

The Effects of Captioning and Keyword-captioning on the Comprehension and Awareness of EFL Learners

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Abstract: This study examined the effects of using “captions”, “subtitles” and “keyword captions” on the comprehension of audiovisual materials by English as a foreign language (EFL) learners, who were divided into two different groups, proficient and less proficient learners. It also investigated the participants’ awareness of the distinction between different types of input they were exposed to and their benefits with the help of the interviews conducted. After the participants watched the videos, they answered comprehension questions. The results of the study indicated that in the less proficient group, those who watched the videos with Turkish subtitles outperformed those who didn’t. However, in the proficient group, the videos with keyword-captions led to better results. The data gathered via the interviews revealed that the participants could identify the differences between different types of input and, while the proficient group displayed positive attitudes towards keyword-captions, the less proficient group preferred the videos with captions. The findings of this study are expected to contribute to the related research with the help of the results of each experimental condition for different levels of learners.

Anahtar Sözcükler:

İngilizce altyazı, yabancı dil olarak İngilizce, altyazı, anahtar kelimeli altyazı, anlama

İngilizce Altyazı ve Anahtar Kelimeli Altyazı Kullanımının İngilizceyi Yabancı Dil olarak Öğrenen Öğrencilerin Anlaması ve Farkındalık Düzeyine Etkisi

Özet: Bu çalışma İngilizce altyazı, altyazı ve anahtar kelimeli altyazısının farklı yeterlik seviyelerine sahip iki öğrenci grubu ile kullanımının görsel-ışitsel materyallerin anlaşılmasındaki etkisini incelemiştir. Ayrıca bu çalışmada, katılımcıların farklı girdi türleri arasındaki ayrım ve bu farklı girdi türlerinin katkısı dair farkındalıkları araştırılmıştır. Katılımcılar videoları izledikten sonra anlamaya dair soruları yanıtlamışlardır. Çalışmanın sonuçlarına göre daha az yeterlik seviyesine sahip öğrenci grubu videoları Türkçe altyazı ile izlediklerinde izlemeyenlere göre daha iyi sonuçlar elde etmişlerdir. Ancak daha yüksek yeterlik seviyesine sahip öğrenci grubu videoları anahtar kelimeli altyazı ile izlediklerinde daha iyi sonuçlar elde etmişlerdir. Katılımcılarla yapılan görüşmeler sonucunda öğrencilerin maruz kaldıkları girdi türleri arasındaki farkların farkında oldukları, yeterlik seviyesi yüksek öğrencilerin anahtar kelimeli altyazı kullanımına yönelik olumlu tutumları varken daha az yeterlik seviyesine sahip grubun ise Türkçe altyazılı videoları tercih ettikleri anlaşılmıştır. Bu çalışma sonucu elde edilen bulguların ilgili alanyazına farklı deneysel şartlara ve farklı öğrenci seviyelerine dair bulguları ile katkıda bulunması beklenmektedir.

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1. Introduction

Recent technological advances and trends have increased the importance and prevalence of using video clips and/or video streaming in classrooms to support teaching regardless of content. For language teaching as well, the use of videos is considered to be a great means of support and they are preferred in different contexts as good language teaching tools (Kasapoglu-Akyol, 2010). It is generally believed that videos provide a rich context for both foreign and second language (L2) acquisition as they are considered to be a good “synthesis of culture and language” with their content including visual, auditory images and gestures of the target culture (Guillory, 1998, p. 90). They also have the advantage of being easily accessible via YouTube, Viewpoint, and some mobile apps (Teng, 2019). With these advantages in mind, they are being widely used in language classrooms and thanks to these materials, students are provided with different learning-support options such as first language (L1) subtitles, reversed subtitles (L1 video, L2 text), captioning (L2 video, L1 on-screen text) (Montero Perez et al., 2014a), and keyword-captioning (Guillory, 1998). In this categorization, *caption* refers to the same language texts presented with the visual material. *Subtitle* includes different language texts presented with the visual material. *Keyword-caption*, on the other hand, refers to the selective presentation of captions only with some key words. Even though these supporting options were developed for people having hearing problems in the 1980s, they have been used in a wide variety of language learning and teaching settings (Vanderplank, 1988, 1990).

The use of videos with different types of captioning for language teaching purposes has also been supported by a number of researchers (Bavaharji et al., 2014; Baltova, 1999; Garza, 1991; Winke et al., 2010; Huang & Eskey, 1999; Yuksel & Tanriverdi, 2009) and their significance has been acknowledged for a variety of reasons such as their support for the presentation of authentic and contextualized content, their motivating structure and their nonlinguistic visual cues aiding comprehension (Weyers, 1999). Moreover, when subtitles or captions are integrated into films or videos in a language classroom, it changes a simple film-viewing activity into a multidimensional one including both viewing and reading (Çağlar, 2020). For the advantages of each option, captions, for instance, are considered to be beneficial in drawing learners' attention to word forms (Winke et al., 2010) and making form-meaning relationship possible for unfamiliar vocabulary items, subtitles are generally thought to be appropriate for low level learners (Danan, 2004). It is also stated that subtitles not only aid learners' comprehension (Pujadas & Muñoz, 2020) but they also help to increase learners' motivation (Peters et al., 2016). As all of these benefits have been well-recognized, plenty of research has been conducted in different contexts.

1.1. Literature Review

Earlier studies regarded the use of captions with visual materials as a way to increase learners' attention, to reduce anxiety, to give students instant confirmation of what was heard, and to provide motivation (Froehlich, 1988; Guichon & McLornan, 2008; Vanderplank, 1988, Winke et al. 2013). In one of the first studies, Garza (1991) investigated the role of captions in comprehension. With 70 university-level English as a second language (ESL) students learning English and 40 English speakers learning Russian for five or six semesters, the study led to a positive correlation between the presence of captions and increased comprehension of the video material. Similar results were also presented from different language teaching contexts (Baltova, 1994; Chung, 1999; Yuksel & Tanriverdi, 2009). Videos can be used as instructional materials because they can familiarize learners with the target culture, improve

their comprehension skills and vocabulary learning thanks to some other sources of input. As suggested by Paivio (1986) in his Dual Coding Theory, simultaneous occurrence of verbal associations and visual imagery contributes positively to the retention and retrieval of the data. Videos' contribution to language learning/teaching was generally studied by paying attention to the role of captioning. In the related research, it was revealed that captioning had a positive effect on listening comprehension and vocabulary learning (Markham, 2001; Park, 2004; Teng, 2019; Winke et al., 2010). To investigate the role of captions specifically on listening comprehension, Markham, Peter and McCarthy (2001) focused on different effects of different captions; namely, L1 captions, L2 captions and no-captions on listening comprehension. They found that the best results were obtained in L1 captions group and the L2 captions group outperformed the no-captions group. In the case of vocabulary learning, previous studies revealed that exposure to audiovisual materials facilitates vocabulary learning in L2 (Peters & Webb, 2018; Rodgers & Webb, 2019). For the contribution of each learning-support option, research results illustrated that while captions are helpful for learners on the level of written word form recognition and aural word form recognition (Sydorenko, 2010), subtitles are considered to expand vocabulary knowledge and make it easier for learners to identify separate words in a spoken text (Koolstra & Beentjes, 1999).

On the other hand, the use of captions was criticized because it was believed that captions might hinder the processing of the aural input as the cognitive load of the learner increases due to its dual task of decoding aural and visual input. Mayer (2001), in his cognitive theory of multimedia learning, claimed that presenting pictures and texts simultaneously leads to an additional load on the learners' processing abilities. In the same manner, Paas and Sweller (2014) and Sweller (2005) indicated the problem of the processing overload that might lead to working memory failures and distraction from the video content (Linebarger, Piotrowski, & Greenwood, 2010; Mayer & Moreno, 2003; Moreno & Mayer, 2002). Another counter-argument was that the use of captions does not necessarily assist comprehension (Danan, 2004). To overcome this problem, Chapelle (2003) suggested modifying the input in the captions to facilitate its comprehension. For this reason, reducing the amount of written text on the screen when visual input is shown might bring about more positive results. In an effort to lessen the cognitive load, Guillory (1998) proposed the use of keyword captioning to facilitate the comprehension process; however, the use of keyword captioning led to mixed results in the related studies. Taking the findings of Barron & Atkins (1994) into consideration, Guillory (1998) designed her study in accordance with their idea of partial captions. She conducted her study with three input conditions: full- text captions, keyword-captions; and no captions. According to her results, the keyword-caption group outscored the no captions group and the full text captions group outperformed the keyword captions group. However, in the posthoc analysis, it was revealed that there was no significant difference between the means of the full text captions group and the keyword captions group, which proved that both keyword and full text captions had a positive effect on comprehension. Park (2004) investigated whether full or keyword-captions were more effective for three different groups of learners: low-intermediate intermediate, and high-intermediate ESL learners for comprehension. His findings revealed that both keyword-captions and full captions were equally beneficial for high intermediate learners. For the intermediate level learners, the full caption group outscored the keyword group and the keyword group outperformed the control group. For low level learners, on the other hand, the full captioning group outperformed both the keyword group and the no caption group between which there was no difference. According to these results, Park pointed out that keyword captioning was beneficial only for high intermediate learners.

Montero Perez et al. (2014a), in a Flemish context, carried out a study with 226 learners to find out about the effect of full captioning, keyword captioning and no captioning on learners' listening comprehension. The full captioning group outperformed both the keyword-captioning and no captioning group. They also investigated the learners' perceptions and learners stated that they found keyword captions highly distracting. In another study, Yang and Chang (2014) worked with 44 EFL learners and tested the role of full caption, keyword caption and annotated keyword caption. Their study indicated that annotated keyword caption group exhibited the best performance with the highest mean score. Like the studies above, our study investigated the efficiency of different types of input: full captions, keyword captions, no captions, and subtitles for listening comprehension in a Turkish university EFL context. In addition to the roles of different input conditions, we also focused on the learners' level of awareness of different types of captioning and their roles in their performance. As claimed by Montero Perez et al.(2014b), there are very few studies addressing the learners' perception of keyword captions. For this reason, this study may contribute to the related literature in this aspect as well.

The study aims to answer the following questions:

1. To what extent did the scores of the participants differ from each other in different conditions?
2. What was the relationship between the participants' test scores and their proficiency level?
3. To what extent were the participants able to identify the differences between different conditions? What were the most beneficial differences?

2. Method

2.1. Research Design

This study adopted a mixed-method research design. We specifically examined the effects of three experimental conditions: caption; subtitle; and keyword caption; and one control condition - no caption.

2.2. Participants

There were two groups of participants divided by their English language proficiency (i.e., proficient and less proficient). The participants were 218 students from a major Turkish state university. Their age ranged from 18 to 22 years. They were L1 speakers of Turkish who were learning English as a foreign language (EFL). They all signed a consent form before taking part in the study and this study was approved by the ethics committee of the university where the study was conducted. An in-house proficiency test given prior to the study was used to determine the groups. As a result of the proficiency test, the participants who got 60 (the cut-off grade of the proficiency tests at the university) or below were considered as "less proficient" and the ones getting above 60 were considered as "proficient" participants. Out of the 218 participants, 110 of them belonged to the less proficient group and 108 of them belonged to the proficient group.

Students in each proficiency level were separated into four groups. There were 25 to 29 students in each group. The students watched four different videos. A multiple-choice comprehension test was prepared for each of the four videos. Two experts examined the tests and, based on their opinions, some changes were made by the researchers. A pilot study with all four tests was conducted with 20 less proficient and 20 proficient participants. Too

easy questions (cut off rate 80 %) and too difficult questions (cut off rate 20 %) were removed from the test and the final version of the test was obtained. There were 15 questions in the final version of each test.

2.3. Data Collection

The BBC Documentary Series, *Planet Earth* (2006), Episodes 1, 2, 3, and 5 were used as the audio-visual materials in this study. These clips were selected as the verbal input in them was articulated clearly and there was no background noise (e.g., laugh tracks in sitcoms) that might affect perception (and hence comprehension) of the language and also documentaries are considered to be appropriate materials for classroom use (Berk, 2009). In all of the videos, there was a narrator who gave information about the wildlife and different animals. The episodes included topics such as ‘Polar Life’, ‘Mountains’, ‘Fresh Water’, and ‘Deserts’. Three experienced lecturers and instructors watched the videos and agreed that their level was B1 according to CEFR and they were suitable for both groups of learners. Four different versions of these videos were prepared by the researchers: one with captions (CAP); one with subtitles (SUB); one with keyword captions (KW); and one with no captions (CONTROL). In order to eliminate order effects, we counterbalanced the order of conditions. The participants watched these four episodes in the order shown in Table 1 below.

Table 1.

The Order of Videos Shown to Different Groups

PARTICIPANTS	SESSION 1 (Video 1)	SESSION 2 (Video 2)	SESSION 3 (Video 3)	SESSION 4 (Video 4)
Proficient 1	CAP	SUB	CONTROL	KW
Proficient 2	SUB	CONTROL	KW	CAP
Proficient 3	CONTROL	KW	CAP	SUB
Proficient 4	KW	CAP	SUB	CONTROL
Less Proficient 1	CAP	SUB	CONTROL	KW
Less Proficient 2	SUB	CONTROL	KW	CAP
Less Proficient 3	CONTROL	KW	CAP	SUB
Less Proficient 4	KW	CAP	SUB	CONTROL

2.3.1. The Procedure of Determining Keywords

Keywords are defined as the words which are “important for the meaning of the sentence or the paragraph” (Montero Pérez et al., 2014, p.3). In order to obtain the “keyword caption” version of the video scripts, a panel of researchers consisting of four people, each of whom had either a MA or PhD in English Language Teaching, discussed which words in the scripts were to be the keywords to be included in the captions. They read the scripts of videos and circled the words they thought to contribute to the main idea of the videos. The number of the selected words was counted and divided by the number of panel members. The most frequently chosen words were identified and the keyword captions for each video were prepared by the researchers.

Immediately after each video was shown, a ‘Multiple Choice Comprehension Test’ prepared was given to the participants to measure their comprehension levels. The questions were prepared based on the information given by the keywords. In order to increase the reliability of the findings, qualitative data were also included with the help of the interviews we carried out with 10 participants from each group (N=20), who volunteered to take part in the

interviews. The main purpose of the interviews was to be able to learn more about the impact of the conditions in terms of their noticing and comprehension. The following questions were posed during the interviews.

- Were you able to notice the differences of the texts in the four different versions of the videos shown?
- Did you benefit from those texts at the bottom of the screen? In your opinion, which one was the most beneficial? Why?

The interviews lasted for 10-15 minutes and were recorded, transcribed verbatim and analyzed by the researchers through content analysis. As a result of our content analysis, we ended up with some codes and we analyzed them in relation to the quantitative findings.

2.4. Data Analysis

Quantitative data were analyzed using Repeated Measures ANOVA with one within-group and one between-group factor was used in SPSS 23 for the analysis. The within group factor was the Treatment and the between group factor was the Proficiency Level. Qualitative data of the interviews were analyzed through content analysis.

3. Findings

Research question 1: To what extent did the scores of the participants differ from each other in different conditions?

This research question inquired about the success of the participants in different experimental conditions. Table 2 illustrates the number of participants in two different groups, less proficient (LP) and proficient (P) and their average test scores in four different conditions.

Table 2.

Descriptive Statistics of the Test Scores of Both Groups

Proficiency		N	Min.	Max.	Mean	SD
LP	CAP	110	22.22	66.67	49.27	8.15
LP	SUB	110	33.33	73.33	55.96	6.96
LP	CONTROL	110	26.67	60.00	45.85	7.30
LP	KW	110	33.33	73.33	54.67	7.46
Average		110	32.50	62.78	51.44	5.14
P	CAP	108	44.44	86.67	66.99	9.49
P	SUB	108	44.44	80.00	64.81	8.28
P	CONTROL	108	38.89	86.67	62.80	7.57
P	KW	108	40.00	86.67	69.31	7.83
Average		108	49.44	78.61	65.98	6.03

As can be seen in Table 2, the participants in the less proficient group received the highest scores when they watched the videos with Turkish subtitles and keyword captions ($M= 55.96$ with Turkish subtitles and $M= 54.67$ with keyword captions). On the other hand, the participants in the proficient group received the highest scores when they watched the videos with keyword captions ($M= 69.31$) and with captions ($M= 66.99$).

Research Question 2: What was the relationship between the participants' test scores and their proficiency level?

According to the Repeated Measures ANOVA results (see Table 3), the Treatment effect, the Proficiency effect and the Treatment*Proficiency interaction effect were all significant. In terms of treatment, all pairwise comparisons were significant. In other words, the highest scores were recorded in KW treatment group, followed by SUB, CAP and CONTROL groups. In terms of proficiency, the proficient group received significantly higher scores than the less proficient group. The proficient group received 65.98 where the less proficient group received 51.44 points (see Table 2). In terms of the effect sizes, the proficiency has the highest effect (0.630), followed by the treatment (0.211) and the interaction between those two (0.089).

Table 3.

Repeated Measures ANOVA Results

	Type III sum of squares	df	Mean Square	F	P	Partial Eta Sq.
Treatment	7225.29	3	2408.43	59.128	0.000*	0.211
Prof	46087.00	1	46087.00	367.28	0.000**	0.630
TreatmentProf*	2628.02	3	876.01	19.724	0.000	0.089

Examining the Treatment*Proficiency effect in Figure 1, it can be seen that the highest score for the proficient group was in the KW treatment, whereas the less proficient group received their highest score in SUB treatment. The proficient group received their second highest score in CAP treatment, whereas the less proficient group's CAP scores were in the third place. These differences between the proficiency groups caused the interaction effect. Furthermore, Table 4 below shows the results of the detailed analysis carried out. In the high proficiency group, there were significant differences in scores among all conditions, keyword caption condition having the highest score. In the less proficient group, there was no significant difference between subtitles and keyword captions conditions. All the other differences were significant.

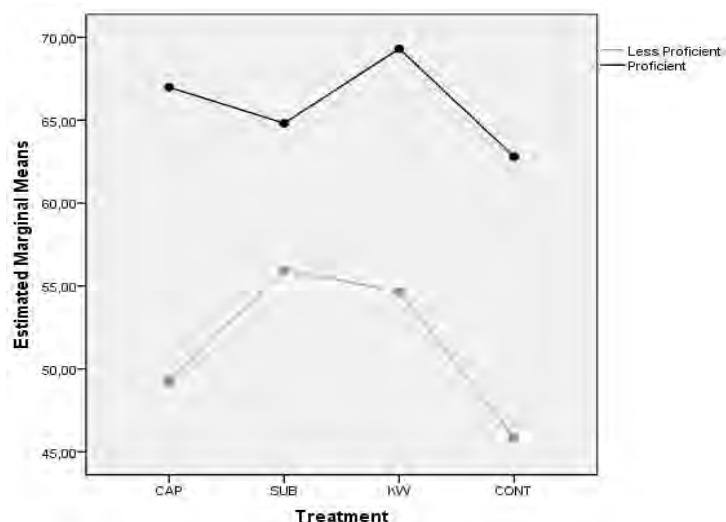


Figure 1. Estimated Marginal Means of Treatment Groups

Table 4.

Simple Main Effects in Repeated Measures ANOVA

Proficiency			Mean Difference	P
Less Proficient	CONTROL	CAP	-3.425	0.000
		SUB	-10.113	0.000
		KW	-8.820	0.000
	CAP	CONT	3.425	0.000
		SUB	-6.688	0.000
		KW	-5.395	0.000
	SUB	CONT	10.113	0.000
		CAP	6.688	0.000
		KW	1.293	0.143
		CONT	8.820	0.000
		CAP	5.395	0.000
		SUB	-1.293	0.143
Proficient	CONTROL	CAP	-4.187	0.000
		SUB	-2.016	0.021
		KW	-6.512	0.000
	CAP	CONT	4.187	0.000
		SUB	2.171	0.009
		KW	-2.325	0.011
	SUB	CONT	2.016	0.021
		CAP	-2.171	0.009
		KW	-4.496	0.000
	KW	CONT	6.512	0.000
		CAP	2.325	0.011
		SUB	4.496	0.000

Research question 3: To what extent were the participants able to identify the differences between different conditions? What were the most beneficial differences?

The third research question of this study investigated to what extent the participants in both groups identified the four different versions of the videos and it also searched for their opinions related to the most beneficial version. This part of the interview was significant because the researchers wanted to make sure that the participants were aware of the differences between the videos they watched before they wanted the participants to answer some questions about the usefulness of different types of captioning.

According to the findings of the interview, in the proficient group, the majority of the students stated that they noticed the differences between captions, keyword captions and subtitles in the videos and the percentages were 96%, 96% and 92%, respectively. In the less proficient group, too, the majority of the participants stated that they noticed the differences between the three versions of the videos; 92%, 96%, and 92%, respectively. Secondly, in both the proficient and the less proficient group, the participants were asked about the type of captions they found most beneficial. Among these three versions of the videos, the participants in the proficient group found the videos with keyword captions most beneficial. The participants in the less proficient group, however, pointed out that they found the version with subtitles most beneficial. Some of the sample answers from the participants belonging to both groups related to their preferences as well as their codes are given in Table 5.

Table 5.

Student Preferences with Their Codes

Group	Preference	Code	Sample answer
Proficient	KW Caption	Fewer words, better comprehension	<i>While I was watching the video, the words on the screen were really helpful. As there are only a few words, I watched the film and read them. It was easy. (L2)</i>
Proficient		Emphasizing the points to focus on	<i>I did not waste time on irrelevant parts. By simply remembering the words, numbers and percentages on the screen, I easily understood the video content. (L5)</i>
Less Proficient	Subtitles	Comfort	<i>I felt more comfortable with the subtitles. I read them and understood what they were saying. (L3)</i>
Less Proficient		Full understanding	<i>It was easier to understand with the Turkish translations. That's what I always do. I think I understood everything with Turkish words. (L7)</i>

Interestingly, the test results of the proficient group supported their positive opinions of keyword captioning as they thought that keyword captions facilitated comprehension. Likewise, the participants in the less proficient group preferred to watch the videos with Turkish subtitles because they believed that Turkish subtitles were more helpful for them in understanding the content of those videos.

4. Discussion and Conclusion

In this study, we examined the results of watching videos with different forms of texts; namely, captions, keyword captions, subtitles and no captions. We also tried to identify the role of these different forms in students' general awareness and questioned students' opinions about these four different versions. Overall, the results of this study supported most of the results of the previous studies in the sense that any form of text i.e., captions, subtitles and keyword captions, facilitated the comprehension of the videos (Bavaharji et al., 2014; Syrodenko, 2010; Yuksel&Tanriverdi, 2009; Winke et al., 2010). Unlike these studies investigating only the efficiency of different forms of input on students' comprehension, the role of students' proficiency level was also taken into consideration in this study. Moreover, students' level of perception regarding different forms of input and their opinions related to them were investigated.

When the test scores of the participants in both groups are analyzed, the results of the study indicated that the participants in the proficient group had higher scores in all four conditions. Secondly, we questioned the role of different forms of input (i.e. treatment) in videos. The results in terms of the effect sizes showed that of the two constructs we examined, the proficiency had the highest effect in the performances of our participants. It was followed by the treatment and the interaction between those two. Another noteworthy result of this research is that the participants in the less proficient group did better with L1 subtitles. In contrast, the participants in the proficient group had better results with L2 captions and keyword captions. This finding supports the findings of Danan (2004), who stated that captioning may not be suitable for lower-level learners. Unlike what Yang (2014) suggested in his study, there was a relationship between English proficiency and experimental

conditions. In both groups, the lowest scores appeared when the participants were only exposed to auditory input ($M= 45.84$ in the less proficient group and $M= 62.79$ in the proficient group). This result supports the findings of the previous studies (Chung, 1999; Hsu et al., 2013; Huang&Eskey, 1999; Montero Perez et al., 2014b). Furthermore, this difference between these two groups might be attributed to the individual variations in comprehension levels which require different levels of caption support (Leveridge & Yang, 2013).

Another finding of this study is related to the role of keyword captioning on students' listening comprehension. Unlike the other studies examining the role of keyword captions (Guillory, 1998; Perez et al., 2014a; Yang & Chang, 2014), the results of this study indicated that the students in the proficient group had higher scores in the comprehension test when they watched the video with keyword captions ($M= 69.31$). In the less proficient group, too, watching the video with keyword captions led to the second highest score of the test results ($M= 54.66$). In the study by Park (2004), as well, among the three groups representing different proficiency levels, keyword captions were more beneficial for the most proficient group. The use of keyword captions in all these studies brought about these positive results because the keyword captions provided the learners with the necessary support without overwhelming them with too much information (Montero Perez et al., 2014a). Furthermore, students did not suffer from the task of relying on contextual clues to be able to derive the meanings of unknown words, which is extremely challenging for them with the real-time nature of video input they are presented with (Montero Perez & Desmet, 2018). Moreover, as the findings of the interviews suggest, the participants generally stated that they were able to notice the differences between four different versions of the video they watched. When they were asked about what type of input helped them most, the participants in the proficient group said that videos with keyword captions were the most helpful while the participants in the less proficient group said that they benefited from subtitles most. The qualitative results of the proficient group support the findings of Park's (2004) study. In Park's study, too, the attitudes of learners towards keyword captions changed depending upon their level of proficiency. The attitudes of high intermediate learners were more positive towards keyword captions while they were distracting for low intermediate learners. Unlike these studies revealing the positive attitudes of learners towards keyword captions, Montero Perez et al. (2014a), in their study, in which they investigated the perceived usefulness of different types of captioning by Flemish learners, revealed that the participants in their study found keyword captions confusing and distracting. When the opinions of the participants in our study were compared and contrasted with the test results, it is possible to see that what the participants said is in line with their test scores.

As information and communication technologies keep developing, the role of audio-visual materials in language teaching has become more visible. In this sense, including them in actual teaching practice is an alternative in different language teaching contexts (ESL, EFL, etc.). This study led to some findings which confirmed the findings of previous research in that supporting audio-visual materials with different forms of texts contribute to learners' comprehension. Therefore, they might be considered as resources for language development. In this study, learners' proficiency levels were taken into consideration while investigating their comprehension and learners' performance differed depending upon the type of caption used. The less proficient participants got better results with subtitles while the participants in the proficient group were more successful with captions and keyword captions. Future research might focus on some other learner differences, i.e., language aptitude, learning strategies, and memory, to gain a better insight into the actual contribution of audio-visual

materials to language learning. Moreover, additional research including other proficiency groups could make researchers and practitioners understand the potential of audio-visual input better. We observed that the participants' attitudes towards different forms of captions differed depending upon their proficiency levels. When supported by further research findings coming from different contexts, generalizations might be made and language teachers might choose the type of captions they will use in their classroom depending upon the proficiency level of their students.

Note on Ethical Issues

The authors confirm that ethical approval was obtained from Kocaeli University, Turkey (Approval Date: 22/4 /2021).

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