Chinese subtitles. Group 2 watched the same movie with the supply of the English soundtrack and the English subtitles. Watching movie with English subtitles enabled participants to improve their spelling, understanding of spoken language, intonation, word recognition ability, and pronunciation of new words and words they have already learned. On the contrary, the Chinese subtitles merely enabled learners to improve their language proficiency in terms of vocabulary, listening comprehension of the language and oral abilities to a very limited extent. Kusumarasdyati (2005) obtained the similar results. He studied the effect of subtitled movie and found it an effective teaching device to develop the EFL learners' listening skills. In this study, the subtitled movie equipped the learners with the relevant knowledge of the target culture which could raise their awareness of diversity across cultures. So they could use the language in the proper cultural context.

Katchen (1996b) investigated a group of advanced level students using a more qualitative method in order to examine the effects of the L1 subtitles over listening comprehension and language learning. The first language of participants was Chinese. The participants summarized the movie and commented on the helpfulness or hindrance of the L1 subtitles. The results denoted that the use of the L1 subtitles was effective for learning new English vocabulary especially for learners who had a good dictionary. The researcher also discovered that learning idioms, functional words, slang, and culture-specific referents were more difficult with the assistance of the L1 subtitles. In this study only the use of the L1 subtitles, without a comparison of the application of both L1 subtitles and L2 subtitles were examined. In a similar study, Markham (2001) found the use of the L1 subtitles more effective for gaining listening comprehension of the movie.

In contrast, some research was prone to the use of subtitles in target language of language learners. Baltova (1999) conducted an experiment with lower-intermediate native French speakers learning English in order to examine the effects of the L1/L2 subtitled video on listening comprehension and vocabulary learning. The learners' performances were defined as their scores obtained in the comprehension questions and gap-fill test. The results showed that L2 subtitles were the most beneficial for the recall of L2 vocabulary and of content. Similarly, Hirose and Kamei (1993) conducted a research using Japanese EFL students, and they found that English subtitles facilitated the listening comprehension of students with low, intermediate, and high levels of English proficiency. Peng (2012), also, conducted a study on three groups of Chinese EFL students in order to assess the students' listening comprehension. In conclusion, the participants of all three groups who were exposed to English subtitles reacted very positively compared to Chinese subtitles or without subtitles.

### 2.3.1 Subtitling and Listening Comprehension in Iran

Hayati and Mohamedi (2011), in a study on intermediate Iranian EFL students supported the effectiveness of movie subtitling in improving comprehension. The results of listening comprehension test revealed that the English subtitled group performed at a considerably higher level than the Persian subtitled group, which in turn performed at a substantially higher level than the no-subtitled group on the listening test.

Latifi, Mobalegh, and Mohammadi (2011), also, tried to capture the effects of movie subtitles on the immediate and long term improvement of listening comprehension. The intermediate learners of the study were assigned into three groups: English subtitled group, Persian subtitled group, and No-subtitled group (NSG). All of the participants' immediate comprehension was measured by a multiple choice teacher-made test, and their long term listening improvement was assessed by means of an IELTS test. The results revealed that regarding immediate comprehension, both subtitled groups outperformed the no-subtitled group; however, on the IELTS test which measured the long term improvement of the learners the no-subtitled group performed significantly better.

Although these studies have yielded some very interesting results, they do not compare the Iranian monolingual with bilingual learners of English in terms of their linguistic processing of English movie with Latinized Persian subtitles. Therefore, the present study aimed to compare Iranian monolingual and bilingual EFL students' listening comprehension in terms of Latinized Persian subtitling of English movie to see whether there was a significant difference between monolinguals and bilinguals on immediate linguistic comprehension of the movie. The following is the research question:

Is there any significant difference between Iranian bilingual and monolingual EFL students' listening comprehension in terms of watching English movie with Latinized Persian subtitles?

Based on this question, the null hypothesis of the study was:

There is no significant difference between Iranian bilingual and monolingual EFL students' listening comprehension in terms of processing linguistic information of English movie with Latinized Persian subtitles.

## 3. Methodology

### 3.1 Participants

The participants were selected from among undergraduate EFL students of two intact classes of two different universities in Iran. The population of the study included 63 students. They were comprised of 36 students from Gorgan State University in Gorgan and 27 students from Islamic Azad University, Tabriz Branch in Tabriz. Based on a demographic questionnaire, 24 Persian monolinguals were chosen from the selected class in Gorgan State University and 22 Azeri-Persian bilinguals were chosen from the selected class in Islamic Azad University, Tabriz Branch. The monolingual participants were first year students who were majoring in English Language and Literature and the bilingual participants were third year students who were majoring in English Teaching. The participants were both male and female and their age range was between 20 to 35 years. These two groups (monolinguals and bilinguals) were checked for their homogeneity based on the listening part of PET test. The results through the Independent-Samples t-test indicated their homogeneity. Therefore, all monolingual and bilingual students in the both groups were considered as the participants of the study.

### 3.2 Instruments and Materials

#### 3.2.1 Demographic Questionnaire

In order to elicit subjective information of participants, a background questionnaire was developed by the researcher (See Appendix A), which covered issues such as the participants' age, gender, mother tongue (L1), bilinguality status (L1 and L2), age of acquisition of the language(s) they speak, degree of using each language daily, and their experience about watching the selected movie since their knowledge about it plays a vital role in immediate listening comprehension (Gilakjani & Ahmadi, 2011).

#### 3.2.2 Preliminary English Test (PET)

The Cambridge 'Preliminary English Test' (PET) is an Intermediate-basic level examination for learners of English. It covers the four main language skills- Reading, Writing, Listening, and Speaking- as well as knowledge of grammar and vocabulary, and assesses learners' ability to communicate in English in real situations. But in this study, only the listening part of this test was administered due to the fact that watching movies essentially demand the viewers' listening abilities. The listening part of this test includes four parts comprising 25 questions (See Appendix B). Each question carries one mark. The time allotted for taking this test was 25 minutes for students. The first part has seven short recordings and three pictures. The participants

listened for key pieces of information in order to complete seven multiple choice questions. The second part consists of a longer recording in an interview format. The participants identified simple factual information in the recording to answer six multiple choice questions. The third part includes a longer monologue, which is an announcement about design competition. The participants were given a page of notes summarizing the recording and must fill in six pieces of information which were missing from the notes. The last part has an informal conversation between two people who are talking about winter sports. The participants should decide whether six statements are true or false.

### 3.2.3 Movie

Twenty minutes of an original American English movie which was entitled “*Girl with a Pearl Earring*” was selected for this study. It is a 2003 drama movie directed by Peter Webber. It is about a young peasant maid working in the house of painter Johannes Vermeer Who becomes his talented assistant and the model for one of his most famous works. The movie was available with Persian subtitles not Latinized Persian subtitles so the researcher used Aryanpur Progressive Persian to English dictionary and two software programs “Online Behnevis Converter” and “Ulead Video Studio 11” to add permanent Latinized Persian subtitles to the movie.

### 3.2.4 Listening Comprehension Test

The researcher administered a listening comprehension test taken from (Ghasemboland & Nafissi, 2012) for comparing the listening comprehension of Persian monolingual with Azeri-Persian bilingual learners of English. The test was based on the content of the movie which was consisted of 20 multiple choice questions (See Appendix C). These comprehension questions were based on the linguistic information of the movie (dialogue or subtitles) not visual information of the movie. The monolingual and bilingual participants of the study had to answer the test while they were watching the movie. In other words, they had to watch and answer the test simultaneously. The reliability, validity, and item analysis of the test was concerned and measured by Ghasemboland and Nafissi (2012). The obtained reliability for this test was 0.78, which is acceptable for a test of this kind (Ghasemboland & Nafissi, 2012).

### 3.2.5 Aryanpur Progressive Persian to English Dictionary

In this study, the Persian language was represented in the Latin script (Latinized Persian subtitling). In other words, the Persian letters or words were displayed in the characters of Latin alphabet. The latinization of Persian words was based on their pronunciations. The letters of Latinized Persian words were representing speech sounds. The researcher used hard copy of Aryanpur Progressive Persian to English dictionary where one can look up a word written in Persian and get the pronunciation of that word in Latin alphabet.

### 3.2.6 Online Behnevis Translator/Convertor

The researcher tried Google to find out a software program which converts Persian language script to Persian written in Latin alphabets. But it only came up with Latinized Persian to Persian translators. So, the researcher after checking the Persian words in Aryanpur Progressive Persian to English dictionary used Online Behnevis Converter to make the Latinized Persian subtitles. This program can convert Persian written in Latin alphabets to Persian language script. With this program you can directly email the text or save it as a document and also you can copy the converted text (See Appendix D).

### 3.2.7 Ulead Video Studio

It is a video editing software package for Microsoft Windows distributed by Ulead systems. The researcher used this application to permanently add Latinized Persian subtitles to the movie (See Appendix E). The subtitles were merged with the movie and converted into one new movie file. One of the most common readable fonts, Arial, with an approximate size, 14 points, was used (Bernard, Lida, Riley, Hackler, & Janzen, 2002). According to subtitling conventions, subtitles of this study consisted of one or two lines of an average maximum length of 35 characters (Gottlieb, 2005) and they were placed at the bottom and center of the screen (Baker, 2009). For the best results, white screen text was used on a black background (Poothullil, Sahasrabudhe, Chavan, & Toppo, 2013).

## 3.3 Procedure

The study was conducted at language laboratories of two different universities which were located in two different cities in Iran. First, it was done at Islamic Azad University, Tabriz Branch and then at Gorgan State University. It took two weeks to do the study in each university. The population of the study included 63 students. At the initial stage, 27 students of Islamic Azad University, Tabriz Branch filled out a demographic questionnaire in order to determine the Azeri-Persian bilingual students and 36 students of Gorgan State University filled out

the same questionnaire in order to determine the Persian monolingual students. Then, for homogenizing the students of both bilingual and monolingual groups, they took the listening part of PET test, due to the fact that watching movie in the study, essentially demands the viewers' listening abilities. The results through the Independent-Samples t-test indicated that all students in both groups were homogenous.

Then, the homogenized bilingual and monolingual participants watched 20 minutes of a movie and they were exposed to a listening comprehension test while they were watching the movie. The listening comprehension test was based on the verbal information of the movie (soundtrack or onscreen text) and it aimed to measure the monolingual and bilingual participants' immediate processing of linguistic information of the movie. The monolingual and bilingual participants had to watch and answer the test simultaneously. Before they started taking the test, clear instruction was given concerning that the main focus of students should be on linguistic information of the movie (dialogue or subtitles) because the comprehension questions were based on this linguistic information not visual information of the movie. The participants of both groups completed the test during 20 minutes. The researcher did the best endeavor to draw the participants' attention to take part in the research stage by giving them necessary information about the nature and purpose of the research. Later, the bilingual and monolingual participants' scores in listening comprehension test were calculated. Finally, SPSS software version 16 was used to analyze data to answer the research question and to test the research null hypothesis.

### 3.4 Research Design

To carry out this study, an ex-post facto or causal comparative non-experimental research design was employed because the researcher had no control over the manipulation of the preexisting independent variables and there was no treatment. The listening comprehension as the dependent variable, which might be influenced by the bilinguality and monolinguality status as independent variables, was measured to compare these two groups. In other words, the processing of linguistic information of the movie by monolingual and bilingual students was measured while they were watching the English movie with Latinized Persian subtitles.

### 3.5 Data Analysis

The data were analyzed through Statistical Package for Social Sciences (SPSS 16). In order to check the normality of the data in PET and listening comprehension tests, Kolmogorov-Smirnov Normality test was used. For finding the homogeneity of monolingual and bilingual groups, the researcher applied Independent-Samples t-test on their PET scores. Then, for comparing the listening comprehension test scores of both groups, Mann-Whitney U test was run to find whether there was a significant difference between the monolingual and bilingual students' processing of linguistic information of the English movie with Latinized Persian subtitles.

## 4. Results and Findings

### 4.1 Normality Test

As mentioned before, the listening part of PET exam was administered for homogenizing the Persian monolinguals and Azeri-Persian bilinguals of the study. Also, one listening comprehension test, which was based on the linguistic information of the movie with Latinized Persian subtitles, was administered to compare the linguistic processing of these two groups. In order to see whether monolingual and bilingual participants' scores in PET exam and listening comprehension test were normally distributed Kolmogorov-Smirnov Normality test was used (see Table 1).

Table 1. Results of normality test

	Group	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
PET	Mono	.111	24	.200*	.969	24	.649
	Bi	.143	22	.200*	.969	22	.696
Listening Test	Mono	.213	24	.006	.859	24	.003
	Bi	.191	22	.036	.932	22	.135

a. Lilliefors Significance Correction.

\*. This is a lower bound of the true significance.

As the results of Kolmogorov-Smirnov test in Table 1 indicates, the distributions of PET exam scores in monolingual ( $p = .200$ ) and bilingual ( $p = .200$ ) groups are normal because the *significant value* is more than *alpha level* ( $\alpha = .05$ ) for these two groups' scores. Therefore, to test the homogeneity of both groups, parametric test of Independent-Samples t-test was used. With regard to the data of listening comprehension test, as the results show, the two groups' scores in listening comprehension test were not normally distributed since Sig.-values for the monolingual and bilingual participants' scores were .006 and .036, respectively which are both less than .05. This finding alerted the researcher to the fact that the non-parametric test of Mann-Whitney U should be employed for comparing the listening comprehension test scores of both groups.

#### 4.2 Homogeneity Test

As mentioned above, for testing the homogeneity of monolingual and bilingual groups, parametric test of Independent-Samples t-test was utilized. The results of Independent-Samples t-test had two main parts: descriptive statistics and inferential statistics. Table 4.2 shows the results of t-test for descriptive statistics.

Table 2. Descriptive statistics for the monolingual and bilingual groups

	Group	N	Mean	Std. Deviation	Std. Error Mean
PET	Monolingual	24	13.83	3.10	0.63
	Bilingual	22	13.00	3.02	0.64

Table 2 shows the descriptive statistics for each of the monolingual and bilingual groups in PET exam. The mean score of the monolingual group was 13.83 while the mean score for bilingual group was 13.00. The standard deviation for monolingual group was 3.10 and for bilingual group was 3.02. The last column presented the standard error of mean for each two groups. In order to determine whether there was a significant difference between their mean scores, we should consider the results of the Independent-Samples t-test for inferential statistics (see Table 3).

Table 3. Results of the Independent-Samples t-test for PET Test between the groups

	Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference		
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
PET	Equal variances assumed	0.224	0.638	0.921	44	0.362	0.83	0.9	-0.99	2.66
	Equal variances not assumed			0.922	43.824	0.361	0.83	0.9	-0.99	2.65

\*  $p < .05$ .

As displayed in Table 3, the Levene's test for equal variances yielded a  $p$ -value ( $p = .638$ ) which was more than *alpha level* ( $\alpha = .05$ ), so it was assumed that the variances are equal. This meant that the difference between variances was not significant. In other words, the variability of scores in two groups was same. In the equal variances assumed raw, the Sig. (2-tailed) value was .362 which was greater than alpha level. It was concluded that there was no statistically significant difference between the mean scores of two groups in PET exam. Therefore, the monolingual and bilingual participants of the study were homogenous.

#### 4.3 Comparing Listening Comprehension of the Monolingual and Bilingual Groups

For comparing the listening comprehension test scores of both groups, non-parametric test of Mann-Whitney U was used. Because the distributions of two groups' scores in listening comprehension test were not normal. The ranks table of Mann-Whitney U test shows means rank and sum of ranks for two groups tested (see Table 4).

Table 4. Results of mean ranks for the monolingual and bilingual groups

	Group	N	Mean Rank	Sum of Ranks
Listening Test	Monolingual	24	29.46	707.00
	Bilingual	22	17.00	374.00
	Total	46		

The monolingual group with the highest mean rank (29.46) is the group with the greater number of high scores in it. Similarly, the bilingual group with the lowest means rank (17.00) is the group with the greater number of lowest scores in it. Therefore, the monolingual group with the highest mean rank can be considered as having the higher listening comprehension test scores. Table 5 provided the test statistics, U statistics, as well as the asymptotic significance (2-tailed)  $p$ -value.

Table 5. Results of Mann-Whitney U Test

	Listening Test
Mann-Whitney U	121.00
Wilcoxon W	374.00
Z	-3.162
Asymp. Sig. (2-tailed)	.002

a. Grouping Variable: Group.

b. \*  $p < .05$ .

According to Table5, the results of the Mann-Whitney U test indicated that at the .05 level of significance, there was a significant difference ( $p = .002$ ) between the mean rank of the monolingual group (29.46) and that of the bilingual group (17.00) on the listening comprehension test. Therefore, it was concluded that there was a significant difference between the performances of the two groups in listening comprehension and the monolingual group outperformed the bilingual group in listening comprehension test. In other word, the monolingual group processed the linguistic information of the movie with Latinized Persian subtitles better than bilingual group. Thus, the null hypothesis of the study was rejected.

#### 5. Discussion and Conclusion

This study, which was comparative in nature, aimed at investigating the listening comprehension of Iranian monolingual and bilingual foreign language learners while they were watching English movie with Latinized Persian subtitles. The results indicated that Persian monolinguals performed better than Azeri-Persian bilinguals in comprehension questions which were based on the verbal information of the movie. According to multimedia principle, Latinized Persian subtitles and English soundtrack of movie are considered as verbal materials which can be processed in visual channels and auditory channels respectively (Schnotz, 2005). Latinized Persian subtitles affect the processing of linguistic information contained in the movie. Latinized Persian subtitles as verbal data seem to facilitate the processing linguistic information for Persian monolinguals more than Azeri-Persian bilinguals. The meaningful difference between the two groups' performance on the processing of linguistic information of the movie could be due to a number of reasons. Perhaps the most important reason for such processing is that Persian was the first language of the monolinguals and the second acquired language of the bilinguals. Therefore, the dominancy of mother tongue for Persian monolinguals is logical and it can be

possible reason for Persian monolinguals to process the Latinized Persian subtitles of the movie better than Azeri-Persian bilinguals. In other words, bilingualism appears to have a negative effect on certain aspects of linguistic processing (Schroeder & Marian, 2013). Latinized Persian subtitles had negative effects for Azeri-Persian bilinguals. Bilinguals showed a disadvantage for linguistic aspects of the movie which is in harmony with a study done by Fernandes, Craik, Bialystok, and Kreuger (2007). The finding of this study is also in line with the study of Bairstow and Lavour (2011) in which they argue the facilitating effects of subtitling in mother tongue for the monolinguals and inhibitory effects for bilinguals.

The participants' background knowledge about the movie chosen for this study was same. Their background knowledge about the movie was considered as one criterion by a background questionnaire since their knowledge about it plays a vital role in immediate listening comprehension (Gilakjani & Ahmadi, 2011). But their linguistic background as homogenized monolingual and bilingual learners of English was different. The linguistic background has a significant impact on the performance of the monolinguals and bilinguals (Bahrainy, 2007). The Persian and English belong to the Indo-European family of languages (Bahrainy, 2007; Baldi, 2008); whereas, Azeri belongs to the Altaic family (Yildiz, 2010), with no resemblance to English and Persian (Bahrainy, 2007). Therefore, the great resemblance between Persian and English languages (Bahrainy, 2007) may be another possible reason for greater processing of Latinized Persian subtitles by Persian monolinguals than Azeri-Persian bilinguals. This supports the claim of Swain, Lapkin, Rowen and Hart (1990) that the topology of the languages involved should be considered as a variable since it might account for differences in the result research on the impact of bilingualism on third language learning.

Nevertheless, the finding of this study does not adhere to the findings of other researchers. As mentioned previously, some studies showed that bilingual learners outperformed the monolingual counterparts on listening comprehension tests (Gorjian & Mahmoudi, 2012; Legac, 2007). The nature of listening comprehension tests of those studies is different from this study. Gorjian & Mahmoudi, (2012) focused more on the comparison of strategy use of bilinguals and monolinguals than their listening comprehension and the bilinguals and monolinguals of Legac's (2007) study were not exposed to the audiovisual materials with subtitles. So, the bilinguals and monolinguals of that study did not get the chance to process verbal information of two languages in two auditory and visual channels. However, the results of those studies also suggest that bilinguals in all situations might be able to use their improved executive control processes (Stocco, Yamasaki, Natalenko, & Prat, 2014) to overcome a bilingual deficit in verbal memory (Schroeder & Marian, 2013).

Since monolinguals processed linguistic information of movie, especially Latinized Persian subtitles, better than bilinguals, curriculum designers and program developers should incorporate Latinized Persian subtitled educational programs into English language curriculum. Syllabus designers need to be familiarized with the undoubtedly differences between monolingual and bilingual learners of English and they should be careful of negative effect of bilingualism on certain aspects of linguistic processing in order to solve some distinctive instructional problems in bilingual contexts. On the basis of such analysis, the instruction for bilinguals should be different from the monolinguals. This study was only interested in comparing of linguistic processing of Iranian monolingual and bilingual EFL students while they were watching English movie with Latinized Persian subtitles. There should be much research and investigation about bilingualism and its effect on foreign language learning and processing in Iran as a bilingual and multilingual situation in order to look for ways to aid bilingual/multilingual population and their needs. If the educational system has more understanding of the differences between learners in bilingual and multilingual environments, they will actually have effective answers in solving some distinctive instructional problems in bilingual and multilingual contexts.

The monolinguals of this study processed linguistic information of the movie better than bilinguals during short exposure time to the movie (20 min). For the practical purpose of language processing with Latinized Persian subtitles, further studies need to use longitudinal exposures in order to assess cumulative effects. Moreover, it is also important to delay the time of the language processing assessment; in the present study, the assessment was done while students of both groups were watching the movie. Also, the means of assessment employed, such as multiple choice items, open-ended questions, and true or false, could be important factors affecting the results and how to present these test items, orally or in writing, is a critical issue need to be considered. In addition, investigation of the benefits derived from the use of multimedia materials with Latinized Persian subtitles in language instruction would seem an appropriate field for further research. Even the researchers can go further and examine the impact of Latinized Persian subtitles on visual processing of audiovisual materials. Until now, only Persian subtitled, English subtitled and non-subtitled audiovisual materials have been used in Iran as an instructional tool. As this study suggests, using of Latinized Persian subtitles made the linguistic processing of the movie easier for monolinguals than bilinguals. Therefore, the use of audiovisual materials with Latinized

Persian subtitles may also be considered in instructional settings. Learning effects may be stronger when teachers play the movie more than once and analyze with the learners the parts of the movie being viewed rather than just watching the movie once with subtitles as the participants of the present study have done. Through the correct use of audiovisual materials with Latinized Persian subtitles, their unique combination of multisensory presentation of information may add to the effectiveness of educational activities when learning a foreign language. In short, the future research should be directed towards investigating the efficacy of Latinized Persian subtitles with students of different proficiency level over longer periods with audiovisual materials of varied difficulties.

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