THE ROLE OF CAPTIONING AND FOCUSED PRACTICE IN VOCABULARY LEARNING THROUGH VIDEO VIEWING

YAĞMUR KAYKAÇ

BOĞAZİÇİ UNIVERSITY

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Yağmur Kaykaç

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The thesis of Yağmur Kaykaç

has been approved by:

Assist. Prof. Şebnem Yalçın _____
(Thesis Advisor)

Assist. Prof. Senem Yıldız Ersoy _____

Assist. Prof. Derya Altınmakas _____
(External Member)

August 2020

DECLARATION OF ORIGINALITY

I, Yağmur Kaykaç, certify that

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Signature .....

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ABSTRACT

The Role of Captioning and Focused Practice in Vocabulary Learning Through Video Viewing

This study examines the effects of watching captioned and non-captioned five successive episodes of a TV show and the pre-teaching of vocabulary on L2 (foreign language) vocabulary acquisition by young EFL (English as a Foreign Language) learners in Turkey. The participants were L1 Turkish and L2 English 6th graders studying in a state school. Four whole classes were randomly assigned to one control group and three different experimental groups: (1) captions with pre-teaching, (2) captions with no-pre-teaching, (3) no caption, and no pre-teaching. A pre-/post-/delayed-posttest design was used. Following the delayed-post-tests, a questionnaire investigating exposure to English outside the classroom was administered to the same group of participants. The results of the study showed that there was no significant difference between the groups in relative and raw vocabulary gains in the meaning recognition tests. The results of both post- and delayed-post-tests revealed that there was a significant difference between groups in terms of meaning and from recall tests. The group that was pre-taught the target items (TIs) and watched the videos with captions performed better than the other groups. Relative and raw vocabulary gains were retained as there was no decrease in overall vocabulary gains of the three experimental groups based on the delayed-post-test scores. Furthermore, the English exposure survey revealed English TV watching behaviors of the participants in relation to the use of L1 and L2 subtitles.

ÖZET

Altyazı Eklemenin ve Alıştırmaların
Video Aracılığıyla Kelime Edinimindeki Rolü

Bu çalışma Türkiye'de yabancı dil eğitimi alan çocukların, yabancı dilde bir çizgi filmin ilk beş bölümünün altyazıyla/altyazısız olarak izlenmesinin ve ön-öğretimin yabancı dilde kelime öğrenimi üzerindeki etkisini araştırmaktadır. Katılımcıları birinci dili Türkçe ikinci dili İngilizce olan Türkiye'deki bir devlet okulunda okuyan 6. Sınıf öğrencileri oluşturmaktadır. Araştırma bağlamında dört hazır sınıf, bir kontrol ve üç deney grubuna atanmıştır: (1) altyazı ve ön-öğretim alan araştırma grubu, (2) ön-öğretim olmaksızın altyazı alan araştırma grubu, (3) altyazının ve ön-öğretimin olmadığı araştırma grubu. Araştırmada, ön test/son test/ertelenmiş son test düzeneği kullanılmıştır. Ertelenmiş son test uygulamasını takiben, öğrencilerin ders dışında İngilizce 'ye maruz kalmasını ölçen bir anket aynı katılımcı grubuna uygulanmıştır. Anlam tanıma testinde ölçülen ham ve nispi kelime kazanımları araştırmaya katılan gruplar arasında anlamlı bir fark olmadığını göstermektedir. Anlam tanıma testinden sonra uygulanan yapı ve anlam hatırlama son testleri ve ertelenmiş son testleri, gruplar arasında anlamlı farklar olduğunu ortaya koymaktadır. Hedef kelimelin ön-öğretim tekniğiyle öğretilen ve videoları İngilizce altyazıyla izleyen araştırma grubu testlerde kontrol grubundan daha anlamlı puanlar almıştır. Ertelenmiş son test puanlarına dayalı olarak elde edilen nispi ve ham kelime kazanımları da üç deney grubunda da kalıcı olmuştur. Ayrıca, anket sonuçları katılımcıların Türkçe ve İngilizce altyazı kullanımına da ilişkili olarak İngilizce televizyon izleme alışkanlıklarını ortaya çıkarmıştır.

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TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION……..1

1.1 Background to the study……1

1.2 Aims of the study……...4

1.3 Organization of the thesis …….5

CHAPTER 2: LITERATURE REVIEW……7

2.1 Introduction…….7

2.2 Underlying theories on vocabulary learning through viewing TV……...10

2.3 Instructed vocabulary learning through pre-viewing ……...17

2.4 Second language instruction, instructed vocabulary learning and focus on form…….21

2.5 Incidental vocabulary learning through viewing television……..30

2.6 Language learning through viewing television with subtitles …….38

2.7 Previous studies conducted on the issue of language learning and subtitling…….43

2.8 Conclusion……54

CHAPTER 3: METHODOLOGY…….59

3.1 Introduction……...59

3.2 Research questions……59

3.3 Procedure…….....61

3.4 Research context and participants…….63

3.5 The pilot study……..67

3.6 Pre-teaching intervention……..69

3.7 The audiovisual material and the test instruments……71

3.8 Data collection……..82

3.9 Data scoring……..84

3.10 Data analysis……...86

CHAPTER 4: RESULTS……88

4.1 Introduction……...88

4.2 Quick Oxford Placement Test and Picture Vocabulary Size Test results……..88

4.3 The role of watching captioned and non-captioned L2 videos from English TV series in learning new L2 vocabulary.....90

4.4 The benefit to young learners of pre-teaching vocabulary from captioned English-language TV series……96

4.5 Delayed posttest results……99

4.6 TV-watching behaviors of young EFL learners with regard to L1 and L2 subtitles ……...106

CHAPTER 5: DISCUSSION……..114

5.1 Introduction…….114

5.2 The effects of English TV watching on foreign vocabulary learning…….115

5.3 The effect of captioning and pre-teaching on foreign vocabulary learning…….119

5.4 The role of English TV watching behaviors of Turkish EFL students on foreign vocabulary learning……..124

CHAPTER 6: CONCLUSION ……129

6.1 Summary and conclusion …….129

6.2 Pedagogical implications……...131

6.3 Limitations and suggestions for future research……133

APPENDIX A: SUMMARY OF PREVIOUS RESEARCH INVESTIGATING INCIDENTAL VOCABULARY ACQUISITION VIEWING VIDEOS……135

APPENDIX B: LANGUAGE BACKGROUND QUESTIONNAIRE……139

APPENDIX C: PRE-VIEWING ACTIVITIES …….....141

APPENDIX D: AUDIOVISUAL INPUT…….……...151

APPENDIX E: FORM RECALL TEST ……...……...154

APPENDIX F: MEANING RECALL TEST ……..155

APPENDIX G: MEANING RECOGNITION TEST ……..156

APPENDIX H: ENGLISH EXPOSURE QUESTIONNAIRE ……158

APPENDIX I: QUICK OXFORD PLACEMENT TEST…...……..164

APPENDIX J: PICTURE VOCABULARY SIZE TEST……170

REFERENCES…….190

LIST OF TABLES

Table 1. English Vocabulary Size of Foreign Learners…….18

Table 2. Participants Excluded from the Analysis …….66

Table 3. The List of the Distractors……70

Table 4. Vocabulary Profile for Type, Token and Family Coverage at Each K-Level in 5 Episodes Using BNC/Coca……74

Table 5. Target Items……..76

Table 6. Items from the Meaning Recall Test……79

Table 7. Item 1 from the Meaning Recognition Test……..80

Table 8. The Survey Items……..81

Table 9. General Proficiency and Vocabulary Size Scores……...89

Table 10. Relative Vocabulary Gains in the Meaning Recognition, Meaning Recall, Form Recall Tests…….....93

Table 11. Raw Vocabulary Gains in the Meaning Recognition, Meaning Recall, Form Recall Tests……...94

Table 12. Relative and Raw Gains Based on the Delayed Posttests and Posttest for the Meaning Recognition Test……102

Table 13. Relative and Raw Gains Based on the Delayed Posttests and Posttest for the Meaning Recall Test……...103

Table 14. Relative and Raw Gains Based on the Delayed Posttests and Posttest for the Form Recall Test……105

Table 15. Watching Movies and TV Series in the Original Version in English…...107

Table 16. Descriptive Table for Watching English TV with Turkish/English/No Subtitles ……...109

Table 17. When I Watch Movies in English with English Subtitles……112

Table 18. When I Watch Movies in English with Turkish Subtitles……113

ABBREVIATIONS

BNC:	The British national corpus
CEFR:	Common European framework
CF:	Caption focus group
CLT:	Communicative language teaching
CNF:	Caption no-focus group
COCA:	Contemporary corpus of American English
DYNED:	Dynamic Education
EBA:	Eğitim Bilişim Ağı
EFL:	English as a foreign language
ESL:	English as a second language
FonF:	Focus on form technique
FonFs:	Focus on forms technique
L1:	First language, mother tongue
L2:	Second language
MNE:	The ministry of national education
NC:	No-caption group
PPT:	Power-point presentation
PVST:	Picture vocabulary size test
QOPT:	Quick Oxford placement test
SLA:	Second language acquisition
SPSS:	Statistical package for the social sciences
TI:	Target item

CHAPTER 1

INTRODUCTION

This introductory section shows the overall schema for the thesis, set out in three main parts, starting with the background of the study. The background section is followed by the aims of the study and the organization of the thesis.

1.1 Background to the study

Research in the field of first language (L1) and second language (L2) acquisition has developed several theories and approaches that accept language input as indispensable. The language input needs to be both authentic (Nunan, 2002) and comprehensible for acquisition or learning (Krashen, 1985). However, the difficulty of accessing authentic input exists in English as a Foreign Language (EFL) setting because, generally, second language instruction is the only form of exposure to the input. Therefore, watching English TV designed for an English speaking audience might provide language learners with further authentic language use outside the classroom. A good number of previous studies have investigated the role of multimedia in language learning. However, there is a lack of studies investigating the role of extensive English TV watching in language learning (Rodgers, 2013).

In Turkey, two studies (Başaran & Köse, 2012; Yüksel & Tanrıverdi, 2009) have investigated the effects of using short videos in EFL classrooms. However, there is still a need in the field to investigate the role of using English TV episodes as a source of input because TV input in English might help L2 learners gain new L2 vocabulary and become more proficient in English. English is a foreign language in Turkey and, because L2 learners in Turkey are mainly only exposed to classroom

English, EFL learners are in need of authentic language use (input). As a teacher working in a state school, I am aware of the difficulties of providing students with authentic English input in a foreign language learning context. The instruction hours for English are not sufficient for language learning. Therefore, the need to find authentic English materials for students in Turkey should be addressed. The need to provide language learners with authentic input can be met through making use of episodes of English TV outside the classroom. While exploring the literature on second language and foreign language education, the idea of finding a solution to the problem of how to expose my students to English outside the classroom was my priority. In addition, I had noticed that some students' interlanguage development was better than that of the rest of the class. I asked my students what they did outside the classroom to improve their English. The students who had a better level of English stated that they watched foreign series and cartoons, and that they play online games in English. A study by Pujadas and Munoz (2019) that investigated the effects of extensive viewing of captioned and subtitled TV series on L2 vocabulary learning of adolescents also inspired me to conduct a study on the use of foreign TV episodes. The literature on the issue of foreign TV viewing made me realise that many studies (e.g. Etemadi, 2012; Gass et al., 2010) used captions, and that the effects of captions were another focus of the research in the field. Furthermore, most of the research (Başaran & Köse, 2012; Birules-Muntane & Soto-Faraco, 2016) compared the effects of captions and subtitles on video comprehension and vocabulary acquisition. Price (1983) proved that captions could also help understand foreign TV in the way they helped the deaf community. The comprehensible input hypothesis (Krashen, 1985) also provides more support for the use of captions

because adding captions can facilitate understanding (i.e. comprehension) of the aural input.

Using episodes of English TV and captions as input does raise the issue of the suitability of the input. However, the theory of multimedia learning (Mayer, 2014) accepts TV as a channel of multimedia and supports the notion that learning is an outcome of multimedia exposure. Because lower proficiency learners can have difficulty in processing the foreign aural input, captions can facilitate the language processing. Therefore, captions were also used in the present study to investigate their role in foreign vocabulary learning. In addition to the role of captions in vocabulary learning, a survey was used to investigate whether or not the participants of the study use captions, subtitles or the audio first to deal with the linguistic burden of English TV. This survey was undertaken because existing studies (Başaran & Köse, 2012; Birules-Muntane & Soto-Faraco, 2016) compared subtitling and captioning in quasi-experimental or experimental designs without conducting a background investigation of the EFL learners' preferences. EFL learners' use of L1 and L2 subtitles while watching English TV needs to be considered in order to contribute to a wider understanding the role captions and subtitles can play in foreign language learning through TV input.

The input processing model (Vanpattern, 1993) claims that learners focus on meaning by hearing the input before they notice the form. Form necessitates further help through teaching strategies. Classroom instruction with the help of a teacher can facilitate the process of noticing forms and with processing form and meaning together. Considering the context of the present study, EFL learners might need classroom instruction of word forms and meaning together to recognize and recall the unknown word forms after their exposure to English TV series. Therefore, this

study also used focus-on-form with one of the groups in the study and investigated the effects of form focused instruction in addition to the role of captions. The reason for using form focused instruction as a classroom instruction technique was to investigate whether young EFL learners in Turkey could learn vocabulary incidentally, or whether further classroom instruction is needed for foreign vocabulary learning. Thus, the use of English TV in EFL classrooms, with or without captions, and the use of form-focused instruction to teach new L2 words are investigated in the present study. In the next section, the study's aims will be covered.

1.2 Aims of the study

Initially, the general aim of the present study is to see the effects of watching episodes of English TV on incidental vocabulary learning. The present study also investigates the effects of captioned TV episodes and form-focused instruction on incidental vocabulary learning. Furthermore, the use of a survey aims to investigate the English TV watching behaviors of the participants in respect of their use of L1 and L2 subtitles outside the classroom. Given the unpopularity of reading and the increased interest in TV watching by young learners identified by Pujadas & Munoz (2019), the participants' reading in English backgrounds is discussed in the methodology section together with their English proficiency and vocabulary size. The following research questions also inform the research interests of the present study:

1. What is the role of watching captioned and non-captioned L2 videos of English TV series in learning (i.e. recognizing, recalling meaning and recalling form) new L2 vocabulary?

2. Do young learners benefit from pre-teaching vocabulary activities in learning from captioned L2 videos from English TV series in EFL classrooms?
3. What are the English TV watching behaviors of the young EFL learners in relation to their use of L1 and L2 subtitles?

The current study has a quasi-experimental design, and it was conducted in real classrooms. Three experimental groups and one control group participated in the study. All of the experimental groups watched five successive episodes of the cartoon *Doki* with English audio. However, not all groups were exposed to captions and pre-teaching. The experimental conditions included captioning and pre-teaching, only captioning, and no captioning.

1.3 Organization of the thesis

The primary introductory chapter provides a background to the study and explains the aims and design of the study together with presenting the organization of this thesis. A review of the underlying theories, the teaching techniques (FonF and FonFs) and vocabulary research is provided in the literature review. The issue of captioned foreign TV and its effects on vocabulary learning and comprehension is also dealt with in the literature review section. The third part of the study gives detailed information about the methodology employed. The methodology section is followed by the results section, which presents the findings of the study. The sixth section discusses the study's findings in the light of dual-coding theory, multimedia-learning theory, and cognitive load theory. The effects of explicit instruction are also discussed in this chapter. The final chapter of the thesis provides the reader with a summary of the thesis, its limitations, pedagogical implications, and suggestions for

further research in the field of EFL (English as a foreign language)/ESL (English as a second language) learning.

This introduction gives information on the background and aims of the study, followed by the organization of the thesis section. The next section provides a detailed literature review on the use of foreign TV as a tool for learning L2 vocabulary and the effects of captions and classroom teaching on learning L2 vocabulary.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The theory of second language acquisition (SLA) is based on the simple hypothesis that language can be learned by comprehending messages. Since the 1980s, the role of comprehension in a second language has been a crucial issue, both in theories and research (Loschky, 1994). The issue of comprehension in second language learning is based on the quality of input that learners are exposed to. First, linguistic input is an indispensable part of the second language acquisition process (Gass, 1997), although there are also internal and external factors involved. Although not directly related to the empirically grounded theory of second language acquisition, the Natural Approach (Krashen & Terrell, 1983) as an approach to teaching L2 is based on the role of input and comprehension. The role of comprehension in second language acquisition and teaching led to the creation of an influential and controversial hypothesis: **t**he input hypothesis. This hypothesis is described as a process of turning input (i) into intake by Krashen & Terrell (1983), and the process operates as follows: First, learners understand a message using the not yet acquired i + 1 L2 structure (that is slightly beyond their current level of comprehension, and somehow they connect the form with its meaning. Second, learners must notice a difference between their current interlanguage (IL) competence and the L2 form. As a result, exposure to comprehensible input is necessary for the acquisition of a language structure.

According to Nunan (2002), the use of input that is authentic (i.e. not originally designed for use by L2 learners) is important for learning a second

language. In addition to the authenticity of such input, the suitability of input in terms of comprehensibility is another issue for teaching a second language. However, in English as a Foreign Language (EFL) contexts, input that is both authentic and comprehensible (Rodgers, 2013) is hard to find because the majority of exposure to English is through the classroom English used by teachers. Therefore, graded readers (designed to be comprehensible, but which lack authenticity even when based on original, authentic texts) have been widely used by learners as they provide suitable input for various proficiency levels (Rodgers, 2013). According to Nation (2011), such graded readers have comprehensible vocabulary that can be used to learn high-frequency words through extensive reading. Comprehensible graded readers can provide suitable input for the learners as, in theory, the words are chosen at different levels, from the 1000 most frequent word families up to approximately the 3000 most frequent word families.

Despite the use of graded readers, however, there is still a need for authentic materials in the field of second language learning (Rodgers, 2013) as young learners' interest in extensive reading has decreased (European Commission 2017). It seems that the reading habit has been replaced by TV watching as especially young learners spend more time on watching TV than on reading (Peters, 2018). Therefore, one way to fulfil the need for authentic materials is through using foreign TV programs (Webb & Chang, 2015). In contrast with graded readers, TV programs provide rich aural input that is not modified according to the level of the learners. However, to support TV's positive effects on L2 vocabulary acquisition, it is necessary to focus on how the TV input is processed. This is because second language acquisition (SLA) is a complex process requiring the implicit and explicit acquisition of linguistic items for processing.

How L2 learners process the input they receive is explained by different theories and approaches in the field of SLA and EFL. The input provided by TV programs provides rich content words, and learners' prior motivation is to understand the input's message while watching the program. In this way, watching TV can facilitate processing of the input, an idea that is supported by the Input Processing model (VanPatten, 1993). Although this model focuses on grammatical structures, the form-meaning relationship is at its core. According to this model, the meaning is processed before the form. By processing content words like nouns, verbs, adjectives and adverbs, learners put a prior focus on meaning than on form.

The cognitive learning theories, Mayer's (2001, 2005, 2014) cognitive theory of multimedia learning theory and Paivio's (1986) "dual coding theory", both have supporting premises that consider TV as suitable, authentic, and processable input for EFL/ESL (English as Second Language) learners. The TV can be regarded as a multimedia channel, and so multimedia learning theory supports the possibility of foreign language learning from TV viewing. Furthermore, the similarity between the learning principles explained by the dual-coding theory and the presentation of input via the TV underlies how the human mind processes the incoming input. TV input has both audio and visual modes, and these need to be processed simultaneously by the audience. As dual-coding theory supports the existence of visual and auditory channels in the human cognition system, the processing of TV input becomes easier, facilitating the learning process.

To have a deeper perspective on how TV watching leads to incidental vocabulary learning, it is necessary, first, to understand what these theories suggest. Following the explanation of theories, vocabulary research, including vocabulary instruction and incidental vocabulary learning, will be explained in detail. As the

present study investigates the effects of captioned TV, the issue of subtitling, dubbing and captioning will also be covered briefly.

2.2 Underlying Theories on Vocabulary Learning through Viewing TV

Two main theories support the premises for the use of foreign TV to learn L2 input. Most research in the field of ESL/EFL conducted on the issue of foreign language acquisition through TV watching all has attributions to the dual-coding theory and the generative theory of multimedia learning to support the suitability of TV input for foreign/second language learning. Based on the cognitive theory of multimedia learning (Mayer, 2001, 2005) and dual-coding theory (Paivio, 1986), many studies have been conducted to prove the efficacy of multimedia or imagery with verbal channels in vocabulary learning. As multimedia-learning can also be presented with the use of videos taken from TV series, studies in the field have used these two theories as evidence to prove the beneficial effects of extensive or narrow TV watching in vocabulary learning and for improving comprehension with listening skills.

In light of the implications of the cognitive theory of multimedia learning and dual coding theory, the present study accepts the positive effects of watching TV in an EFL context to learn new L2 vocabulary. Although the redundancy principle of multimedia learning (Sweller, 2005) states that adding extra text on the screen will not improve learning, many studies (Huang & Eskey, 2000; Markham, 1999; Pujadas &Munoz, 2019) in the field of foreign language education have proved that on-screen captions can contribute to recognition and recall of new vocabulary in a foreign language. Thus, setting aside the redundancy principle effect, this study also assumes the positive effects of captioning in new vocabulary learning.

In addition to the supportive results of the studies in the field, the model suggested by Vanderplank (1990) explains how captions are perceived by language learners. Although Vanderplank's model does not present an underlying processing principle or theory, the model does explain how attention is given to the TV input and turned into intake with the help of the comprehensible input hypothesis. Indeed, Vanderplank's model is built on the comprehensible input hypothesis (Krashen, 1985) which, as noted above, can be considered as a good framework to explain the TV input because, in a rudimentary sense, comprehensible input is turned into intake through paying attention.

Attention is divided into two main categories, and there are important selection factors and grading factors that affect the attention process. The purpose and the interest in watching TV are the selection factors affecting the process, with the grading factors including linguistic and non-linguistic knowledge, the language proficiency of learners, the language or information load, the presentation mode, and program length. As Vanderplank (1990) states, attention factors are not enough for the acquisition of a linguistic element. However, the absence of attention might not lead to deficiencies in acquisition of L2 structures; it is obvious that learners benefit from foreign TV when it is subtitled (Vandeplank, 1990).

Following the attention process, adaptation, adoption and the taking in processes are needed for the complete process underlying TV-based language learning. Adaptation means selecting the language suitable for learners' purposes, and adoption uses the linguistic elements presented in the input. However, taking in is the assimilation of the linguistic elements, which will be a part of linguistic competence. The whole process described by Vanderplank (1990) provides a framework to understand the role of attention in the processing of input from TV

watching. Although Vanderplank (1990) presents a simple framework to understand the cognitive processing of TV input, multimedia-learning theory and dual-coding theory will now be explained in detail to clarify how the input from TV is processed by language learners.

2.2.1 Multimedia learning theory

Before explaining the premises of the cognitive theory of multimedia learning, it is necessary to define multimedia learning itself. Multimedia means presenting messages via images, sounds and words together in combination; therefore, multimedia learning means learning from this combinatory means of communication (Mayer, 2014). The design of multimedia teaching/learning can be based on a technology-centered approach and a learner-centered approach. However, multimedia learning can be seen as a consequence of the resemblance between multimedia and nature of the human cognitive system for learning (Mayer, 2014) because the human cognition system has processing mechanisms for visuals and texts and multimedia includes both. Consequently, multimedia instruction can also take various forms. It can be, for example, a power-point presentation, watching a video on a TV screen or reading a text accompanied by visuals like graphics and charts, or reading texts such as graphic novels. Notwithstanding the mode used for presenting multimedia, the logic behind multimedia learning is to connect associations with the working system of the human mind so that active learning (understanding) or remembering can occur (Mayer, 2014).

For a better understanding of multimedia learning, Mayer (1997) described the distinctions between terms such as delivery media, presentation modes, and sensory modalities. Delivery media can be explained as being whether the media is

delivered via a book or a computer. Presentation modes represent the format used for delivery, such as words or pictures. Sensory modalities refer to visual and acoustic processing.

The generative theory of multimedia learning by Mayer (1997) explains the dynamic and active learning of the human mind. This theory is based on Wittrock's (1974, 1989) generative theory and Paivio's (1991) dual-coding theory. The logic behind the generative theory of multimedia learning is that the learner is an active participant and plays a crucial role in constructing knowledge. First, the learner selects relevant information, and then organizes it. After organizing the information, the learner integrates the verbal input with the visual input. In this way, knowledge construction happens. Moreover, it is a fact that multimedia learning theory cannot be separated from the dual-coding theory and working memory systems. Thus, it is good to start explaining this theory via its principles.

The theory of multimedia learning states that multimedia should be presented in the same way the human mind works. Three basic principles constitute the backbone of the cognitive theory of multimedia learning: dual-channel assumptions, limited capacity assumptions, and active processing assumptions. The dual-channel principle assumes that the human mind has two distinct channels for pictorial and auditory information, which is also supported by the dual-coding theory (Paivio, 1986). The second element of the theory, limited capacity, is incorporated from Baddeley's (1986) model of working memory, whereas the idea of active processing and its underlying principles are proposed by Mayer (2001). The limited capacity assumption underlines the idea that working memory has a limited capacity for both visual and auditory channels, and limitless information cannot be processed at one time in both channels. The limited information is processed, organized, and

integrated by the human mind according to the active processing principle. In this way, multimedia presentations make sense to the human mind and are transferred to the long-term memory system. Other than the underlying principles of the cognitive theory of multimedia learning, the theory presents five processes in which learners engage. Mayer (2005) lists these five processes as follows: "(1) selecting relevant words for processing in verbal working memory, (2) selecting relevant images for processing in visual working memory, (3) organizing selected words into a verbal model, (4) organizing selected images into a pictorial model, and (5) integrating the verbal and pictorial representations with each other and with prior knowledge" (p. 38).

In addition to the processes of multimedia learning, there are many principles of multimedia learning theory (Yuksel Arslan, 2012), too. However, three basic principles can be discussed in detail since they have been tested in empirical research. The principles are split-attention, modality and redundancy. The first principle is split- attention, and it is deeply connected to the cognitive load theory. According to Chandler & Sweller (1991, 1992), paying attention to two distinct sources of information can create a cognitive load, which is also called split-attention. Mayer & Moreno (1998) conducted experiments and revealed that presenting both text and visuals resulted in less retention and less generation of solutions to problems when compared to the presentation of text and narration together. The modality principle is also linked to the cognitive load theory. According to this principle, and considering Paivio's (1986) dual-coding principle, the text should be presented in an auditory way. Thus, information is best remembered when both verbal and non-verbal channels are used. However, presenting the scripts of a video on the screen can cause cognitive load. Moreno &

Mayer (1999) stated that the limited nature of the working memory can be best used by moderating the memory load. Consequently, the best approach is to process texts in the auditory channel and imagery in the visual channel. Using both channels can facilitate the integrating and building of associations between the verbal and non-verbal stimuli. The third principle, the redundancy effect, can interfere with the learning process because it, too, increases the cognitive load of learners. Mayer, Heiser, and Loan (2001) investigated the effects of the redundancy principle on multimedia learning by conducting two experiments. It was revealed that adding the exact text of a narration on-screen could negatively affect the learners' retention process. Thus, presenting spoken words and visuals together with the same onscreen printed text causes redundancy (Yuksel Arslan, 2012).

Although the cognitive theory of multimedia learning supports the idea that using both channels (visual and auditory) provides a better understanding of the input, cognitive load theory has a contradictory assumption (Moreno & Park, 2010). Dating back to the late 1980s, cognitive load theory (a psychological theory) was first used by John Sweller. However, the claims of this theory can be adapted to the theory of learning. To comprehend this theory, it is important to first explain the construct "cognitive load" or "mental load." According to Moreno & Park (2010), it can be described as "the demands that a certain task imposes on an individual" (p.10). How objective characteristics of a task affect learning and cognitive load is more deeply dealt with within the scope of this theory than subjective characteristics, such as motivation or self-regulation (Moreno & Park, 2010).

2.2.2 Dual-coding theory

The precise separation of multimedia learning theory and dual-coding theory is not possible as multimedia learning theory is based on dual-coding theory. However, the dual-coding theory is a theory developed to explain human cognition. Dual-coding theory is based on the assumption that human cognition is based on two channels: a verbal system specialized for dealing with language, and an imagery system for non-linguistic objects and images. These two systems are composed of subsystems called logogens and imagens. These representational units are activated when manipulating or thinking about the words and objects. These two systems work together when dealing with sensory input and output. This is why language-related activities can also involve imagens. To illustrate, verbal systems dominate in a crossword puzzle task, whereas the imagery system dominates in a jigsaw puzzle task (Clark & Paivio, 1991). Furthermore, there are two crucial hypotheses suggested by the dual-coding theory. The first is about the involvement of verbal and non-verbal channels independently. In free-recall experiments, subjects named objects covertly, thus using verbal and non-verbal channels. Thus, recalling concrete words involves dual-coding channels. However, recalling abstract names is difficult as they cannot be dually coded. The second hypothesis is called the peg hypothesis. This hypothesis states that a compound noun creates two images and recalling one stimulus causes recall of the other stimulus. Monkey-bicycle can be given as an example for this situation (Paivio, 2006).

To conclude, the research by Paivio (1986, 1991) and Mayer (2001, 2005, 2014) offers supporting assumptions for the use of TV watching in incidental vocabulary learning. The underlying assumptions that human cognition resembles the way multimedia is presented and that verbal and imagery channels exist in

human cognition are used by research in the field of EFL/ESL to support the acquisition of vocabulary through TV watching. Furthermore, the acquisition of vocabulary by foreign language learners has been investigated in depth by researchers in the field. These underlying cognitive learning theories may be considered as supportive of linguistic acquisition through viewing TV. It can also be accepted that the acquisition of foreign vocabulary is possible via watching foreign TV with the support of captions (Vanderplank, 1990) and vocabulary instruction techniques considering the framework by Vanderplank (1990) and the efficacy of form-focused instruction (Long, 1991). For this reason, vocabulary research in the field of EFL/ESL is another focus of the current study in order to have a deeper perspective with regard to further explanation of incidental vocabulary learning and vocabulary learning through instruction.

2.3 Instructed vocabulary learning through pre-teaching

Because this study investigates the role of captioning and pre-teaching on EFL learners' vocabulary learning, it is necessary to have a deep understanding of research on vocabulary learning. To function in a second language/foreign language properly, vocabulary learning is a priority for language learners. However, no best method is suggested for vocabulary teaching (Schmidt, 2008). Although there is no consensus on how much of the vocabulary in a piece of written or spoken discourse should be known to understand it, studies have been conducted to show the percentages necessary to understand a piece of discourse. According to the study by Laufer (1989), 95% coverage was necessary, while Hu & Nation (2000) suggested a higher coverage of 98-99%. Nation (2006) analyzed the data from the British National Corpus and found that a lexical coverage of 98% meant knowing from 6000

to 7000-word families. Furthermore, to read an authentic text in English, Nation (2006) calculated that 8000-9000 word families were required to be known. However, Bonk (2000) claimed no-threshold for lexical coverage, finding that having less than 90% coverage resulted in poor comprehension. Considering that each word family includes individual words with inflections and derivations, even knowing the first 1000 words means knowing 28,015 individual words (Nation, 2006).

As can be seen, the task is very challenging for language learners: a huge vocabulary size is required to function in English effectively and, when acquiring English, one major hurdle is to acquire lexical items (Schmidt, 2008). Table 1 (Gallego & Llach, 2009, pp. 116-118) shows the vocabulary size of various learners of English from different countries all over the world. The results were calculated based on a vocabulary test of meaning recognition.

Table 1. English Vocabulary Size of Foreign Learners

Country	Vocab Size	Hours of Instruction	Reference
Japan (EFL Univ.)	2000	800-1200	Shillaw 1995
	2300		Barrow et al. 1999
China (Eng. Majors)	4000	1800-2400	Laufer in press
Indonesia (EFL Univ.)	1220	900	Nurweni and Read 1999
Oman (EFL Univ.)	2000	1350	Horst et al. 1998
Israel (high school grad.)	3500	1500	Laufer 1998
France High school	1000	400	Arnauld et al. 1985
Greece "Age 15, high school"	1680	660	Milton & Meara 1998
Germany "Age 15, high school"	1200	400	Milton & Meara 1998

It is clear from the table that the vocabulary size of non-native English speakers is quite small compared to the native speakers' vocabulary size (Gallego & Llach, 2009). Based on the available instruction hours in Turkey at primary school, middle school and high school level, the hours are insufficient to teach such a large L2 vocabulary size.

2.3.1 Instruction hours in Turkey

In terms of the effects of instruction on vocabulary acquisition, it is necessary to give brief and explanatory information on the foreign language instruction system and hours in Turkey. Following an Educational Reform in 1997 in Turkey by the Ministry of National Education (MNE), English was introduced in Grades 4 and 5 as the duration of compulsory education increased to eight years. The objectives of language teaching were changed following the change in the curriculum as the traditional method of language teaching was seen as out of date. The new curriculum aimed to teach English using the Communicative Language Teaching (CLT) approach. Consequently, teacher-fronted classes needed to be changed to match the concept of teachers as guides and/or facilitators. With regard to this change, a Teaching English to Young Learners course was introduced at faculties of education for language teachers to meet the aims of the curriculum (Kırkgöz, 2007). The change in the curriculum was enhanced in the 2013-2014 education year (Babayiğit & Ekuş, 2013). Following the introduction of Communicative Curriculum Innovation in Turkey in 2012, the Ministry of Education decided to lower the grade at which young learners were introduced to English. Therefore, the need to further revise the curriculum appeared, and an action-oriented approach in line with Common European Framework (CEFR) was adopted. The new changes described

students as social language users rather than students studying a lesson for topic instructions, and students started to learn English at grade 2 for two hours per week following the Action-Oriented Curriculum change (Daloğlu & Palabıyık, 2016). Thus, students in Turkey have approximately 38 weeks of education in school, and English instruction hours for each grade do not exceed 150 hours. Many studies in the field (e.g., Arnauld et al. 1985, Barrow et al. 1999) showed that 150 hours of English instruction do not even guarantee having 1200 vocabulary size. To summarize, the hours of instruction in primary school education from Grade 2 to Grade 8 are insufficient to acquire that expected number of vocabulary considering the results of the study conducted by Gallego & Llach (2009) even though the hours increase to 3 per week in Grade 6, and 4 per week in Grade 7 and 8. Thus, students in Turkey have a considerable need for out of classroom exposure to English to learn foreign vocabulary.

When it comes to methods of vocabulary teaching and learning, a priority is to build a form-meaning correlation. Most materials and activities are intended to make students gain a form-meaning link (Schmidt, 2008). Engagement and exposure play a significant role in vocabulary acquisition, which can be explained by the results of studies and hypotheses in the field. First, Craik and Lockhart's (1972) Depth/Levels of Processing Hypothesis claims that the more an item is processed by paying attention and being engaged, the more it can be remembered. Based on studies in the field (Ellis & He, 1999; Hulsjtin, 1992; Knight, 1994, inter alia), numerous factors affecting vocabulary learning have been determined. Schmidt (2008) summarizes these factors by observing that "virtually anything that leads to more exposure, attention, manipulation, or time spent on lexical items adds to their learning" (p. 339).

Considering the lexical coverage percentages required to function properly in a second or foreign language, and the insufficient instruction hours, the need for exposure to foreign vocabulary outside the classroom takes on greater significance. Thus, instruction and incidental vocabulary learning through TV viewing are explained together as part of the present study's investigation of incidental vocabulary learning and the role of instruction through pre-teaching. In light of the research conducted in the field of ESL/EFL, the role of second language instruction and vocabulary instruction will be explained together with the noticing hypothesis (Schmidt, 2001) as noticing plays an important role in the acquisition of linguistic elements. Later, the definition and role of incidental vocabulary acquisition in the field, accompanied by the results of the research on incidental vocabulary acquisition, will be further discussed and explained.

2.4 Second language instruction /instructed vocabulary learning and focus on form

Because the current study investigates the effect of instruction on vocabulary learning, it is crucial to define both the role and the effects of second language (L2) instruction. De Graaff & Housen (2009) define instructed L2 as "any deliberate attempt to promote language learning by manipulating the mechanisms of learning and/or the conditions under which these operate" (p. 726). L2 instruction includes a variety of methods, approaches, strategies, techniques, practices and activities. The current study does not suggest any systematic method or approach in terms of vocabulary instruction; however, it includes activities that shift the focus from incidental learning to the deliberate learning of the form and meaning of the target vocabulary items.

Considering the role of instruction in vocabulary learning, some theoretical positions supporting the indispensable role of instruction provide evidence for successful language acquisition by EFL learners. Moreover, EFL learners have little opportunity to be exposed to the language for the necessary input outside the classroom (DeKeyser, 2000). In other words, the instruction in the classroom becomes the only significant source of exposure in EFL contexts. However, exposure to both authentic input and meaningful instruction can result in a maximum opportunity for the acquisition of a language structure (De Graaff & Housen, 2009).

The acquisition of L2 linguistic structures cannot be guaranteed by non-systematic exposure to the input. Therefore, the role of input becomes more significant in terms of investigating how linguistic structures are processed and how classroom instruction helps processing of L2 linguistic structures. One way of explaining the role of instruction is through the noticing hypothesis (Schmidt, 2001). The issue of noticing (Schmidt, 2001) and the allocation of cognitive resources to certain linguistic structures can be discussed within the scope of L2 instruction. When the noticing hypothesis (Schmidt, 2001) is considered, some features in the input can be transferred to the short-term memory before becoming an intake after further processing and transfer into the long-term memory. Therefore, noticing through meaningful classroom instruction might facilitate learning new vocabulary items while watching foreign TV or videos.

Other than the effectiveness of instruction, the type of instruction also makes a difference. Some approaches (Ellis, 1999, 2001; Norris & Ortega, 2000) make a distinction between form-focused instruction and meaning-focused instruction. The definition of "form-focused instruction" can be given as "any instructional activity which aims at drawing learners' attention to language form, where 'form' stands for

grammatical structures, lexical items, phonological features and even sociolinguistic and pragmatic features of language" (De Graaff & Housen, 2009, p. 736). The existence of explicit and implicit teaching techniques has led to the distinction between Focus-on-Form instruction (FonF) and Focus-on-Forms instruction (FonFs). Explicit focus on vocabulary is a way to make learners pay attention to lexical items and become more engaged with them. Although focus on form/forms are usually supported and seen as a method to teach grammar items, it can also be used as an efficient method for vocabulary instruction (Laufer, 2005; Schmidt, 2008).

2.4.1 Defining pedagogic focus on form

The term focus on form was first introduced by Michael Long (1991) and was then extensively used by many scholars in the field of second language acquisition. Focus on form (FonF) and focus on forms (FonFs) are seen as distinct programs and /or approaches by Long (1991). The differences between the two approaches is stated by defining FonF as an approach which "overtly draws students' attention to linguistic elements as they arise incidentally in lessons whose overriding focus in on meaning or communication" (pp.45-46). On the other hand, FonFs is about presenting and practicing separate language items in a classical way of teaching (Ellis, 2016). Ellis (2016) summarizes Long's views on FonF by pointing out that a focus on form is usually an implicit and incidental process which causes noticing (Schmidt, 2001) and form-function mapping. It also has distinct features compared to the traditional form-centered approaches.

Although Ellis (2016) restricts the term FonF to grammatical features, form should not be restricted only to grammatical forms as it can also refer to lexical, grammatical and pragmalinguistic features. Thus, FonFs is defined as a very explicit

teaching of grammatical forms within a structural syllabus. The dilemma arises when FonFs is used as a response to a problem in the classroom or when power-point presentations (PPT) can also be seen as a part of FonF. The realization about the fact that FonF can also be explicit and non-interactive changed the perspectives on this approach. However, the definition of FonF has changed, and it has been shaped by many scholars in the field. As Ellis (2016) states, FonF activities "can be found in both explicit and implicit approaches to language teaching. They can also occur before a communicative task is performed or while it is being performed" (p.411).

From this point of view, FonF shares commonalities with the task-based teaching approach as Long (1983) also focuses on the negotiation of meaning. Although it reacts to theories and approaches in the field of second language education, Long's definition of FonF can even include the very explicit explanation of a grammar rule as a reaction to a communication-based problem. However, the term FonF has indeed changed in many ways as an approach.

Because of the absence of a clear consensus on the definition of focus-on-form and focus-on-forms, the psycholinguistic backbone of these techniques can provide a better perspective. According to Ellis (2016), two systems, selective attention and cognitive comparison, together with the memory systems, constitute the psycholinguistic backbone of focus on form. First, selective attention is consciously paying attention to some linguistic features by ignoring the distracting factors in the input. The issue of whether the learners' attention is on form or meaning creates one of the differences between FonF and FonFs. Focusing on the form in the input via engaging in a communicative activity occurs when the gap or the hole in the input is noticed by the learners. Noticing of some salient structures can be achieved through implicit instruction, whereas the non-salient structures need to be supported by focus

on form activities. Another psycholinguistic component of focus on form is the cognitive comparison. Schmidt (2001) defines this as noticing the discrepancy between the target structure and the learners' utterances. At the point where the learners become aware of it, they compare the structures and notice the difference between the target structure and the one they have uttered. The third backbone of focus on form is working memory systems along with the selective attention and cognitive comparison. According to some SLA researchers, working memory either processes the input implicitly in procedural memory or explicitly in declarative memory. However, processing form and input simultaneously is not possible considering the limited capacity of the working memory. Short term storage occurs, and it can be saved from being only temporary knowledge by rehearsal and repetition. Thus, focus on form can affect input storage. However, no clear and simple bond can be established between the working memory and focus on form intervention as the relationship seems to be complex.

Overall, FonF and FonFs techniques are used in instructed ESL/EFL, and the techniques are based on an underlying hypothesis (noticing) and connections with the working memory system. The use of FonF and FonFs can be extended to teaching vocabulary despite the presence of perspectives on using these techniques for grammar teaching. In the same vein, although a respectable number of studies on FonF have been conducted, the issue of vocabulary acquisition has been neglected as the focus has been on the acquisition of grammatical structures (Laufer, 2005). The reason why vocabulary acquisition was ignored by FonF is due to the belief of the researchers in the field who thought that vocabulary can best be acquired in a meaning-focused context. Even DeKeyser (1998), as a supporter of FonFs, did not accept that a huge vocabulary size could be acquired by explicit instruction.

However, Laufer (2005) challenges this view and explains the relationship between vocabulary acquisition and FonF/FonFs. First, the uninstructed position assumes that learning vocabulary results from encountering words in a context and noticing, after which one can deduce the meaning of a word from the context. The "default hypothesis" by itself assumes that most vocabulary is learned by reading input (Laufer, 2006). Laufer (2005) opposes this view as the process of incidental vocabulary acquisition is not as simple as presumed. As Laufer states,

> With respect to the ability to infer words from context, very often clues are unavailable, misleading, and most importantly, may appear in words which themselves are unknown to the learner and are therefore unusable. This happens if the learners' lexical coverage of the text, i.e. the number of previously known text words is lower than 98% (Laufer, 2005: p.226).

Based on Laufer's (2005) position, the idea that FonF and FonFs can be used efficiently for vocabulary learning can be supported. A respectable number of studies in the field (Cho & Krashen, 1994; De La Fuente, 2002; Ellis & He, 1999; Knight, 1994; Luppesku & Day, 1993) have shown that FonF was more effective than meaning-focused tasks, although the conditions used in these studies were not used to investigate FonF.

On the other hand, FonFs can also be an efficient factor in vocabulary learning, although Long & Robinson (1998) has criticized FonFs as being a vain effort in terms of teaching grammatical structures. Despite Long's views on FonFs, studies have revealed that FonFs (Hill & Laufer, 2003; Horst et al., 2005; Laufer, 2003) could be used to teach vocabulary in foreign language teaching.

There are few studies (Hill & Laufer, 2003; Laufer, 2003; Laufer, 2006; Sheen, 2005; Shintani, 2013) investigating the role of FonF and FonFs on vocabulary

learning, and these studies were conducted with adults, university level, and high school level language learners. Their results do, however, provide support for using FonFs and FonF in vocabulary learning. Furthermore, an alternative hypothesis to the default hypothesis was formulated by Laufer (2005) that claimed that the acquisition of words is possible through repeated exposure to the input. The word focused classroom instruction might be seen as an alternative to teaching L2 vocabulary in EFL/ESL settings.

The first study by Hill & Laufer (2003) used a message-oriented and a form-oriented task to measure their effects on the retention of unfamiliar words encountered while reading. Another aim of this study was to differentiate the tasks via the dictionary activity, or the time required for its completion. 128 adults, enrolled in an English Enhancement Course, participated in the study. A reading text with 12 target words were used in the three different tasks developed. The participants had 15 minute long individual tutorials, and a pre-post-delayed-posttest design was used in the study. The results of the study revealed that task 1, which was message-oriented, was the least effective one in terms of vocabulary acquisition; however, task 2 and 3, which were form-oriented tasks, resulted in better vocabulary acquisition. This study proved the crucial effect of form-focused instruction. although the study was not conducted for the purpose of investigating FonF or FonFs techniques.

Another study by Laufer (2003) was conducted to compare the effects of different activities which focus on vocabulary with reading only activities. This study included three separate experiments. The purpose of the first experiment was to compare the number of words retained after a reading activity with the number of the words remembered after writing isolated sentences containing these words. Sixty

university learners of EFL in two full classes participated in the study. A vocabulary test was implemented, and the results revealed that the sentence writing group had high scores on the immediate and delayed test. The second experiment had 82 advanced EFL learners in two classes. Task 1 was reading and task 2 was writing a composition through integrating target words. The composition group outperformed the reading group in the immediate and delayed tests. The third experiment had three tasks: reading and looking up unknown words in a dictionary, writing sentences with target words, and completing sentences provided by the researcher using the target words after looking up their meanings. The subjects were 90 high school learners. Overall, the three experiments revealed that word focused activities and activities that necessitated further attention and engagement are more effective for retention of new words.

In line with the previous studies, the direct role of FonF and FonFs tasks was also investigated for learning new L2 words (Laufer, 2006). 159 high-school learners at Grade 11 who had been learning English for seven years participated in the study. Twelve target words were chosen, and two different tasks were developed. For the FonF task, participants were exposed to the target words during a reading task. For FonFs, the group received a list of 12 target words with their translations and explanations in English. An unexpected vocabulary test was given after the tasks. The difference between the two tasks was significant; the FonFs group outperformed the FonF group.

Similar results were also revealed in another study by Sheen (2005). This study had a larger scale of purposes. The first aim of the study was to investigate whether interactive situations provided comprehensible input that led to grammar acquisition. The second aim was to compare the effects on the oral production of

interrogative forms and high frequency adverbs under two treatments: FonFs and FonF. 48 6th graders from two classes participated in the study, with a control group and an experimental group. Both groups had 4 hours of instruction each week. An aural written comprehension test and an oral interview were used as testing materials. The results showed that the instruction based on FonFs that provided frequent oral practice caused good improvement in oral production entailing question forms and correct adverb placement.

Among the studies comparing the effects of FonF and FonFs techniques, a study by Shintani (2013) aimed to compare the effects of two techniques on vocabulary acquisition. Nouns as well as adjectives were used as target items in the study. 45 six-year-old Japanese children with no English background participated in the study. Three different material types were developed for three conditions: FonF, FonFs and control. Each lesson lasted approximately 30 minutes, and the lesson was repeated nine times over five weeks. The testing items consisted of discrete-item word production test, and a same or different test. The results showed that FonFs instruction was effective in developing the learners' productive knowledge of both nouns and adjectives. Both FonF and FonFs were effective compared to the control group, whereas the FonF group outperformed in the free production of adjectives.

The conclusion that FonF and FonFs techniques can be used in vocabulary instruction can be drawn based on the results of several studies in the field (Hill & Laufer, 2003; Laufer, 2003; Laufer, 2006; Sheen, 2005; Shintani, 2013). According to Laufer (2005), L2 vocabulary is not only acquired by reading input, and vocabulary instruction similar to grammar instruction can be used for teaching vocabulary. The term "Planned Lexical Instruction" was coined as an alternative the default hypothesis (Laufer, 2005). Moreover, three studies directly compared the

effects of FonF and FonFs techniques. Laufer (2006) and Sheen (2005) revealed that FonFs techniques were more effective in learning new L2 vocabulary. Hill & Laufer (2003) and Laufer (2003) also compared meaning focused tasks and form-focused tasks. The positive effects of form-focused tasks supported Laufer's (2005) belief in the use of form-focused instruction.

2.5 Incidental vocabulary learning through viewing television

Since incidental vocabulary learning is at the core of this study, it is essential to define and present studies related to incidental vocabulary learning. Even if not the main consideration here, it is true that second language vocabulary is also acquired incidentally. The word "incidental" needs to be defined properly before having a deeper understanding of what incidental vocabulary learning means. However, there is no consensus in the field regarding the exact definition of what Incidental L2 Vocabulary Acquisition means. Ellis (1994) defined incidental as a situation of "understanding the passage as a whole, and memory for the new word comes as a natural result of this process, a conscious effort to learn to be unnecessary" (p. 219). Defining incidental vocabulary learning is facilitated by operationalizing the term according to the methodologies used in the field of ESL/EFL research. It is defined by some researchers (Hulstijn, 2003; Peters, Hulstijn, Sercu, & Lutjeharms, 2009) as learners' unawareness of the upcoming tests in studies. Therefore, intentional learning can be defined as the case when leaners are aware of an upcoming vocabulary test, such that they pay more attention to the target vocabulary. Hulstjin (2003) defines intentional learning as being in contrast to incidental learning since it is a term "which refers to a deliberate attempt to commit factual information to memory, often including the use of rehearsal techniques, like preparing for a test in

school or learning a song by heart" (p.1). In contrast to intentional learning, Uchihara et al. (2019, p.561) defined incidental learning as "the learning that emerges through a meaning-focused comprehension task in which learners are not told of an upcoming vocabulary test." Therefore, incidental vocabulary learning can be considered as a methodological construct changing from study to study rather than a theoretical term. Consequently, for a better understanding of the term, it is necessary to base the definition of incidental learning on that for intentional learning by specifying the discrepancies between the two conditions. Considering the conditions as lying along a continuum, the difference between them depends on the degree of exposure, cognateness and known L2-related words, and it is the acceleration of exposure, cognateness and known L2-related words that provides incidental learning (Gass, 1999). Considering the current study's aim, incidental vocabulary learning can be based more specifically on Uchihara et al.'s (2019) definition, where understanding TV series is a meaning-focused activity where learners are unaware of the fact that they would be tested later on some target words chosen by the researcher. Thus, noticing and the conscious processing of unknown words can be a part of the incidental vocabulary learning that occurs through watching TV series.

After defining incidental vocabulary learning, it is necessary to explain how TV watching can contribute to vocabulary learning overall. Rodgers (2013) underlined the role of using original materials when teaching vocabulary because published materials can only cover the most frequently used words in English. However, access to low-frequency words in order to have a rich lexis can be guaranteed through the use of original materials like extensive TV watching because teaching beyond the first 3,000 most frequent words is problematic in EFL/ESL classrooms. First, the problem of which words should be chosen arises. Teaching the

mid-frequency words (3000-9000-word level) is another necessity, but no systematic way to teach them is present in EFL/ESL classrooms (Rodgers, 2013). Moreover, the instruction hours to teach such a huge lexis are generally limited, especially in EFL contexts as is the case in Turkey.

In line with the perspective of considering TV as suitable and authentic input to learn L2, there are some characteristics of TV input to be discussed in detail. The fact that graded readers and coursebooks are insufficient for learning authentic and rich lexis cannot be enough of a justification to consider TV input as suitable. Explaining how TV input can be regarded as suitable for foreign language learners can be the first step for a better understanding of the use of TV in incidental vocabulary learning.

Extensive watching of TV can be classified under the meaning-focused strand. Nation (2007) explains the detailed principles of meaning-focused input, where the learners' main focus is to understand and have fun at the same time. However, there are five main conditions under which the meaning-focused strand can be realized. These conditions include the following: (1) the familiarity of input; (2) the interest and a wish to understand by learners; (3) 90-95 % familiarity with the running words; (4) extensive amount of input; (5) the presence of hints in the context and background information to understand the unfamiliar language. Rodgers (2013) provides a detailed explanation of each condition via integrating these conditions with the input from TV series. Thus, the meaning-focused input from TV series can meet all the above criteria so that the meaning-focused strand can work well.

Considering the first condition (familiarity of input), television can provide learners with a large variety of genres and subjects, and learners can choose the one that is best for them. In addition, because of successive episodes, learners can

become familiar with the characters and the plot, and thus suitable input can be ensured. Research in the field has proved that learners can understand the context (Markham & Peter, 2003; Taylor, 2005; Winke, Gass, & Sydorenko, 2010). The second criterion (learner interest and wish to understand) is also met by TV as it can sustain enjoyable audiovisual input so that learners can easily become engaged in watching TV. The third condition entails the knowledge of at least 90-95 % of the words to be known by the language learners for the comprehensibility of the context and vocabulary acquisition. Although studies are investigating the necessary percentage of vocabulary that learners need to know, the relationship between vocabulary acquisition and watching TV is still under investigation.

Rogers (2013) explains that consuming large quantities of input, the fourth condition, is seen in the fact that hours spent watching L1 TV are quite high all around the world. Sparing even a portion of time to watch L2 TV may ensure the processing of considerable amounts of input. Indeed, Vanderplank (2010) supports extensive watching of TV as it provides detailed insights into the processes and techniques used by the learners. The last condition is about learning unknown words via contextual clues. TV clearly provides learners with imagery and repetitive dialogues. Extensive TV viewing can lead to the acquisition of new words as the studies in the field have shown (Markham et al., 2001; Markham, 1999; Koskinen & Neuman, 1992; Sydorenko, 2010).The input provided by TV watching can be considered under the meaning-focused input, and the provision of input from the TV can lead to learning lexical items in a foreign language.

As one of the major focuses of this study is on foreign TV viewing and incidental L2 vocabulary acquisition, it is necessary to include studies with supporting results. Within this scope, numerous studies (Rodger & Webb, 2009a;

Rodger & Webb, 2011; Webb, 2008; Webb, 2011) have been conducted to build a relationship between TV watching and incidental vocabulary learning. These studies were inspired by the reading studies conducted on incidental vocabulary learning. These studies are mainly corpus-based studies, and the ones with classroom interventions will be reported in the following section, which focuses on the effects of captioned TV watching on incidental vocabulary learning.

According to Rodgers (2013), learning beyond the first 3000 most frequent words is problematic using graded readers or listening activities. Graded readers or listening activities provided with coursebooks are generally modified input that do not exceed the first 3000-4000 most frequent words. Therefore, the need for a way to provide original input arises. Although this need can be met through extensive TV watching, the number of experimental studies on TV watching and incidental vocabulary learning is limited. This limitation can be overcome with reference to the various corpus-based studies (Rodger & Webb, 2011; Webb& Rodger, 2009a; Webb, 2011; Uchihara et al., 2019) that have investigated incidental vocabulary learning through analyzing the transcripts of different TV genres aired on television and by considering diverse variables that affect vocabulary gains.

Rodgers & Webb (2011), for example, conducted a study on vocabulary learning in related TV programs based on narrow viewing. The reason why this study was conducted was precisely as a result of the difficulty of providing learners in EFL settings with original materials. Therefore, TV can be considered as a resource for learning new words that is as efficient as listening and reading activities done in EFL classrooms. Rodgers & Webb's study aimed to investigate the lexical content of TV series and possible vocabulary learning through related (watching TV programs with related content) and unrelated (watching TV series with unrelated content) TV series.

Compared to the ESL context, it was not easy to find TV programs available in the EFL environment. However, the rise of TV viewing on the internet can facilitate the accessibility of foreign language audio-visual input. Rodgers & Webb analyzed the vocabulary in 288 TV series (142 with related content and 146 with unrelated content) using the RANGE program.[1] The results showed the advantageous features of related programs. Related programs put lower vocabulary demands on learners as there were fewer word families in related TV programs than in unrelated ones. However, the main result of this study showed that incidental vocabulary learning was possible as some words were encountered ten or more times. Based on this result, from 32 to 45 words can be learned through watching unrelated TV programs.

Another study, conducted by Peters & Webb (2018), on the issue of incidental vocabulary learning through viewing L2 television investigated the effects of watching a full-length TV program on incidental vocabulary acquisition. Three other vocabulary-related factors, such as frequency of occurrence, cognateness, and word relevance, together with one-learner-related variable (prior vocabulary knowledge), were also examined. Two separate experiments were conducted with different participants using a pretest, posttest and delayed-posttest design with the use of three tests (form-recognition, meaning recall, and meaning recognition). Dutch-speaking EFL university students participated in the study, and their proficiency level was between B1 and B2. The results of the study revealed that extensive TV viewing had a positive effect on incidental vocabulary learning considering the results of the meaning recall and meaning recognition tests. Moreover, the other three variables (frequency of occurrence, cognateness, and

[1] RANGE is a program used for analyzing the vocabulary load of texts. It can tell you how much and what vocabulary occurs in a particular text or group of texts. It used to be called *VORDS*, *FVORDS*, and *VocabProfile* (Nation & Heatley, 2002).

learners' prior vocabulary knowledge) had a positive relationship with incidental vocabulary learning.

In the same vein, Webb & Rodger's (2009) study focused on the vocabulary demands needed to comprehend TV series. This study is basically on the relationship between lexical coverage and comprehension of TV. As with the studies conducted to understand how much vocabulary coverage is needed to read texts in English, there is a need in the field to investigate the same for TV comprehension. First, coverage can be defined as the percentage of words known in a discourse. 88 television programs were used in the study and analyzed using RANGE. The results showed that knowing a minimum of the first 3000 most frequent words could be enough to understand any TV programs, and that watching an hour of TV every day can result in significant incidental vocabulary learning.

Another study sharing the same focus with the previous studies was conducted by Webb (2011). This study aimed to find whether related TV programs had lower lexical demands, thus facilitating the comprehension of TV. This facilitation could result in further incidental vocabulary learning. The scripts of 288 TV programs were analyzed through RANGE. Subgenres of the same category of TV programs and different programs were chosen to compare the results. The number of types, tokens and word families was counted. The results showed that it was more efficient to watch different episodes of the same subgenres rather than random TV watching. Watching different episodes of the same subgenre increases the chance of incidental vocabulary acquisition.

In the scope of incidental vocabulary learning and TV watching, Uchihara et al. (2019) investigated the effects of repetition on incidental vocabulary learning through a detailed corpus-driven vocabulary script analysis that also considered the

effects of numerous other factors such as learners' characteristics, word characteristics and test types. The study was a meta-analysis, and effect size was calculated for the correlation of these variables. The crucial role of repetition in vocabulary learning is the common view of researchers in the field. However, Uchihara et al. (2019) state the need to change the focus of studies on the threshold number of encounters needed to learn a word because the variables affecting the frequency can provide the research with different perspectives. The results of the current study found a medium effect between frequency and vocabulary learning. The role of other variables, like learners' characteristics, word characteristics and test types, were also explained in detail in this study. However, the main interest of the present study is on incidental vocabulary learning. For this aim, another important finding was the fact that low proficiency learners benefited more from the high number of encounters than high proficiency learners did.

Considering the vocabulary research on vocabulary instruction and incidental vocabulary learning, two conclusive results can be deduced: (I) FonFs and FonF can be used efficiently in EFL and ESL classrooms to teach L2 vocabulary; and (II) incidental vocabulary learning can be acquired through extensive TV watching. Moreover, studies in the field have investigated incidental vocabulary acquisition through exposure outside of EFL/ESL classrooms as long instruction hours cannot guarantee a large vocabulary size for L2 learners (Laufer, 2000). Watching extensive TV can be a good way to start as studies (Rodger & Webb, 2009a; Rodger & Webb, 2011; Uchihara et al., 2019; Webb, 2011) conducted to build a relationship between TV watching and incidental vocabulary learning have proved the vocabulary gains by the learners. Regarding the role of vocabulary instruction and incidental vocabulary learning, an approach including both can be a good start to improve the

lexical knowledge of foreign language learners. However, the scope of the studies on incidental vocabulary learning and foreign TV watching is wider as the issue of TV with captions and subtitles also commands serious attention in the field. The next section will briefly mention the TV watching behaviors in European countries and will mainly focus on the issue of captioned TV.

2.6 Language learning through viewing television with captions

The role of TV in incidental vocabulary learning brings the issue of TV watching behaviors in different countries and how foreign language learners can attain lexical knowledge through watching TV. However, there is no guarantee that every country has the same foreign TV watching behaviors to ensure vocabulary learning. According to a report by the European Commission (2011), huge disparities exist among non-English speaking countries in terms of their proficiency in English. For example, 80% of people in countries like the Netherlands, Denmark, and Sweden can communicate in English. Other counties like Austria, Germany, and France have a proportion below 60%. Similarly, there are huge disparities between the TV watching habits of countries in Europe, including Turkey. According to Almeida & Costa (2013), TV programs and movies are taken from foreign language countries in Europe and three techniques are used for translation: dubbing, subtitling and voice-overs. Dubbing is changing all or a large majority of the source language utterances on the original audio into the target language. Subtitling is another technique in which the original language is kept, and a written version of the utterances is provided to keep the audience aware of what the characters say. Lastly, voice-overs are the use of additional or substitute source language voices to provide a translation to what is being said (Kilborn, 1993).

Another study was conducted by the European Commission on the way European countries, including Turkey, perceive the language transfer issue both in cinema and television programs (European Commission, 2011). This study focuses on several issues, including the language transfer choice in media in 33 European countries and the relationship between foreign language proficiency and the choice of subtitling or dubbing. Although most countries, including Turkey, belong to the category of subtitling countries for cinema, dubbing is prevalently used for TV viewing in countries like Turkey, France, Italy, etc. In fact, according to the report,

> Dubbing is the dominant practice in 11 countries: Austria, Belgium (French-speaking), Czech Republic, France, Germany, Hungary, Italy, Slovakia, Spain, Switzerland, and Turkey. Voice-over is practiced in four countries: Bulgaria, Poland, Latvia, and Lithuania. It is practiced to a lesser extent in Estonia as well, where one-third of programs are broadcasted in voice-over and the remainder with subtitles. Subtitling is practiced in the remainder of the countries: Belgium (Flemish-speaking), Croatia, Cyprus, Denmark, Estonia, Finland, Greece, Iceland, Ireland, Netherlands, Norway, Portugal, Romania, Slovenia, Sweden and the United Kingdom. (European Commission, 2011, p. 8)

The use of captions in watching foreign TV is another method used besides subtitling and dubbing techniques. It will be discussed and explained in detail with a good number of studies conducted on the use of captioned TV. This section includes the definition of captions and captioning, the original purpose for the use of captioning from a historical perspective, and a detailed literature review of past and recent studies conducted in the field. Before the detailed definition of captioning, however, the difference between captioning and subtitling needs clarification. Subtitling is

used as the term that only refers to the L1 translation of the L2 audio in some cases (Pujadas & Munoz, 2019) and captioning is accepted as the same language on-screen text.

Before explaining the role of using captions in incidental vocabulary learning through comprehensive studies, it is necessary to define what caption and captioning mean. Captions were first developed in the early 1970s to help hearing-impaired people (Taylor, 2005). Chung (1999) described captions as transcriptions of a spoken text and as closed captions that were originally used to serve the deaf community (in Europe they were also known as Teletext subtitles). In sum, captions can be termed as either closed captions, same language subtitles, or Teletext subtitles. In second language research, Danan (2004) proposed several terms that can be used for captions: bimodal, same-language, unilingual, or intralingual subtitles. Since Garza (1991) described captions as a pedagogical aid for using authentic videos in foreign language classrooms, captions in the current study refer to the same language spoken text used under the videos to enhance vocabulary cognition.

The use of captioned TV provides comprehensible input to foreign language learners, which is need for L2 learning according to the Comprehensible Input Hypothesis (Krashen, 1985). Furthermore, Vanderplank (1994) states that learners become affectively engaged in the TV programs, and the use of captions relieves foreign language learners of the higher cognitive load of watching foreign TV. Considering TV as a verbal medium, Vanderplank (1994) has several axioms concerning captioned TV and language learning. Being a rich input, the use of captioned TV fosters language learning and enables learners to watch TV in a native-speaker-like way.

It was in the early 1980s that second language learning studies started to investigate the usefulness of captions (Taylor, 2005). Numerous studies have investigated the role of captions in L2 comprehension and L2 incidental vocabulary learning. Rodgers (2013) listed five main reasons for improving comprehension via the use of captions in TV watching. First, the use of captions can provide learners with the opportunity of reading, which can facilitate comprehension because listening can be more challenging than reading. Second, the use of visual imagery on TV for comprehension is not distracted by the use of captions, as Danan (2004) showed. Third, separating the input as a whole into meaningful chunks or units is facilitated by captions. Fourth, visualizing the TV input via captions is also useful to foster better comprehension. Fifth, captions on TV provide deeper processing of the input as learners try to understand better. The crucial role of captions on TV is also valid for incidental vocabulary learning because low proficiency learners find it difficult to perceive and process the word boundaries. Captions give the chance to see the unknown word forms on screen.

Almost thirty years have passed since Karen Price (1983) proved that the use of captions with the deaf community could also provide access to TV programs and films in foreign languages. By accessing foreign language multimedia, foreign language learners can benefit from original multimedia materials that are incomprehensible otherwise. An extensive study by Price (1983) included 500 participants from different backgrounds at Harvard. There were two experimental groups in the study, and participants were distributed into with and without captions conditions. Half of the participants watched once, and the other half watched twice. The data revealed that even the group who watched the videos once with captions

benefitted from the captions, and they were superior to the other group who watched without captions.

Following Price's (1983) study, foreign language teachers have tended to use captioned videos in their classes; however, students were not able to follow the videos even with the captions. As a result, teachers gave up using them in their classrooms (Vanderplank, 2010). However, the body of research in EFL and ESL continued, despite classroom practices, because Prices' study (1983) inspired researchers in the field. A good number of studies (e.g. Vanderplank, 1988; Markham, 1989; Garza, 1991; Koskinen & Neuman, 1992) also revealed supporting results for the use of captions, and the effects of caption were proved to be efficient in incidental vocabulary learning together with improving comprehension and listening skills. First, the effect of TV watching on vocabulary learning was investigated through corpus-studies (Webb & Roger, 2009a; Webb, 2011; Uchihara et al., 2019). These studies proved that incidental vocabulary learning was possible, and that it met certain criteria such as proficiency and vocabulary size. Some studies (Webb & Roger, 2009a; Webb, 2011; Uchihara et al., 2019) found that learners needed to know at least 3000 of the most frequent words to start watching foreign TV.

To summarize, foreign TV viewing can be an important source for foreign language development considering its effects on foreign language acquisition rates in European countries based on the reports of several studies (e.g. Micola et al., 2019; European Commission, 2011). Although Turkey is considered among the dubbing and subtitling countries, the reverse can be an effective way to expose learners to a foreign language, especially as TV watching hours in Turkey are quite high. A study by Aksaçlıoğlu & Yılmaz (2007) revealed that 222 Turkish primary school students

watch TV for at least one hour every day, and more than half of the participants watch 2-3 hours of TV on weekdays and weekends. The absence of dubbing and the use of either subtitling or captioning can make EFL learners become more familiar with English. Now that the role of watching captioned TV in incidental vocabulary acquisition can be proven via numerous research studies, the next section of this study will include past and recent studies conducted mainly on the issue of captioning, subtitling and incidental vocabulary learning.

2.7 Previous studies conducted on the issue of L2 vocabulary learning, captioning and subtitling

A considerable body of literature exists on the issue of vocabulary acquisition, comprehension and captioning. Many studies (Başaran & Köse, 2012; Birules-Muntane & Soto-Faraco, 2016; Etemadi, 2012; Gass et al., 2010; Perez et al., 2013; Chung & Huang, 1998; Markham et al., 2001; Hui, 2007) have investigated the effects of captioning on the comprehension of video. However, the methodologies used by these studies do not only use one variable for measuring the comprehension of the videos. Five of the studies (Birules-Muntane & Soto-Faraco, 2016; Etemadi, 2012; Gass et al., 2010; Perez et al., 2013; Hui, 2007) measure the effects of captioning on both video comprehension and vocabulary acquisition, while six of the studies (Sydorenko, 2010; Yüksel & Tanrıverdi, 2009; Lwo & Lin, 2012; Donche et al, 2015; Koskinen & Neunan, 1992; Taylor, 2005; Pujadas and Munoz, 2019) investigated the effects of captioning only on vocabulary acquisition. However, seven studies (Başaran & Köse, 2012; Birules-Muntane & Soto-Faraco, 2016; Donche et al, 2015; Lwo & Lin, 2012; Pujadas and Munoz, 2019; Munoz, 2017) measured and compared the effects of both captioning and subtitling on vocabulary

acquisition. Two of these studies (Munoz, 2017; Pujadas and Munoz, 2019) used different methodologies in comparison to the rest of the studies by including diverse variables. Appendix A presents a survey of the studies in the literature review in order to provide a summary and comparison of the studies. Brief descriptions of the studies can be found in Appendix A in detailed tables. Following are the detailed summaries of the studies on the issue of captioning and incidental vocabulary learning.

Initially, several studies have investigated the role of captioning in both video comprehension and vocabulary acquisition. Birules-Muntane & Soto-Faraco (2016) investigated the improvement in listening skill, vocabulary acquisition and comprehension following a one-hour-long video watching session in ESL classrooms. Each experimental group in the study included twenty participants, and they watched videos with English captions, Spanish subtitles, and no-subtitling situations. The results were measured based on listening and vocabulary pre-tests and post-tests, and a comprehension test was conducted as a post-test after the participants had watched the one-hour-long first episode of the British series *Downtown Abbey*. The results showed a significant improvement in the listening skills of the participants who watched the videos with English subtitles; however, the vocabulary tests did not show any significant difference between the pre-test and post-test results in any of the subtitling situations. Birules-Muntane & Soto-Faraco (2016) reported the vocabulary acquisition as being a modest improvement, only significant in the no-subtitles condition. Regarding the comprehension test, the Spanish viewers performed better than the participants in the other conditions.

Etemadi (2012) aimed to find the effects of bimodal subtitling (captions) on the content comprehension and vocabulary recognition of 44 undergraduate English

EFL learners in Iran. The participants were divided into two classes. Both classes watched two movies, *Dangerous knowledge* and *Where is my robot?,* both with and without subtitles in mixed orders. Two tests were developed by the researcher for each movie: one was a multiple-choice comprehension test, and the other was a multiple-choice vocabulary recognition test. A paired-sample t-test was run to determine the result of this study. Subtitles improved the comprehension of the participants as they scored better on the comprehension test. However, there was no significant difference between the subtitled movie and the movie without subtitles in terms of the vocabulary recognition test.

In line with the previous studies in the field, Gass, Sydorenko & Winke (2010) conducted a study on the effects of captioning videos used for foreign language listening activities (including vocabulary activities). The one hundred and fifty English participants were second- and fourth-year learners of Arabic, Chinese, Spanish and Russian. Besides investigating the effect of captioning on vocabulary acquisition, other preliminary concerns of the study were the ordering effects of captions and the relationship between individual differences and processing issues. Individual differences included the participants' proficiency levels and the target language participants were learning during the study. Three short English-language documentaries about animals were translated and dubbed into the four target languages for this study. Two vocabulary tests and one comprehension test were used, and an interview was conducted with the participants at the end of the study. The results of the study proved the efficacy of captioning on vocabulary gains since the t-test and two-way ANOVAs showed that captioning was more effective than no captioning.

One meta-analysis of 18 studies (Perez et al., 2013) was conducted to investigate the effects of captioning on listening comprehension and vocabulary acquisition. Moreover, two different relationships were also investigated as part of the analysis: (I) the relationship between the test type and captioning effect on vocabulary acquisition and listening comprehension; (II) the relationship between proficiency level and the effect of captioning on L2 listening comprehension and vocabulary acquisition. The results revealed that the overall effect size of captioning on listening comprehension was large ($g = 0.99$). Considering the effect of the test type on listening comprehension, the effect of the receptive tests was significant. Furthermore, immediate vocabulary posttests displayed a large effect size ($g = 0.87$). Considering the proficiency factor, the results with the beginner learners were not significant for listening comprehension studies. However, the effect size was large and significant for vocabulary learners for both beginning and intermediate learners. The results of this meta-analysis proved and supported the dual-coding theory, although it rejected the redundancy principle (Sweller, 2015).

A study by Hui (2007) investigated the effects of captioning on Chinese EFL learners via measuring comprehension and incidental vocabulary acquisition. 182 participants were divided into two groups: high proficiency and low proficiency. Each group was also sub-divided, with one of them watching a video clip with English captions and another with Chinese captions. The material was a 16-minute nature of science documentary from *National Geographic.* A pre-test and post-test design were used, and the results revealed that all groups benefitted from captions in terms of vocabulary acquisition. The English caption group was better at the mastery of word recognition, while-listening and word spelling, whereas the Chinese caption group showed enhanced word-meaning recognition.

In the examination of the effects of captioning on vocabulary acquisition, numerous studies have simply focused on vocabulary acquisition using different testing methods. Yuksel and Tanrıverdi (2009) investigated the effects of watching a closed-captioned movie clip on incidental vocabulary learning, using a 20-item vocabulary knowledge scale as a pre-test and post-test in an experimental design. The study aimed to compare caption and no-caption conditions in terms of vocabulary acquisition. 120 intermediate level university students in Turkey participated in the study. Although no significant difference in results was found between the caption and no-caption video conditions, a modest vocabulary acquisition was revealed. Thus, the results can be interpreted as the participants having developed their vocabulary knowledge regardless of the caption and no-caption conditions.

A study conducted by Lwo and Lin (2012), however, revealed contradictory results regarding the positive effects of captioning on vocabulary acquisition by L2 learners of English. The impact of different captions on L2 learning was tested by a quasi-experimental design with the participation of thirty-two eighth graders from a junior high school. Students were divided into two levels according to their proficiency levels: low proficiency and higher proficiency. A computer-assisted multimedia context was developed by the researchers, the narration was in English, and there were four different captioning conditions: (1) no captions, (2) English captions, (3) Chinese captions, (4) English and Chinese captions. Although the students of low proficiency improved more under the English captions and English/Chinese captions conditions, Lwo and Lin (2012) found that captions are less effective than animated images and voice-overs in L2 multimedia programs.

A study conducted by Koskinen and Neuman (1992) aimed to investigate the incidental vocabulary acquisition of minority students through captioned television. Together with the effects of captioning, the researchers also examined the relationship between the students' proficiency and their vocabulary learning level. The participants in this study were one hundred and twenty-nine bilingual students, ranging from seventh to eighth grade in a middle school in the U.S. Separate segments of a Children's Television Workshop science production, *3-2-1 Contact*, were used in the study, and they were clustered in a three week-long science lesson unit. Four experimental groups participated in the study, and the main focus was on a captioned TV group and a traditional TV group with no captions. The results of this study favored the captioned TV group as they achieved significantly higher scores than any comparison group on all word knowledge tests. However, Taylor (2005) revealed contradictory results when considering the positive effects of captioning on incidental vocabulary acquisition. 85 beginner students of Spanish participated in the study, and they were divided into two groups (caption and no-caption groups). Although there was no proficiency difference among the students, the length of time spent learning Spanish did differ. Free-recall and multiple-choice measures were used, and the t-test results revealed no significant difference between the caption and no caption groups. A significant difference was revealed, however, between the students with three years of study and students in their first years within the caption group on the free-recall test. Based on the results of the questionnaire used in the study, the researcher revealed that students in their first year of the study found the captions distracting or confusing. Overall, the study discussed the issue of proficiency as the use of captions might not be as efficient when considered with beginner learners.

Another study, conducted by Markham (1999), considered the issue of subtitled multimedia and vocabulary. The purpose of the study was to examine the effects of captioned videos on advanced ESL students' listening word recognition. Furthermore, the study investigated the effects of passage content and the backgrounds of the ESL students. This study was conducted with one hundred and eighteen advanced, university-level ESL students. The materials included two video excerpts from educational TV programs about whales and the civil rights movement lasting 12 and 13 minutes. The results of the study revealed the positive effects of captions on listening of word recognition. Participants watching the videos with captions scored higher on the subsequent listening-only multiple-choice tests.

The role of captioning on vocabulary acquisition and video comprehension has been investigated by many studies in the field. However, the role of subtitling and a comparison of subtitling to captioning has also been dealt with in some studies. In line with the purposes of research investigating the effects of extensive TV watching with subtitles, Koolstra and Beentjes (1999) conducted a study that covered the effects of watching subtitled TV in non-educational settings and the degree of word acquisition. The participants were fourth and sixth grade, Dutch students, learning English words. The study aimed to investigate incidental vocabulary acquisition, so the researchers hypothesized that Dutch students would learn English words from a television program with an English soundtrack and Dutch subtitles. The findings of this study supported the hypothesis, and the participants acquired new English words from the subtitled TV programs. In addition to subtitled TV programs, one group in the study also watched non-subtitled, English-spoken TV programs. Even though no translation was supplied, the children still learned English words.

Besides the studies investigating the effects of proficiency and instruction techniques, studies exploring the effects of intralingual and interlingual subtitles reveal the role of subtitling on vocabulary acquisition. Donche et al. (2015) aimed to find the effects of subtitled TV series on conversational speech, such as slang, phrasal verbs, and colloquial expressions. 49 second-year university students from multiple language backgrounds attended the study, and their proficiency ranged from A2 to C1. After they had watched the TV series *Friends*, participants took the post-tests and the results of the post-tests favored the use of intralingual subtitling.

Regarding the role of comprehension, some studies in the field have dealt with the issue of video comprehension and captioning. A study by Başaran & Köse (2012) investigated the effects of captioning on EFL learners' listening comprehension. The study aimed to measure the effects of English captions, Turkish captions, and no captioning situations on the listening comprehension skills of 30 Turkish 8th graders in primary school. Comparing the test results of three experimental conditions, the study yielded no significant results. However, Başaran & Köse (2012) state that the English language proficiency of the participants in the no captions condition was at the intermediate level, and the other groups had the same scores as the intermediate level students although they had a lower-intermediate level of language proficiency. A study by Markham et al. (2001) attempted to understand and compare the effects of Spanish-captions, English-captions, and no-captions on the comprehension of a DVD passage of material that had Spanish audio. 169 intermediate-level Spanish as a foreign language student participated in the study. After participants had watched a 7-minute DVD passage about the preparation of the Apollo 13 mission, two tasks were administered. One of the tasks was writing, and the other was a 10-item multiple-choice test. To be able to

answer the multiple-choice questions, participants needed to know the meaning of the vocabulary. The results of the one-way ANOVA revealed that the English-caption group scored the highest, followed by the Spanish-caption group. The least successful group was the no-caption group. This result proved the efficient role of captions in L2 learning.

One of the earlier studies conducted on the issue of captioning and overall listening comprehension including vocabulary learning was conducted by Huang & Eskey (2000). The researchers investigated the effects of closed-captioned TV on the listening comprehension of thirty intermediate level ESL students. Huang & Eskey (2000) believed that listening comprehension was mainly based on vocabulary/phrase level comprehension. Although the main independent variable was closed-captioned TV, other variables such as the starting age of ESL instruction, length of time in the USA, length of ESL instruction, length of time in private language schools, length of time with tutors and length of time traveling in English speaking countries were also inspected in order to predict possible correlations. Students were divided into two groups (a closed-captioned TV group and a traditional TV group), with each group watching 28 episodes of the TV series *Family Album* twice. The results of this study revealed a significant listening comprehension gain for the closed-captioned TV group compared to the traditional TV group.

Other than the effects of subtitling on vocabulary acquisition and listening comprehension, there are various research interests focused on subtitling in the field of second language acquisition. A study by Munoz (2017) aimed to investigate the role of age and proficiency in subtitle reading by using eye-tracking. Interlingual subtitling and intralingual subtitling, together with the age and the proficiency of the participants, were used as variables in the study to explore their roles in the reading

behavior of foreign language learners. 40 Spanish-Catalan learners of English participated in the study, and the age groups included children, adolescents, and adults. The participants watched two clips, which were extracts from different episodes of *The Simpsons*. The clips had audio in English, but the subtitles were either in Spanish or English. Calculating the participant's eye movements and fixation points, the researchers found that the children had more fixations on subtitles than adults and adolescents did. In terms of proficiency, beginners' fixation times on L1 subtitles were more than those for adults on L2 subtitles. The pedagogical implications of this study suggest that children and beginner learners of English have a limited vocabulary capacity and a slow reading pace. Therefore, L2 subtitles used for classroom materials need to be shortened and simplified.

The presence of studies that deal with several different factors on vocabulary learning with the use of multimedia materials offers a deeper understanding of vocabulary acquisition in the field. A study by Pujadas and Munoz (2019) explored the effects of extensive TV viewing on vocabulary acquisition, including other variables like the type of instruction (pre-teaching and non-pre-teaching), the language of the on-screen text (L1 or L2), and learners' language proficiency. The study was conducted with the participation of 106 secondary school learners in a state school in Spain, and 24 episodes of the TV series *Fresh off the Boat* were chosen as the multimedia material for the study. It was found that the vocabulary gains in aural recognition and meaning recognition tests were significant, regardless of the experimental conditions. Another finding revealed the positive effects of pre-teaching on vocabulary acquisition as the group that was pre-taught the words outperformed the rest of the students in vocabulary tests.

An investigation of input modality was undertaken by Sydorenko (2010) to reveal its effects on written and aural word forms, overall vocabulary gains, vocabulary learning strategies and attention to input. The scope of this study is wide in terms of understanding the effects of input modality. Input modality was defined as the use of captions, video, and audio. Based on input modality measures, 26 Russian EFL beginner participants were divided into three groups: a video, audio, and caption group (VAC), a video and audio group (VA), and a video and caption group (VC). The study was conducted in a laboratory, and participants watched the videos on individual computers. Three tests were developed by the researcher. One was a comprehension test, and the other two were translation and recognition tests that included vocabulary in written and aural forms. Participants needed to choose true or false for the comprehension test. However, the participants also decided on whether the words were the target words or not in terms of two vocabulary tests. A mixed-design ANOVA was conducted to see the effects of input modality and the tests. First, the results showed a significant interaction between the tests and input modality. The VAC group scored higher on the written test than the other groups, and the VA group scored higher on the aural test. However, there were no significant results for the vocabulary translation test. Overall, it can be deduced that captions improved the recognition of written word forms.

To sum up, this section has reviewed numerous studies previously or recently conducted that primarily focus on the issue of captioning and vocabulary acquisition. Besides the issue of captioning, several studies have investigated the role of comprehension and subtitling using similar methodologies. Involving several different factors affecting the efficacy of captioning, some studies in the field have also investigated learners' proficiency and age, the effects of instruction type, and

input modality. Considering the overall results of the studies included in this literature review, it is clear that there is no consensus considering the efficacy of captioning and subtitling on comprehension and vocabulary acquisition. Although Başaran & Köse (2012) found no significant effects of captioning on comprehension, the studies by Huang & Eskey (2001) and Markham et al. (2001) found positive effects of captioning on video comprehension. A few studies (Birules-Muntane & Soto-Faraco, 2016; Etemadi, 2012; Yüksel & Tanrıverdi, 2009) did not favor the use of captions for incidental vocabulary gains as the results of these studies were not significant. However, most studies (Koolstra& Beentjes, 1999; Donche et al, 2015; Gass et al., 2010; Hui, 2007; Koskinen & Neuman, 19992; Lwo & Lin, 2012; Markham, 1999; Perez et al., 2013; Taylor 2005) proved the efficacy of captioning on vocabulary gains as the results revealed that captioned groups were significantly different from no caption or subtitled groups in these studies. Furthermore, some studies changed and improved the research interests by adding different variables and measuring their effects on the efficacy of captioning. For example, Pujadas and Munoz (2019) found that the role of instruction is crucial as pre-teaching before watching captioned TV can increase vocabulary gains. Munoz (2017) revealed that beginner L2 learners fixated more on L1 subtitles, and Sydorenko (2010) proved the interaction between the input modality and test types.

2.8 Conclusion

The role of comprehension in second language learning has led to the development of various hypotheses that have focused on input. First, Krashen's (1983) input hypothesis emphasized the importance of exposure to comprehensible input for language acquisition. Although this hypothesis lacks an empirical basis to define

acquisition and ignores the role of grammar instruction, it still has a place in the field. The role of suitable and comprehensible input paved the way to defining the characteristics of L2 input, too. Therefore, suitable and authentic L2 input has become important for second language learning (Nunan, 2012). However, exposure to large quantities of comprehensible and authentic input is not always possible in a foreign language learning environment. Graded readers and coursebooks are generally used to expose L2 learners to L2 input. Learners generally only have access to the first 3000 most frequent word families through graded readers, and the lexis used in the course books is also limited. The possibility of having a rich lexis and mid-frequency or low-frequency words in an EFL setting is problematic. Using videos in EFL classrooms is not a recent method to teach grammar and lexis because developments in technology have helped teachers access videos easily in classrooms (Wang, 2012). The fact that videos enhance lexical and grammatical knowledge and expand comprehension led to the use of TV as a tool to teach vocabulary in a second language as TV watching started to replace reading habits among young learners and teenagers (Pujadas and Munoz, 2019).

Considering the characteristics of TV input, Rodgers (2013) has supportive ideas. First, the role of authentic and rich input provided by the TV cannot be underestimated, especially as Nunan (2012) describes authentic input as a crucial factor in second language acquisition. The input provided to learners should be meaning-focused and should meet some criteria to be accepted as meaning-focused. Rodgers (2013) supported the idea that TV input meets these criteria considering that extensive TV watching can provide familiarity, and also because learners are motivated to watch TV for fun. The main purpose for watching TV is to comprehend the input, and visuals, characters, and plots. Therefore, incidental language learning,

especially at lexical level, might occur while watching TV in L2. However, the issue of how learners process videos is still unexplored (Wang, 2012). Cognitive learning theories such as multimedia learning theory and dual-coding theory have supportive claims to consider videos as a source to learn vocabulary in L2.

First, it is necessary to clarify how learners can gain vocabulary from just watching TV. The cognitive theory of multimedia learning and dual-coding theory support the underlying cognitive process of the human mind when watching TV. Dual-coding theory (Paivio, 1986, 2006) supports the existence of dual channels, verbal and non-verbal, when processing the stimuli. The existence and use of two channels while processing the stimuli results in better understanding and retention. Supported by the dual-coding theory, the cognitive theory of multimedia learning (Mayer, 1999, 2001, 2005) underlines the similarity between the nature of multimedia and the human mind's processing of information. Integrating visual and verbal input, learners can learn from multimedia material. TV watching might be accepted as a means of multimedia learning as videos are accepted as multimedia materials. However, the use of multimedia might be problematic considering the limited nature of working memory (Moreno & Mayer, 1999). The cognitive load theory claims that creating a load on memory might have unexpected effects on the learning process. Wang (2012) also stated that a load on the working memory might cause the loss or forgetting of the information, and so memory enhancement is also necessary.

In light of the contradictory claims of cognitive theories for teaching and learning L2 vocabulary, classroom instruction might play a role to enhance working memory and reduce the load of unknown words in the videos. The vocabulary research in the field has suggested no best method for learning vocabulary. As the

current study investigates both instructed vocabulary learning via pre-teaching and incidental vocabulary learning, the studies on instructed vocabulary learning and incidental vocabulary learning have been explained. Constructing links between form and meaning leads to vocabulary learning (Schmidt, 2008). Focus on form and focus on forms as vocabulary teaching techniques can contribute to vocabulary learning when used in instructed vocabulary teaching (Laufer, 2005). The default hypothesis is used in L1 claims that learners need to be exposed to the input incidentally. The incidental learning of vocabulary is possible via reading for L2 learners. The need for vocabulary instruction in the field has been one of the issues which needs further research (Laufer, 2005). However, studies in the field (Hill & Laufer, 2003; Laufer, 2003; Laufer, 2006; Sheen, 2005; Shintani, 2013) have proved the efficacy of instruction and FonF and FonFs techniques on L2 vocabulary learning. The results of the studies reveal that simply reading a text in L2 does not help with recalling L2 vocabulary.

However, Gallego & Llach (2009) has also revealed that the efficacy of long instruction hours in the acquisition of a large amount of vocabulary is not possible through instruction alone. Learners need to be exposed to lexical input outside of the classroom, so extensive TV watching is found to be beneficial for acquiring new words in a foreign language. Vanderplank (2010) supports extensive TV watching and the fact that foreign language learners can gain new vocabulary through doing it. What is more important is that TV watching is a leisure-time activity and that learners can easily be motivated to watch TV. Corpus studies on extensive and short TV watching (Rodger & Webb, 2009a; Rodger & Webb, 2011; Webb, 2008; Webb, 2011) have proved substantial vocabulary gain.

Even though vocabulary acquisition is possible through watching TV as a leisure-time activity, it can be challenging for low proficiency learners of English. Apart from instructing learners in the vocabulary before watching TV episodes, adding captions might be another solution to decrease the load of unknown L2 words for low proficiency learners. Vanderplank (2010) accepts the crucial role of adding captions under videos while watching. Previous studies in the field (e.g., Koolstra & Beentjes 1999; Koskinen & Neuman, 1992; Markham, 1999) have shown the efficacy of adding captions under videos for EFL learners. Recent studies have also investigated the effects of captioning on vocabulary gains, comprehension and listening skills. Studies by Başaran & Köse (2012), Birules et al. (2016), Gass et al. (2010) have revealed the effects of adding onscreen captions by measuring vocabulary gains. Adding captions under L2 videos proved to play an efficient role in foreign language vocabulary acquisition.

In light of the study by Munoz (2019), this study aims to investigate the effects of captioned foreign TV watching and pre-teaching on vocabulary learning of EFL students in Turkey. Previous studies in the field have supporting results for using captions with L2 videos for learning L2 vocabulary. The dual-coding theory and multimedia learning theories also provide supporting premises for the use of videos in the L2 learning process. However, the cognitive load theory has contradictory claims considering the limited capacity of the working memory. Therefore, in the present study, classroom instruction considering the effectiveness of the techniques of focus on form and focus on forms was also used to decrease the load of working memory.

CHAPTER 3

METHODOLOGY

3.1 Introduction

The chapter opens with the presentation of the research design and the research questions. It then gives information about the research context and participants of the study. The chapter then continues with the description of the pilot study conducted to assess the main study in terms of reliability and validity. After that, a detailed description of the audiovisual material and test instruments will be given. Finally, data collection and data analysis sections will be set out after the explanation of data scoring.

3.2 Research Questions

The aim of the study is to investigate the effects on L2 vocabulary learning of viewing English videos taken from English TV series with and without captions (intra-language subtitling) together with the effects of form-teaching (pre-teaching) of target words before the video intervention. In addition to the quasi-experimental design of the study, the survey conducted with the same participant groups examines background English TV watching behaviors in relation to the use of English and Turkish subtitles outside the classroom. The role of captioning (L2 subtitles) and subtitling (L1 subtitles) is investigated to understand how the participants deal with the burden of watching L2 TV and movies. In line with the aims of the study, the following research questions are advanced:

1. What is the role of watching captioned and non-captioned L2 videos of English TV series in learning (i.e. recognizing, recalling meaning and recalling form) new L2 vocabulary?

2. Do young learners benefit from pre-teaching vocabulary activities in learning from captioned L2 videos from English TV series in EFL classrooms?

3. What are the English TV watching behaviors of the young EFL learners in relation to their use of L1 and L2 subtitles?

To answer the first two research questions, all pre- and posttests were scored, and relative vocabulary gains together with raw gains were calculated based on the formula used by Horst, Cobb, and Meara (1988). Furthermore, delayed posttests were conducted after three weeks, and relative vocabulary gains and raw vocabulary gains were calculated based on the scores of pre-tests and delayed posttests using the same formula from Horst, Cobb, and Meara (1988). To answer the third research question, English TV watching behavior is operationalized as the frequency of watching English TV outside the classroom with L1/L2 subtitles or without subtitles. This question was answered by conducting an English exposure survey (Munoz et al., n.d). The survey data were analyzed based on the frequency scales in the survey. Each item in the survey has five different frequency scales running from “never” to “always” with changing frequencies. Each frequency scale was given an ordinal number to analyze the survey data.

The core of this study is informed by two theoretical premises. First, Mayer’s (2009) Multimedia Learning Theory assumes that the simultaneous use of audio and visual channels contributes to the learning of new words better than the use of only one channel at a time. In addition, frameworks like the Dual Coding Principle (Paivio, 1985) and the Theory of Cognitive Load (Sweller, 2005) support the

principles of Multimedia Learning Theory. Secondly, form focused instruction as a technique contributes to the theoretical background of this study as its interest rests on how the attention of learners can be drawn to the target forms (Long & Robinson, 1988).

The cognitive theory of multimedia learning (Mayer, 2001) and dual coding theory (1986) support that idea that learning can be facilitated by the effective use of visual and verbal input since the processing of information in the human mind resembles the presentation of multimedia.

Therefore, the following hypotheses were posited:

- The participants in three experimental groups who watched the English cartoon *"Doki"* would have higher scores than the control group.
- Based on the study conducted by Pujadas and Munoz (2019), it was also hypothesized that the focused group would have the highest scores of all three research groups.
- Considering the results of the pioneering study by Price (1983) and a good number of studies (Vanderplank, 1988; Markham, 1989; Garza, 1991; Koskinen & Neuman, 1992) conducted on the efficacy of captions, it was also hypothesized that the caption group would have better scores than the no-caption group.

3.3 Procedure

In order to investigate the effects on vocabulary acquisition of English videos taken from TV series with and without captioning together with pre-teaching, the present study used quantitative data collection methods. Whole classes were chosen for the

study considering the availability and feasibility of the study. Each group was randomly assigned to the experimental and control conditions. The study has a quasi-experimental research design with three experimental groups and one control group. The independent variables are the video intervention with captions, video intervention without captions and video intervention and captioning with pre-teaching (form-focused activities before the video intervention). The dependent variable is the participants' scores in recall and recognition tests that measured the target vocabulary knowledge of participants. Participants in all three experimental groups watched five episodes of an English language cartoon, *Doki*, which is streamed in Canada. The first experimental group, caption focus group (CF), was taught four target words and three distracting words, and then watched each episode with English subtitles and English audio. Similar words to the target words in terms of their form and family were chosen so as to prevent participants understanding the aim of the pre-viewing activities and paying unintended attention to forms. These words were named as distracting words or distractors. The caption focus group had the same format of intervention, with five successive episodes of the cartoon videos during two weeks of intervention. The second experimental group, caption group (C), watched the videos with English subtitles and English audio. The caption group watched five successive episodes of the cartoon videos with English subtitles during two weeks of intervention. The third experimental group, the no caption group (NC), watched the five successive episodes of the cartoon videos with English audio but without subtitles in English over a two week period. The control group did not have any intervention: they followed their regular course material at the time of data collection. The study was conducted with those students who participated in the extra courses given at the weekend. The intervention took two weeks with four class

periods. The pre-teaching activities included power-point slides, picture-word matching activities, and different types of puzzles. Each pre-teaching session took approximately 12 minutes, followed by a video-watching session. Overall, the acquisition of the target vocabulary by each experimental group was measured.

In order to explore the learners' English exposure outside the classroom in an EFL context, a comprehensive survey was conducted after the data collection process and the delayed posttests. The survey investigated the students' English TV and movie watching habits in order to have more background information about the participants. Moreover, one of the items in the survey investigated how often the EFL learners read books, magazines, and comic strips in English outside the classroom. A specific part of the same survey was also used for the study in order to investigate the strategies used by the participants while watching L2 TV and movies.

3.4 Research Context and Participants

This study was conducted in a state school located in an area of low socio-economic status. Consequently, the learners' access to foreign language learning materials was limited to the school environment. However, all participants had access to the internet, smartphones and tablets via the facilities provided by the school (smartboards), and some students had their own smartphones, tablets and computers at home. A majority of the participants had access to the internet via their parents' smartphones. The participants were used to use online education websites like EBA and Dyned as a source of foreign language materials. Other than the online foreign language materials, 70% of the participants reported that they never read English books, magazines or newspapers outside the classroom.

The researcher has been working in the school for two years as an English teacher, teaching English to 6th and 8th graders. The participants of this study were chosen from the extra English lessons which were free for students. These extra English lessons were given to each 6th grade class for two hours per week. This extra-curricular course system is called “Supplementary Courses”, and it has its own regulations decided on by the Turkish Ministry of Education. The courses start in October and last till the end of each education year. Four classes were recruited to the English classes the researcher gave, all of them were the same classes the researcher regularly taught on weekdays. Each class had two hours of English per week at the weekend. As each of four classes was randomly assigned to a research group, all of the groups (excluding the control group) joined the intervention process. The video-intervention and pre-teaching lasted for two weeks. 12 hours of video intervention and pre-teaching were done during the two week period. The intervention took six class hours each week. Learners followed their regular weekend course curriculum before and after the intervention.

A total of 75 middle-school students in Grade 6 (34 females and 41 males), divided into four whole classes participated in the study. The age of the participants ranged from 10 to 12, and a language background questionnaire (Appendix B) was given to the participants before the intervention and the pre-tests in order to learn more about their language backgrounds. The questionnaire was filled in by the participants with the help of instructions from the researcher as the age of participants was not sufficient to understand the items in the questionnaire. Each section in the questionnaire was exemplified and explained in detail to clarify the concepts like mother tongue, second language and foreign language.

The participants' language background showed the following. 23 of the participants are Kurdish, 20 of whom are exposed to Kurdish at home. 3 of the participants are Arabic, and they are exposed to Arabic at home. One of the participants is exposed to the Laz language at home, and one student is multilingual using the Laz language, Kurdish, and Turkish at home. Students who are exposed to Kurdish, the Laz language and Arabic at home are all bilinguals as they also speak Turkish in their daily lives.

All of the participants started learning English as a second language at the age of 8 in the 2nd grade. They had 2 hours of English per week at Grade 2 and 4, but 3 hours per week in the 5th grade. As they were in the 6th grade at the time of the study, they were also taking 3 hours of English lessons on weekdays and 2 hours of English on Saturdays, in total 5 hours per week.

In order to measure the English proficiency of the participants, a Quick Oxford Placement Test was administered before the intervention started in November. The total number of students who took the Quick Oxford Proficiency Test was seventy-one, and their results showed that all of the participants were at the A1 proficiency level before the intervention started, meaning they were all at beginner proficiency level. Based on the guidelines of the test, the scoring was done considering the number of correct answers provided by each student. Students who scored below 18 were considered as A1 as suggested in the evaluation criteria provided by the exam format. Following the Quick Oxford Placement Test, the Picture Vocabulary Test (PVST) by Anthony and Nation (2017) was given to the participants after a week. Seventy-four students took the test, and the mean score was 1,976 words out of 6000 words.

The number of participants changed during the intervention process as sixteen students dropped out during the intervention. Although more students participated in the OPT (n = 71) and PVST (n = 74), only the participants who had 100% attendance and who took all pre/posttests and delayed posttests were included in the analysis. Table 2 shows the final number of participants, the number of exclusions shows the participants who did not have 100% attendance. Furthermore, two more participants were excluded from the delayed posttest analysis as they did not take the delayed posttests. Therefore, the final number of participants dropped to fifty-seven.

Table 2. Participants Excluded from the Analysis

Group name	Starting Size	Number of Exclusions	Final Number of Participants for the Posttests	Exclusions	Final Number of Participants
Control	16	1	15	1	14
Caption	20	4	16	0	16
No caption	19	4	15	1	14
Caption Focus	20	6	14	0	14
Total	75	16	59	2	57

The participants were not randomly distributed to four different classes; instead four existing classes were used for the study as randomization is not possible in a classroom setting. However, assigning these classes into experimental groups and the control group was done randomly. The experimental conditions included captions and focused instruction (CF), captions with non-focused instruction (C), no-captions (NC), and there was one control group for the study. A pilot study with the same pretest and posttest design was conducted with the participation of 69 Grade 5 students in three different classes.

3.5 The Pilot Study

A pilot study was conducted to investigate whether or not all instruments and materials that would be used in the study were functioning. The pilot study was conducted in the same state school with 5th graders. Three classes (two girls' classes and one boys' class) of 5th graders participated in the pilot study as male and female students in the 5th grade were distributed to different classes in the school. The classes were being taught by another English teacher at the time of piloting. However, the intervention including all tests and materials were implemented by the researcher following the procedure of the main study, while the other English teacher helped with the classroom management. The piloting lasted for three weeks in September (2019), the students took their pre-tests in the first week of September, and the following week the intervention was done. One of the female classes (n = 25) took pre-teaching before watching each episode of the cartoon with subtitles. The pre-teaching included power-point slides with pictures and the written forms of the target vocabulary (4 target words and 4 distractors). After the words were taught using the power-point slides, the students did two other activities. The first one was a picture and word matching, and the other one was different types of puzzles (word search, unscramble the words). No translation was used while words were taught as the aim was to make students pay attention to form. In total, 25 students in the female class watched five successive episodes of the cartoon *Doki,* and before each episode, pre-teaching together with the following two activities were done to teach 4 target items and 4 distractors in each episode. The other female class (n = 20) watched the successive five episodes of the same cartoon with captions. This class was not pre-taught the target items and distractors before watching each episode. The male class (n = 24) watched the same cartoon videos without captions. They were

not pre-taught the target items and distractors before watching each episode, either. Following the one-week long intervention process, the students took the posttest in the third week of September.

The results of the piloting were informative, and changes were made to the pre-tests and posttests after the piloting study. First, two pre-tests were developed by the researcher following the earlier study by Pujadas and Munoz (2019). One of the pre-tests was meaning recall and the other was aural recall test. A third test was added to measure the meaning recognition, too. However, the aural recognition test was not administered as the researcher considered it difficult to find distractors (minimal pairs of each target word). Furthermore, the aural recall test also included aural recognition of the target words as participants were required to listen to the target words and recognize the words. After recognition, they were expected to write the spelling of the words correctly. A detailed description of the test instruments can be found in the "materials" section of this thesis. In summary, the input in the cartoon videos and the tests were found to be suitable for the participants. The main alteration after the pilot study was to the aural recall test. Students heard each word once with thirty-second-long pauses after each word. The audio was recorded again with the help of a native speaker, and each target word was repeated twice followed by a thirty-second-long pause as students were observed to have difficulty in picking up on the words in the audio.

Another important change was necessary after noticing that students could not understand the format of the aural recall test. Some students did not write the words they heard, and instead they wrote the numbers on the paper. All instructions were written in Turkish, and students were instructed about the format of the test before implementing the pre-tests to the main study participants.

3.6 Pre-viewing Intervention

One of the experimental groups was randomly assigned to the focused group that was taught the target items before watching each episode. The purpose of the pre-viewing activities (Appendix C) was to make the participants focus their attention on the target words. No specific teaching technique was used; however, the main purpose of the activities was to make the participants in the focused group focus on form. Four target words together with three distractors (Table 3) were used for the pre-viewing activities so as to avoid the risk of learners' noticing the purpose of pre-teaching activities and paying undesired attention to the target items.

While choosing the distractors, the same criteria used for choosing the target items were met. Distractors belonged to the same word families as the target items, compounds were also chosen as distractors. Content words were chosen, and no prepositions or abstract words were used as distractors.

With regard to pre-viewing activities, a power-point presentation of words with visuals and orthographic transcription of each word was used first. The researcher used a 'repeat after me' technique to teach the words. After the presentation, matching activities (Figure 1), word-search puzzles, and unscrambling activities (Figure 2) were done by the participants. The participants in the focused group did one matching activity and one puzzle (either a word search or unscramble) after each presentation before watching the intervention videos.

The same category of activities was used in the study by Pujadas and Munoz (2019) to draw learners' attention to the target words before viewing. No specific strategy was suggested to teach the target items before viewing; however, attention to form was the main purpose. It took 10 to 15 minutes to do the activities, and the

activities were done by the whole class after all participants had finished their pre-viewing tasks.

Table 3. The List of Distractors

Distractor	Episodes	Bnc/Coca Frequency	Syllable Number	Word Type
Island	Ep 1	2k	2	N
Army	Ep1	2k	2	N
Landslide	Ep 1	?	2	N
Sail	Ep 2	2k	1	V
Nature	Ep 2	1k	2	N
Drumstick	Ep 2	?	2	N
Horizon	Ep 3	5k	3	N
Lucky	Ep 3	1k	2	Adj.
Lake	Ep 3	3k	1	N
Chairman	Ep 4	?	2	N
Lend	Ep 4	2k	1	V
Climate	Ep 4	3k	2	N
Push	Ep 5	1k	1	V
Smell	Ep 5	2k	1	V
Crockery	Ep 5	7k	3	N



1…….

Figure 1. Item 1 from episode 2 matching activity

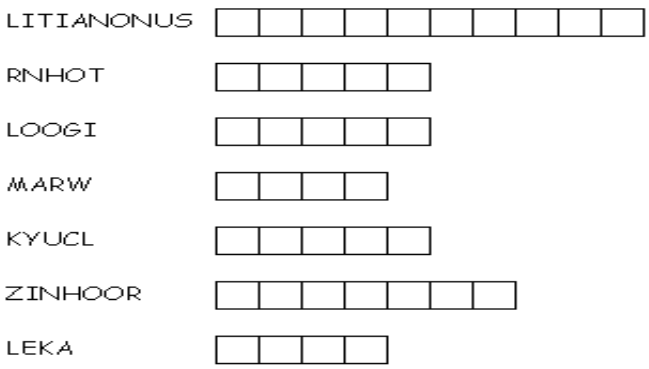


Figure 2. Unscramble puzzle activity from episode 3

3.7 The Audiovisual Material and The Test Instruments

The cartoon series selected for the intervention was *Doki,* a Canadian animated children's television series for the Discovery Kids channel that is aired in various countries. There are several reasons for choosing cartoon *Doki.* First, the language was not strongly accented. As a classroom teacher and a researcher, the researcher chose this series since the grammatical structures and vocabulary used together with the intelligibility of the language were considered as criteria. As this study aimed to find the effects of watching original audiovisual materials outside the classroom, the language was not simplified. The most appropriate cartoon was selected by considering the language proficiency level of the participants. Another criterion was minimizing the chance that participants might have watched this TV series before. As this series was not aired in any of the local channels in Turkey, it was chosen.

Furthermore, the length of video was appropriate as each episode lasted approximately eleven minutes. Another reason for selecting this cartoon series was that the content is appropriate for the age group of this study. The cartoon is about the adventures of a dog and his five friends traveling to different and famous places

all around the world. All of the characters are members of a Worldwide Expedition Club, and the content was also educative for this age group, thus making this TV series pedagogically suitable for use in a classroom. To exemplify, in the second episode the characters travel to London from China to fix Big Ben because they think it is broken. However, they realized that it is not broken, the problem being the international time differences between the east and the west. In addition, *Doki is* a serial, which helped the students to understand the content and the characters better.

The first five consecutive episodes in season 1 were selected, meaning a total of 52 minutes and 65 seconds of audiovisual input (Appendix D) was watched by the participants in each experimental group. The language input was analyzed by using RANGE software (Nation and Heatley, 2002).

Table 4 shows the analysis of the scripts of five sequential episodes of *Doki* streamed on TV in the first season. Using an online RANGE software developed by Cobb (2015), the scripts were analyzed to reveal the vocabulary profile for type, token, and family profile for each K-level in a total of five episodes using the British national corpus and contemporary corpus of American English (BNC/Coca) 1-25k. Certain criteria were applied when processing the script for the output text:

- punctuation was eliminated,
- all figures (1, 20, etc.) were replaced by the word *number*,
- contractions were replaced by constituent words (*won't => will not*),
- the type-token ratio was calculated using these modified constituents,
- in the 1k sub-analysis content + function words might sum to less than total (depending on user treatment of proper nouns as well as program decision to class numbers as 1k although not contained in 1k list)

  single letters were eliminated as words except for "a", "I", and "an".

In addition, compounds were parsed by the processor and counted as separate nouns in order not to process them as off-list words. There were 32 compounds (e.g. midnight, sandcastle, sidewalk etc.) in total, and they were counted as 64 tokens in the analysis. Proper nouns and marginals words were considered as off-list words by the processor, and so they were not included in the analysis. There were 21 proper nouns (e.g. Anna, Otto, Chimborazo etc.) and 9 marginal words (e.g. ahh, mmm, huh, ha etc.). Excluding the proper nouns and marginal words, the total number of tokens equals to 5048, whereas the number of types is 1021 together with 712-word families. K-1000 level words constitute 87.5% token coverage, which means that a vocabulary size of 1000 word families leads to understanding 87% coverage for five episodes. To reach a coverage level of 95%, learners need to know up to 11k words. Although the words reached up to 21k word family, there were no words in the episodes belonging to 16k, 18k,19k or 20k word families. Therefore, the audiovisual material was found to be suitable for the proficiency and vocabulary size level of the participants. Knowing the most frequent 1000 word families was predicted to lead to understanding 87% coverage for five episodes for the participants. The participants' vocabulary size was above 2000 based on the results of the PVST.

3.7.1 The Selection of Target Items

Target vocabulary items (Table 5) were chosen based on the criteria used by Pujadas and Munoz (2019) to test vocabulary learning. A total of 120 target words was chosen for their study, and 5 target words for each episode were selected. These target words were chosen based on some basic criteria: frequency of occurrence (between 2 and 14 times within the episode) and low possibility of being known by participants (the schoolteachers gave advice when selecting the target items.)

Table 4. Vocabulary Profile for Type, Token and Family Coverage at Each K-Level in 5 Episodes Using BNC/Coca

Freq. Level	Families (%)	Types (%)	Tokens (%)	Cumul. token (%)
K-1:	489 (68.7)	681 (66.70)	4416 (87.5)	87.5
K-2:	93 (13.1)	103 (10.09)	176 (3.5)	91.0
K-3:	29 (4.1)	32 (3.13)	44 (0.9)	91.9
K-4:	29 (4.1)	31 (3.04)	58 (1.1)	93.0
K-5:	18 (2.5)	20 (1.96)	26 (0.5)	93.5
K-6:	17 (2.4)	19 (1.86)	30 (0.6)	94.1
K-7:	6 (0.8)	6 (0.59)	8 (0.2)	94.3
K-8:	8 (1.1)	9 (0.88)	13 (0.3)	94.6
K-9:	4 (0.6)	4 (0.39)	12 (0.2)	94.8
K-10:	4 (0.6)	4 (0.39)	7 (0.1)	94.9
K-11:	3 (0.4)	3 (0.29)	3 (0.1)	95.0
K-12:	4 (0.6)	4 (0.39)	8 (0.2)	95.2
K-13:	1 (0.1)	1 (0.10)	2 (0.0)	
K-14:	2 (0.3)	2 (0.20)	6 (0.1)	95.3
K-15:	3 (0.4)	3 (0.29)	3 (0.1)	95.4
K-17:	1 (0.1)	1 (0.10)	3 (0.1)	95.5
K-21:	1 (0.1)	1 (0.10)	1 (0.0)	
Off-List:	??	80 (7.84)	200 (3.96)	99.46
Total (unrounded)	712+?	1021 (100)	5048(100)	≈100.00

The same procedure was adopted and followed in this study, adding more criteria for the selection of target items (TIs). First, the subtitles of all episodes were analyzed by the researcher as the researcher was also the participants' English teacher. The words that the researcher thought the students would know were eliminated based on her

decision and the coursebook used in grade 5. The words that were used and taught in Grade 5 were not used as TIs. Second, the words that were only uttered once were also removed, and only the ones used twice within the same episode were retained. No word groups were used, and only single and unit words were used, including the compound nouns. Third, transparency was used as a criterion, so concrete words were used as much as possible. Phrasal words and quantifiers were also removed together with cognates. However, one cognate, "igloo", was kept since it was a keyword in the 5th episode and the likelihood of the word "igloo" being known by the students was low. After meeting the criteria above, 85 words remained. Only 20 words (4 each episode) were to be selected because the duration of each episode was approximately 11 minutes.

The most frequently used words in the episodes were chosen within both the main episode and all episodes. TIs were from the first to the fourteenth frequency word lists on the BNC/COCA (Nation, 2012). 65% of the words belonged to the 1-3 K word families, 10% to the 4-8 K word families, another 10% to the 12-14 K word families and 15% were off-list (they were compounds).

The TIs also belonged to different parts of speech. The majority of the words which were 70 % belonged to the category of nouns; 20 % were verbs, 10 % were adjectives. The detailed Table 5 below shows the frequency counts of the TIs. The frequency of the target items throughout the intervention process changed between 3 to 14.

Table 5. Target Items (TIs)

Target Items	Episode	Frequency	Total Frequency	Bnc/Coca Freq.	Syllable Num.	Word Type
sand	EP 1	11	11	2k	1	N
wheel	EP 1	4	4	1K	1	N
shade	EP 1	5	5	2k	1	N
sandcastle	EP 1	6	6	?	3	N
expedition	EP1,2,4	3	7	4k	4	N
midnight	EP2	6	6	?	2	N
line	EP2,4	3	4	1k	1	N
fix	EP1,2,4	2	5	1k	1	V
insulation	EP3	6	6	4k	4	N
north	EP3	3	3	1K	1	N
igloo	EP3	5	5	14k	2	N
warm	EP3,4	13	14	1k	1	ADJ.
fry	EP4	6	6	2k	1	V
earth	EP2,4	7	8	1k	1	N
experiment	EP4	4	4	3k	4	N
sidewalk	EP4	3	3	?	3	N
ancient	EP5	4	4	3k	2	ADJ.
win	EP5	13	13	1k	1	V
throw	EP5	5	5	1k	1	V
javelin	EP5	3	3	12k	3	N

3.7.2 Test Instruments

3.7.2.1 The Oxford Placement Test (OPT)

Before the intervention started, the Oxford Quick Placement Test (OPT) was given to a total of seventy-one participants to measure their proficiency level. The test is in two parts and includes sixty separate items. The students took the first forty-item placement pen and paper test in their classroom. Each group of students (three experimental groups and one control group) took the test in separate classes on the same day. Forty minutes were given to the participants to complete the test. The

number of correct items was calculated to evaluate the proficiency level of the students. Students who scored below 18 were evaluated as being at the A1 proficiency level based on the exam guidelines.

3.7.2.2 The Picture Vocabulary Test (PVST)

The participants' vocabulary size was measured using the Picture Vocabulary Test (Anthony & Nation, 2017). The Picture Vocabulary Test (PVST) normally runs on Mac and Windows, and it is an online test aimed at measuring the receptive vocabulary size of native speaker children up to age 8 and young non-native speakers of English. It is a formative test that diagnoses the vocabulary size to decide the readiness of the test takers for reading and content-based oral tasks. However, the test is based on the most frequent 6000-word families, and each word in the test represents the most frequent 62.5 words. Therefore, it can also be used with the young non-native speakers of English to measure their vocabulary size.

There are 96 words in each test, and it can run on any computer. After logging in with personal information, the test takers hear a sentence and choose the closest picture out of four pictures that best describe the sentence. The transcription of the audio can be added on the screen by changing the codes of the program (Anthony & Nation, 2017).

When administrating the PVST, a pen and paper format was used as the program did not run properly on the computers in the school lab. Since time limitation was not a necessity, a paper test consisting of pictures in each question with five options was prepared. The test itself was run on the smartboard in the classroom, participants listened to the audio twice, and the transcription of the audio was added on-screen. As participants listened and saw the sentence on the screen, they selected the answer

on their exam paper. Before moving to the next question, all participants were asked if they were ready for the next question to ensure that no student was left behind.

3.7.2.3 Pre/Posttests

Other than the questionnaire, three tests were developed by the researcher to measure vocabulary recognition and recall. Based on the tests developed by Pujadas and Munoz (2019), the researchers developed one pre- and posttest including two parts: (1) an aural form recognition and written form recall test; and (2) a meaning recall test. To check the reliability of these three tests, test-retest reliability measurement was used. 30 sixth grade students took the same tests at two different time intervals. The time interval between the two sessions was fifteen days. The form recall test (20 items; $r = 82$) was found to be reliable, as was the meaning recall test (20 items; $r = .80$). The meaning recognition test (20 items; $r = .72$) was also reliable.

3.7.2.4 Form Recall Test

The test (Appendix E) was developed by the researcher as it was specially designed for the study based on the form recall test developed by Pujadas and Munoz (2019). The test was considered a form recall test as participants recalled the spelling of the target words (form) from the videos they watched during the intervention while the words were read out by the audio. The test included 20 target items with 4 items from each of the five successive episodes of the cartoon. The participants wrote down the target words, which were pronounced by a native speaker instructor, and they heard each word in the audio twice. There were thirty-second-long pauses between each target word. Participants were required to spell each target word correctly to be considered right.

3.7.2.5 Meaning Recall Test

A meaning recall test (Appendix F) was administered following the form recall test. Table 6 shows the first three items in the meaning recall test. The test was also developed following the format of the meaning recall test in the study by Pujadas and Munoz (2019). The test was considered a meaning recall test as meaning recall was operationalized by explaining the meaning of the target (underlined) English words in Turkish or translating or explaining them in Turkish, without being given multiple options to choose from.

The test included the same 20 target items with 4 items from each of the five successive episodes of the cartoon, and participants provided Turkish translation or explanations for the English words. The order of each item was different from the form recall test. The instructions were given in Turkish, and they were also written on the test papers.

Table 6. Items from the Meaning Recall Test

	Item	Translation
1	Sand	……..
2	Expedition	……
3	Insulation	……

3.7.2.6 Meaning Recognition Test

The final test was a meaning recognition test (Appendix G), for which a multiple-choice test was developed. The fist item in the test is shown in Table 7. The test included the same 20 target items with 4 items from each of the five successive episodes of the cartoon. Meaning recognition was operationalized by recognizing the meaning of English target words from five Turkish words as options. Thus, the

participants chose the correct Turkish meaning of each English word out of five distractors. The distractors were in Turkish, and several criteria were considered in the writing process of these distractors. The criteria for developing, analyzing, and using distractors were summarized by Gierl et al. (2017) based on the research in the field of education studies. Based on Gierl et al.'s (2017) study, several strategies were adopted when developing distractors. First, plausible but incorrect distractors were chosen, and concept and structural similarity were also included. There were also two main strategies used when developing the distractors. The length of the distractors was, as much as possible, kept equal, and negative distractors and cognates were avoided. The distractors were also checked by two other English instructors, and necessary corrections were made afterward.

Table 7. Item 1 from the Meaning Recognition Test

1	Sand
A	Vaha
B	Çöl
C	Göl
D	Kum
E	Kaya

3.7.2.7 English Exposure Questionnaire

After the intervention was completed, an Out-of-school Exposure Questionnaire (Munoz et al., n.d) was administered in order to gather information about the students' behaviors on watching English TV and movies with inter-language and intra-language subtitles outside the classroom. The questionnaire (Appendix H) was developed by a group of researchers called the GRAL research group. It is available online on the GRAL website. The translation of the questionnaire from English to Turkish was completed by the researcher as the participants' proficiency level was

insufficient to understand the questionnaire. The questionnaire's main aim is to seek the role of exposure to English – or contact with English – outside the classroom. It contains four main parts, with sub-categories questioning the contact with English outside the classroom by the participants of this study. However, two parts of the questionnaire that investigate the frequency of subtitled English TV and movie watching, the frequency of reading in English and the frequency of the strategies students use while watching subtitled English TV and movies were used for the purposes of the study. The response categories in the survey to two main parts used were as follows: Never, less than once a month, between one to three times a month, between one to three times a week, between four to six times a week, and every day. Table 8 shows the items used for the survey study.

Table 8. The Survey Items

Item Number	Content
Item 1a1.	Watching movies and TV series in original version in English with English subtitles
Item 1a2.	Watching movies and TV series in original version in English with Turkish subtitles
Item 1a3.	Watching movies and TV series in original version in English without subtitles
Item 1c.	Reading books, magazines or comic books in English
Item 2b1.	When I watch movies in English with Turkish subtitles, I try to listen to the audio before reading the subtitles
Item 2b2.	When I watch movies in English with Turkish subtitles, I read the subtitles before listening to the audio
Item 2b3.	When I watch movies in English with Turkish subtitles, I only read the subtitles if I do not understand the audio
Item 2c1.	When I watch movies in English with English subtitles, I try to listen to the audio before reading the subtitles
Item 2c2.	When I watch movies in English with English subtitles, read the subtitles before listening to the audio
Item 2c3.	When I watch movies in English with English subtitles, I only read the subtitles if I do not understand the audio

3.8 Data collection

The current study is a classroom intervention study and a quasi-experimental study. Quantitative data collection methods were used to investigate the research questions. The main aim of the study was to understand the effects of English TV watching in an EFL context on foreign vocabulary acquisition. Other than the main aim of the study, the survey used in the study investigated the frequency and exposure to subtitled English TV and movies outside the classroom in an EFL context.

To begin with, consent forms were distributed to the parents of the participants. The whole process took approximately one week. Following receipt of signed consent forms, the language background questionnaire (Appendix B) was distributed to students in order to have detailed information about the participants in the study. Administration of the OPT and PVST took two successive weeks. The purpose of administering the OPT and PVST was to investigate whether there were any significant differences between the four groups in terms of language proficiency and vocabulary size. Following the OPT and PVST, the intervention process, including the pre/post and delayed posttest administration, took five weeks. Figure 3 gives a summary of the whole data collection process and steps included in the process.

For the first step, three pretests (form recall, meaning recall and meaning recognition) were prepared by the researcher to measure what the participants knew about the TIs chosen for the tests. After two weeks, the intervention began, and all experimental groups watched two episodes of *Doki*. They watched the video at the normal speed (1.00x), but the focused group did pre-viewing activities before



Figure 3. The steps of data collection

watching each video. Furthermore, the participants in the captioned video group watched all episodes with captions, and the no caption group just listened to the audio without any onscreen captions. The following week, all groups watched the remaining three episodes with the same procedures. After a week, posttests were administrated by the researcher to calculate the vocabulary gains. The same tests were also taken by the students as delayed posttests after a month following the school winter break. One week after the delayed posttest, the survey on the exposure of English outside the classroom (Munoz et.al, n.d) was conducted with 58 participants. The survey was translated from English to Turkish as the participants' proficiency level was insufficient to understand the survey.

To answer the first two research questions, the data from the three pre- and posttests were compared. Relative vocabulary gains and raw vocabulary gains were calculated by using the scores of the participants in both pretests and posttests. The third research question was answered based on the pretests and delayed posttests.

The exposure survey was used to answer the fourth research question, and the survey data was collected with the guidance of the researcher. Each section of the survey was explained in detail to make sure that participants understood the questions correctly. Furthermore, the OPT and PVST tools were also used to understand to what extent the extraneous variables, such as language proficiency and lexical knowledge, might affect the results.

The pre- and posttests were used to show the vocabulary gains of the participants and the difference between the vocabulary gains of the groups after the intervention. The survey as a tool was used to determine the frequency of exposure to English TV and movies outside the classroom by the students in an EFL context. The OPT and PVST tools were used to ensure that there was no significant difference between the groups before the intervention in terms of proficiency and lexical knowledge.

3.9 Data Scoring

Within the scope of this study, all participants took one Oxford placement test, one picture vocabulary size test, three pre/posttests, and three delayed posttests. The Quick Oxford Placement test is a multiple-choice test, and one point was given to each question if it was answered correctly. The scale provided by the test itself measured the proficiency level of the students.

In the picture vocabulary size test, there were 96 separate questions, and participants were required to select the one correct option out of four options. The participants got 1 point for each correct answer. The PVST is based on the most frequent 6000-word families of English for young native-speaking children. Each

test word in the PVST represents 62.5 words in the source lists. Thus, a learner's score on the test was multiplied by 62.5 to calculate their total vocabulary size.

The pre and posttests included one meaning recognition test, one meaning recall test, and one form recall test. The scoring of pre and posttests was dichotomous (1 or 0). For meaning recognition, participants were required to choose the correct Turkish translation of each word out of five options. For meaning recall, scoring was done by two English teachers (disagreements were negotiated). For form recall, each word was considered correct when it was spelled correctly. The evaluation was based on the criteria used by Pujadas and Munoz (2019).

Relative vocabulary gains and raw vocabulary gains were calculated. Before the calculations, each word was considered as *known* if it was answered correctly on both pre- and posttests. For the *learned* condition, a word needed to be answered incorrectly in the pre-test and correctly in the posttest. Moreover, a word was considered as not learned if it was not answered correctly in the pretest and posttest or answered correctly in the pretest and incorrectly in the posttest (Horst, Cobb, and Meara, 1988; Peters and Webb, 2018; Rodgers, 2013).

Initially, raw vocabulary gain was calculated by subtracting the number of items known in both pre- and posttests from the total number of correct words in the posttest. Relative vocabulary gain was calculated based on the formula developed first by Shefelbine (1990). The formula was used in the study by Horst, Cobb, and Meara, 1988) and can be stated as follows:

Relative Gain for Participants = (number of learnt TIs/total number of TIs – number of known Ts) x 100

Using this formula, relative vocabulary gains were calculated for three tests by comparing the scores in pre- and posttests. As the total intervention took two weeks

and four class hours for each group, 100 % attendance of the participants at the viewing sessions was required as a criterion for including them in the analysis.

3.10 Data analysis

Quantitative analysis of data was done following the data collection process. Overall, descriptive statistics as well as inferential statistics including parametric (one-way ANOVA, mixed ANOVA, post-hoc Tukey test, paired-sample t-test) and non-parametric tests (Kruskal Wallis test, Mann-Whitney U test, Wilcoxon signed-rank test) were used for the analysis using IBM SPSS Statistics 25 software. Normality and homogeneity of data were checked before the analysis, and non-inferential statistics were used for non-normally distributed data when data transformations did not normalize the data. To ensure the validity of tests, expert opinion was asked in addition to the opinions of another two researchers. The same format of tests (form recall and meaning recall) was used in the study by Pujadas and Munoz (2019). Considering the meaning recognition test, the literature on the format of this type of test was investigated. In terms of reliability, a pilot study was conducted, the reliability of each test was checked, and a separate group of students (n = 30) was used to calculate reliability with test-retest measurement.

Initially, the scores of the participants in the OPT and PVST were calculated. For the OPT, the number of correct items was calculated. The correct number of items was calculated and multiplied by 62.5 for each PVST score, too.

To answer the first and the second research questions, three pretests and posttests were analyzed by the researcher. The meaning recall test scores were analyzed by the researcher and one English teacher to decide on the correct translation of the words. The number of correct items was calculated by the researcher. For the meaning

recognition test, the number of correct items was also calculated, and the spelling of the TIs on the form recall test was also analyzed by the researcher.

To answer the rest of the research questions, the English exposure surveys were also analyzed using IBM SPSS Statistics 25 tool, and data entry was done by the researcher. Descriptive analysis of items was done to answer how and how often young EFL learners were exposed to English TV and movies outside the classroom. Furthermore, the strategies and the frequency of the strategies that the young EFL learners used when they were exposed to English were identified by using descriptive statistics. Parametric tests (a one-way ANOVA, dependent t-tests) were used to compare the frequency mean of the four groups in terms of English TV and movie watching behaviors. Moreover, the frequency means of English TV and movie watching and the frequency means of reading in English were compared to find whether there is any significant difference between them using dependent t-tests.

CHAPTER 4

RESULTS

4.1 Introduction

In this section, the results of the current study are reported based on the research questions for the study. Parametric and non-parametric analyses were conducted to answer the research questions. Parametric tests (a one-way ANOVA, a mixed-ANOVA, paired-sample t-tests) were done for normally distributed relative and raw vocabulary gain scores in the meaning recognition test and the survey data, while non-parametric tests (a Kruskal Wallis test, the Mann–Whitney post hoc tests, a Wilcoxon signed-rank test) were conducted for non-normally distributed raw and relative vocabulary gain scores in the meaning recall and form recall tests based on posttests and delayed posttests. Although raw vocabulary gains (real gains) were also calculated using parametric and non-parametric statistics, only relative vocabulary gains were reported. There are two reasons for only reporting the relative vocabulary gains: (1) only calculating the raw gains would not give a correct picture of vocabulary learning as the participants who already knew the target vocabulary items had less room for vocabulary improvements; (2) the parametric and non-parametric test results showed similarity in terms of significance and effect size of the treatment. Therefore, relative vocabulary gains are reported in inferential statistics, and raw gains are only reported when there is a difference between the raw and relative gains.

4.2 Quick Oxford Placement Test and Picture Vocabulary Size Test results

First, analysis of the Quick Oxford Placement Test (QOPT) and the Picture Vocabulary Size Test (PVST) was completed to ensure that the four groups in the

study (control group, caption non-focused group, no-caption group, and caption focused group) were not significantly different from each other in terms of language proficiency and lexical knowledge.

To start with, the scores of the participants in each group were counted, and the number of correct answers for each participant in each group was calculated for the analysis of the QOPT. A different calculation was used for the PVST as the number of the correct answers was multiplied by 62.5 for each participant to calculate the vocabulary size score of each test taker. Table 9 shows the mean scores of each group for the Quick Oxford Placement Test (Appendix I) and Picture Vocabulary Size Test (Appendix J).

Table 9. General Proficiency and Vocabulary Size Scores

	General Proficiency				Vocabulary Size		
Group	*n*	*M (SD)*	Min.	Max.	*M (SD)*	Min.	Max.
Control	15	11.40 (3.85)	6	19	1979.16 (346)	1187	2375
No-caption	15	13 (1.77)	10	15	2091.66 (552)	1250	3312
Caption	16	11.75 (2.79)	7	16	1894.53 (347)	1437	2437
Focused Caption	14	13.07 (2.30)	10	17	2183.03 (423)	1187	2812
Average		12.30	8.25	16.75	2037.09	1.265	2.734

Data transformations were done before the analysis to meet normality as assumptions (independence, homogeneity of variance, normality) of one-way ANOVA were checked. The normality assumption was not met; however, the assumption of homogeneity of variance was met for both the QOPT and the PVST. Squared transformations were computed to meet normality. After meeting normality, a one-way ANOVA was conducted among the groups for the QOPT scores. Consequently, there was not a significant difference among the groups at the $p > .05$ level for the

four groups (F (3.57) = 1.69, p = .17). The caption focused group had the highest mean of all the groups (M = 13.07), followed by the no-caption group (M = 13). The lowest mean for the QOPT belonged to the control group (M = 11.40), which was also lower than the caption group (M = 11.75).

Considering the PVST scores, squared transformations were done as normality was not met. The scores of the PVST were not normal after the transformations, so a non-parametric test (Kruskal Wallis test) was conducted. The test showed that there was not a statistically significant difference among the scores of the groups (H (3) = 4.21, p = .23), with a mean rank of PVST score of 28.70 for the control group, 31.90 for no-caption, 37.46 for the focused group, and 24.78 for the caption group.

Assuming that the four research groups were equal in terms of general English proficiency and vocabulary size based on the analysis of the scores of the QOPT and PVST using parametric and non-parametric tests, the research questions of the study were answered below, respectively.

4.3 The role of watching captioned and non-captioned L2 videos from English TV series in learning new L2 vocabulary

To answer the first research question, scores that the participants had in the three pretests and the posttests were compared. Depending on the scores, relative vocabulary gains and raw vocabulary gains were calculated for each student based on the formula used by Rodgers (2013). In addition to the relative vocabulary gains, raw (real) vocabulary gains were also calculated. Only relative vocabulary gains are reported in inferential statistics, although both raw and relative gains were analyzed using parametric and non-parametric tests. Raw gains are only reported when there is a difference between the raw and relative gains. However, detailed descriptives are

shown in the following tables: relative vocabulary gains (Table 10) and raw vocabulary gains (Table 11) for each group.

The results for the relative gain on the meaning recognition, meaning recall, and form recall tests for the three experimental groups and the control group are shown in Table 10. Of all the three research groups (control, caption, and no caption groups), the no caption group had the highest mean relative gains: 25.63% for the meaning recognition test, 10.62% for the meaning recall test, and 13.13% for the form recall test. The mean relative gain for the caption group was 21.05% for the meaning recognition test, 0.95 % for the meaning recall test, and 11.67% for the form recall test. The mean relative gain for the control group was 21.55% for the meaning recognition, 4.19% for the meaning recall, and 6.45% for the form recall test. There were large differences between the minimum and maximum relative gains for three tests in the no caption group.

In addition to the relative vocabulary gains, raw vocabulary gains were also analyzed. Table 11 shows the descriptives for the raw vocabulary gains based on three tests. For the control group, the mean real gain was 3.73 for the meaning recognition, 0.8 for the meaning recall, and 1.2 for the form recall tests. The mean real gain for the no caption group was 3.66 for the meaning recognition, 1.73 for the meaning recall, and 2.4 for the form recall tests. For the caption group, the mean real gain was 3.68 for the meaning recognition, 0.18 for the meaning recall, and 2.06 for the form recall tests. Considering the raw vocabulary gains of the three groups based on the mean scores they had in three tests, it can be said that the caption group did not have higher raw vocabulary gains than no caption and control groups, but the only score which was higher than the control group was the mean raw vocabulary

gains in the form recall test. In conclusion, in all tests, the caption group did not achieve higher scores than the no caption group.

4.3.1 Meaning recognition test results

When the significance of the mean relative vocabulary gains was considered for the meaning recognition test, data transformations were done before the analysis as assumptions of one-way ANOVA were checked. The Q-Q plot revealed serious threats to the normality assumption, and homogeneity of variance was not met. Squared transformations were done, and normality assumptions were met for all groups; homogeneity of variance was also met for all groups after the transformations. The results of the one-way ANOVA showed that there was no significant difference among the groups for the meaning recognition test for relative vocabulary, (F (3.56) = 1.10, p = .35, η^2 = 0.06).

4.3.2 Meaning recall test results

For the meaning recall test, data transformations were done before the analysis as assumptions of one-way ANOVA were checked. The normality assumption was not met after checking the Q-Q plot. The homogeneity of variances was not met, either. Squared transformations were done. However, the scores were not normally distributed after the transformations, and so a non-parametric test (Kruskal Wallis test) was conducted.

Table 10. Relative Vocabulary Gains in the Meaning Recognition, Meaning Recall, Form Recall Tests

		Meaning Recognition				Meaning Recall			
Group Name	N	Mean Relative Gain	Median	Minimum	Maximum	Mean Relative Gain	Median	Minimum	Maximum
Control	15	*21,55%*	23,52%	6,25%	37,5%	4.19%	5%	0.00%	16.66%
NC	15	*25,63%*	22,22%	10%	50%	10.62%	5.26%	0.00%	52.63%
C	16	*21,05%*	*22,5%*	6,66%	33,33%	0.95%	0.00%	0.00%	5.26%
CF	14	*27.15%*	*24.03%*	11.76%	60%	16.07%	10.26%	0.00%	50%

Form Recall					
Group Name	N	Mean Relative Gain	Median	Minimum	Maximum
Control	15	6.45%	5.26%	0.00%	15.78%
NC	15	13.13%	10%	0.00%	50%
C	16	11.67%	11.11%	0.00%	22.22%
CF	14	28.92%	19.44%	5%	87.5%

Table 11. Raw Vocabulary Gains in the Meaning Recognition, Meaning Recall, Form Recall Tests

		Meaning Recognition				Meaning Recall			
Group Name	N	Mean Real Gain (SD)	Median	Minimum	Maximum	Mean Real Gain (SD)	Median	Minimum	Maximum
Control	15	3.73 (1.28)	4	1	6	0.8 (0.9)	1	0	3
NC	15	3.66 (1.29)	4	2	6	1.73 (2.43)	1	0	10
C	16	3.68 (1.56)	3.5	1	6	0.18 (0.39)	0	0	1
CF	14	4.64 (2.05)	4.5	2	9	3.14 (3.29)	2	0	10

		Form Recall			
Group Name	N	Mean Real Gain (SD)	Median	Minimum	Maximum
Control	15	1.2 (0.97)	1	0	3
NC	15	2.4 (2.21)	2	0	8
C	16	2.06 (1.19)	2	0	4
CF	14	5.07 (4.21)	3.5	1	14

The test showed that there was a statistically significant difference among the relative vocabulary gain scores of the groups (H (3) = 16.08, p = .001, η^2 = .22), with a mean rank of relative vocabulary gain scores of 28.1 for the control group, 26.27 for the no-caption group, and 18.41 for the caption group. Post hoc comparisons, using the Mann-Whitney post hoc procedure, were conducted to determine which groups' meaning recall means differed significantly. A Bonferroni correction was applied, so all effects were reported at a .008 level of significance. The Mann-Whitney test revealed that caption group (Mdn = 0.00) was not significantly different from the control group (Mdn = 5) (U = 105.50, z = -.621, *ns,* r = -0.1), but it was significantly different from the no caption group (Mdn = 5.26) (U = 51, z = -2.83, p = .005, r = -0.50). However, the relative gains for no caption group were higher than the caption group based on their means. The difference between the no caption group and the control group was not significant with a medium effect size (U = 55, z = -2.45, p = .01, r = -0.44). Overall, the relative vocabulary gains of the caption group were not significantly different from the control group; however, the situation was different for the no caption group considering that it is significantly different from the caption group. Although the no caption group was not significantly different from the control group, there was a medium effect size for the treatment.

4.3.3 Form recall test results

Analysis of the results of the relative vocabulary gains in form recall test was done. Data transformations were done after the analysis as assumptions of one-way ANOVA were checked. The Q-Q plot revealed a serious threat to the assumption of normality. However, the homogeneity of variance was met. Squared transformations were conducted to meet the assumption of normality. The scores were not normally

distributed, and so a non-parametric test (Kruskal Wallis test) was conducted. The test showed that there was a statistically significant difference among the relative vocabulary gain scores of the groups (H (3) = 13.77, p = .00, η^2 = 0.23), with a mean rank of relative vocab gain scores of 19.17 for the control group, 28.90 for the no-caption group, and 31.69 for caption group. Post hoc comparisons using the Mann-Whitney test indicated that the relative vocabulary gains of the caption group (*Mdn =11*) did not significantly differ from the control group (*Mdn = 5.26*) (U = 66.50, z = -2.12, *ns,* r = 0.38) and the no caption group (*Mdn* = 10), (U = 104.50, z = -.61, *ns,* r = -0.10). The relative vocabulary gains of the control group did not significantly differ from the no caption group (U = 72.50, z = -1.67, *ns,* r = -0.30).

Considering the first research question, it was hypothesized that the caption group would have higher scores than the control group and the no-caption group. However, the caption group only had higher scores than the control group in the form recall test. The difference between the caption and the control group was not significant. Moreover, the caption group's mean relative vocabulary gains were not higher than the no caption group depending on the calculated relative vocabulary gains of the three tests.

4.4 The benefit to young learners of pre-teaching vocabulary from captioned English-language TV series

The second research question in the current study investigates the effects on the relative and raw vocabulary gains of the students of pre-teaching (form-focused vocabulary activities) and captioning together. The focused group is different from the no caption and caption groups as the vocabulary gains are not solely incidental: the effects of classroom teaching also play a role in the vocabulary acquisition. Using

the formula in the study by Rodgers (2013), the raw and relative vocabulary gains were calculated again for the focused group. Parametric (One-way ANOVA) and non-parametric tests (Kruskal- Wallis test and Mann-Whitney test) were done to report the results of the relative vocabulary gains of the participants.

Table 10 shows that the caption focus group has the highest relative mean gains in all tests of all the groups. The relative mean gain was 27.15% for the meaning recognition, 16.07% for the meaning recall, and 28.92% for the form recall test. There was a big difference between the maximum and minimum scores for all three tests. Table 11 shows the descriptives for raw vocabulary gains. According to Table 11, the caption focus group has the highest mean real (raw) gains in all tests compared to the other groups in the study. The mean real gain for the caption focus group was 4.64 for the meaning recognition test, 3.14 for the meaning recall test, and 5.07 for the form recall test.

4.4.1 Meaning recognition test results

Based on the study by Pujadas and Munoz (2019), it was hypothesized that the caption focus group would get the highest scores among the four groups, thus proving the positive effects of pre-teaching. Data transformations were done before the analysis as assumptions of one-way ANOVA were checked. The Q-Q plot revealed serious threats to the normality assumption, and homogeneity of variance was not met. Squared transformations were done, and normality assumptions were met for all groups; homogeneity of variance was also met for all groups after the transformations. However, the relative vocabulary gains in the meaning recognition test did not support the hypothesis as there was no significant difference among the

groups for the meaning recognition test for relative vocabulary (F (3.56) = 1.10, p = .35, η^2 = 0.06).

4.4.2 Meaning recall test results

Considering the relative vocabulary gain results of the meaning recall test, data transformations were done after the normality assumption was checked. The assumption of normality was not met for the tests. Homogeneity of variance was not met for the meaning recall test, either. Non-parametric Mann-Whitney post-hoc tests were conducted. The meaning recall test showed that there was a statistically significant difference among the relative vocabulary gain scores of the groups (H (3) = 16.08, p =.001) with a mean rank of relative vocabulary gain scores of 28.1 for the control group, 26.27 for the no-caption, 40.71 for the focused group, and 18.41 for caption group. The Mann-Whitney post-hoc tests were conducted to reveal whether the caption focus group was significantly different from the other groups. A Bonferroni correction was applied, so all effects were reported at a .008 level of significance. The Man-Whitney post tests revealed that the relative vocabulary gains of the caption group (Mdn = 0.00) did not significantly differ from the caption focus group (Mdn = 10.26) (U = 52.50, z = -2.56, *ns,* r = -0.46. Moreover, the caption focus group *(*Mdn =10.26) was not significantly different from the no caption group (Mdn = 5.26) (U = 97.50, z = -.330, *ns,* r = 0.00). Similar results were revealed for the control and caption focus groups as the caption focus group (Mdn = 10.26) did not significantly differ from the control group (Mdn = 5.00) (U = 56.50, z = -2.17, *ns,* r = -0.40).

4.4.3 Form recall test results

Following the meaning recall test, relative vocabulary gains were also calculated for the form recall test. Similarly, squared data transformations were also done for the form recall test data to meet the normality assumption. Although homogeneity of variances was met, Q-Q plots revealed that the data was not normal after the transformations. Consequently, the non-parametric Kruskal Wallis test was used. The form recall test showed that there was a statistically significant difference among the relative vocabulary gain scores of the groups (H (3) = 13.77, p = .003), with a mean rank of relative vocabulary gain scores of 19.17 for the control group, 28.90 for the no-caption group, 43.00 for the focused group, and 31.69 for the caption group. Regarding the post-hoc test, the Mann-Whitney test revealed that relative vocabulary gains of the caption focus group (*Mdn* = 19.44) in the form recall test was significantly different from the control group (*Mdn* = 5.26*)* (U = 28.50, z = -3.35, p = 0.001*,* r = -0.62). However, the caption focus group was neither significantly different from the no caption group (*Mdn* = 10.00) (U = 56.50, z = -2.12, *ns,* r = -0.41), nor from the caption group (*Mdn* = 11.11) (U = 62.00, z = -2.08, *ns,* r = -0.38).

4.5 Delayed posttest results

To answer this research question, delayed-post tests were conducted. The time interval between the posttests and delayed posttests was five weeks. The order of the items in the three posttests was changed as the format and the vocabulary items in the tests could not have been changed. Based on the delayed posttests scores, relative vocabulary gains and raw vocabulary gains were calculated by using the results of the pre-tests and delayed posttests (Rodgers, 2013). Both parametric (a mixed-

ANOVA) for the meaning recognition test and non-parametric tests (Wilcoxon signed-rank test) for the meaning recall and form recall tests were conducted to find whether or not there was a significant difference between the relative vocabulary and raw vocabulary gains in posttests and delayed posttests scores. Only relative gain scores and analysis are reported for the reasons presented in the previous section.

4.5.1 Meaning recognition test results

The normality assumption was met after data transformations for the meaning recognition test scores as the Q-Q plots revealed no serious threats to normality. Homogeneity of variance and the assumption of sphericity were also met. Therefore, a mixed-ANOVA was used. Since the data satisfied the assumptions of normality, homogeneity of variance and independence, a mixed ANOVA was conducted for the post and delayed-posttest relative vocabulary gains in the meaning recognition test. The mixed ANOVA was a 4 x 2 one with groups as an independent factor and post and delayed tests vocabulary gain scores as a within-subjects and between-subject factors. Considering the relative vocabulary gains, there was not a significant main effect for the groups (F (3.56) = 1.87, p = .145, r = .03). The relative vocabulary gains among the four groups did not significantly differ from each other. On the other hand, the analysis revealed a main effect of the tests (F (1.56) = 723, p = .000, r = .92). Descriptive statistics showed that the sum of means for the posttests (M = 4.83, *STD* =.13) was higher than the sum of means for the delayed posttests (M = 1.25, *STD* = .03). Table 12 shows detailed descriptives for the meaning recognition test including four groups. The four groups performed better on the posttests compared to the delayed posttests. Furthermore, there was not a significant tasks and

group interaction (F (3.56) = .47, p = .704). All four groups decreased their relative vocabulary gains in the delayed posttests.

To summarize the results of the meaning recognition test, there was a significant difference between the posttest and delayed posttest results as the scores decreased in the delayed posttest significantly. Although the vocabulary gains among the groups were not significantly different from each other, the results proved that relative vocabulary gains were not permanent.

4.5.2 Meaning recall test results

Detailed descriptives for the relative and raw vocabulary gains both in post and delayed posttest are shown in Table 13 for the meaning recall test. The non-parametric Wilcoxon repeated measures t-test showed that posttest scores of the control group (Mdn = 5.00) were not statistically significant from the delayed post-test scores (Mdn = 3.00) (z = -1.43, p = .150, r = -0.26) considering the relative vocabulary gains in the meaning recall tests.

Considering the results of the no caption group, the test showed that relative vocabulary gain scores in the post meaning recall test (Mdn = 11.76) were significantly different from the delayed posttest (Mdn = 9.61) (z = 2.49, p = .013, r = 0.45). However, the raw vocabulary gains in the post tests (Mdn = 1.00) and delayed posttests (Mdn = 1.50) were not significantly different (z = -.352, p = .725, r = -0.06). The focused group did not have significantly different scores regarding the relative and raw vocabulary gains in the posttests and delayed posttests. First, the non-parametric t-test showed that the relative vocabulary gains in the post tests (Mdn = 10.26) were not) significantly different from the delayed tests (Mdn = 12.50) (z = -.954, p = .340, r = -0.17.

Table 12. Relative and Raw Gains Based on the Delayed Posttests and Posttest for the Meaning Recognition Test

	Control					No Caption				
	N	Min.	Max.	Mean	SD	N	Min	Max	Mean	SD
Relativevoc.	15	6.25	37.50	21.55	7.91	15	10.00	50.00	25.63	11.02
Delay.relative.voc	14	5.55	31.57	17.88	8.83	14	6.66	55.55	22.44	14.81
Raw	15	1.00	6.00	3.73	1.33	15	1.00	6.00	3.66	1.34
Delay.raw	14	1.00	6.00	3.07	1.63	14	1.00	8.00	3.42	2.20

	Caption Focus					Caption				
	N	Min	Max	Mean	SD	N	Min	Max	Mean	SD
Relativevoc.	14	11.76	60.00	27.15	13.81	16	6.66	33.33	21.05	8.55
Delay.relative.voc	14	.00	64.28	29.42	19.74	16	5.00	42.10	16.01	9.41
Raw	14	2.00	9.00	4.64	2.13	16	1.00	6.00	3.68	1.62
Delay.raw	14	.00	11.00	4.92	3.29	16	1.00	8.00	2.87	1.74

Table 13. Relative and Raw Gains Based on the Delayed Posttests and Posttest for the Meaning Recall Test

	Control					No Caption				
	N	Min.	Max.	Mean	SD	N	Min	Max	Mean	SD
Relative voc.	15	0.00	16.66	4.19	7.91	15	0.00	52.63	10.62	11.02
Delay.relative.voc	14	0.00	16.66	4.94	6.74	14	0.00	57.89	14.66	17.51
Raw	15	0	3.00	0.8	0.9	15	0	10.00	1.73	2.43
Delay. raw	14	0.00	3.00	0.92	1.26	14	0.00	11	2.64	2.95

	Caption Focus					Caption				
	N	Min	Max	Mean	SD	N	Min	Max	Mean	SD
Relative voc.	14	0.00	50	16.07	13.81	16	0.00	5.26	0.95	8.55
Delay.relative.voc	14	0.00	52.63	16.82	16.76	16	0.00	10.52	2.85	3.26
Raw	14	0.00	10.00	3.14	3.29	16	0.00	2.00	0.37	0.61
Delay. raw	14	0.00	10.00	3.28	3.22	16	1.00	8.00	2.87	1.74

Finally, the Wilcoxon signed-rank test showed that the posttest scores of the caption group (Mdn = .000) were not significantly different from the delayed posttests (Mdn = .000) (z = -1.185, p = .236, r = -0.20) considering the relative vocabulary gains.

4.5.3 Form recall test results

Detailed descriptives for the relative and raw vocabulary gains both in post and delayed posttest are shown in Table 14 for the form recall test. As the data of the meaning recall test was not normalized after squared transformations, Wilcoxon signed-rank tests were conducted for relative vocabulary gain scores. Parallel results were obtained considering the results of the form recall posttest and delayed posttest gains. First, the Wilcoxon signed-rank test showed that the relative gain scores of the control group in the posttests (Mdn = 5.26) were not significantly different from the delayed posttests (Mdn = 5.26) (z = -.920, p = .357, r = -0.16).

The posttest and delayed posttest scores of the no caption group showed that the group had improved relative vocabulary gains as the Wilcoxon signed-rank test revealed that the relative vocabulary gain scores in the posttest (Mdn = 10.00) were significantly different from the delayed posttest scores (Mdn = 19.34) (z = -2.74, p = .006, r = -0.50).

Regarding the relative vocabulary gains of the caption focus group, the non-parametric t-test showed that the relative vocabulary gains in the post tests (Mdn = 19.44) were not significantly different from the delayed tests (Mdn = 21.63) (z = -.535, p = .593, r = -0.10).

Lastly, the Wilcoxon signed-rank test showed that the post test scores of the caption group (Mdn = 11.11) were not significantly different from the delayed

Table 14. Relative and Raw Gains Based on the Delayed Posttests and Posttest for the Form Recall Test

	Control					No Caption				
	N	Min.	Max.	Mean	SD	N	Min	Max	Mean	SD
Relativevoc.	15	0.00	15.78	6.45	7.91	15	0.00	50.00	13.13	11.02
Delay.relative.voc	14	0.00	23.52	8.11	6.21	14	0.00	62.25	20.79	15.12
Raw	15	0	3.00	1.2	0.97	15	0.00	8.00	2.44	2.21
Delay.raw	14	0.00	4.00	1.5	1.11	14	0.00	10.00	3.71	2.49

	Caption Focus					Caption				
	N	Min	Max	Mean	SD	N	Min	Max	Mean	SD
Relative voc.	14	5.00	87.5	28.92	13.81	16	0.00	22.22	11.67	8.55
Delay.relative.voc	14	0.00	81.25	30.24	25.63	16	0.00	15.78	8.37	4.06
Raw	14	1.00	14.00	5.07	4.21	16	0.00	4.00	2.06	1.19
Delay. raw	14	0.00	13.00	5.28	4.19	16	0.00	3.00	1.5	0.76

posttests (Mdn = 8.20) ($z = 1.73$, $p = .083$, $r = 0.30$) considering the relative vocabulary gains.

To summarize the results, there was a significant difference between the posttest and delayed posttest results of the meaning recognition tests. All groups except for the caption focus group decreased their scores in the delayed posttests. Regarding the meaning recall test, there was no significant difference between the post and delayed posttest scores of all groups. Parallel results were observed in the form recall test. However, only the no caption group improved their scores in the delayed posttests as the difference between the post and delayed posttest scores was significant.

4.6 TV-watching behaviors of young EFL learners with regard to L1 and L2 subtitles

A survey investigating English exposure outside the classroom of 58 Turkish EFL students was conducted. The same group of participants who took part in the previous study attended the survey study. The survey study has two main aims. First, it aims to reveal the TV watching behaviors of the participants by investigating how often young EFL learners in Turkey watch movies and TV series with/without interlanguage and intra-language subtitles and read books and magazines in English. Defining participants' use of Turkish and English subtitles before or after the audio, the survey also examines the role of subtitling in relation to the participants' TV watching behavior.

The descriptive Table 15 shows how often the participants watch English TV with Turkish subtitles, with English subtitles, and without subtitles. Each question in the survey has six frequency scales. Each frequency scale was assigned a number that starts with 1 (never) to 6 (every day) ordinally for the data analysis on SPSS.

Table 15. Watching movies and TV series in the original version in English

	Never		Less than once/ month		Between 1-3 times/ month		Between 1-3 times/week		Between 4-6 times/week		Every day			
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Mean	SD
RQ1a1.With Turkish subs.	17	29.3	11	19.0	15	25.9	6	10.3	7	12.1	2	3.4	2.67	1.47
RQ1a2.With English subs.	25	43.1	9	15.5	12	20.7	6	10.3	3	5.2	3	5.2	2.34	1.50
RQ1a3.Without subs.	30	51.7	10	17.2	8	13.8	3	5.2	2	3.4	4	6.9	2.10	1.53

To describe the TV watching behaviors of the participants, descriptive data analysis was carried out using SPSS. The results showed that 29.3% of the participants never watch English TV with Turkish subtitles, 43.1% of the participants never watch English TV with English subtitles, and 51.7% of the participants never watch without subtitles. More than half of the participants either never, or less than once a month, watch movies and TV series in the original version in English with Turkish subtitles / English subtitles / without subtitles and read in English. The participants watch movies and TV series in the original version in English with Turkish subtitles (*M* = 2.67 *SD* = 1.47) more frequently than they watch with English subtitles (*M* = 2.34 *SD* = 1.50) and without subtitles (*M* = 2.10, *SD* = 1.53).

Regarding the difference in the frequency to which the participants are exposed to TV series and movies in English, the three survey items measuring the frequency of watching TV series and movies in English with Turkish subtitles, English subtitles, and without subtitles were analyzed separately, based on the responses of the four groups (control, caption, caption focus, and no caption). For each item in the survey, the four groups were compared to each other using one-way ANOVA. Before conducting the test, the assumptions of one-way ANOVA were checked. The P-P plots revealed that the data was normal, and homogeneity of variance was also met.

In respect of the descriptives, Table 16 shows that the highest means belong to the control group (M = 2.93, SD = 1.66), followed by the no caption group (M = 2.71, SD = 1.58). For the first item's result, the caption group's frequency mean was 2.43 (SD = 1.36), and the caption focus group's frequency mean was 2.61 (SD = 1.38). The frequency means of the groups on the second survey item were 2.78 (SD = 1.62) for no caption, 2.00 (SD = 1.52) for caption focus, 1.56 (SD = .89) for

caption, and 3.06 (SD = 1.53) for the control group. The third item's frequency means were 1.69 (SD = .85) for the no caption group, 2.00 (SD = 1.52) for the caption focus group, 1.75 (SD = 1.23) for the caption group, and 2.93 (SD = 2.01) for the control group.

Table 16. Descriptives for Watching English TV with Turkish/English/No Subtitles

	Group	N	Mean	SD	Minimum	Maximum
RQ1a1. Watching English TV with Turkish subtitles	No caption	14	2.71	1.58	1.00	6.00
	C. Focus	13	2.61	1.38	1.00	5.00
	Caption	16	2.43	1.36	1.00	5.00
	Control	15	2.93	1.66	1.00	6.00
RQ1a2. Watching English TV with English subtitles	No caption	14	2.78	1.62	1.00	6.00
	C. Focus	13	2.00	1.52	1.00	5.00
	Caption	16	1.56	.89	1.00	4.00
	Control	15	3.06	1.53	1.00	6.00
RQ1a3. Watching English TV without subtitles	No caption	13	1.69	.85	1.00	3.00
	C. Focus	13	2.00	1.52	1.00	6.00
	Caption	16	1.75	1.23	1.00	5.00
	Control	15	2.93	2.01	1.00	6.00

Furthermore, based on the parametric test results, there was no significant difference among the frequency means of the groups: $F (3, 54) = .289$, $p > .05$ considering the first item that measures the frequency of watching English TV with Turkish subtitles. However, the results of the second item revealed that there was a significant difference among the frequency means of the groups: $F (3, 54) = 3.67$, $p < .05$. Groups significantly differed from each other based on their frequency of watching English TV with English subtitles. The analysis of the third item revealed no significant difference among the frequency means of the groups:

F (3, 53) = 2.22, p > .05. As the second item revealed a significant difference, a Tukey HSD test was conducted to show the significant difference among the groups. Post-hoc comparisons using the Tukey HSD test revealed that the frequency means for the control group (M = 3.06, SD = 1.50) was significantly different from the frequency mean of the caption group (M =1.56, SD = .89).

The third research question also examines the role of L1 and L2 subtitles in the L2 TV watching behaviors of the participants. The survey has six different items investigating the preferences of participants when watching TV and movies in the original language in English with English subtitles and with Turkish subtitles. Descriptive analysis was done using SPSS to find the frequency (the number of participants) and percent of how often the participants use subtitles before they listen to the audio. Table 17 shows the descriptives for how often the participants use L1 and L2 subtitles before English audio.

First, the use of subtitles or audio first do not apply to an average of 38.5% of the participants when they watch with English subtitles. 41.4% of the participants do not listen to the audio before reading the subtitles when watching English TV and movies with English subtitles, 36.2% of the participants do not read the subtitles before listening to the audio, and 37.9% of the participants only read the subtitles if they do not understand the audio. Furthermore, 25.9% never try to listen to the audio before reading the subtitles, 20% never read the subtitles before listening to the audio, and 17.2% only read the subtitles if they do not understand the audio. When it comes to the percentage of participants who use subtitles while watching English TV and movies with English subtitles, 32.7% try to listen to the audio before reading the subtitles, 43% try to read the subtitles before listening to the audio, and 44.7 % only read the subtitles if they do not understand the audio. It is clear from the descriptives

that the percentage of participants who use subtitles first while watching English TV and movies is higher than the participants who first use the audio. Moreover, using the subtitles or audio first while watching English TV and movies with English subtitles does not apply to a high percentage of the participants.

The use of Turkish subtitles while watching English TV and movies was also investigated. Table 18 shows the percentages of how often the participants use the same strategies while watching English TV and movies with Turkish subtitles. It was revealed that these activities do not apply to a total of 31% of the participants. 27.6% never try to listen to the audio before reading the subtitles, 22.4% never read the subtitles before listening to the audio, and 15.5% only read the subtitles if they do not understand the audio. In addition, a total of 51.6% of participants with different frequency intervals try to listen to the audio before reading the subtitles. 77.5% read the subtitles before listening to the audio at different frequency intervals and 74.1% only read the subtitles if they do not understand the audio, again at different frequency intervals.

Table 17. When I Watch Movies in English with English Subtitles

	Does not Apply			
	Freq.	Percent	Mean	SD
RQ3b1. I try to listen to the audio before reading the subtitles	24	41.4	3.70	2.15
RQ3b2. I read the subtitles before listening to the audio	21	36.2	3.39	2.08
RQ3b3.I only read the subtitles if I do not understand the audio	22	37.9	3.93	1.99

	Never		Sometimes		Often		Very Often		Always	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
RQ3b1. I try to listen to the audio before reading the subtitles	15	25.9	8	13.8	5	8.6	5	8.6	1	1.7
RQ3b2. I read the subtitles before listening to the audio	12	20.7	18	31.0	5	8.6	2	3.4	0	0.00
RQ3b3.I only read the subtitles if I do not understand the audio	10	17.2	10	17.2	4	6.9	6	10.3	6	10.3

Table 18. When I Watch Movies in English with Turkish subtitles

	Never		Sometimes		Often		Very Often		Always	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
RQ3a1. I try to listen to the audio before reading the subtitles	16	27.6	13	22.4	6	10.3	10	17.2	1	1.7
RQ3a2. I read the subtitles before listening to the audio	13	22.4	25	43.1	6	10.3	6	10.3	8	13.8
RQ3a3.I only read the subtitles if I do not understand the audio	9	15.5	14	24.1	11	19.0	10	17.2	8	13.8

	Does not Apply			
	Freq.	Percent	Mean	SD
RQ3a1. I try to listen to the audio before reading the subtitles	12	20.7	3.05	1.86
RQ3a2. I read the subtitles before listening to the audio	0	0.0	2.63	1.60
RQ3a3.I only read the subtitles if I do not understand the audio	6	10.3	3.20	1.58

CHAPTER 5

DISCUSSION

5.1 Introduction

This chapter will discuss the results of the study based on the cognitive load theory (Sweller, 1994; Sweller et al., 2011), multimedia learning (Mayer, 1997, 2005, 2014) and dual-coding theories (Paivio, 1986, 1991, 2006) and also focus on form/focus on forms techniques. The results of the survey study will also be discussed in relation to the results of the quasi-experimental study to explain and discuss the participants' English TV watching behaviors and subtitle use. One main reason behind discussing the survey results is the motivation behind the present study. The discussion includes three main parts: the effects of English TV watching on foreign vocabulary learning, the effect of captioning and pre-teaching on foreign vocabulary learning, and the role of the English TV watching behaviors of Turkish EFL students in a state school on foreign vocabulary learning. In the third part, the results of the survey study will be presented to reveal how often the young EFL participants in a state school were exposed to English TV with L1/L2 subtitles or without subtitles. The calculation of relative and raw vocabulary gains (Horst, Cobb, and Meara, 1988) based on recognition and recall tests revealed significant effects of foreign TV watching and pre-teaching on foreign vocabulary learning. However, the results of the meaning recognition test did not reveal any significant difference among the groups. The caption focus group's relative and raw vocabulary gains in the form recall test were significantly different from the control group, which proved the positive effects of captioning with pre-teaching on foreign vocabulary learning. Although the significant effect of foreign video watching and pre-teaching was found, the caption

group did not achieve higher scores than the no caption and control groups in the study, which raises a question as to the positive effects of captioning on foreign vocabulary learning. On the contrary, the no caption group's relative vocabulary gains were significantly higher than the caption group's scores, which should be explained in detail.

Furthermore, the results of the survey data will be discussed in relation to the results of the relative and raw vocabulary gains of all groups together with the strategies Turkish EFL learners use to understand English TV and movies with English and Turkish subtitles.

5.2 The effects of English TV watching on Foreign Vocabulary Learning

The present study investigated the effects of watching foreign TV on foreign vocabulary learning together with the effects of captions and pre-teaching. The fact that all three experimental groups watched five successive episodes of an English cartoon led to the assumption that all three experimental groups would have higher scores than the control group in recognition and recall tests. Therefore, it was hypothesized that the relative and raw vocabulary gains of the participants in all three experimental groups would be significantly different from the control group. However, the results of the study did not totally support this hypothesis as the scores of the participants in three experimental groups showed variety based on the three test scores. As independent variables, captioning and pre-teaching issues will be discussed in the following section, it is better to focus on the scores of the no caption group in the three tests. The relative and raw vocabulary gains of the caption group and caption focus group might have been affected by captioning and pre-teaching. Therefore, the relative and raw vocabulary gains of the no caption group are

discussed in this section in detail based on the results of the three test scores based on the posttest and delayed posttest scores.

First, there was no significant difference between the control and no caption group in the meaning recognition, meaning recall and form recall tests considering both relative and raw vocabulary gains. However, there was a medium effect size of the treatment considering the no caption group's relative vocabulary gains. Considering the relative vocabulary gains in the meaning recall test, there was a medium effect size between the no caption and caption groups. Another striking finding was that there was no significant difference between the posttest and delayed posttest scores of all groups. However, the no caption group significantly improved their relative gains in the form recall test.

These finding are not completely consistent with the claims of the dual coding theory (Paivio, 1991, 2006) and the multimedia learning theory (Mayer, 2014). The human processing system can process both auditory and pictorial input; the presence of two channels might have helped participants process and learn target words introduced in the audio. However, the limited capacity (Baddeley, 1986) of the short-term memory and low language proficiency and vocabulary size might have put a further load on the learners' cognitive processing of the target items. Nevertheless, the medium effect size of the treatment in the meaning and the form recall tests might suggest caution as rejecting the dual-coding and multimedia learning theories might not be justified. The presence of the studies with results supportive of the dual coding theory (Pujadas and Munoz, 2019) and various factors (repeated exposure to the input, vocabulary size, word encounters) when considering the efficacy of foreign TV and video watching on language learning process need to be evaluated in the light of the findings of the present study. Contrary to the findings of Yüksel &

Tanrıverdi (2009), who found that viewing a movie clip helped participants develop their vocabulary knowledge regardless of the absence or presence of captions, the present study did not find any significant vocabulary gains in terms of meaning recognition and form recall. However, participants have achieved some progress in foreign vocabulary learning in the meaning recall and form recall tests. Therefore, the assumption that L2 vocabulary can be acquired through watching TV series proposed also by Pujadas and Munoz (2019), Peter & Webb (2018) and Rodgers (2013) can be partially accepted considering the situation of young beginner EFL learners in Turkey. The different results for meaning recognition, meaning recall, and form recall can lead to a different perspective in terms of a consideration of the effects of test type. Nation (2011) states that recognition and recall are different skills as recall and recognition involve different processes. The recognition test measures whether participants have noticed a form in the input, which entails their episodic memory of the forms, whereas comprehension of the meaning is measured by translation tests. Therefore, it can be accepted that complex processing is required in translation tests and, while watching the videos in a foreign language, learners need to deduce the meaning, and match the form and the meaning together. After matching the form and the meaning, they need to recall the meaning of the form (Sydorenko, 2010). One interesting finding considering the results of the current study was that the mean relative gains in the meaning recognition tests were quite higher compared to relative gains in the meaning recall and form recall tests. This result might be supportive of Nation's (2011) division between recognition and recall as different skills. Contrary to the expectations, one-way ANOVA did not reveal any significant outcome among the groups in the meaning recognition test. The unanticipated finding might be caused by the vocabulary size of some participants

who already had higher scores in the meaning recognition pretests. As the already known words are not accepted as *learn*ed, based on the definition by Rodgers (2013), the exclusion of these words caused a serious decrease in the relative and raw vocabulary gains in the meaning recognition tests.

This study has not been totally supportive of the results of the earlier research (Baltova, 1999; Huang & Eskey, 1999; Hui, 2007; Markham et al., 2001, Sydeorenko, 2010; Vidal, 2003; Winke et al., 2010) that found incidental foreign vocabulary learning occurred through viewing videos. However, the medium size treatment effects and the relative vocabulary gains in the form recall test show that the potential effectiveness of watching foreign videos ought not to be rejected. Still, there are various factors to be considered in the vocabulary learning process of young EFL learners through foreign videos. A possible explanation for these results may be the fact that acquiring new words is not necessarily momentary, and repeated exposure to the input and time is needed as multiple modalities are involved in the process (Sydorenko, 2010). Lack of adequate vocabulary size to comprehend and learn new foreign words from the videos might be another explanation for why learners did not learn new foreign words incidentally by watching episodes of TV programs. Participants' vocabulary size was measured by a vocabulary recognition test that used the most frequent 6,000-word families, with the average scores across all groups being 2037. However, the present vocabulary size of the participants might be the factor behind the poor vocabulary learning, especially as Webb & Rodgers (2009) state that the potential for significant incidental vocabulary learning is dependent on the vocabulary size. Knowing the most frequent 3,000-word families and watching regular TV may contribute to potential vocabulary learning. Another possible reason behind the importance of vocabulary size is that watching L2 TV

might be difficult initially (Webb, 2010). The speed of the speech and the burden of the unknown word forms may prove a challenge for beginner learners with no previous regular foreign TV watching habits.

These results are also likely to be related to the number of word encounters in the discourse. The importance of word encounters is discussed in several corpus-driven studies (Rodgers & Webb, 2011; Webb, 2010; Uchihara et al., 2019) that investigated the texts from TV programs. Rodgers & Webb (2011) suggest that word families encountered ten or more times can be accepted as learned, although finding this prediction too conservative, five or more encounters is also regarded as enough to provide a potential for learning new foreign words. The number of target items encountered during the five successive episodes in the cartoon episodes changed from three to fourteen; however, there were only three target items that were encountered ten or more times in the successive five episodes of the cartoon videos. Therefore, a possible effect of encounter times might be the reason behind the poor relative and raw gains by the participants of the study.

5.3 The Effect of Captioning and Pre-teaching on Foreign Vocabulary Learning

The first and second research questions investigated the role of captioning and pre-teaching on foreign vocabulary learning. The results of the current study did not support the hypothesis that the caption group would have significantly higher scores than the no caption group. On the contrary, the no caption group had significantly higher scores than the caption group in the meaning recall test in terms of relative vocabulary gains. Considering the literature on the effects of captioning, prior studies (Donche et al., 2015; Garza, 199; Hui, 2007; Markham, 1989; Pujadas & Munoz, 2019; Koskinen & Neuman, 1992; Perez et al., 2013; Sydorenko et al., 2010;

Vanderplank, 1988) have noted the importance of captioning in L2 vocabulary learning. However, the existence of certain study results in the literature that did not support the positive effects of captions led to a consideration of various factors like age, proficiency, previous TV watching habits, and also the cognitive load hypothesis. The effect of age and proficiency on watching captioned TV is under-researched. Munoz (2017) conducted an eye-tracking study on the role of age and proficiency in subtitle reading. First, the underdeveloped reading skills due to age caused learners to spend more time on reading subtitles. Second, it was revealed that proficiency played an important role in subtitle reading as low proficiency learners' fixation times on subtitles were longer. The crucial role of proficiency was also supported by many other studies in the field (e.g., Danan, 2004; Taylor, 2005). Vanderplank (2016) further suggested that low proficiency could create decoding problems in terms of listening and reading in a foreign language. In line with these findings, Yüksel & Tanrıverdi (2009) did not find any difference between the absence and presence of the captions for video comprehension by intermediate-level university students. The detrimental effects of captions on the first-year students to their understanding of videos were also revealed by Taylor's (2005) study. The vocabulary recognition test results from Lwo & Lin (2012) were not supportive of the positive effects of captions as there was no significant difference between the four caption groups. The results from Etemadi (2012) investigating the effects of captioning on undergraduate university students revealed no significant difference between watching a movie with captions or without for understanding of the vocabulary. Overall, in accordance with the present results, previous studies have also demonstrated no clear positive effects of captions on the L2 vocabulary learning process through watching foreign videos. One explanation behind the present results

can be based on the assumptions of the cognitive load hypothesis and the redundancy principle of the multimedia learning theory. Sweller (1994) states that complex mental processes are required to deal with a complex task, and that the efforts expended on the complex processes are then only alleviated with time and practice. The characteristics of a task can put a cognitive load on an individual, and the learning process can be affected negatively. The presence of captions (text) and the audio version of the same text at the same time might have caused a possible cognitive load on learners. The cognitive load is created by the split attention the text causes as leaners need to watch the videos, read the texts, and listen to the audio all at the same time.

Another explanation behind these results may be explained by the redundancy principle in relation to the multimedia learning theory (Moreno & Mayer, 1999). The redundancy principle is also based on the cognitive load because our limited processing capacity can be inadequate to process too much information within a short time. The study by Mayer, Heiser, and Loan (2001) revealed supporting results for the cognitive load hypothesis and the redundancy principle because the presence of the exact text of the audio narration on the screen caused negative effects on the retention process of learners. Therefore, the presence of captions in the current study might have caused a possible split-attention, which led to poor retention of the word meaning and form.

The second research question in the study tried to investigate the role of pre-teaching and captioning together by focusing on the form through different form-focused activities on L2 vocabulary learning. Considering the relative and raw gains in the meaning recognition test, no significant difference among the scores of the three experimental groups was found. However, the only group that did not drop

their relative vocabulary gains in the delayed posttest was the caption focus group. Although there was no significant difference, the descriptives for the maximum gains showed that some students benefited from the intervention and did not lose their gains even after a month. Considering the results of the inferential statistics, the non-significant result might have been caused by the fact that some participants already had higher scores in the pretests, which caused a drop in the number of the *learn*ed items. The results of the form recall revealed a significant difference between the caption focus group and the control group in terms of relative and raw vocabulary gains. There was also a significant difference, with a big effect size of the treatment, between the caption and caption focus groups in the meaning recall test in terms of raw vocabulary gains. Although the difference between the caption focus and the control groups was not significant in the meaning recall test, there was a medium effect size of the treatment concerning both relative and raw vocabulary gains. Moreover, the effect size of the treatment between the caption focus group and the no caption group was quite small in the meaning recall test. In contrast, a medium effect size existed between the same groups in the form recall test. Therefore, the hypotheses that the focused group would have the highest scores of all three research groups was supported by the results of the meaning recall and form recall tests. Although the results were only significant in the form recall test, the medium effect size of the treatment in the meaning recall test between the caption focus group and the other groups also revealed supportive results for the use of instruction in EFL classrooms. These results reflect those of Pujadas and Munoz (2019) as the study also revealed that participants who were pre-taught the target items performed better on the tests without the effects of intralingual and interlingual subtitling. The main difference between the current study and that of Pujadas and Munoz (2019) is based

on the investigation of the effects of extensive TV watching on L2 vocabulary acquisition. The current study investigated the issue with the inclusion of only five successive episodes of a foreign cartoon series; however, the effects of pre-teaching were observed in the results of the tests. Therefore, the results are also supportive of Laufer's claims that focus on form can be used as an effective technique to teach both L2 vocabulary as well as grammar. However, there are few studies investigating the role of FonF and FonFs techniques in vocabulary learning (Hill & Laufer, 2003; Laufer, 2003; Laufer, 2006; Sheen, 2005; Shintani, 2013). In line with the findings of the previous studies, Pujadas and Munoz (2019) have noted the importance of pre-teaching via a focused group, although no definite suggestion of a teaching technique was made. The current study adopted the same pre-teaching activities as Pujadas and Munoz (2019) that led to the consideration of focusing on target items before watching foreign TV episodes. Laufer (2006) investigated the role of FonF and FonFs techniques in L2 vocabulary learning, and the findings of the study favored the use of FonFs to teach vocabulary. In the same vein, Hill & Laufer (2003) and Laufer (2003) found the benefits of form-oriented tasks in L2 vocabulary learning. The results of these studies provide good proof for believing in the effectiveness of these techniques being used together with foreign TV watching to learn L2 vocabulary. The effectiveness of L2 instruction plays a role in teaching L2 vocabulary with the help of foreign TV watching. Laufer's (2006) claim is based on vocabulary learning through reading. Still, this claim challenges the "default hypothesis" that incidental vocabulary is learned most through reading (Laufer, 2006). Furthermore, incidental vocabulary learning through reading necessitates a lexical coverage of the text of up to 98% (Laufer, 2005). The interpretation of these studies in relation to the current study should be done cautiously because the current

study measures the effects of narrow foreign TV watching on incidental L2 vocabulary learning. The exposure to the audio through videos accompanied by captions or without captions might have a different underlying factor, which can be enlightened by further investigation. However, based on the current study's findings and Pujadas and Munoz 's (2019) findings, the assumption that young beginner L2 learners may learn L2 vocabulary through integrating L2 instruction and foreign TV can be deduced based on the results of the present study.

5.4 The role of English TV Watching Behaviors of Turkish EFL Students on Foreign Vocabulary Learning

The remaining research question in the study investigated the foreign TV watching behaviors of 58 young EFL learners in Turkey with English/Turkish subtitles or without subtitles. The results of the current study revealed that more than half of the participants either never or less than once a month watch movies and TV series in the original version in English with Turkish subtitles/ English subtitles/without subtitles. Therefore, the deduction is that the participants of this study, who are students in a state school in Turkey, do not watch foreign TV and movies with native and target subtitles prevalently. To deeply understand the reasons behind this finding, the access to English TV and movies needs to be investigated considering the background of the participant students.

The European Commission's (2011) study revealed that dubbing is a dominant technique used in Turkey, which also supports the findings of the current study as more than half of the participants hardly ever watch subtitled TV and movies. The use of captions or subtitles instead of dubbing can be used as a tool to boost foreign vocabulary in learning. Aksaçlıoğlu & Yılmaz (2007) revealed that 222

Turkish primary school students watch TV for at least one hour every day, and more than half of the participants watch 2-3 hours of TV on weekdays and weekends. Considering that TV watching is a common activity among young learners in Turkey, watching foreign TV may be an alternative means to improve foreign vocabulary learning, too. Watching foreign TV may become a leisure time activity, through which learners can be exposed to new foreign vocabulary, and learn foreign vocabulary incidentally (Rodgers, 2013). Previous studies (Baltova, 1994; Brett, 1997; Chung & Huang, 1998; Chung, 1999; Gruba, 2004, 2006; Hasan, 2000; Sueyoshi & Hardison, 2005; Vanderplank, 1988; Wang, 2012) have also investigated the attitudes of foreign language learners towards language learning through foreign video watching. A positive attitude was found among EFL learners towards foreign video watching to learn language. The participants in the study by Wang (2012) also showed a positive attitude towards foreign vocabulary learning through watching foreign videos. The young learners' attitudes towards foreign vocabulary learning through foreign videos and towards the use of captions can be further investigated in Turkey.

The finding that more than half of the young EFL learners did not watch English TV and movies with English subtitles also can be interpreted as the rest of the participants preferred watching L2 TV with L2 subtitles. Moreover, most participants used subtitles when watching L2 TV, as was revealed by the survey. However, based on the reading background of the participants, 70% of the participants never read magazines, books and journals in English. This finding might be supportive of the motivation of the present study because the popularity of reading in L2 dropped among young learners. Nevertheless, the research context of the study and the participants' socioeconomic status might play a role in the

unpopularity of reading among young learners. Since the participants were educated in a state school, their access to foreign language materials was limited to what the school provided. The unpopularity of L2 reading among the participants might cause a decrease in incidental vocabulary learning outside of the classroom. Consequently, the need to find a new way to expose L2 learners to L2 vocabulary and language as a whole appears. The finding of the survey revealed that this need can be filled by using L2 TV and videos efficiently as a tool to teach L2 vocabulary. Peters (2018) also revealed that L2 learners were exposed to L2 multimedia channels more frequently than they were to L2 reading materials as a result of a survey study developed by the European Commission.

Furthermore, the frequency of reading in English outside the class is lower than the frequency means of watching TV and movies in English with the target language and native language subtitles or without subtitles. This can be interpreted as meaning that watching foreign TV is more popular among the participants compared to reading in English outside the classroom. One implication of this finding is that students even preferred watching foreign videos without subtitles to reading books in English. Supportive results were also indicated by the decrease in the reading habits of young people in Europe (European Commission, 2017). Studies by Lingren & Munoz (2013) and Peters (2018) also indicated that exposure to audiovisual input rather than written input was more popular among language learners. Based on the results of the current study and the previous research, the decrease in the reading habit of young learners may mean a decrease in incidental vocabulary learning through reading. Therefore, the popularity of TV watching behavior outside the classroom might be directed to incidental foreign vocabulary learning through regular exposure to foreign TV. A new direction for the use of foreign TV and videos

in the classroom and outside of the classroom in the field might cause an increase in incidental vocabulary learning among young learners of English.

A further investigation of the TV watching behaviors of language learners was undertaken to reveal whether or not a significant difference existed among the four study groups. The significant finding that the control group watched English TV and movies with English subtitles more frequently than the caption group may cause a reconsideration of the low scores of caption group in meaning recognition and recall tests. Of all the groups, the caption group had the lowest means in terms of foreign TV watching with English/Turkish subtitles and without subtitles. Therefore, the groups who had been watching foreign TV and movies before the intervention might have been affected positively. When learners first start to watch foreign TV, they can face difficulties based on the speed of the dialogue, the unfamiliar spoken forms of words, the amount of unfamiliar spoken input overall (Webb, 2011). This difficulty, however, can be overcome by the use of interlanguage and intra-language subtitles (Vanderplank, 1994). Although the effectiveness of captions was not proved by the results of the current study, many studies in the field have proved the effectiveness of captions. The results of the survey also revealed that language learners were prone to look at the subtitles before listening to the audio as a strategy to cope with a foreign video. Regardless of being in native or target language, it was clear from the descriptives that the percentage of participants who used subtitles first while watching English TV is higher than the participants who first used the audio. Further findings from the survey also revealed that the number of the participants who read the subtitles before the audio when the subtitles were in Turkish is noticeably higher than the number of the participants who read subtitles when they were in English. Furthermore, using the strategies in the survey study did not apply

to a high percentage of participants when the subtitles were in English. One possible suggestion for this can be that language learners should be exposed to native language captions first and then, subsequently, they can comprehend the foreign video materials with the target language (Markham et al., 2001). The tendency towards using native language subtitles first with low proficiency learners can be a good start in terms of developing foreign TV and movie watching habits and further vocabulary development can be achieved when they attain better listening and reading skills. The ineffectiveness of captioning in the present study might be caused by the lower reading skills of the participants as the survey study revealed that most participants did not read books in English outside of the classroom.

Overall, it was revealed that young EFL learners in Turkey did not benefit from intra-language subtitles for learning new vocabulary. However, intralingual subtitles accompanied by form-focused classroom teaching caused new form and meaning recall by young learners. The survey results also revealed that young learners in Turkey preferred watching foreign TV and movies in English with L1 subtitles. The claim that L1 subtitles help with video comprehension is also supported by learners' preferences. With a high proficiency level and vocabulary size, however, learners can watch with L2 subtitles to improve their vocabulary learning process. Moreover, classroom instruction to teach target items before watching the videos can help learners better comprehend and learn new vocabulary items because comprehension difficulty is mainly caused by low vocabulary size. In the next section, the summary and conclusion of the thesis will be presented.

CHAPTER 6

CONCLUSION

This chapter reviews the results of the thesis in the light of the research conducted on the effects of foreign TV watching on foreign vocabulary learning. This is followed by the pedagogical utilization of the thesis in the field of EFL/ESL, and the limitations of the thesis.

6.1 Summary and conclusion

The research exploring the effects of captioned video on foreign vocabulary acquisition and video comprehension dates back to the early nineties. Comprehensive studies investigating the role of foreign TV and video watching in language learning, including the investigation of various factors like age, proficiency, captioning, and explicit instruction are still being conducted. In light of the study by Pujadas and Munoz (2019) this aim of the thesis was to assess the effects of captioned foreign video watching and pre-teaching on foreign vocabulary learning. The results of the study did not indicate strong incidental vocabulary learning through watching foreign videos, contrary to the previous literature (Baltova, 1999; Huang & Eskey, 1999; Hui, 2007; Markham et al., 2001, Sydorenko, 2010; Vidal, 2003; Winke et al., 2010). However, there was a slightly significant difference between the control group and the no caption group in the meaning recall test in terms of relative vocabulary gains, which did not exist in the raw vocabulary gains. Likewise, no significant difference existed among the groups in the meaning recognition and the meaning recall tests. This finding was in line with the findings of the studies (e.g., Taylor, 2005) in the field that did not prove the positive effects of

captioned foreign video watching on vocabulary learning. A variety of factors might have played a role in the vocabulary learning process of young EFL learners considering these findings. Excessive exposure to the input (Sydorenko, 2010), vocabulary size (Webb, 2011) and word encounters (Rodgers & Webb, 2011) can play a role in the foreign vocabulary learning process through exposure to foreign videos. The findings of this thesis also showed that adding the same language subtitles on screen did not help learners learn more foreign vocabulary. On the contrary, the striking finding that the relative and raw vocabulary scores of the caption group were lower compared to the control group raised the issue of the detrimental effects of captioning. This result was not supportive of the findings of the previous studies (Donche et al., 2015; Garza, 1991; Hui, 2007; Markham, 1989; Pujadas & Munoz, 2019; Koskinen & Neuman, 1992; Perez et al.,2013; Sydorenko et al., 2010; Vanderplank, 1988) that revealed positive effects of captioning. However, this finding did provide support for the cognitive load hypothesis (Sweller, 1994) and the redundancy principle of multimedia learning (Moreno & Mayer, 1999).

The thesis also explored the role of pre-teaching together with captioned foreign video watching in foreign vocabulary learning. Only a few studies (Pujadas and Munoz, 2019; Wang, 2012) have investigated the role of instruction together with foreign video and TV watching in language learning. In line with the findings of these studies, the thesis also revealed the positive effects of pre-teaching on vocabulary learning. The relative and raw vocabulary gains in the form recall tests were significantly different between the caption focus and control groups, which proved the role and importance of pre-teaching in vocabulary learning. Considering

the effects of the treatment, there was a medium effect size of the form focused instruction and captioning together in the meaning recall test.

The thesis also provided a deeper insight into the foreign TV and movie watching frequencies and use of L1 and L2 subtitles while watching subtitled TV and movies by a small young EFL learner group in Turkey. The thesis study revealed the English TV and movie watching frequencies of a group of young EFL learners in a state school in Turkey. The results, however, showed that more than half of the participants never or only once a month watch English TV and movies with English/Turkish subtitles and without subtitles. Another finding was the tendency of the participants to watch English TV and movies with Turkish subtitles more frequently than they watch with English subtitles. Regarding the subtitle use of the participants, it was also revealed that young learners preferred looking at the subtitles before listening to the audio as a strategy to deal with the burden of foreign video materials. Another important finding from the survey showed that reading in English outside the class was unpopular among the participants. The unpopularity of reading might have been caused by the inaccessibility to printed L2 materials outside the classroom.

6.2 Pedagogical implications

In this thesis, the aim was to assess the effects of English TV watching together with the effects of captioning and pre-teaching on English vocabulary learning by young EFL learners in Turkey. The thesis revealed slight incidental foreign vocabulary gains by young EFL learners, and no positive effects of captioning in terms of learning new foreign vocabulary. Based on these findings, the factors like age, proficiency, previous TV watching behavior, vocabulary size need to be considered

as determinant factors in order to use foreign video materials in the classrooms to teach English vocabulary. The findings of this thesis provide insights into the use of foreign video materials in the Turkish context, both in classrooms and outside the classrooms. Previous studies and the findings of this thesis suggest the use of foreign video materials and extensive foreign TV watching is an important source for the learning of new English words. However, the population of young beginner learners should be dealt with cautiously as the use of captioned video materials even decreased the learning of new foreign vocabulary due to the creation of a cognitive load on young EFL learners. Therefore, the use of native language subtitles can be used as a solution to prevent learners from a load of unknown vocabulary, low reading, and listening skills as suggested by the tendency to use Turkish subtitles by young EFL learners in the survey study.

Another finding of the thesis was that the use of explicit pre-teaching of the target items before each video intervention led to significant vocabulary gains. This finding has a significant implication for understanding the role of instruction in the foreign vocabulary learning process. As young beginner learners face problems while watching English TV, the difficulty can be overcome by explicit instruction of target items before watching the video materials, as proved by other studies (e.g., Pujadas & Munoz, 2019; Wang, 2012) in the field. Turkey is an EFL context, where learners can only be exposed to input in the classrooms. However, the existence of foreign TV and movies can provide a valuable source to teachers and learners as authentic input. As the popularity of reading drops among the young population, based on the report by European Commission (2011), foreign TV might be the future source to provide incidental vocabulary learning in a foreign language.

The theoretical implication of this thesis acknowledges the claims of dual-coding and multimedia learning theories within the perspective that human processing resembles the input presented by the video materials. However, the results also support the cognitive load hypothesis as captions might have created a load on young beginner learners, which hampered the new vocabulary learning process.

6.3 Limitations and suggestions for future research

This study has several limitations. First, three tests were developed based on the techniques and the format of the tests used in the study by Pujadas & Munoz (2019). To overcome their limitations, form recall and meaning recall tests were separated and were taken at two sessions. However, the form recall test included both recognition and recall skills as learners needed to recognize the word and then recall the form correctly. Therefore, there is a need to develop more reliable and valid test techniques in the field to measure word recognition and recall with beginner young learners.

The other limitation was the use of entire existing classes, and so random assignment to different experimental and control groups might have been used to prevent extraneous variables, even though the proficiency and vocabulary size factors were controlled by measuring them with OPT and PVST tests before the intervention. In addition to the randomization of the participants, a small number of participants was used in the study. To generalize the results, a large number of students with different education backgrounds in different contexts should be used as participants.

Furthermore, the need to measure extensive TV viewing effects still exists in the field of EFL as only a few studies (e.g., Pujadas & Munoz, 2019, Rodgers, 2013) have measured its effects on language learning. Thus, longitudinal studies for measuring the effects of extensive TV watching on language learning will shed more light on this so as to comprehend its impacts better. As the current study only used five successive episodes of a foreign cartoon series, the generalizability of the study to extensive TV viewing is limited. Overall, further studies are needed to assess the effects of extensive TV watching considering the effects of factors like age, proficiency, previous TV watching experience and vocabulary size. Moreover, the level of proficiency in reading is also a factor in subtitle reading or the use of subtitles. Therefore, studies investigating the correlation between reading proficiency and subtitle reading are needed in the field. This research has raised many questions that show a need for further investigation of these factors and their interaction with foreign vocabulary learning through extensive foreign TV watching.

APPENDIX A

SUMMARY OF PREVIOUS RESEARCH INVESTIGATING INCIDENTAL VOCABULARY ACQUISITION VIEWING VIDEOS

Study	Participants	L1 Language	Target Language	Comprehension Test	Treatment	Input Video
Koskinen & Neuman (1992)	129 students from seventh and eighth grades	Cambodian Laotian Vietnamese Hispanic	English	Vocabulary tests measuring word recognition and recall	Participants were divided into two groups: captioned TV and traditional TV. They watched the videos with or without captions.	Separate segments of Children's Television Workshop science production "3-2-1 Contact"
Koolstra& Beentjes (1999)	246 4th and 6th graders in a primary school	Dutch	English	English vocabulary matching test and word recognition test	Participants were divided into three groups. One group was a control that watched the video with a Dutch soundtrack. One of the experimental groups watched the video with an English soundtrack and Dutch subtitles, the other experimental group only watched the video with an English soundtrack	5 min episode of the American documentary series, "The New Wilderness."
Markham (1999)	118 advanced, university-level ESL students	Chinese Japanese Korean.	English	**A** separate 50 item listening multiple-choice	Each group viewed the two videos with or without captions.	Two video excerpts from educational TV programmes

Study	Participants	L1 Language	Target Language	Comprehension Test	Treatment	Input Video
Hui (2007)	182 university level participants	Chinese	English	Two vocabulary tests as pretest and posttest.	The participants were divided into three groups with different modes of captions (Chinese captions, English captions and no captions)	A 16-minute nature of science documentary from National Geographic
Yüksel & Tanrıverdi (2009)	120 intermediate level university students	Turkish	English	A 20-item vocabulary knowledge scale	The participants viewed the video with captions and with no captions.	A closed-captioned movie clip
Gass et al. (2010)	150 university students	English	Arabic, Chinese, Spanish, and Russian	Two vocabulary tests and one comprehension test	The participants viewed the videos with captions.	Three short English-language documentaries about animals
Sydorenko (2010)	26 university students	English and Cantonese	Russian	Comprehension, written and aural recognition, written and aural translation (from L2 to L1), and word knowledge tests	The participants watched the video clips in three different experimental conditions. The VAC group saw the videos with audio and captions, the VA group saw the videos with audio, and the VC group saw the videos with captions,	Three video clips, each 2 to 3 minutes long, from a Russian comedy series for native Russian speakers

Study	Participants	L1 Language	Target Language	Comprehension Test	Treatment	Input Video
Başaran & Köse (2012)	30 Turkish 8th Graders	Turkish	English	A 20-item English-language multiple-choice listening comprehension test	Groups viewed the video with Turkish captions, English captions, and no captions	The first 19-minute segment of the movie, Harry Potter and the Order of the Phoenix
Etemadi (2012)	44 senior undergraduate students	Persian	English	One was a multiple-choice comprehension test, the other a multiple-choice vocabulary recognition test	The participants viewed the videos with or without captions	Two movies: "Dangerous knowledge" and "Where is my robot?"
Lwo & Lin (2012)	32 eighth graders from a junior high school	Chinese	English	Vocabulary tests as pre and posttests	Participants viewed the multimedia under four conditions:(1) no captions, (2) English captions, (3) Chinese captions, (4) English and Chinese captions.	Three computer-assisted multimedia

Study	Participants	L1 Language	Target Language	Comprehension Test	Treatment	Input Video
Donche et al. (2015)	49 second year university students	Spanish/Catalan, Dutch, German, Russian, Romanian and Moldavian	English	A multiple choice and open questions pre-test and a post-test for informal vocabulary learning and film comprehension	The participants watched the videos with interlingual and intralingual subtitles	13 subtitled episodes from the American series "Friends"
Pujadas and Munoz (2019)	106 secondary school learners in a state school	Spanish	English	Aural recognition and meaning recognition vocabulary tests	The participants viewed the videos with L1 and L2 on-screen texts, one of the groups also was pre-taught the target vocabulary.	24 episodes of TV series "Fresh off the Boat"
Birules-Muntane & Sato Faraco (2016)	60 intermediate Spanish students	Spanish	English	Listening and vocabulary pre-tests and post-tests, one comprehension test as a post test	The participants of the study watched videos with English captions, Spanish subtitles, and no-subtitling situations,	One-hour-long first episode of the British series "Downtown Abbey"
Munoz (2017)	Forty participants from different age groups (children-adolescents and adults)	Spanish and Catalan	English	The study used eye-tracking	The participants watched the clips in English audio and either with Spanish subtitles or English subtitles.	Two clips, extracts from different episodes of "The Simpsons".

APPENDIX B

LANGUAGE BACKGROUND QUESTIONNAIRE

1) Sınıfınız (Class):

2) Yaşınız/Cinsiyetiniz (Age/Gender):

3) Ortalamanız (GPA):

4) Ana diliniz/ dilleriniz (Mother tongue/s):

5) Bildiğiniz yabancı dillerin seviyelerini (En düşük A1, A2, B1, B2, C1, C2 En yüksek), dilleri nerede öğrendiğinizi (evde, okulda, yurt dışında, ders alarak, kursta gibi.) ve ne zaman öğrenmeye başladığınızı (yaş belirterek) yazınız.

   (Write the proficiency level of the foreign languages that you know (the lowest A1, A2, B1, B2, C1, C2, the highest), where you learnt these languages (at home, at school etc), and when you started learning (specify the age).

	Dil (Language)	Seviyesi (Proficiency)	Nerede öğrendiğiniz(Where you learnt)	Ne zaman öğrenmeye başladığınız(When you start learning)
a.				
b.				
c.				
more :				

6) Bildiğiniz dillerdeki yetkinliğinizi yazınız. (Çok iyi: 5 iyi: 4orta: 3 kötü: 2 çok kötü: 1)

	Dil (Language)	Yazma becerisi (Writing skill)	Konuşma becerisi (Speaking skill)	Dinleme becerisi (Listening skill)	Okuma Becerisi (Reading skill)
a.					

b.					
c.					
more:					

7) Bildiğiniz dilleri nerede (okulda, evde, yurtta...) ve ne kadar sıklıkla (Haftalık saat veriniz) kullanıyorsunuz? (How often (write the hours) and where (at home, at dorm etc) do you use the languages that you know?)

	Dil (Language)	Kullanım alanı (The place where it is used)	Kullanım sıklığı (The frequency of language use)
a.			
b.			
c.			
more:			

8) Daha önce yurt dışında kaldınız mı? Hangi ülkede ve ne kadar süre kaldınız?

(Have you ever been to abroad? How long and at which country did you stay?

APPENDIX C

PRE-VIEWING ACTIVITIES

Episode 1 Activity Sheet

A. Write the English meanings under each word.

.SHADE .WHEEL .SAND .SANDCASTLE .ISLAND .ARMY .LANDSLIDE



1……..



2……



3……



4…….



5……



6……..



7……

B. Find the words below in the puzzle

G V D C A O A S C S

A T L J F Q O W A K

I E A X Z Z U N N P

V E D I L S D N A L

E V U N E C D X Y E

O W T D A S A N D E

K M A S L L L R N H

B H T H I Q S L M W

S L D G A D I I R Y

E R Q L Q B X Q J H

ARMY ***ISLAND*** ***LANDSLIDE***

SAND ***SANDCASTLE*** ***SHADE***

WHEEL

Episode 2 Activity Sheet

A. Write the English meanings under each word)

.LINE	.EXPEDITION	.FIX	.MIDNIGHT	.SAIL
.NATURE	.DRUMSTICK			







1…… 2…… 3……





4…… 5…….. 6……



7……

B. Find the words below in the puzzle

N	S	N	V	L	V	I	T	S	K
S	O	T	Z	K	I	H	C	A	C
P	K	I	K	M	G	N	V	I	I
A	T	F	T	I	R	O	E	L	T
G	O	Z	N	I	S	V	W	L	S
R	C	D	W	D	D	P	Q	U	M
D	I	O	E	D	M	E	S	H	U
M	N	A	T	U	R	E	P	F	R
Z	J	T	F	P	T	I	I	X	D
U	C	S	E	Z	M	X	W	D	E

DRUMSTICK ***EXPEDITION*** ***FIX***
LINE ***MIDNIGHT*** ***NATURE***
SAIL

Episode 3 Activity Sheet

A. Match the words with the pictures.

INSULATION/ NORTH/ HORIZON/ WARM/ LUCKY/ IGLOO/ LAKE







1…… **2……** **3……..**





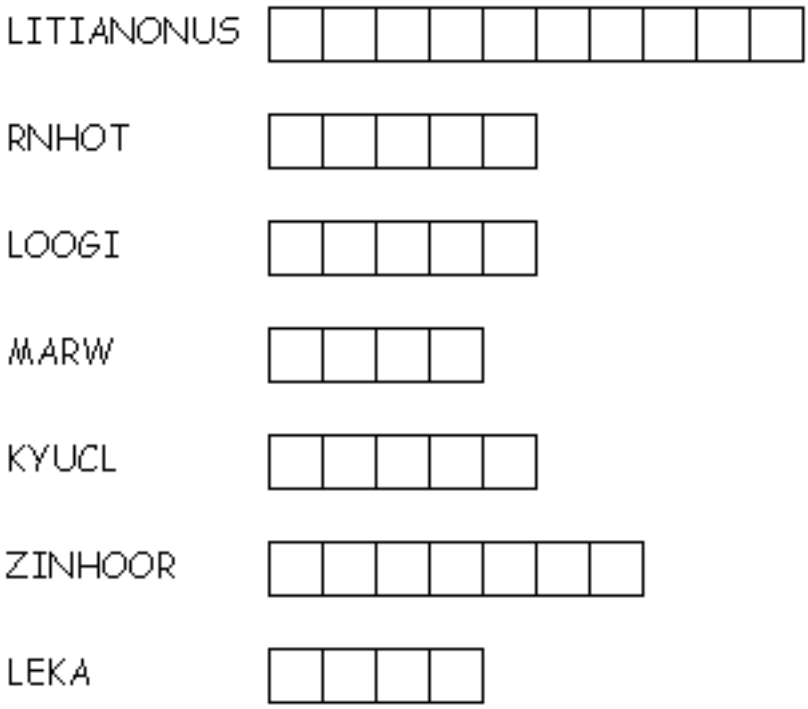


4…….. **5……** **6……..**



7…….

B.Unscramble the words below.



Episode 4 Activity Sheet

A. Write the English meanings under each word

CHAIRMAN/ SIDEWALK/ EARTH/ FRY/ LEND/ CLIMATE/ EXPERIMENT



1……



2……



3……



4……



5……



6……



7……

B) Find the words in the puzzle

B	T	C	B	J	J	X	J	K	N
W	N	S	L	W	C	L	K	A	O
L	E	L	G	I	E	K	M	T	A
C	M	M	C	N	M	R	R	R	L
F	I	L	D	E	I	A	A	W	V
E	R	I	T	A	B	F	T	K	E
A	E	B	H	O	T	E	D	E	J
R	P	C	Y	R	F	F	J	D	X
T	X	I	D	T	P	B	Q	I	U
H	E	S	I	D	E	W	A	L	K

CHAIRMAN **CLIMATE** **EARTH**
EXPERIMENT **FRY** **LEND**
SIDEWALK

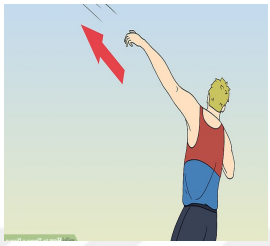
Episode 5 Activity Sheet

A. Write the English meanings under each word.

ANCIENT/ WIN/ THROW/ JAVELIN/ PUSH/ SMELL/ CROCKERY



1……..



2……



3……



4……..



5……



6……



7……..

B) Find the words in the puzzle

R A X M Y I T M R E

Q S X W R N K B E P

J J A V E L I N U J

B K A I K J F S T X

M Z C S C J H N I W

Q N U M O T A V Y B

A T J E R J H X C T

Z C P L C C Q R F M

G H H L H Z T B O S

Y N E L M U Y Q W W

ANCIENT **CROCKERY** **JAVELIN**
PUSH **SMELL**

APPENDIX D

INPUT EPISODE VIDEOS



The first episode of the cartoon “Doki” can be watched by clicking https://www.youtube.com/watch?v=V7Sooq0XT-g&list=PLrSHlO0bHqFrHfyzsM6l-47-qDGOchwbE



The second episode of the cartoon “Doki” can be watched by clicking https://www.youtube.com/watch?v=VNqMotkI31s&list=PLrSHlO0bHqFrHfyzsM6l-47-qDGOchwbE&index=2



The third episode of the cartoon “Doki” can be watched by clicking https://www.youtube.com/watch?v=d7sn7K_Jgg4&list=PLrSHlO0bHqFrHfyzsM6l-47-qDGOchwbE&index=3



The fourth episode of the cartoon “Doki” can be watched by clicking https://www.youtube.com/watch?v=fl493x5iL58&list=PLrSHlO0bHqFrHfyzsM6l-47-qDGOchwbE&index=4



The fifth episode of the cartoon “Doki” can be watched by clicking https://www.youtube.com/watch?v=ogaYOdlpbJ0&list=PLrSHlO0bHqFrHfyzsM6l-47-qDGOchwbE&index=5

APPENDIX E

FORM RECALL TEST

NAME/SURNAME:
NUMBER:
CLASS:

6th GRADERS LISTENING TEST

Please write down the words that you hear in the audio respectively.

1.		11.	
2.		12.	
3.		13.	
4.		14.	
5.		15.	
6.		16.	
7.		17.	
8.		18.	
9.		19.	
10.		20.	

APPENDIX F

MEANING RECALL TEST

NAME/SURNAME:
NUMBER:
CLASS:

6th GRADERS VOCABULARY TEST

Write the meaning or explanation of each English word in Turkish.

1.Sand:		11. Shade	
2.Expedition:		12.Line:	
3.Insulation:		13.Igloo:	
4.Fry:		14.Experiment:	
5.Ancient:		15.Throw:	
6.Wheel:		16.Sandcastle:	
7.Midnight:		17.Fix:	
8.North:		18.Warm:	
9.Earth:		19.Sidewalk:	
10.Win:		20.Javelin:	

APPENDIX G

MEANING RECOGNITION TEST

NAME/SURNAME:
NUMBER:
CLASS:

6th GRADERS VOCABULARY TEST

Choose the correct Turkish translation of each English word.

1) Sand

A) Vaha
B) Çöl
C) Göl
D) Kum
E) Kaya

2) Expedition

A) Bagaj
B) Seyahat
C) Kurye
D) Sürat
E) Gemi

3) Insulation

A) Yapıt
B) İnşaat
C) Soğuma
D) Yalıtım
E) Koruma

4) Fry

A) Pişirmek
B) Fırınlamak
C) Isıtmak
D) Kızartmak
E) Buğulamak

5) Ancient

A) Eski
B) Ölüm
C) Yıl
D) Anıt
E) Çağ

6) Wheel

A) Zincir
B) Pedal
C) Tekerlek
D) Bisiklet
E) Kask

7) Midnight

A) Gün batımı
B) Gün ortası
C) Akşamüstü
D) Gece yarısı
E) Öğlen vakti

8) North

A) Doğu
B) Yön
C) Batı
D) Güney
E) Kuzey

9) Earth
A) İklim
B) Yeryüzü
C) Bitki örtüsü
D) Atmosfer
E) Doğa

10) Win

A) Yarışmak
B) Katılmak
C) Kazanmak
D) İddiaya girmek
E) Rekabet etmek

11) Shade
A) Çim
B) Gölge
C) Güneş
D) İnsan
E) Ağaç

12) Line

A) Çizgi
B) Şekil
C) Kare
D) Düz
E) Daire

13)Igloo

A) Uzay Boşluğu
B) Kutup Yıldızı
C) Kardan Adam
D) Eskimo Evi
E) Buz Parçası

14)Experiment

A) Uzman
B) İcat
C) Deney
D) Tasarım
E) Bilim

15)Throw

A) Bırakmak
B) Fırlatmak
C) Kaldırmak
D) Ayrılmak
E) Boşaltmak

16)Sandcastle

A) Gökdelen
B) Tek katlı ev
C) Kumdan kale
D) Taştan ev
E) Apartman

17) Fix
A) Araba sürmek
B) Sorun çözmek
C) Düzenek kurmak
D) Tamir etmek
E) Yarış yapmak

18) Warm

A) Sıcak
B) Nemli
C) Bulutlu
D) Sisli
E) Rüzgarlı

19) Sidewalk

A) Gezi
B) Kaldırım
C) Patika
D) Yürüyüş
E) Yokuş

20) Javelin

A) Cirit
B) Kalkan
C) Kılıç
D) Güreş
E) Gülle

APPENDIX H

ENGLISH EXPOSURE QUESTIONNAIRE

Questionnaire: English learning

The present study seeks to better understand the role of exposure to English – or contact with English – outside the classroom. The questionnaire consists of 5 sections and it takes approximately 15 minutes to answer.

A. The use of English outside the classroom

1. Indicate how often you do the following activities.

1a. Watching movies and TV series in original version in English.

	Never	Less than once / month	Between 1-3 times / month	Between 1-3 times / week	Between 4-6 times / week	Every day
With Catalan / Spanish Subtitles						
With English subtitles						
Without subtitles						

1b. Playing videogames in English.

	Never	Less than once / month	Between 1-3 times / month	Between 1-3 times / week	Between 4-6 times / week	Every day
Individual						
Multiplayer						
MMO (Massively Multiplayer Online)						

1c. Indicate how often you do the following activities.

	Never	Less than once / month	Between 1-3 times / month	Between 1-3 times / week	Between 4-6 times / week	Every day
Listening to music in English (e.g. radio, CDs, phone, etc.)						
Reading books, magazines or comic books in English						

1d. Indicate how often and with whom you speak English face to face.

	Never	Less than once / month	Between 1-3 times / month	Between 1-3 times / week	Between 4-6 times / week	Every day
With friends						
With relatives						
With tourists						
Abroad						

1e. Indicate how often you do the following activities through the Internet.

	Never	Less than once / month	Between 1-3 times / month	Between 1-3 times / week	Between 4-6 times / week	Every day
Talking in English with someone (e.g. Skype)						
Writing with digital support (e.g. e-mail, chat, WhatsApp, Facebook, Twitter)						
Reading texts (e.g. e-books, magazines, webpages, blogs, newspapers, user guides)						
Watching YouTube videos						
Listening to the radio / podcasts / music on Spotify						

1. Specify if you do the following when carrying out the activities below. If you don't do any
of these activities regularly, select "does not apply"

2a. When I listen to music in English...

	Never	Sometimes	Often	Very often	Always	Does not apply
I try to understand the song as a whole						
I try to segment the words						

2b. When I watch movies in English with Catalan / Spanish subtitles...

	Never	Sometimes	Often	Very often	Always	Does not apply
I try to listen to the audio before reading the subtitles						
I read the subtitles before listening to the audio						
I only read the subtitles if I do not understand the audio						

2c. When I watch movies in English with English subtitles...

	Never	Sometimes	Often	Very often	Always	Does not apply
I try to listen to the audio before reading the subtitles						
I read the subtitles before listening to the audio						
I only read the subtitles if I do not understand the audio						

2d. When I surf the Internet...

	Never	Sometimes	Often	Very often	Always	Does not apply
I use an online translator to understand a full text in English						
I use an online translator to understand individual words in English						

2. If you do any other activities in order to learn or practise English when you watch movies and TV series in English, please complete the following sentence:

In order to learn or practise English when I watch movies, TV series, programmes or videos in English

_____

B. Stays abroad

3. Have you ever been abroad for a period longer than two weeks during which you used English regularly?

___ Yes (go to question 4a) ___No (go to question 5)

4a. Specify the length of your stay/s abroad during which you used English regularly? (Select does not apply" if you do not have a second and/or third stay abroad)

	More than 2 weeks and less than 4 weeks	Between 1 month and 1.5 months	Between 1.5 months and 3 months	Between 3 and 6 months	More than 6 months	Does not apply
Longest stay						
2nd longest stay						
3rd longest stay						

4b. During my longest stay abroad...

	Less than 25% of the time	Between 25% and 50% of the time	Between 50% and 75% of the time	More than 75% of the time
I listened to spoken English				
I spoke English				

4c. During my 2nd longest stay abroad...

	Less than 25% of the time	Between 25% and 50% of the time	Between 50% and 75% of the time	More than 75% of the time
I listened to spoken English				
I spoke English				

4d. During my 3rd longest stay abroad...

	Less than 25% of the time	Between 25% and 50% of the time	Between 50% and 75% of the time	More than 75% of the time
I listened to spoken English				
I spoke English				

C. Language camps

4.Have you ever been in camps in which English was used regularly?

_____ Yes (go to question 5a) ___No (go to question 6)

5a. Indicate how many times have you been in language camps.

___ Once ___

Twice ___

3 times

___ Other: _____

5b. Specify the length of the camp. (E.g., 1st time = 10 days; 2nd time = 15 days; etc.)

_____

_____

_____

5c. In general, during the camps in which English was used regularly...

	Less than 25% of the time	Between 25% and 50% of the time	Between 50% and 75% of the time	More than 75% of the time
I listened to spoken English				
I spoke English				

D.Extracurricular classes

4. Have you ever taken extracurricular English classes (inside or outside an educational centre)?

___ Yes (go to question 6a) ___No (go to question 7)

6a. Number of years you have attended extracurricular English classes.

_____ years

6b. Indicate when you took extracurricular English classes. (You can select more than one option)

Primary school---------- Secondary school---------

Baccalaureate-------- University----------

6c. In general, indicate the frequency (in hours per week) of the extracurricular English classes.

----1h/week ----1,5h/week. ----2h/week ----3h/week. -----more

6d. Mark the reason (or reasons) for which you took extracurricular English classes. (You can select more than one option)

___ Because I like English.

___ Because I needed more speaking practice.

___ Because I failed the regular English subject.

___ Other: _____

E.General information

7. AGE----------

8. GENDER……

9. Specify the grade you got in the last English course you took.

10.What are you currently studying? (E.g. secondary education, baccalaureate in sciences, BA in English Studies, etc.)

_____

11.In what year are you? (E.g. 1st, 2nd, etc.)

_____

12..Name of your educational centre:_____

13.Comments: Please use this section to comment on any other aspect related to your contact with the English language outside the classroom which has not been covered in the previous questions. (E.g. having English-speaking relatives [father, mother, cousins, etc.])

_____

_____

_____

THANK YOU FOR PARTICIPATING!

APPENDIX I

QUICK OXFORD PLACEMENT TEST

Part 1

Questions 1 – 5

- Where can you see these notices?
- For questions **1** to **5**, mark **one** letter **A**, **B** or **C** on your Answer Sheet.



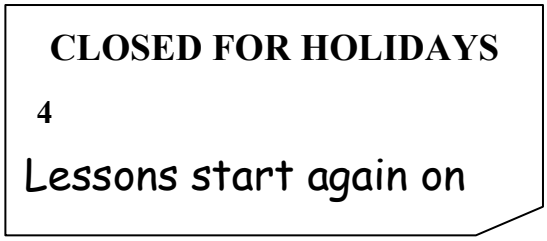
A in a shop
B in a hotel
C in a taxi



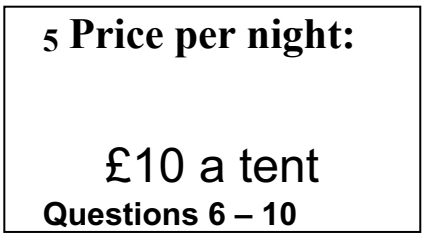
A in a library
B in a bank
C in a police station



A outside a theatre
B outside a supermarket
C outside a restaurant



A at a travel agent's
B at a music school
C at a restaurant



A at a cinema
B in a hotel
C on a camp-site

Questions 6 – 10

- In this section you must choose the word which best fits each space in the text below.
- For questions **6** to **10**, mark **one** letter **A**, **B** or **C** on your Answer Sheet.

SCOTLAND

Scotland is the north part of the island of Great Britain. The Atlantic Ocean is on the west and the North Sea on the east. Some people **(6)** ..... Scotland speak a different language called Gaelic. There are **(7)** ..... five million people in Scotland, and Edinburgh is **(8)** ..... most famous city.

Scotland has many mountains; the highest one is called 'Ben Nevis'. In the south of Scotland, there are a lot of sheep. A long time ago, there **(9)** ..... many forests, but now there are only a (**10)** ..... .

6	**A**	on	**B**	in	**C**	at
7	**A**	about	**B**	between	**C**	among
8	**A**	his	**B**	your	**C**	its
9	**A**	is	**B**	were	**C**	was
10	**A**	few	**B**	little	**C**	lot

Questions 11 – 20

- In this section you must choose the word which best fits each space in the texts.
- For questions **11** to **20**, mark **one** letter **A**, **B**, **C** or **D** on your Answer Sheet.

Alice Guy Blaché

Alice Guy Blaché was the first female film director. She first became involved in cinema whilst working for the Gaumont Film Company in the late 1890s. This was a period of great change in the cinema and Alice was the first to use many new inventions, **(11)** ..... sound and colour.

In 1907 Alice **(12)** ..... to New York where she started her own film company. She was

(13) ..... successful, but, when Hollywood became the centre of the film

11	**A**	bringing	**B**	including	**C**	containing	**D**	supporting
12	**A**	moved	**B**	ran	**C**	entered	**D**	transported
13	**A**	next	**B**	once	**C**	immediately	**D**	recently
14	**A**	after	**B**	down	**C**	behind	**D**	over
15	**A**	remembered	**B**	realised	**C**	reminded	**D**	repeated

UFOs – do they exist?

UFO is short for 'unidentified flying object'. UFOs are popularly known as flying saucers, **(16)** ..... that is often the **(17)** ..... they are reported to be. The **(18)** ..... "flying saucers" were seen in 1947 by an American pilot, but experts who studied his claim decided it had been a trick of the light.

Even people experienced at watching the sky, **(19)** ..... as pilots, report seeing UFOs. In 1978 a pilot reported a collection of UFOs off the coast of New Zealand. A television

(20) ..... went up with the pilot and filmed the UFOs. Scientists studying this

16	**A**	because	**B**	therefore	**C**	although	**D** so
17	**A**	look	**B**	shape	**C**	size	**D** type
18	**A**	last	**B**	next	**C**	first	**D** oldest
19	**A**	like	**B**	that	**C**	so	**D** such
20	**A**	cameraman	**B**	director	**C**	actor	**D** announcer

Questions 21 – 40

- In this section you must choose the word or phrase which best completes each sentence.
- For questions **21** to **40**, mark **one** letter **A**, **B**, **C** or **D** on your Answer Sheet.

21 The teacher encouraged her students ..... to an English pen-friend.

A should write **B** write **C** wrote **D** to write

22 They spent a lot of time ..... at the pictures in the museum.

A looking **B** for looking **C** to look **D** to looking

23 Shirley enjoys science lessons, but all her experiments seem to ..... wrong.

A turn **B** come **C** end **D** go

24 ..... from Michael, all the group arrived on time.

A Except **B** Other **C** Besides **D** Apart

25 She ..... her neighbour's children for the broken window.

A accused **B** complained **C** blamed **D** denied

26 As I had missed the history lesson, my friend went ..... the homework with me.

A by **B** after **C** over **D** on

27 Whether she's a good actress or not is a ..... of opinion.

A matter **B** subject **C** point **D** case

28 The decorated roof of the ancient palace was ..... up by four thin columns.

A built **B** carried **C** held **D** supported

29 Would it ..... you if we came on Thursday?

A agree **B** suit **C** like **D** fit

30 This form ..... be handed in until the end of the week.

A doesn't need **B** doesn't have **C** needn't **D** hasn't got

31 Although our opinions on many things ..... , we're good friends.

A differ **B** oppose **C** disagree **D** divide

32 This product must be eaten ..... two days of purchase.

A by **B** before **C** within **D** under

33 The newspaper report contained ..... important information.

A many **B** another **C** an **D** a lot of

34 Have you considered ..... to London?

A move **B** to move **C** to be moving **D** moving

35 It can be a good idea for people who lead an active life to increase their ..... of vitamins.

A upturn **B** input **C** upkeep **D** intake

36 I thought there was a ..... of jealousy in his reaction to my good fortune.

A piece **B** part **C** shadow **D** touch

37 Why didn't you ..... that you were feeling ill?

A advise **B** mention **C** remark **D** tell

38 James was not sure exactly where his best interests ..... .

A stood **B** rested **C** lay **D**centred

39 He's still getting ..... the shock of losing his job.

A across **B** by **C** over **D**through

40. If you make a mistake when you are writing, just …… it out.

A crosss B. clear. C. do. D wipe

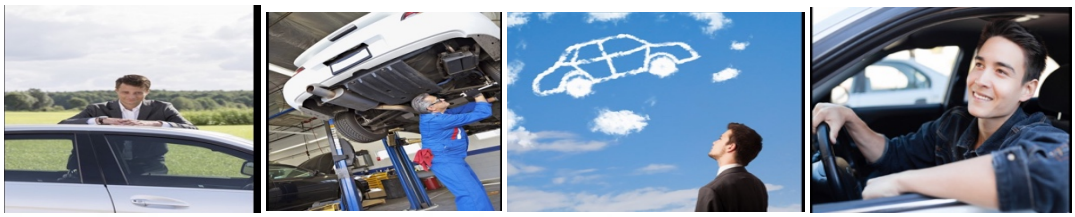
APPENDIX J

PICTURE VOCABULARY SIZE TEST

NAME/SURNAME: CLASS:

NUMBER:

1.



A B C D

2.



A B C D

3.



A B C D

4.



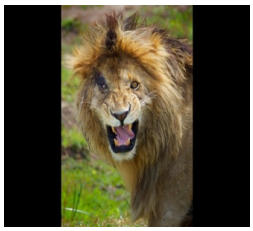
A B C D

5


A


B


C


D

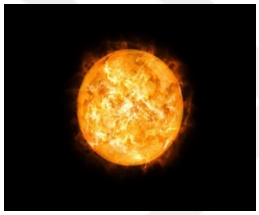
6.


A


B C


D

7.


A


B C


D

8.


A


B C


D

9.


A


B


C



D

10.



A B C D

11.



A B C D

12.



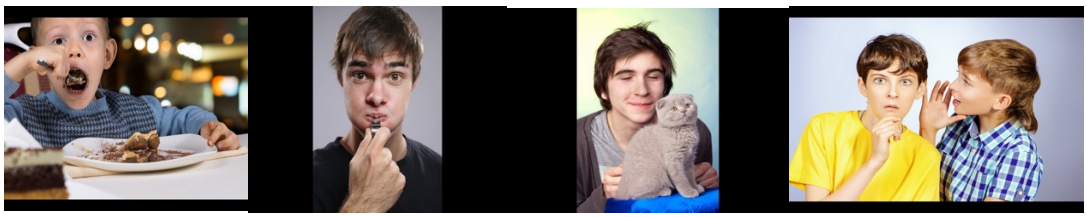
A B C D

13.



A B C D

14.



A B C D

15.



A B C D

16.



A B C D

17.



A B C D

18.



A B C D

19.



A B C D

20.



A B C D

21.



A B C D

22.



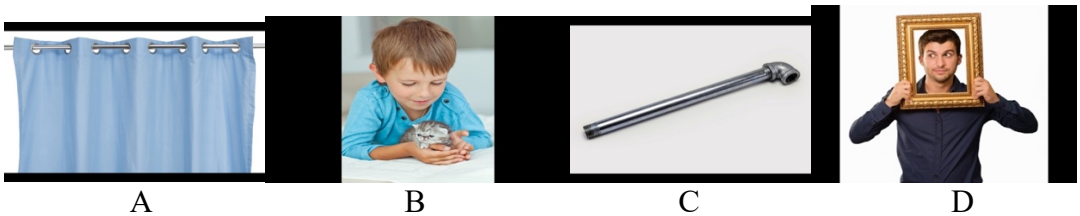
A B C D

23.



A B C D

24



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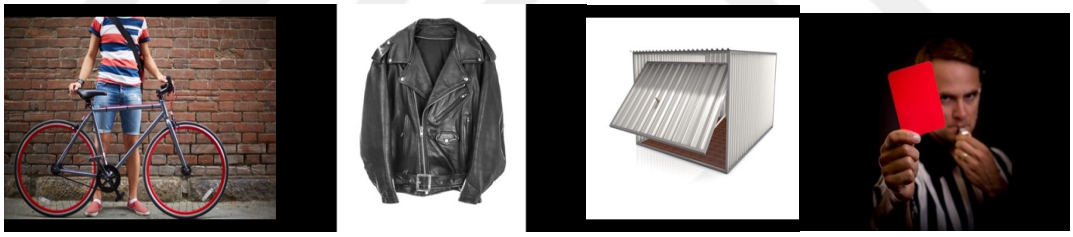

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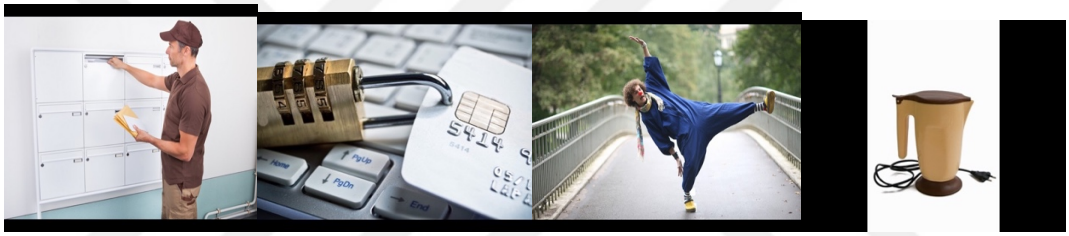

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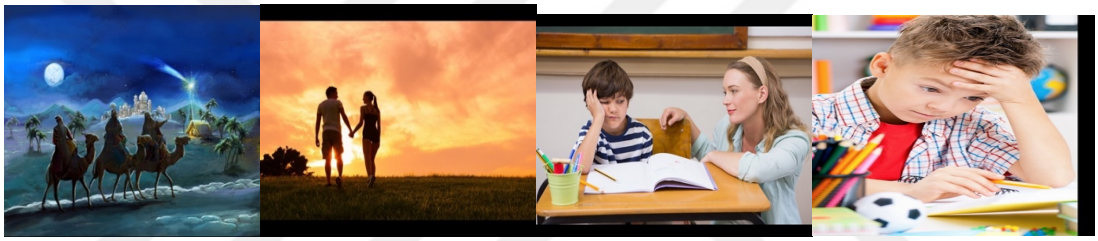

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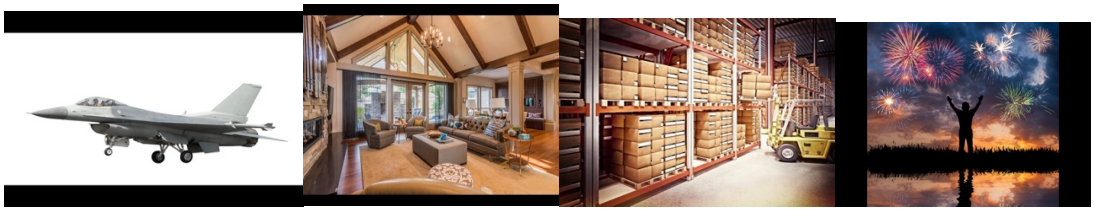

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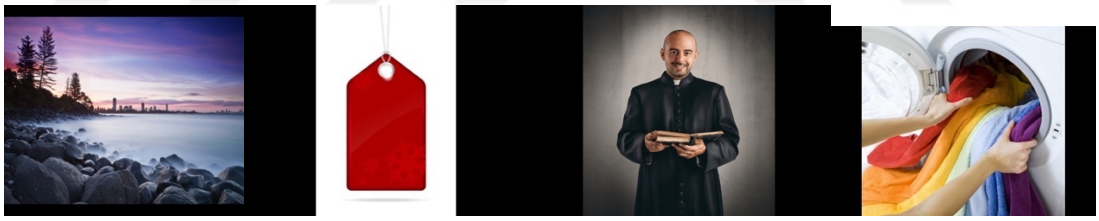

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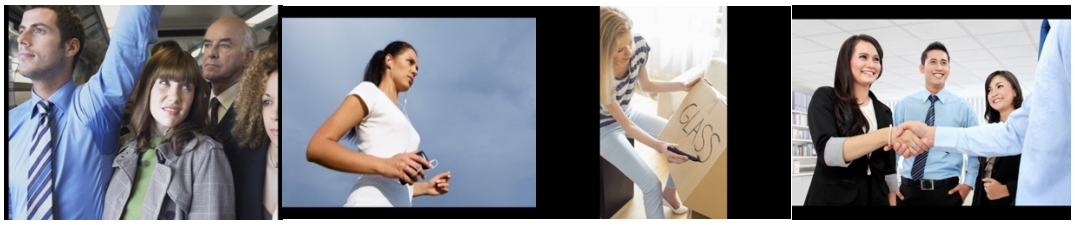

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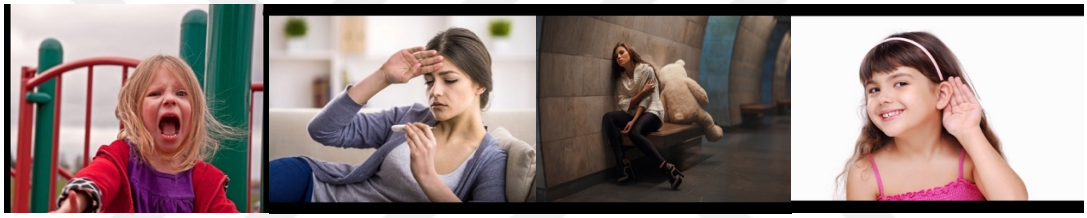

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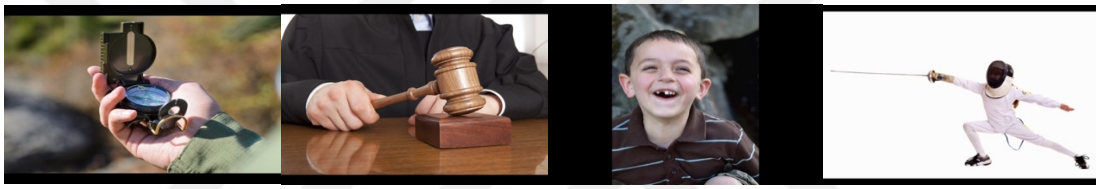

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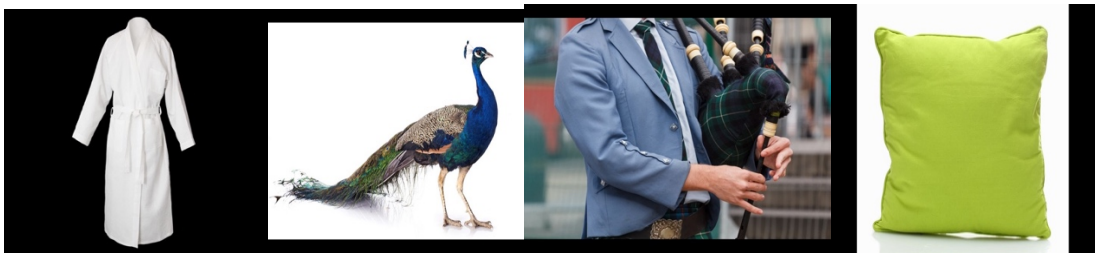

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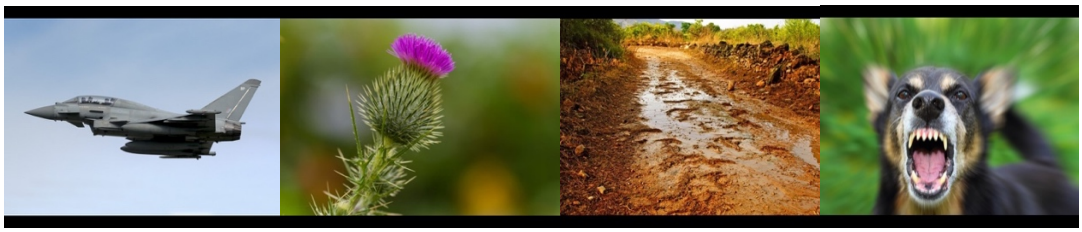

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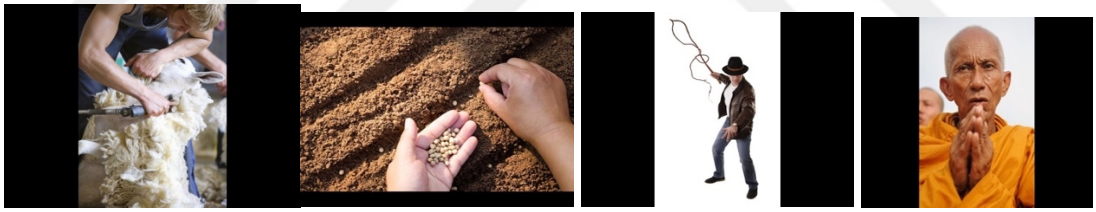

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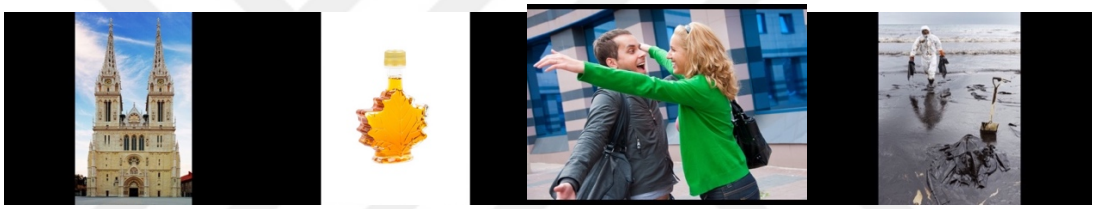

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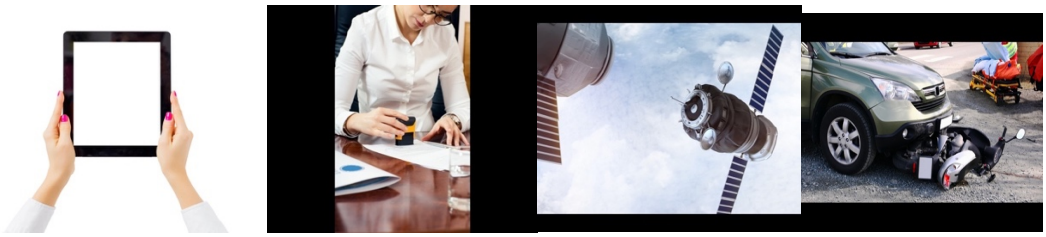

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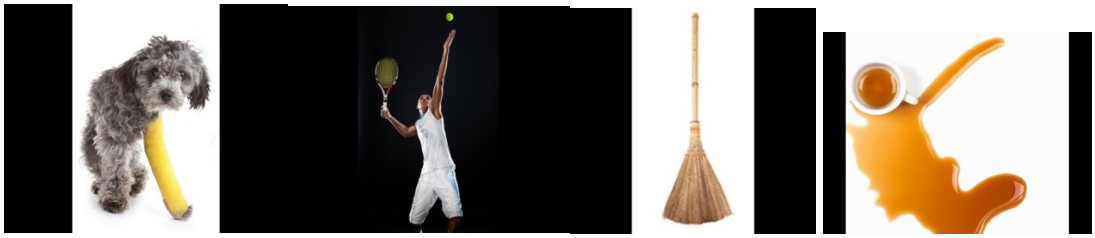

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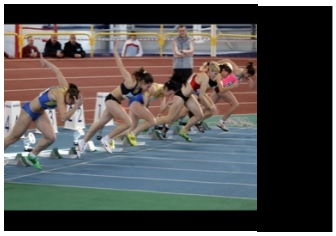

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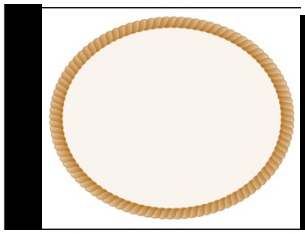

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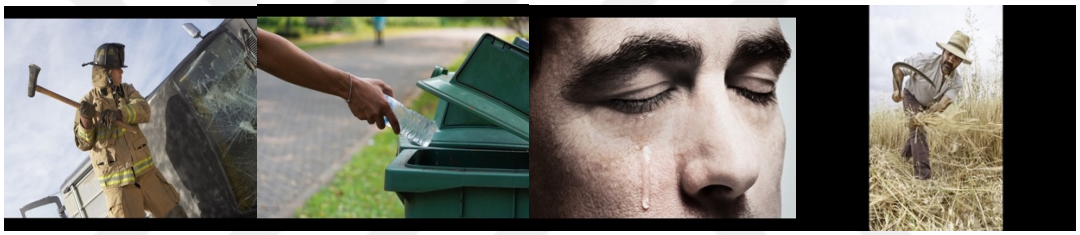

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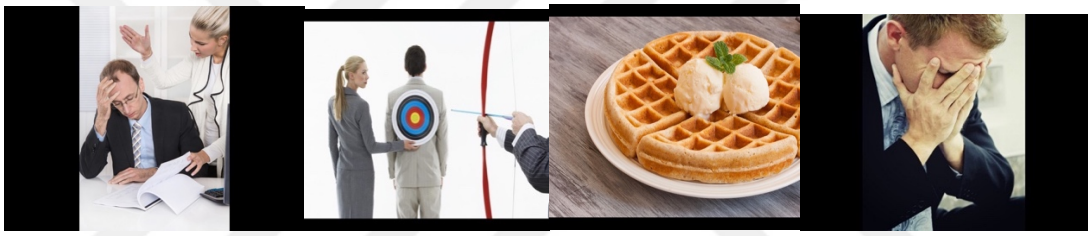

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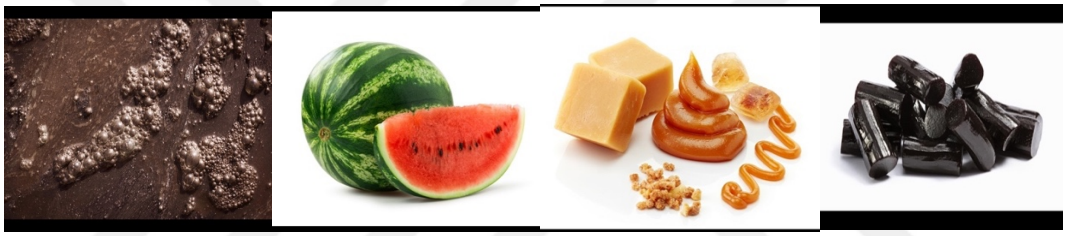

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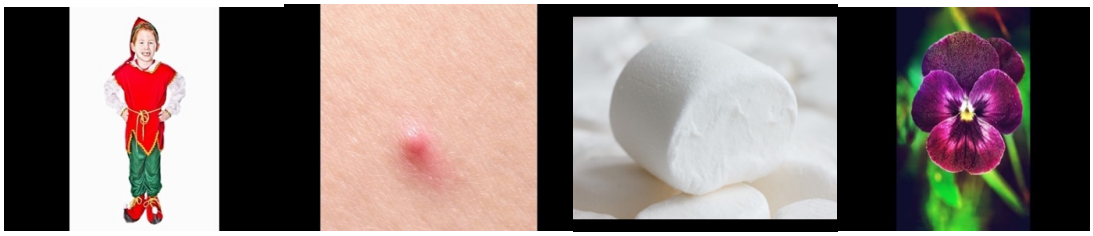

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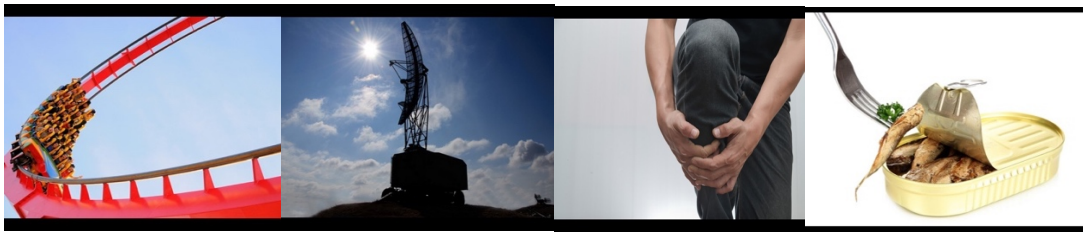

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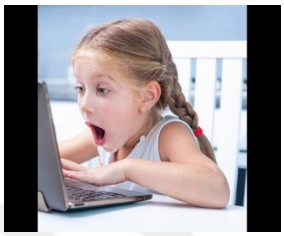

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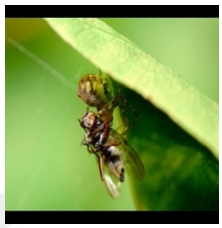

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