

The Effect of Captioned Videos on Advanced EFL Learners' Listening Proficiency in Iran

Shima Shirinbeik Mohajer¹, Behzad Pourgharib^{2*}

¹Department of English Language, Golestan Research and Science University, Iran

²Assistant Professor, Department of English Literature, Golestan University, Golestan, Iran

*Corresponding Author Email: pourgharib_lit@yahoo.com

Abstract

The present study was conducted to probe the effect of captioned videos on the listening comprehension of advanced EFL students. 44 advanced participants were selected from among 75 EFL students from Iran Language Institute in Gorgan, Golestan. They were homogenized based on the results of a pre-test which was the listening comprehension part of Cambridge IELTS Test. They were then randomly assigned into control and experimental groups each of which had 22 subjects. The experimental group received treatment in which the participants were exposed to captioned videos while the control group had the same traditional method for playing videos without captions. As for the treatment of this study, three ABC news documentary movies were selected which were played with captions. They were played in separate sessions and the captions were used in comprehending the content. Finally, a post-test consisting of the listening comprehension section of Cambridge IELTS Test was administered. Using both descriptive and inferential statistics as the means for data analysis, the results indicated that using captioned videos had a significant effect on the listening comprehension of Iranian EFL students. The results of Independent Sample t-test indicated the experimental group outperformed the control group in the post-test. Descriptive statistics showed that there was a clear mean difference between the control and experimental groups.

Keywords: Listening skill, Caption and subtitle, Captioned videos.

Introduction

Listening is the most common communicative activity in daily life (Vandergrift, 2004). According to Morley (1991), we can expect to listen twice as much as we speak, four times more than we read, and five times more than we write. So, listening, as a skill, is assuming more and more weight in SL or FL classrooms than ever before. Listening comprehension is an important language skill that language learners need to develop. Furthermore, the development of all other language skills is interwoven with listening skill; it is said to be at the heart of both first and second language learning (Vandergrift, 2007). Language learning relies greatly on listening which plays a fundamental role in language acquisition and makes it possible for the learners to interact orally. Guo and Wills (2005) indicate that listening provides the foundation for all facets of language learning/acquisition, and plays a life-long role in the processes of communication. Rost (1994) pointed out that listening is vital in the language classroom because it provides input for the learner. Without understanding input at the right level, no learning can happen. Listening thus plays a fundamental role in language proficiency as a receptive skill.

Tomatis (2007) argued that the quality of an individual's listening ability will affect the quality of both his spoken and written language development. The theory also views that if the sounds of the target language are presented to the learners, presenting them in written form, the ease with which they integrate those sounds will be reflected in their understanding and production of the language. Additional support for enhancing listening comprehension is provided by means of providing video and computer programs with multilingual soundtracks and captions. Video-based instruction can help college-level ESL/EFL students improve their communicative competence and their listening comprehension (Winke et al., 2010). With the increasing access to TV, video equipment and more recently, to computers, teachers have found more opportunities to use audio-visual materials at all levels of foreign language teaching, and they have frequently used them effectively in language classes (Pandey & Chudgar, 2004; Lewis & Anping, 2002; Meskill, 1996; Ryan, 1998; Weyer, 1999; Hayati & Mohmedi, 2011). In the same line, Richards and Gordon (2004) maintain that video, as a medium, enables learner to use visual information to enhance comprehension. It allows learners to observe the gestures, facial expressions and other aspects of body language that accompany speech. It also presents authentic language as well as cultural information about speakers of English. Winke et al (2010) indicated that with a greater emphasis on technology in

language classrooms, the use of captioning will undoubtedly increase in importance and frequency. Captioning may be a bonus because it helps language learners connect auditory to visual input (Garza, 1991), which may aid form-meaning mapping, an essential process for foreign language acquisition (Doughty, 2004). Vanderplank (1999) puts the case for captions, arguing that English language broadcasters and educators have yet to develop the full potential of English language television as a global resource for language learning and teaching. Danan (2004) also provides a comprehensive summary of the advantages and disadvantages of captioned and subtitled programs identified by research such as improvement in productive skills, development of word recognition and vocabulary building, comprehension of details and reducing learners' anxiety.

Captioned videos for foreign language learning are becoming more common because they are more accessible, easy to produce, and fit well into online course offerings. They are hypothesized to be an important pedagogical tool because they bring more native voices into the learning environment and help learners integrate written and aural information, which supports language acquisition. While there have been many anecdotal reports about how motivating and useful video is, few empirical studies have been conducted to test the effectiveness of captioning on comprehension of movies in Iran. A number of studies have been conducted to investigate the effectiveness of captioning on intermediate students (Hayati & Mohmedi, 2011) but advanced students have been ignored due to their high level of language proficiency. This study, at the most fundamental level, contributes to the field of instructional design by investigating how authentic videos can be made more comprehensible to FL learners, thus making videos more effective tools for developing FL listening skills.

The purpose of this study is to investigate the effects of using video captioning on Iranian advanced EFL learners' listening comprehension. Within this overall fundamental purpose, the more immediate goal was to measure the effects of captioning, on the listening comprehension of Iranian EFL learners at high levels of proficiency. In sum, since the results of aforementioned studies regarding the effect of captions on listening comprehension among learners with different English proficiencies remain inconclusive and the most studies were done on intermediate level students, the present study aims to investigate whether captions that were added to material presentation mode has positive impacts on high English proficiency learners' listening comprehension. Considering the aforesaid problems and examining the effect of captioning on listening comprehension of Iranian advanced EFL students, the current study made an attempt to answer the following research question: RQ: Do films with English captions help advanced EFL students to improve their listening comprehension more than films without captions?. Regarding the research questions, the following null hypothesis was formulated: HO: The films with English captions don't help advanced EFL students to improve their listening comprehension more than films without captions.

Methodology

Participants

To conduct the study, 44 female participants in this research were randomly selected based on convenience sampling method among 75 advanced EFL students at Iran Language Institute in the summer semester in Gorgan, Golestan. They were considered as advanced students based on the results of ILI placement test taken in advance of every course. 44 advanced learners in terms of listening ability were selected as the participants for the main phase of the study based on the results of an IELTS listening test. They were randomly assigned to two control and experimental groups, each containing 22 students. They had passed all the prerequisite previous courses at the institute; common to all of the participants was at least eight semesters of exposure to EFL instruction during which they had learned English and had managed to get the advanced-level band score according to the institute placement test. With regard to nationality and language background, no difference existed among the participants; all were Iranians and their mother tongue was Persian. Furthermore, none of the participants had lived in any English speaking country.

Materials

Quantitative data collection method was used to obtain the data and also to increase the validity of the findings. The instruments used in this study are as follows:

IELST listening comprehension section

The test was selected from Cambridge IELTS 8, 2011 (subtest one). It contained IELTS listening comprehension items and it was used to enable the researcher to select a homogeneous group. This test consisted of 40 listening comprehension questions which were used as the pre-test of the study. The test consists of four sections, each with ten questions. The first two sections are concerned with social needs. The first section is a conversation between two speakers and the second section is a monologue. The final two sections are concerned with situations related to educational or training contexts. The third section is a conversation between up to four people and the fourth section is a monologue. A variety of question types is used, including: multiple-choice, matching, plan/map/diagram labeling, form completion, note completion, table completion, flow-chart completion, summary completion, sentence completion, short-answer questions.

Captioned documentary movies as treatment

Three ABC News Documentary movies were selected for this study. The first one was *"The Way People Perceive You"*, about short men and their problems in finding appropriate size in clothing, driving, seeing the movie screen in cinema and even finding a woman to date. The second movie called *"The Work Obsession"* which indicates the differences between hardworking and

workaholism which is working for long hours or inability to turn it off like an obsession. The study shows that workaholics define themselves in terms of their works and never be able to cut back, but hard workers seem more balanced and desire to have other important things in their lives too. The third movie which is called "*Being a Better Parent*" deals with parenting problems. In this documentary a psychologist focuses his research on what makes parenting difficult; that is the problems faced by parents of this generation is different from the problems faced by parents of one or two generations ago. The movies consisted of two episodes and were selected based on the content which was interesting and the level of difficulty which was appropriate for the participants. Also, the duration of the films was less than thirty minutes for each session. The difficulty level of the movies was determined by the website of ABS News Documentary in advance. They are the programs that are usually used for teaching purposes.

Pre- and post-tests

One listening subtest of IELTS listening sections adopted from the book "Cambridge IELTS 8" (Cambridge, 2011) was used as the post-test to see whether the participants' listening comprehension improves as the result of watching movies with captions. The second subtest was used for the purpose of this study. The test sections and the types of the items were explained in 3.2.1. As for the requirements of the design, the listening section of IELTS was used as placement test to homogenize the participants and measure their level of listening comprehension. For scoring the test, the answer key of the Cambridge IELTS 8 was used.

Data collection

In order to conduct the study, two advanced classes in a language institute were selected. These two classes were instructed on watching captioned English movies as listening instructional materials and teaching listening based on the traditional way which the institute conventionally has been following through several years. One class was considered as the control group who didn't receive treatment and the other class as the experimental group who received the treatment. The setting of the study concerning time and location was summer (2013) in some institutes in Gorgan, Iran. The classes met twice a week for 105 minutes. First of all, to ensure their homogeneity in the terms of listening comprehension ability, an IELTS listening subtest consisting 40 questions was given to the students of both groups.

Then based on the students' scores, the researcher decided which students could be qualified as the final participants of the study, using a set of statistical procedures discussed in the following chapter. In other words, the students who were considered as having advanced proficiency, based on the results of the institute's placement test, were also examined and homogenized as to their listening ability. This way, the student's listening ability in particular can be homogenized as well. After selecting the participants (N=44) based on the results of the pretest, first both classes watched the same movie 'The way people perceive you', but English Subtitle Group (ESG) watched it with English captioning and No Subtitle Group (NSG) without captioning. The video movies which were authentic ABC News documentaries were used for both groups. After the first episode of the documentary movie was played, the instructor asked students a set of comprehension questions related to the movie orally. Then, the second episode was played and following it the related questions were answered about that episode. Each question contained language that actually occurs somewhere in the episode and were derived from the video segment. This process was administered for the second and third movies too, but the movies were presented in three different sessions. The movies were played with a reasonable rate of speed for both groups. The materials and tests were also identical.

Research design

The research method used in the current study has been a quasi-experimental one with the pretest-posttest control group. In other words, both groups received pre-test (T_1) in order to be homogenized as for their listening ability. After that, the experimental group received treatment (shown as χ) while the control group received no treatment. Finally, both groups took a posttest to find their listening comprehension.

Data analysis

The quantitative methods were used to analyze the data. In order to investigate the research hypotheses, various statistical analyses including both descriptive and inferential statistics were used for different purposes. Independent Sample t-test was run for the scores of the pre-test to find if there were any differences among the control and experimental groups and ensure their homogeneity. Also, descriptive statistics including mean, standard deviation, skewness, kurtosis, and normal Q-Q plot curve were used in order to check the underlying assumptions of normality of the data for post-test. After the assumptions of normality were met, Independent Sample t-test was run for the pre-test and post-test to find if there was any significant difference between the two groups after treatment.

Results

As the result of descriptive statistics in Table 4.1 indicates, the mean scores of post-test groups was more than pre-test groups, and the variance and skewness of the post-test groups was more than pre-test groups. Also the results of table indicates that the amount of kurtosis in pre-test and post-test is between 2 and -2, and it shows to follow the test from normal distribution.

Table 1. Descriptive statistics.

	N	Range	Mean	SD	Variance	Skewness	Kurtosis
Pre-test	44	13	21.1136	3.21491	10.336	-0.05	-0.657
Post-test	44	18	25.1818	3.88960	15.129	0.912	1.154

Hence the amount of sig test for pre-test is 0.074 more than the amount of $\alpha=0.05$, so do not reject the equal assumption of variances and consequently, the variances are homogenous. In the first line of the table, the t-test results (according to the equality of variances) the above table was for pre-test ($t=1.473$) and t-test is higher than a (0.148), so it could be concluded that there is no significant difference between the mean scores of control and experimental groups for pre-test.

Table 2. Independent sample T-Test for Pre-test

	group	N	Mean	SD	Std.Error Mean
Pre-test	control	22	21.8182	2.57527	2.57527
	experimental	22	20.4091	3.67306	3.67306

	Levene's Test for Equality of Variance		T-test for Equality of Means				
	F	Sig.	T	df	Sig.(2-tailed)	Mean Difference	Std.Error Difference
Pre-test Equal variances assumed	3.364	0.074	1.473	42	0.148	1.40909	0.95640
Equal variances not assumed			1.473	37.628	0.148	1.40909	0.95640

As shown in Table 4.4, there is a significant difference between the mean scores of post-test with no captions. Hence, the sig amount for post-test (0.450) is more than $\alpha=0.05$, so the equality assumption of variances do not rejected and it could be resulted that the variances are homogeneous. As mentioned in the first line of the t-test results, the above table for post-test is ($t=-2.183$), and by considering the t-test is less than a (0.035), therefore there is a significant difference between the mean scores of control and experimental groups for post-test.

Table 3. Independent sample T-Test for Post-test

	group	N	Mean	SD	Std.Error Mean
Post-test	control	22	23.9545	3.35910	0.71616
	experimental	22	26.4091	4.06681	0.86705

	Levene's Test for Equality of Variance		T-test for Equality of Means				
	F	Sig.	T	df	Sig.(2-tailed)	Mean Difference	Std.Error Difference
Post-test Equal variances assumed	0.581	0.450	-2.183	42	0.035	-2.45455	1.12457
Equal variances not assumed			-2.183	40.553	0.035	-2.45455	1.12457

The results of the above table, shows that the calculated F (6.112) is higher than F in table 4.1 and is less than 0/05. Consequently, the zero assumption that represents the equal mean value is rejected for statistical society and the hypothesis is accepted. So we can say that there is a significant difference between the post-test scores in both groups (control and experimental). Also, Partial Eta Squared 0.127 shows the effect of captioned videos on the listening proficiency of language learners. Consequently, according to the significant difference in mean scores, we can say that teaching with using captioned videos is more effective than teaching with no caption. According to the independent sample t-test results, the mean scores in post-test experimental group are higher than the mean scores in post-test control group. Also, the co-variance analysis result indicates that using captioned videos has a significant effect on listening proficiency in language learners.

Table 4. The results of Co-Variance analysis test, Tests of Between-Subjects Effects.

Dependent Variable: Post-test						
Source	Type III Sum of Squares	df	MS	F	Sig.	Partial Eta Squared
Corrected Model	1918.891	1	1918.891	6.112	0.018	0.127
Intercept	604025.052	1	604025.052	1.924E3	0.000	0.979
Group	1918.891	1	1918.891	6.112	0.018	0.127
Error	13186.222	42	313.958			
Total	617531.000	44				
Corrected Total	15105.113	43				

a.R Squared= .127 (Adjusted R Squared= .106)

b.Weighted Least Squares Regression-Weighted by pre-test

Discussion and Conclusion

The present study made an attempt to find the effect of using captioned videos on the listening comprehension of advanced Iranian EFL students. As the result revealed, the students in the experimental group who watched the film with English captions outperformed the students in the control group. The experimental group answered the post-test better than the control group. According to the result of this research, the null hypothesis could be rejected and it was concluded that providing captions was helpful and influential in improving EFL learners' listening comprehension. By providing captions learners would have a better chance of understanding the film's content and captions are a means of enhancing students' comprehension of the films in their second language. As mentioned by Chapelle (2003), using technology such as audio-visual materials can aid the learners in developing their listening comprehension. However, this technology should be geared to the level of the students and different factors such as the needs, goals, and processes of language learning should be considered (Vanderplank, 1990). As for using captioned videos, the features and modes of representation are of high importance (Robin, 2007). The argument for using videos with or without captions has been explored during the past decades and previous studies have provided evidence for the superiority of bimodal captioning (using English captions with English dialogues) over other modes of presentation (Markham, 1993; Baltova, 1999; Chung, 1999; Taylor, 2005; Hayati & Mohmedi, 2011; Ghasemboland & Nafissi, 2012).

The results of this study are consistent with the previous studies which found that using captions could be beneficial for improving the listening comprehension of learners. Huang and Eskey (2000) also found that learners understood more when watching a video with captions than without captions. In addition, they provided evidence for the positive effect of captioning on enhancing the learners' vocabulary recognition. The findings of this research are also in line with the study of Chung (1999) who found that using video texts with advance organizers and closed captioned can significantly affect the listening comprehension of the learners. In addition, the results of this study confirmed the findings of Markhan (1999) research project which indicated that using captions can improve the learners' listening word recognitions skills.

The present study provided evidence for the positive effect of captioning in improving EFL students' listening comprehension. The results are in line with other studies which have confirmed the beneficial effect of combining captions with audio-visual materials to enhance the listening comprehension of a foreign language (Garza, 1991; Markham & Peter, 2003). Captions can visualize the auditory information of a foreign language and thus lead to a better comprehension on the part of the students and allow them to process language in a longer time (Rost, 2002; Danan, 2004). To put it in a nutshell, the results indicated that captioning will lead to a deeper processing of input and increase the intake accordingly. The findings thus confirm the results of studies which found that captioning lowers the processing demands on viewers and decrease their learning anxiety (Reese & Davie, 1987; Burger, 1989; Grimmer, 1999).

One of the most beneficial uses of technology is providing a multimodal learning environment in which learners are exposed to different modes of presentation. According to Rogers and Scaife (1996), Learners who have access to multiple representations, enhance their comprehension, learning, memory, communication and inference. Using captioned videos provide multiple modes of presentations (Visual, auditory, and textual) simultaneously and can thus lower the cognitive load on the part of the learners. In other words, as pointed out by Yoshino and Kano (2000), simultaneous use of different modes leads to a lower cognitive demand. Furthermore, multimedia can be used to develop a more inclusive curriculum that appeals to visual, aural and kinaesthetic learners and overcome differences in student performance that may result from different learning styles. Presenting material in a variety of modes has been used to encourage students to develop a more versatile approach to learning (Morrison, Sweeney, & Heffernan, 2003). The findings of this study are also consistent with studies done by Taylor (2005) and Winke et al. (2010) which found that dual channel presentation resulted in better recognition memory, implying that the more input, the better the processing of input will be. In addition, the results are in line with the study of Guillory (1998) which found that full captions had better effects on EFL learners' listening comprehension compared to partial captions.

As for the context of Iran, the findings of this study confirmed the results of Hayati and Mohmedi (2011) who found that intermediate students benefited from using bimodal input in listening comprehension. They found that using English captions was more beneficial than Persian translation for intermediate students. In a more recent study, Ghasemboland and Nafissi (2012) found that using captions had a significant effect on students' listening comprehension and those who received the English captions

outperformed the other group without captions. Similarly, the results of this study also indicated that advanced EFL students at the context of private language institutes, benefited from using captions in watching videos and their listening comprehension improved. Based on the results of this study, using captions with English films can help foreign language students in their understanding and comprehension of film content. Captions can increase the students' knowledge of the target language and enhance language learning by the use of new lexicons and phrases in an appropriate context. This view is supported by Paivio (1971), Garza (1991), and Vanderplank (1988).

Vanderplank (1988) believes that captions might have potential value in helping the language acquisition process, by providing language learners with the key to massive quantities of authentic and comprehensible language input. The following pedagogical implications can be made based on the findings of this study:

1. Teachers should make use of captioned videos as part of their teaching syllabuses to improve their learners' listening comprehension. The students can benefit from captioned videos in EFL classes which are still using the traditional methods for using audio-visual materials.
2. Language learners can use captioned videos for independent learning outside the class to practice their listening. This way, they can make use of movies for both entertainment and a mean for language learning.
3. The policy makers of ELT in Iran can provide captioned videos in the teaching curriculum to improve multimedia as the new mode of language presentation.
4. Materials developers should design captioned videos or at least provide captions for teaching videos to be used in the classes. Furthermore, since using captioned videos is a multimodal teaching method, other modes of presentation could be used in EFL materials.
5. Providing captioned videos can lower the anxiety of the learners in an EFL classroom. As a result, teachers and test developers can make use of them for lowering the stress of the learners during the comprehension processes. This way, the learning process enhances and debilitating anxiety decreases.

References

- Baltova I, 1999. Multisensory language teaching in a multidimensional curriculum: The use of authentic bimodal video in core French. *Canadian Modern Language Review*. 56(1): 32-48.
- Burger G, 1989. Are TV programs with video subtitles suitable for teaching listening comprehension?. *Zielsprache Deutsch*. 20(4): 10-13.
- Chapelle CA, 2003. *English language learning and technology: Lectures on applied linguistics in the age of information and communication technology*. Amsterdam: John Benjamins.
- Chung, 1999. Extensive Form Games with Uncertainty Averse Players, *Games and Economic Behavior*. Elsevier.28(2):256-270.
- Danan M, 2004. Captioning and Subtitling: Undervalued Language Learning Strategies. *Translators' Journal*. 49(1): 67-77.
- Doughty CJ, 2004. Effect of instruction on learning a second language: a critique of instructed SLA research. In: VanPatten B, Williams J, Rott S. (Edn.), *Form-meaning connections in second language acquisition*. NJ: Lawrence Erlbaum Associates Publications.
- Garza T, 1991. Evaluating the use of captioned video materials in advanced foreign language learning. *Foreign Language Annals*. 24(3): 239-258.
- Ghasemolad F, Nafissi Z, 2012. The effects of using English captions on Iranian EFL students' listening comprehension. *Procedia-Social and Behavioral science*. 64(1):105-112.
- Grimmer C, 1992. Supertext english language subtitles: a boon for English language learners. *EA Journal*. 10(1): 66-75.
- Guillory HG, 1998. The effects of keyword captions to authentic French video on learner comprehension. *Calico Journal*. 15(1): 89-108.
- Guo N, Wills R, 2005. An investigation of factors influencing English listening comprehension and possible measures for improvement. Available at Retrieved January 25, 2012 from: www.aare.edu.au/05pap/guo05088.pdf
- Hayati A, Mohmedi F, 2011. The effect of films with and without subtitles on listening comprehension of EFL learners. *British Journal of Educational Technology*. 42(1): 181-192.
- Huang HC, Eskey DE, (2000). The effects of closed-captioned television on the listening comprehension of intermediate English as a foreign language (ESL) students. *Journal of Educational Technology Systems*. 28(1): 75-96.
- Markham PL, 1993. Captioned television videotapes: effects of visual support on second language comprehension. *Journal of Educational Technology Systems*. 21(3): 183-191.
- Morely J, 1972. *Improving aural comprehension*. Ann Arbor. University of Michigan Press.
- Paivio. 1971. Imaginary and verbal processes. 9: 32-38.
- Pandy, Chudger, 2004; Lewis, Anping, 2002; Meskill, 1996. Insights into the role of an active site aspartate in Ty1 reverse transcriptase polymerization. *J Biol Chem*. 279(46): 8-47840.
- Reese, David, 1987. Effects of Visual-Verbal redundancy and recaps on Television news learning. *Journal of Broadcasting and Electronic Media*. 31: 16-207.
- Richards JC, Gordon DB, 2004. *New Interchange Intro: Video teachers guide*. Cambridge: Cambridge University Publications.
- Robin R, 2007. Learner-based listening and technological authenticity. *Language Learning and Technology Journal*. 11(1): 109-115.

- Rogers, Scaife, 1996. How can interactive multimedia facilitate learning ? Proceedings of First International Workshop on Intelligence and Multimodality in Multimodality in Multi-Media interfaces. 45: 185-213.
- Rost M, 1990. Listening. In: Carter R, Nunan D. (Edn.), The Cambridge guide to teaching English to Speakers of Other Languages. Cambridge: Cambridge University Publications.
- Ryan S, 1998. Using films to develop learner motivation. The Internet TESL Journal. 4(11): 22-35.
- Taylor G, 2005. Perceived processing strategies of students watching captioned video. Foreign Language Annals. 38(3): 422-427.
- Vandergrift L, 2004. Listening to learn or learning to listen? Annual Review of Applied Linguistics. 24: 3-25.
- Vandergrift L, 2007. Recent developments in second and foreign language listening comprehension research. Language Teaching. 40(3): 191-210.
- Vanderplank R, 1988. The value of teletext subtitles in language learning. ELT Journal. 42(4): 272-281.
- Vanderplank R, 1990. Paying attention to the words: Practical and theoretical problems in watching television programmes with unilingual (CEEFAX) sub-titles. System. 18(2): 221-234.
- Weyer JR, 1999. The effect of authentic video on communicative competence. The Modern Language Journal. 83(3): 339-349.
- Winke P, Gass S, Sydorenko T, 2010. The effects of captioning videos used for foreign language listening activities. Language Learning & Technology. 14(1): 65-86.
- Yoshino S, Kano N. 2000. The effect of the L1 and L2 caption presentation timing on listening comprehension. 1209-1214.