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CAN ADULTS LEARN VOCABULARY THROUGH WATCHING SUBTITLED MOVIES? AN EXPERIMENTAL CORPUS-BASED APPROACH

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ABSTRACT

Visual media are potential sources for second and foreign language acquisition, with several experimental studies examining the incidental learning of vocabulary through watching television. In contrast to previous studies that relied on self-reported use of English language media, the present experimental study explores how a combination of incidental learning (watching English-language movies with English subtitles) and intentional learning (using instructional materials) contribute to the recognition and recall of vocabulary. Furthermore, the study seeks to discover whether the learning of vocabulary in this way also contributes to the learning of parts of speech. Eighty-eight undergraduate learners of English at an Arabic university watched an English-language subtitled movie for two and a half hours. Using a corpus-based sampling approach, learning gains were assessed using a multiple choice receptive task and a fill-in-the-blank productive task. Based on paired sample t-tests and ANOVAs, the results showed that watching an English subtitled movie had a positive effect on the learning of vocabulary, for both recognition and recall; however, study participants scored significantly higher on receptive than productive tasks. Regarding parts of speech, most of the vocabulary items learnt were nouns, followed by verbs and adjectives. The teaching implications of the findings of the study are also discussed.

Contribution/ Originality: This study contributes to the existing literature by examining whether EFL learners benefit from a combination of viewing subtitled movies and formal vocabulary exercises. It documents the relative extent of receptive and productive mastery of vocabulary and parts of speech that are learnt predominantly through watching English subtitled movies.

1. INTRODUCTION

People use language to communicate and express their thoughts and this could not be done without vocabulary. Foreign language (FL) learners around the world attend classes in whatever language they are learning with the hope to develop their competence in the language. One key element of such learning is vocabulary knowledge. The reason is simple because vocabulary is considered a primary element in all language use (Schmitt, Cobb, Horst, & Schmitt, 2015) and thus it helps learners to be functional in a language in any given context. The consequences of the development of FL learners' vocabulary knowledge have drawn many researchers' attention in recent decades, such as Ellis (2009) who states that "It is probably true to say that during my editorship of *Language*

Teaching Research there have been more articles published on vocabulary teaching than on any other topic". This interest is reflected in the boom in studies that have examined the possibility of incidental vocabulary learning outside the classroom, particularly via media exposure (Kuppens, 2010; Lindgren & Muñoz, 2013). It would be useful to extend research that has testified to the value of media technologies, such as audio and video, and computer software as a critical factor in vocabulary acquisition (Al-Seghayer, 2001; Garnier & Schmitt, 2016; González-Fernández & Schmitt, 2015; Jensen, 2016; Macis & Schmitt, 2017; Sylvén & Sundqvist, 2012).

English as a global language has been universally used for various purposes such as trade and business, international politics, provision of information and communication (McArthur, 2001). For many decades, learners of English as a foreign language (EFL) in Saudi Arabia used to rely on formal materials, e.g. textbooks and teacher input, to promote learning in the classroom, largely ignoring other non-formal sources, outside the classroom such as TV programs, songs and movies. Cinema may serve as a valuable source of L2 for language learners, helping them to acquire authentic input in a context that otherwise provides limited L2 input. However, until recently Saudi government's policy restricted the watching of movies in cinemas due to cultural and religious factors, enforcing strict segregation of genders in all social environments, including in cinemas. This kind of restraint had been a significant barrier to L2 learners who deserve to hear authentic English. However, the integration of cinema into Saudi public life in the last two years has made for a dramatic change, with cinema now publicly available to both genders.

In Saudi Arabia and other gulf countries English-language movies are screened in cinemas with English audio and Arabic subtitles, providing the audience with an opportunity to hear the language as spoken by native speakers. As "young people consider English [as] a cool language because it is the language of most popular music and films" (Koolstra & Beentjes, 1999), subtitled English-language movies provide EFL learners, who are mostly young people in secondary and tertiary education, a unique opportunity to learn and practise English. The present study investigates whether viewing of the English-language television movies with English subtitles is a way of promoting learners' vocabulary acquisition, in combination with a variety of supplementary tasks offered in the classroom.

1.1. Empirical Contribution to Understanding Vocabulary Learning Via Watching Movies

One important issue that should inform the teaching and learning of vocabulary is how much vocabulary is necessary to function in English. In other words, are all vocabularies equally beneficial for learning? It is crucial to build an empirical body of knowledge that will support the use of frequency as the best criterion for choosing the target lexical items because presumably learners learn high frequency words prior to low frequency words. From a very practical point of view, a 2,000 word frequency has been considered as a basic, yet useful platform for being able to converse in English on everyday topics (Adolphs & Schmitt, 2003; Schmitt, 2014). By contrast, a vocabulary of over 3,000 words is needed from a pedagogic perspective as it is needed for reading authentic texts (Schmitt & Schmitt, 2014) while a vocabulary of 5,000 words is considered to be needed for reading materials independently (Nation & Meara, 2002). On the other hand, when learners' knowledge exceeds a vocabulary of 5,000 of the most frequent English words, for example, then their concern shifts to less frequent, i.e. technical, words that are found in a specialized field (Chung & Nation, 2004; Nation, 2001). A vocabulary of a very hefty 10,000 English words seems to be challenging but is probably essential for learners seeking to have a good command of English for Academic Purposes (EAP) (Zimmerman & Schmitt, 2005).

The importance of these simple frequency statistics have useful implications for teachers, making them aware about particular vocabularies, whose frequency is high or low, or particular technical words and academic words that are best targeted for explicit teaching and learning. From a pedagogic perspective the goal of the teacher is daunting because many students are not able to acquire a large number of words without their help, especially in the initial years of study. One way in which teachers can encourage the learning of high frequency words that

emerge in a wide variety of situations is by core reading instruction (Nation, 2001). In contrast, low frequency words may not be found in normal L2 input and therefore explicit teaching cannot easily facilitate the learning of such words, particularly under the constraints of a fixed school curriculum (Webb, 2010). While certain types of vocabulary knowledge (e.g. meaning and form) can be taught, other aspects of vocabulary knowledge (e.g. collocations and registers) required for competent language use can be learned incidentally through extensive exposure to various contexts (Schmitt et al., 2015).

Given the incremental nature of vocabulary learning, (Nation, 2001; Schmitt 2008) it is necessary to encounter new vocabulary items more frequently, for which researchers have investigated and recommended efficient approaches to maximize ongoing exposure to target words (Gass, 1999; Schmitt 1998; Sonbul & Schmitt, 2013). Using different vocabulary learning strategies such as guessing from context, using dictionaries, keeping vocabulary notebooks may help learners to compensate for their limited vocabulary in reading (Schmitt, 2008). Moreover, in a recent overview of research into second language (L2) vocabulary knowledge, targeting a readership who seeks to learn more about practical pedagogy and assessment to enhance L2 users' vocabulary learning, Schmitt (2019) illustrates important ideas that need to be kept in mind in future research. Most interestingly, Schmitt discusses an important element of extracurricular language exposure and how it can contribute to considerable learning of vocabulary outside the classroom. Schmitt demonstrates three types of what he refers to as extramural exposure to English as L2, namely watching English-language TV, playing computer/internet games in English and reading English-language newspapers and accessing anything in English on the internet. Schmitt shows that few studies have attempted to investigate the extent to which watching movies as an extramural L2 input may affect older learners' vocabulary acquisition (e.g. (Garnier & Schmitt, 2016; González-Fernández & Schmitt, 2015; Macis & Schmitt, 2017)). However, even those, Schmitt points out, have largely left a fundamental and crucial issue unaddressed, namely the relevance of the nature of the L2 exposure. Due to the lack of information regarding the manner and degree to which such language exposure is controlled, its utility is viewed with skepticism. The challenge will ultimately be how questions such as "how to promote the most effective use of extramural exposure in a range of contexts, and how to best integrate it with classroom instruction" (Schmitt 2019) are answered, which is the focus of the research reported here.

There is a school of thought which proposes that watching movies can boost the incidental learning of vocabulary (Webb & Rodgers, 2009a). In a study by Koolstra and Beentjes (1999) those participants who viewed subtitled English-language movies intensively learned more English L2 vocabulary incidentally than those who watched fewer English-language movies. In a study whose focus was the frequency of words learned, Nation (2006) analysed nearly 200,000 words taken from the Willington Corpus of Spoken New Zealand English which comprises a diverse range of spoken discourse (e.g. movies, talk radio, interviews and conversations). Nation calculated that a listener needs to have knowledge of 6,000-7,000 word families to achieve a good comprehension of 98% of the lexical words of spoken texts. This suggests that input from outside the classroom environment, such as visual media, i.e. movies and TV, could be a useful source of L2 language as much information in movies especially is conveyed by extended images and music. Thus the learner is sufficiently involved in promoting the 'unconscious' or incidental learning of vocabulary. The dilemma is that a larger number of known words are needed for successful listening comprehension because if the language of authentic movies is delivered rapidly, it will often include less frequent words. Corpus studies of 88 different TV programs (Webb & Rodgers, 2009a) and 318 film scripts (Webb & Rodgers, 2009b) have concluded that 3,000 most frequent words of English provide a 95% lexical coverage of these media. This means that comprehension of the language typically used in these media requires knowledge of 3,000 most frequent words of English. In another study taking a similar approach to the analysis of eight different TV program genres, Webb (2010) used the RANGE software to determine both the coverage of 10 most frequent low-frequency word families and the coverage of 3,000-word level of each program. The findings showed that

knowledge of 3,000 most frequent word families along with knowledge of 10 most frequently occurring low-frequency words is likely to provide learners with the competence needed to comprehend most TV authentic texts.

It appears that informal input of spoken genres such as TV shows and movies can produce incidental vocabulary learning opportunities for learners. However, the vocabulary incidentally learned according to the above studies is unlikely to be retained without further exposure to L2 and an intentional focus on vocabulary learning (Schmitt 2010) to consolidate and enhance the vocabulary learned while watching subtitled movies. Schmitt (2019) reviewed a study similar to the present one which explored the combination of extramural exposure to subtitled movies and a variety of tasks typically used in language classrooms. The complementarity of the informal and formal contexts can be seen within an ecological framework proposed by Kuppens (2010) who first investigated the relationship between the self-reported use of English or Dutch with English subtitled movies and English video clips with Dutch subtitles. Subsequently, a variety of classroom activities, such as translating from English to Dutch and from Dutch to English were conducted focusing on vocabulary and grammar exercises. The experiment was carried out with 374 Belgian Flemish-speaking students in their final year of primary school in Flanders. Activities included responding to a written survey which inquired after their use of English-language media as well as exercises in the language classroom which required them to work on words learnt from watching subtitled media, i.e. spoken English with Dutch subtitles. The results of multivariate ANOVAs showed that watching bilingual subtitled movies led to facilitative vocabulary gains and that strategies training provided to students helped optimize their learning of words from media exposure outside the classroom. One of the more intriguing findings of Kuppens' study was that when the effect of watching subtitled TV on the linguistic test scores was compared, it was found to be statistically significant ($p < 0.05$). The questionnaire survey showed that 31% of the respondents were highly motivated to learn English by watching English-language TV.

However, it is rather difficult to generalize Kuppens' (2010) findings since the strength of incidental learning of vocabulary could also be due to the fact that in Flanders (as in the neighboring Netherlands with which it shares its standard language) English-language media are always subtitled. This is unlike Germany, its bigger neighbor, where English-language TV programs and movies are generally dubbed into German. It might therefore be the case that the young people in Kuppens (2010) sample are exposed daily to authentic English, thus having plenty of opportunities for incidental vocabulary learning.

We should also note certain methodological constraints affecting Kuppens (2010) results. For example, they are difficult to interpret since Kuppens had to rely on a simplified self-report survey on account of her learners' age, though she used comprehensive test batteries to measure their overall English skills. Further, Kuppens' study combined a survey questionnaire into incidental learning, and asked participants their opinions on the learning of English from TV, along with explicit classroom tasks. But her study did not entail any actual watching of TV movies by her participants nor did she analyze transcripts of TV movies through lexical frequency profiling, making use of either Cobb (2009) corpus (available on the Lextutor website) or the British National Corpus (BNC) based frequency list developed by Nation (2006).

1.2.Problem Statement

The question to be asked with regard to the present study is whether watching subtitled movies offers the same opportunities for incidental vocabulary learning in an FL context like that of Saudi Arabia. So far no studies have investigated the effect of watching subtitled movies on vocabulary learning by Saudi learners, a gap which the present study seeks to fill by examining whether EFL learners benefit from a combination of viewing subtitled movies and formal vocabulary exercises.

The present experimental study is the first to draw on the actual texts of subtitled movies to investigate the potential complementarity of watching subtitled media for the purpose of incidental vocabulary learning and the language materials that learners are exposed to in their classroom activities. This study aimed to examine whether

the watching of English subtitled movies supported incidental vocabulary learning in combination with the use of materials in explicit classroom teaching and contributes to cementing the use of English language media by FL learners at tertiary level. Other issues emphasized in the current research are determining the relative extent of receptive and productive mastery of vocabulary as a result of complementary forms of learning and examining which parts of speech are learnt predominantly through watching English subtitled movies. The study also aimed to answer the following research questions:

1. To what extent does watching English subtitled movies promote the exposure of receptive vocabulary knowledge in the classroom?
2. To what extent does watching English subtitled movies promote the exposure of productive vocabulary knowledge in the classroom?
3. Is there a category of words that is learnt better through watching English subtitled movies?

2. METHODOLOGY

2.1. Participants

The study participants comprised 88 undergraduates from three sections of their first-semester intensive English language program in the Department of Modern Languages and Literature (DMLL) at King Abdulaziz University (KAU). They were randomly selected from students who had responded to a notice posted in the DMLL and to an email sent out to all students enrolled in the program. Participants were between 20 and 22 years of age. The program, which offers English, French and Chinese, addresses the needs of both English teachers, supporting them in their goal to teach English effectively in their schools, and non-specialist teachers taking an additional language for the first time. As part of the program the participants received English instruction for 17 hours a week, with the learning goal of improving their overall English competence. The participants spoke Arabic as their native language. Before matriculating and entering university, they had received 9 to 10 years of formal English instruction in intermediate and secondary schools. All participants were informed of the purpose of the study by the researcher. They were motivated to participate in the research as they understood that watching movies provided a real context for L2 learning outside the classroom, as the emerging trend of going to the cinema already did. All participants received module credits in compensation for their participation. They were also told prior to the study that the data gathered would be utilized for research, and that data and records would be safe and confidential.

2.2. Corpus Construction and Analysis

The script chosen for analysis was taken from the popular American movie *Joker*. Its selection was not made on any criteria other than that it was the top trending American movie of the drama genre released in September 2019. The script includes a total number of 12,869 word families. Nation (2006) and Webb and Rodgers (2009b) argue that the learning burden of proper nouns, marginal words (e.g. *eh*, *oh*, *wow*, *hmm*, *uh*, *sshh*) and non-linguistic cues in movies for L2 learners is perhaps not that big, thus posing a comparatively light vocabulary burden. Following their approach, the analysis of the movie *Joker* in the present study did not include non-verbal words such as stage commands or directions, songs and proper nouns such as speakers' names, which reduce the word knowledge required to comprehend it. The Vocabprofile BNC-online program of fourteen 1,000 word lists (Heatley, Nation, & Coxhead, 2002) was used for the analysis of the script to ascertain the levels of coverage offered by each of the 1,000-3,000 word frequency levels. Nation (2006) and Webb and Rodgers (2009b) claimed that a focus on 1,000-3,000 high word frequency levels would enable learners to comprehend spoken input such as movies, levels which they are also likely to be exposed to in their classroom course materials. Table 1 shows the coverage at 1,000-3,000 word frequency levels that are spread according to their frequency on the BNC lists.

Table-1. Lexical frequency profile: families, types and tokens in *Joker*.

Word list	Families	Types	Tokens
K1 words	789	1,647	9,764
K2 words	594	904	2,468
K3 words	384	412	1,638

Source: Adapted from Vocabprofile BNC-20 software.

Further analysis was conducted on the textbook series *Pathways Listening, Speaking and Critical Thinking* (MacIntyre, 2013) published by the National Geographic Society. The textbook series is targeted at particular levels of performance as set out in the Common European Framework of Reference for Languages (CEFR). A total of 265 words were taken from the lists of items provided at the end of the textbook which presumably reviewed and checked explicit exposure to the spoken and written form and the meaning of items in relevant units of the textbook. The lists of items were then compared with the words occurring at the 1,000-3,000 word frequency levels in *Joker*. It should be noted that the present study defined vocabulary as knowledge of words, be they spoken or written, and the meaning of a single word, therefore any type of multi-word knowledge such as collocations or idioms was excluded.

It may be more appropriate to run the lists of items over a largely written corpus such as BNC as it provided detailed estimates of the vocabulary load of texts (Nation 2006). Moreover, the lists of items used for analysis were at 1,000-3,000 word frequency levels from the BNC data. The vocabulary frequency profile of the lists is displayed in Table 2.

Table-2. Lexical frequency profile for textbook lists by word families from the BNC.

Occurrence	K1	K2	K3
Units 1-2	30	26	21
Units 3-4	25	22	19
Units 5-6	24	16	12
Units 7-8	15	12	8
Units 9-10	13	12	10
Total	107	88	70

Source: Adapted from textbook lists with reference to Vocabprofile BNC-20 software.

These word levels are considered acceptable for comprehension, if the learners in the program were expected to learn high frequency words in the 1,000-3,000 lists. The criteria for target word selection included word class, covering most common parts of speech appearing in the natural input, i.e. nouns, verbs and adjectives (Webb 2008). The final selection of target words comprised 60 single words. These words had been studied most likely as part of the course syllabus. Moreover, it was decided to include a large number of target words to capture as many of explicitly learned items as possible. As can be seen from Table 2, there is a general pattern of decline in frequency as more frequent words tended to be found in larger number than infrequent words. In fact, the textbook lists provide roughly 40% of words accounted for in the K1 list of the 1,000 most frequent BNC word levels.

2.3. Assessment Tasks

In order to tap into distinct levels of vocabulary knowledge through the combination of input from English subtitled movies and the exposure to materials provided in language classrooms, a paper and pencil format multiple choice receptive task and a fill-in-the-blank productive task were prepared. The first task assessed the participants' ability to recognize the correct meaning of 30 target items embedded in short sentences. A multiple choice item was constructed for each word, comprising the target item in bold and four possible meaning-distractors as unacceptable answers that corresponded to each tested word. Careful attention was given to the design of the distractors which shared a semantic relationship as well as being of the same part of speech as the target word. All distractors were

likely familiar to the participants as unknown ones could impact their performance. In the following example the correct answer is "c".

Ex: All I have are negative thoughts.

A. Processes.
B. Circumstances.
C. *Ideas.
D. Details.

The second task measured the participants' ability to retrieve the correct meaning of 30 target items of gapped sentences where they were asked to supply the form-meaning of the target words. To constrain guessing and reduce the supply of other English words, the first letter of the missing word was given. The following example seeks to elicit the word **illness**:

Ex: The worst part of having a mental ill……is that people expect you to behave as if you don't.

Although the tasks were authentic as the words were drawn from a movie. The researcher strives to match the benefit of the learners' exposure with the supplementary input from the language classroom. Both tasks were piloted with a group (N=10) of sophomore students at the same university as the study participants to reveal any difficulty and / or ambiguity of the tested word items and to avoid a ceiling effect. Vocabulary items that were known by all participants in the pilot study were excluded from the main study. The maximum score for each task was 30, with each correct answer awarded one point. Apart from testing receptive and productive vocabulary knowledge, an item's word class was identified to examine its effect on the participants' vocabulary learning, therefore the target items for each task included nouns (n=10), verbs (n=10) and adjectives (n=10).

2.4. Procedure

Participants were asked to sign consent forms, which explained that they were entitled to withdraw at any time without penalty. The study was carried out in a cinema (Vox Cinema) and in the language classroom, covering three sessions close to the last period of the first semester in 2019. Table 3 outlines the data gathering methods used in the study. At the beginning of the study the participants were instructed to watch the movie in a session which lasted approximately two and a half hours. Participants were grouped together in front of a big screen to ensure that all had the same chance to hear what was said on the sound track. The tests were administered over the following two days during two class sessions, with participants completing the multiple choice receptive test on day one, and the fill-in-the-blank productive test on day two, with each test taking no longer than 60 minutes. The test guidelines were explained before each test.

Table-3. The research design involving the three data collection sessions.

Tasks	Session 1	Session 2	Session 3
Watching the movie	√		
Receptive test		√	
Productive test			√

Source: Data gathering methods used in the present study.

On the multiple choice receptive test, a correct answer was awarded one point. On the fill-in-the-blank productive test, answers were marked taking an acceptable scoring approach, since the test aimed at measuring knowledge of meaning rather than knowledge of form. That is, if the word was misspelled but was recognizable, it was marked as correct. If the word to be completed, e.g. *illness* in "the worst part of having a mental *ill…*" merely shared a semantic relationship with the word provided as answer, e.g. *sickness* or *disease* the answer was not accepted. If no answer or an incorrect answer was given, the score was zero. The data were analyzed with the Statistical Package for Social Sciences (SPSS 22.0). Inferential analyses, namely paired-sample *t*-tests, were conducted to detect any difference between the learners' knowledge of receptive versus productive vocabulary

knowledge. Subsequently a one-way ANOVA was performed to arrive at the contribution of the two independent variables (receptive and productive modes of vocabulary knowledge, word classes) to the dependent variable (participants' tests scores).

3. RESULTS

The descriptive statistics for the receptive and productive tasks are given in Table 4. The findings for the multiple choice receptive task show that the participants performed quite well, with scores ranging from 18 to 27, and a few participants even scored the maximum marks. Participants found it more difficult to recall the meaning of target words than recognizing the meaning of lexical items. The standard deviation (SD) of the productive test was larger than the SD for the receptive test, indicating great differences between their scores. The results of the paired sample *t*-tests revealed that the difference between receptive and productive vocabulary test scores $t(32) = 64.7$, $p < .001$, was statistically significant. That is, participants were able to recognize lexical items better than recall them.

Table-4. Descriptive statistics for vocabulary measures.

Task type	Mean	Standard deviation	Total
Receptive knowledge	*72.18*	15.77	30
Productive knowledge	68.08	32.01	30

Note: All participants (N=88).

This indicates that receptive vocabulary knowledge is not only easier to acquire than productive vocabulary knowledge, but it is also the sort of knowledge that participants are more likely to retain. Conversely, the scores of 4467% on the productive tests, though remarkably lower than those on the receptive tests, showed that participants could produce nearly half of all test items.

Another important issue investigated in the present study was the development of L2 learners' knowledge of the parts of speech. Table 5 presents the mean scores for the proportions of parts of speech applying to both receptive and productive vocabulary knowledge.

Table-5. Mean scores of parts of speech for receptive and productive word knowledge.

Word item	Parts of speech		
	Noun	Verb	Adjective
Receptive knowledge	*12.86*	10.99	8.06
Productive knowledge	11.22	9.76	7.37

Source: Descriptive statistics from SPSS.

The means revealing that nouns were learned best, are followed by verbs and adjectives, that is, most participants' vocabulary growth was largely due to learning new nouns both receptively and productively. On the productive task, a repeated-measures ANOVA showed a statistically significant difference between the recall of nouns and other parts of speech (F=14.820, p<.001). That is, participants produced more nouns than verbs and adjectives. On the receptive task, participants also recognized more nouns than verbs and adjectives, but the difference did not reach the level of statistical significance.

4. DISCUSSION

The study sought to investigate whether watching an English subtitled movie had an impact on the participants' receptive or productive vocabulary tests and how the prevalence of particular parts of speech contributed to their learning. The present research expands on existing studies by adopting the viewing of a subtitled movie and exposure to classroom materials to learn new words from them. Based on these two types of inputs, the participants' vocabulary learning was measured using two vocabulary tests. The following discussion takes the research questions as its orientation.

It appears that visual input in combination with the use of classroom materials is an effective approach to learning new words, since the results of the analyses showed that watching an English subtitled movie facilitated the acquisition of vocabulary knowledge by the EFL learners in the study. The present study supports the findings of previous research that watching visual media is a potential and fruitful source of vocabulary learning (Koolstra & Beentjes, 1999; Kuppens, 2010; Webb, 2010; Webb & Rodgers, 2009a; Webb & Rodgers, 2009b). As suggested by Nation (2006); Schmitt (2019) and Syodorenko (2010) watching TV and English subtitled movies enhances comprehension and new vocabulary learning to varying degrees.

Moreover, the present study demonstrates that both receptive and productive vocabularies are gained from watching a subtitled movie. It is important to note that the greater learning gain was of receptive vocabulary knowledge. The rather more limited learning gain of productive vocabulary knowledge seems to be attributable to the limited exposure to spoken input in classrooms (Alharthi, 2020; DeHaan, Reed, & Kuwanda, 2010; Nation, 2001). This suggests that even though watching English subtitled movies may be enjoyable and involve a rich vocabulary to learn from, participants' production of the form-meaning link requires a kind of deep processing that they are not likely to be able to perform while giving attention to interesting, even exciting aural input from a dramatic movie. The ability to recall target words when carrying out a productive task most likely depends more on written rather than aural input and participants therefore did not score terribly well in this test task (Syodorenko, 2010).

The learning gains obtained in the present study can be compared with those reported by Kuppens (2010) as she investigated the effects of L2 learners watching subtitled TV programs and movies on vocabulary acquisition. In absolute terms, the results of the present study showed a clearer trend and higher scores (M=72.18) on the receptive task than Kuppens' scores (M=5.29) for the English to Dutch translation test, with the scores of participants in the present study being almost 60% higher than Kuppens (2010) scores. These differences might be driven by methodological issues, such as the task design itself. With regard to task type measure i.e. receptive vs productive knowledge, the results of the present study provide support for Laufer and Goldstein (2004) ranking of complexity for vocabulary measurement tasks. As a consequence, the receptive vocabulary is assumed to be larger than the productive one (Nation, 2001).

Apparently, L2 intake was operationalized in the present study as the participants' ability to indicate recognition of the target words on a multiple choice receptive task with transparently possible answers was something not revealed in Kuppens (2010) translation task. This operationalizing of L2 intake could have eased the difficulty of the multiple choice receptive task. Rather unexpectedly, the mean totals for the fill-in-the-blank productive task were consistently lower than those for the multiple choice receptive task as the former was typically a more demanding task (Schmitt, 2014). Although measuring vocabulary in a given context might be a more valid approach (Read, 2000) the contextualized hints provided with the fill-in-the-blank productive task were more challenging and thus led to a somewhat poor performance. This is also confirmed by the descriptive analyses where the standard deviations of the two vocabulary tasks were high, indicating substantial variability in the participants' vocabulary learning gains as shown in Table 4. Moreover, in Kuppens (2010) study learners were requested to translate the meanings of the Dutch target words into English and vice versa. However, to reveal the full extent of learning, the present study attempted to measure two modes of vocabulary knowledge, receptive and productive, since assessing more than one aspect of lexical knowledge is believed to be more valid and accurate.

Another plausible reason for the higher learning gains observed in the present study than in Kuppens (2010) study could be the participants' maturity. One might argue that language learners use a variety of media to autonomously acquire vocabulary and that watching subtitled movies will continue to gain popularity among adult learners. Given that the participants in the present study are relatively experienced learners of English at tertiary level, it seems likely that they were sufficiently motivated to engage with the content of the movie, especially since the target words appearing in their course materials were relevant. In contrast, Kuppens (2010) obtained her young

participants' opinions about their use of English media, relying on self-reports. Moreover, it is arguably the case that the methods used in the present study crucially depended on the corpus used. The content used to measure the effect of watching an English subtitled movie may contribute to L2 learners having positive perspectives of English, such perspectives in turn having been shown to influence the learning gains obtained in the present study. That is, the power of watching English movies may not only reside in the movies but also in the context and activities related to the classroom input. The main concern to be voiced here is that the vocabulary learning reported in Kuppens (2010) study is not based on actual data of learning English from watching English subtitled movies or TV.

To gain further insight into the results, the extent to which parts of speech (noun, verb, adjective) predict receptive and productive vocabulary knowledge gains was examined. The results clearly show that nouns were learned better than verbs and adjectives, in respect of both modes of vocabulary knowledge. This is in line with a recent vocabulary acquisition study (Alharthi, 2016). Of course, it is expected that nouns are the most dominant as well as transparent part of speech in media or instructional texts, as they name "things". It may be possible that the growth rate in the proportion of nouns during vocabulary learning is due to the effects of their semantic discrepancies (Clark, 1993). However, other parts of speech such as verbs and adjectives also require more linguistic information, namely about morphological variations, which in turn increases their learnability, particularly in the productive task. In other words, while participants often encounter difficulty in producing target verbs and adjectives along with their right inflectional and derivational components, this nevertheless may aid learning. The results of the receptive task, presented in Table 5, show that it was less difficult for the participants to recognize verbs and adjectives as they were able to guess the meanings through contextual clues.

5. CONCLUSION AND PEDAGOGICAL IMPLICATIONS

The present study demonstrates that both receptive and productive word meanings can be successfully learned via the consumption of media, namely by watching English subtitled movies. The research showed that L2 learners find a combination of visual media input along with instructional classroom content as a useful method for facilitating the process of learning new lexical items. The gains are not uniform since the effect of watching an English subtitled movie seems greater with regard to an increase in receptive vocabulary knowledge than one in productive vocabulary knowledge. Furthermore, the results confirmed another crucial point, namely that there is a relationship between visual media and parts of speech, found in both receptive and productive vocabulary tests. The growth rates for nouns exceeded those for verbs and adjectives, which suggests that they are easier to acquire, and participants also maintained their knowledge of nouns regardless of mode of vocabulary knowledge.

The findings of the study have several pedagogical implications for EFL instruction and learning. First, as vocabulary is often a big obstacle for learners in the classroom, it is likely that watching subtitled movies can be a useful type of content especially for learners who receive little spoken input in the classroom. Teachers should therefore strive to supply students with a combination of subtitled movies and typical teaching materials. This approach can be applied to listening and speaking classes not only for learning new vocabulary items but also to reinforce already learned but half-forgotten words. However, care must be taken in adapting such a combination of incidental vocabulary learning to situations of intentional vocabulary learning. Teachers should provide students with a sufficient amount of visual exposure, with supplemental feedback and strategies for dealing with a variety of inputs simultaneously. Students should be exposed to clips of subtitled movies in the classroom, asked to highlight and record new words, and in conjunction with consulting a dictionary reveal their meanings. Such a method is especially recommended for helping L2 learners with productive tasks and subsequent recall of vocabulary as these were found to be relatively difficult for the study participants.

Even though the method employed in the present research was promising, the findings should be considered in light of any undoubted shortcomings. One barrier to its generalization is the research sample and the type of lexical

knowledge. The participants in this study were exclusively Arabic learners of English and it is difficult to determine whether the results would apply to EFL learners with other first language backgrounds. More research is needed before generalizing the findings to different learning environments. The present study produced insights into how effectively the viewing of visual media can promote the learning of single words in the language classroom. Future research should explore the effects of watching English subtitled movies on receptive and productive tasks in instructed English formulaic sequences learning, for example, helping learners develop their knowledge of collocation or phrasal verbs via media exposure outside the classroom.

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