

## EFFECTS OF WATCHING CAPTIONED MOVIE CLIP ON VOCABULARY DEVELOPMENT OF EFL LEARNERS

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### ABSTRACT

The current study examined the effects of watching a closed-captioned movie clip on incidental vocabulary learning in a pre-test post-test experimental design. 120 college students from a college preparatory class, who were learning English as a foreign language (EFL), participated in the study. Two weeks before the treatment, all of the participants completed a 20-item vocabulary knowledge scale (VKS) that was adopted from Wesche and Paribakht (1996). One month after the treatment, they were given another VKS with 20 words. The participants were randomly assigned to one of the two groups: Group A (movie clip with captions); Group B (movie clip without captions). T-test analyses were conducted to examine development between and within each group. Results revealed that both groups demonstrated significant gains based on the VKS, and Group A improved more in the post-test. However, the development between the groups was not significant. Pedagogical implications of the study are discussed in the end.

**Key Words:** Use of technology in EFL, captions, English-as-a-foreign-language, teaching vocabulary.

### INTRODUCTION

Using captions and/or subtitles to facilitate the comprehension of video materials is taken for granted by many teachers and researchers. Moreover, many educators believe that television programs with captions seem to provide a rich context for foreign language acquisition. It is also argued that viewers are, generally, quite motivated to understand what is shown and said on television when the captions are provided (Danan, 2004). Many educators recommend their students to watch TV and movies with captions in the belief that being exposed to the target language in this way will increase the language proficiency level of their students. However, the number of the studies that specifically examined the functions of captioned movies in second/foreign language learning is few compared to the popularity of the assumption regarding the effectiveness of the captioned movies in language development. To fill in the gap in literature, this study investigated the effects of closed-captioning on incidental vocabulary acquisition.

### LITERATURE REVIEW

Most of the previous research concerning the use of captions and subtitles while watching videos supported the value of using captions for facilitating language skills. Earlier studies on this topic usually focused on the effects of captions and subtitles on the development of listening (Garza, 1991; Huang & Eskey, 2000; Markham, 1999; Markham & Peter, 2003) and reading comprehension (Garza, 1991; Goldman & Goldman, 1988; Koskinen, Wilson & Jensema, 1985).

In one of the first experimental studies on this topic, Garza (1991) examined the effects of captions in a study of adult language learners who were studying English as a second language (ESL) and native English learners of Russian. Based on the findings of his study, Garza argued that captions had a significant effect on reading/listening comprehension. Similarly, Huang and Eskey's (2000) study investigated the effects of closed-captioned TV (CCTV) on the listening comprehension of intermediate ESL students. Their study revealed that captions improved not only listening comprehension skills of college-level ESL students but also their general comprehension and vocabulary development. In another study on the effects of captions, Markham (1999) investigated the effects of captioned videotapes on second language listening word recognitions skills. He reported that the presence of captions significantly improved the adult ESL learners' listening word recognition of English language regardless of the level of pictorial support of the video.

Another line of studies investigated the effects of captioned and subtitled TV programs on the acquisition of vocabulary (Goldman & Goldman, 1988; Koolstra & Beentjes, 1999; Koskinen et al., 1985; Markham & Peter, 2003; Neuman & Koskinen, 1992). Koolstra and Beentjes' study focused on elementary-level Dutch-speaking students, and investigated the level of improvement in reading vocabulary knowledge by watching Dutch-subtitled English language television programs at home. In another study, Neuman and Koskinen's middle school-level ESL students increased their English language reading vocabulary knowledge significantly after lengthy exposure to the target language captions. Both of these studies involved the use of extended exposure to the target language videos with captions and/or subtitles, and yielded favorable implications about the effects of captions. In another study, Koskinen et al. chose their participants from the residents of a correctional facility. In their study, the researchers examined the effects of captioned videos on incidental reading vocabulary

knowledge. Based on their findings, Koskinen et al. argued that captioned videos substantially improved the incidental reading vocabulary knowledge of adult non-native English speakers. Similar results on the favor of captions were reported in Goldman and Goldman's and Markham and Peter's studies.

### Vocabulary Acquisition

Vocabulary acquisition is one of the central components of developing successful communication and literacy skills, and has been seen as an integral part of language by both researchers and teachers. Many researchers working on vocabulary acquisition claim that acquiring a word requires numerous encounters with the word in different forms (Horst, Cobb, & Meara, 1998; Nation, 1990; Schmidt, 2001). One of the most commonly accepted views of vocabulary acquisition is that it occurs along a continuum of development, similar to the example below.

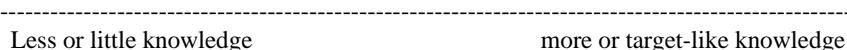


Figure 1. A scale or continuum of knowledge

It is also argued that “combining text with visuals is more effective in facilitating vocabulary learning than providing only definitions of words” (Akbulut, 2007, p. 5). This assumption is in line with the current conceptualization of teaching vocabulary. Teaching vocabulary implicitly, and creating instances for the incidental acquisition of vocabulary has been highlighted in recent reviews of vocabulary teaching (Hunt & Beglar, 1998; Nagy, 1997) following the argument that “first-language learners pick up most vocabulary from the context” (Lee, 2004). Based on the ideas of Krashen (1983), especially the distinction between acquisition and learning he proposed, many teachers try to assist the implicit and incidental acquisition of vocabulary instead of explicitly teaching them. Similarly, as Duquette and Painchaud (1996) argued, “current pedagogical trends emphasize incidental or indirect learning by resorting to contextual cues” (p. 143).

### Situation in Turkey

With the belief that EFL learners depend “heavily on visual clues to support their understanding” (Çakır, 2006, p. 2), watching different types of videos, with or without subtitles, has been recommended as a pedagogical tool for foreign language learners and teachers. However, there are not any studies, to our best knowledge, that are set in Turkish context that examined the effects of the captioned or non-captioned videos on language development in general or vocabulary learning in particular.

In Turkish mainstream TV channels, foreign-language programs are mostly dubbed. There are only limited numbers of channels which broadcast foreign videos subtitled in Turkish. The only way to find videos subtitled in English or no subtitle on TV is to pay for some channels since they are broadcasted via satellites. In other words, even though related literature studies indicate that subtitled television programs make a contribution to foreign language learners on vocabulary acquisition, there are almost no facilities for language learners to find subtitled films in English.

### Purpose of the Study

Use of authentic videos and incorporating the target words into a context might be a way of facilitating vocabulary acquisition, and can be quite rewarding in a foreign language learning setting, considering the low frequency of instances that learners are exposed to target language outside the classroom. Moreover, current understanding of the vocabulary development holds the belief that acquiring a word should be viewed on a continuum of knowledge level (Nation, 1990; Schmidt, 2001; Wesche & Paribakht, 1996), where numerous encounters to a target item are needed for acquisition.

The main aim of this study was to examine the effects of using English captions on intermediate-level English as a Foreign Language students’ vocabulary acquisition of a video episode as measured by a vocabulary test. Specifically, it investigated how English language material (i.e., a movie clip) with or without English language captions would affect vocabulary development of the foreign language learners in a Turkish university setting.

The previous studies on captions and/or subtitles in language learning either focused on listening or reading comprehension of the passages, or investigated vocabulary acquisition in lengthy exposures of TV programs. No other study, to our best knowledge, examined the vocabulary acquisition of foreign language learners who are given a relatively short piece of video recording. Another innovation in this study was implementing a process oriented vocabulary knowledge scale rather than a discrete multiple choice test that was mostly used in previous studies on this topic (Koolstra & Beentjes, 1999; Markham, 1999; Markham & Peter, 2003).

## METHODOLOGY

### Participants

The study was conducted with 120 intermediate university-level students enrolled in preparatory classes at Kocaeli University, Turkey. The participants of the study were taking intensive English language courses before their undergraduate education to fulfill the language requirements of their programs. There were 20 hours of English courses in a week, and the students had to attend 80% of the classes. The participants were majoring in different fields such as Finance, Business Administration, Engineering, Journalism, or Education. 41 of the participants were male and 47 were female. Six of the participants did not specify their gender in the background questionnaire. Because all of the participants were recent graduates of high school, further questions regarding their ages were not posed. All of the participants were at similar English proficiency levels (i.e., Intermediate) at the time of the study based on an in-house proficiency test conducted by the University. The proficiency test involved questions in reading comprehension, vocabulary, grammar, and writing.

Each participant was randomly assigned to captions or no-captions groups. Fourteen of the students from both captions and no-captions groups failed to take one or more of the tests or the treatment. Due to this, their results of the tests were removed from the data pool. Statistical analyses were conducted with 104 participants (N=53 in captions group and N=51 in no-captions group) who completed all of the phases of the study.

### Design of the Study and Procedures Followed

In this study, a pre-test post-test experiment and control group design was used. The participants were randomly assigned to each group: Group A included students who watched the movie clip with captions, and Group B with students who watched the movie clip without captions. Both of the groups took the same pre and post tests (Vocabulary Knowledge Scales) prior to and after the treatment. Table 1 illustrates the design of the study.

**Table 1. Design of the Study**

Pretest	Treatment	Post-test
VKS is given to both groups	Group A (movie clip with caption) Group B (movie clip without caption)	VKS is given to both groups

All of the tests and treatments were given in a Multimedia Room that was available in the building where students had their regular classes. It was reported that the participants used this classroom from time to time to watch movies in the target language. An LCD projector and a laptop were already available for use in the Multimedia Room. VLC player, free software that enables the incorporation of the captions into motion picture, was used to play the movie clip. Prior to the study, the participants were informed that their participation to the study was voluntary, and their answers would not affect their course grades in any way.

### Materials Used and Target Vocabulary

A popular American TV series, Seinfeld, was chosen as the stimulus material for this study. It is one of the most popular television shows in the 1990s, and was available in Turkish TV channels until recently. The episode chosen was ‘The jacket’ which evolved around the main character’s newly-bought expensive jacket. The treatment involved students in all groups watching the first 9 minutes and 14 seconds of the episode, twice. Twenty target words from the episode were chosen based on the proficiency level and background of the students, and pilot tests were conducted with similar groups from the same university to determine the appropriateness of the vocabulary. All of these words belonged to the same word category (i.e., noun). After the pilot tests, the researchers decided to keep ten of the twenty target vocabulary based on the performances of the participants. Please refer to Appendix A to see the items used in the pilot test. In Appendix B the list of target words is provided.

Wesche and Paribakht’s (1996) scale of vocabulary knowledge to measure the development was utilized in the study. This scale is one of the most commonly used Vocabulary Knowledge Scales (VKS), which specifies the stages of vocabulary acquisition from first exposure to output. Turkish translations of the following five steps were given in the VKS provided to the participants:

- I I don’t remember having seen this word before.
- II I have seen this word before, but I don’t know what it means.
- III I have seen this word before, and I think it means (synonym or translation)
- IV I know this word. It means ... (synonym or translation)
- V I can use this word in a sentence: (Write a sentence)  
*(If you do this section, please also do Section IV.)*

Figure 2. Wesche & Paribakht’s (1996) Vocabulary Knowledge Scale

### Coding

The coding of the participant responses was quite straightforward. The researchers scored participants' answers based on the level they chose for each word on Wesche and Paribakht's (1996) Vocabulary Knowledge Scale. However, when the participant choices needed some form of production, the researchers had to check the accuracy of their answers and mark their choices as they were, if their choices were correct. If the responses of the participants were incorrect, then the participant's choice was downgraded one level. For example, if a participant chose *Level III* for a word, his/her answer was marked as *Level III* if his/her response were accurate, if it were not, then the researchers marked his/her answer as *Level II*.

### RESULTS

To see the general distribution of the data and average scores, the researchers conducted descriptive statistics on SPSS. As Table 2 shows, the highest mean value lies in the posttest of the Group A (Mean= 2.76). Also the averages in pretests in both groups were very close (Group A = 1.85, Group B = 1.74). The t test between groups analysis on the pretests demonstrated that there was no significant difference between the groups ( $p=.082$ ). This finding demonstrated that both groups had similar knowledge about the target words prior to the treatment.

**Table 2. Minimum and Maximum Scores Attained in Each Group and Averages**

	N	Minimum	Maximum	Mean	Std. Deviation
GroupAPretest	53	1.44	2.56	1.8575	.26272
GroupAPosttest	53	2.00	3.56	2.7697	.40799
GroupBPretest	51	1.00	2.89	1.7433	.37363
GroupBPosttest	51	2.00	3.33	2.5650	.33189
Valid N (listwise)	51				

After conducting descriptive statistics, t-test was used to measure the development in each group. The t-test results revealed that both group had significant gains from pretest to posttest. Participants in Group A improved on an average of .91221 from pre-test to posttest whereas their peers in the no captions group (Group B) progressed .82168 point averagely. As Table 3 demonstrates, both of the improvements were significant at a .01 level ( $p < .01$ ).

**Table 3. Summary of One-Sample Test T-test Results**

	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
	Lower	Upper	Upper	Lower	Upper	Lower
Gains for Group A	15.923	52	.000	.91221	.7972	1.0272
Gains for Group B	12.186	50	.000	.82168	.6863	.9571

The researchers conducted further analysis to see if one of the groups improved significantly better than the other. T-test was used for this purpose. Before this, the homogeneity variances were checked. Here, Levene Statistic was not significant ( $p=.537$ ), which indicated there was no sign of homogeneity (Note 1). On average, Group A had improved slightly better than Group B. However, the t-test results revealed that there was no statistical significant difference between the two groups' improvement ( $p=.307$ ) (Table 4).

**Table 4. Summary of T-test Results for the Gains between Two Groups (Independent Samples Test)**

	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
	Lower	Upper	Upper	Lower	Upper	Lower
Equal variances assumed	1.026	102	.307	.09052	-.08449	.26554
Equal variances not assumed	1.023	98.759	.309	.09052	-.08504	.26609

## **DISCUSSION**

The results of our study revealed that both groups (i.e., captions and no captions) improved significantly from pretest to posttest in the self-reported Vocabulary Knowledge Scales. Moreover, the captions group performed a little better than the group who viewed the movie clip without the captions (Group A gains  $M=.91221$ , Group B gains  $M=.82168$ ). However, the difference between groups in terms of gains was not statistically significant. Therefore, it can be argued that watching the movie clips facilitated the development of the vocabulary knowledge of the students regardless of the captions.

As it was stated before, both groups' initial knowledge about the target words were similar (i.e., slightly below Level II) at the beginning of the study (please refer to Figure 2 to see the VKS used in this study). In other words both groups had seen most of the words before but had not known what they meant. After viewing the movie clip twice, both groups improved to above Level two and a half (2.5) when the average of all words was taken into consideration (captions group posttest  $M=2.7697$ , no captions group posttest  $M=2.5650$ ). The improvement of the students' vocabulary knowledge indicates that both groups not only remembered seeing the words but also they could accurately guess at least half of the words and provide the Turkish translations or synonyms of them.

The researchers believe that the development in the knowledge of the target words stemmed from the importance of encountering the words in the context. Overall, our study supported the belief that most vocabulary is learned from context (Sternberg, 1987). Because the researchers did not provide any information about the target words, the participants were not even aware of the focus of the study until the debriefing done after the posttest. Based on the previous studies on vocabulary development, one might argue that contextualization in vocabulary teaching might be a source of improvement. Our study might have provided evidence to the assumption that incidental or indirect learning of vocabulary can be achieved by resorting to contextual cues (Duquette & Painchaud, 1996). This calls for an important pedagogical implication for teacher about using contextual communication materials to assist students' vocabulary learning instead of explaining the words in an isolated manner.

The tool that was used for the measurement of vocabulary development was a self-report scale that has been used extensively in recent vocabulary teaching studies (Huang & Luoi, 2007; Nassaji, 2004; Wu, Chang, Liu & Chen, 2008; Zareva, 2005). However, self-report scales have been devalued by some scholars due to their limitations. For example, Read (2000) argued that self-report scales in general, and the Vocabulary Knowledge Scale that was used in this study in particular, might not provide an accurate picture of learner development because "it is doubtful whether learners' developing knowledge of second language words can be meaningfully represented by a single linear scale" (p. 136). Self-report scales might be also problematic because they may not reflect the actual knowledge level of the students since it is based on the students' statements. To overcome this problem, the accuracy of the student choices was also controlled when some form of output production was necessary in the level that participants chose (i.e., when students were asked to provide the synonyms of the target words or produce a sentence).

## **CONCLUSION**

When the findings of our study are interpreted, it can be argued that viewing the movie clip has helped the participants of the current study develop their vocabulary knowledge regardless of the absence or presence of captions. This is important information in favor of incidental learning. As the results of the study revealed, the participants made significant progress in their vocabulary knowledge after viewing the movie clip while focusing on the meaningful flow of conversations. The development that was observed supported the idea that vocabulary acquisition is a process that occurs along a continuum (Wesche & Paribakht, 1996; Schmidt, 2001). However, one should not forget that learning a word necessitates multiple exposures to the word in different forms (Horst, Cobb, & Meara, 1998; Nation, 1990; Schmidt, 2001).

The main focus of the study was the development of some specific vocabulary items after watching a target language movie clip with or without captions. Further research can be conducted to examine the effects of watching target language movie clips with or without captions on other aspects of language, especially on listening skills. Captions paired with movie clip soundtrack might be a good opportunity to develop listening skills and comprehension of listening materials. Also, nouns were chosen as the target word group for this study. Other word groups (i.e., verbs, adjectives, etc) can be chosen for a further study, and effects of captions can be examined by taking saliency of the target words as a variable.

## NOTES

1. You can check the scores of test of Homogeneity of Variances in Table 5.

**Table 5. Test of Homogeneity of Variances (Gains)**

Levene Statistic	df1	Df2	Sig.
.383	1	102	.537

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#### APPENDIX A

1. Outfit
2. Closet
3. Solid
4. Inn
5. Idiot
6. Palm
7. Buffer
8. Suede
9. Ballpark
10. Stripe
11. Lining
12. Clients
13. Composer
14. Puppet
15. Confidence
16. Secure
17. Challenge
18. Dove
19. Cab
20. Candidate

#### APPENDIX B

1. Outfit
2. Dove
3. Candidate
4. Challenge
5. Buffer
6. Client
7. Puppet
8. Suede
9. Vacation
10. Closet