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Research Paper

The Effect of Audiovisual Input on EFL Learners' Receptive and Productive Vocabulary Knowledge of Concrete and Abstract Words

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Abstract

Not only is vocabulary a pivotal constituent of language learning, but also it does constitute an important part of the instructional process of a foreign language. Considering the undeniable role of vocabulary plays in language learning, this study explored the effects of audiovisual input on EFL learners' receptive and productive knowledge of concrete and abstract words. To this end, 24 upper-intermediate English language learners were selected from Iran Language institute in Qom, with an age range of 15 to 25. A 30–item pretest of concrete and abstract words was administered prior to the study. The words were selected from one movie and its corresponding book that included both receptive and productive vocabularies. During the eight-session treatment, the control group was instructed through the written input (the book) and the experimental group was taught via the audiovisual input (the movie). Results of the delayed posttest pointed to significant differences between the two groups in terms of vocabulary gains and the audiovisual group outscored the written input group regarding the vocabulary knowledge. More specifically, the study revealed that the audiovisual input significantly impacted learning concrete words. The study is a confirmation on the importance of audiovisual input in learning all different classifications of

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vocabulary in general and concrete words in particular. The study further implies that there would be a way for a more detailed scrutiny on the methods of acquiring various categories of vocabulary.

Keywords: Audiovisual input, Vocabulary knowledge, Receptive knowledge, Productive knowledge, Concrete words, Abstract words

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1. Introduction

Vocabulary is the pivotal constituent of language learning and even instruction of a foreign language; because it enables learners of the language, to have access to all materials needed for communication (Moeller et al., 2009). Developing a noteworthy size of vocabulary is vital in getting close to the practical aspect of language learning. There has been a lot of investigations by the researchers in the area, focusing on different variables that can possibly facilitate vocabulary acquisition (e.g., Peters, 2019; Peters & Webb, 2018, Webb, 2014). Different methods, techniques, strategies and input can be utilized in teaching vocabulary. Even multi-modal input is proposed for learning content and vocabulary simultaneously. From among the proposed strategies is video watching or audiovisual input (Perez et al., 2014). Recent studies have proved that input via TV in the target language has the potentiality to provide the viewers with much of the input needed for language learning (Webb, 2014, 2020).

Many studies have delved into the matter of receptive (passive) and productive (active) vocabulary distinction, and it is now accepted that most of the vocabulary needed for successful communication is acquired by reading and listening (Jenkins et al., 1984; Nagy et al., 1987; Nagy & Herman, 1987). The nature of teaching vocabulary in the classroom possibly leads vocabulary

learning into receptive side, because teachers sometimes tell the meanings to the students, define, or contextualize the words. They do not usually ask about a word, except for the correct spelling form or pronunciation. However, research indicates that productive learning is more effective. Researchers accept the receptive vocabulary as the ground for developing the productive. Waring and Nation (2004) describe the process of learning the two types of vocabulary as a continuum. However, discrepancies abound in the literature on the difference between receptive and productive vocabulary, but Milton (2009) stated that EFL learners develop receptive knowledge of words before productive. Yet, it has not been made clear how exactly this transfer happens. To achieve the productive vocabulary needed for successful communication, a high level of receptive vocabulary size is critical (Milton, 2009)

The distinction between concrete and abstract vocabulary, has emerged since the 1970s, when the first distinction based on perceivability was proposed. Concrete words have perceivable entities, whereas abstract words are the ones separated from the outer world. (Barsalou et al., 2003; Crystal, 1995; Paivio et al., 1986). There must be complete elaboration on how to learn the different categories of vocabulary, both for the instructors and the learners. However, the researchers did not address the concrete and abstract words directly.

Overall, there has been massive debate about what the most efficient methods are to grow students' foreign language vocabulary. Having in our mind that audiovisual input has the potential to be a massive source of L2 vocabulary input, both intentionally and incidentally, the study at hand tried to prove how much the possible effect is. Not enough is known about the possible impact of audiovisual input on passive and active vocabulary; let alone distinguishing between the abstract and concrete vocabulary. The study is conducted to move one step beyond the previous studies, revealing the

different possible effects of audiovisual input on FL learners' vocabulary of concrete and abstract words, as well as receptive and productive vocabulary.

2. Literature Review

2.1 Audiovisual Input and Vocabulary Learning

Previous studies have shown that the use of multimedia in the target language can provide language learners with massive amount of input needed for language acquisition (Webb, 2014). Subtitles are now widely used in language teaching (Bisson et al., 2014). There are several underlying reasons stated in experimental studies, to believe in benefit of audiovisual input and subtitles for L2 vocabulary acquisition. The most noticeable benefit of audiovisual input is possibly the fact that it simulates a kind of natural context (Oetting et al., 1995). This is consistent with the natural approach. The learner who faces authentic materials, is interacting with the target language naturally used in the world and not just the forms (Berardo, 2006). Also, some others concluded that audiovisual input provided learners with supportive input channels consisting of visual image, audio, and written text (Perego et al., 2010). Additionally, subtitling beneficially reduces the nervousness of the learners when they face authentic input (e.g., Čepon, 2011; Talaván, 2007), and it also positively affects learners' confidence in comprehending the second language.

Plethora of research have shown promising outcomes for the addition of captions in the second language multimedia input (e.g., Koolstra & Beentjes, 1999; Lertola, 2012; Zanón, 2006). Koolstra and Beentjes (1999) stated that learning from authentic input is more beneficial, not because the learner intends to remember, but because the learner is attempting to recognize the content of the input. Authentic audiovisual input attracts the learner to the culture of the second language (Bacon & Finneman, 1990; Erbaggio et al., 2012). While some researchers argued that a facing a real version of language

at natural speed possibly brings about anxiety and frustration among students (Bacon & Finneman, 1990), the experiments prove, subtitles provide a kind of positive reinforcement, which possibly boost confidence levels in receiving second language multimedia input, even when they face a natural uncaptioned input afterwards (Talaván, 2007). Overall, many studies (e.g., Koolstra & Beentjes, 1999; Lertola, 2012; Neumann & Koskinen, 1992; Talaván, 2007) are suggestive of positive impact of subtitled audiovisual input on students' foreign language competence.

There was research conducted on the cognitive effects of captions by Perego et al. (2010). The outcome proved that understanding the input, will not interfere with the auditory and visual processing, if the learner has an acceptable level of vocabulary knowledge beforehand. This means, attention to the text and caption does not reduce the image processing. This implies the possibility of simultaneous video, audio, and text processing.

Sydorenko (2010), concluded that audiovisual input provides very rich environment, because he investigated the differences in L2 vocabulary learning in different situations: subtitled, without L2 subtitles, or just focusing on the subtitles and not the movie. He finally asserted that students who were exposed to audiovisual input with subtitles, enjoyed larger vocabulary gains than other groups and, more importantly, they outperformed those who only focused on subtitles.

Concerning vocabulary acquisition, Perez et al. (2014) did research in which the learners watched short videos. They found out that all captioning groups, moderately exceeded the group with no caption input. The authors concluded that different types of captioning (key word & full) were not more efficient than traditional subtitles and ultimately concluded that providing subtitles accelerates learning second language vocabularies.

Vanderplank (2016) asserted that using simultaneous subtitles will benefit L2 learners, possibly because the data to be leaned, is distributed among three channels of input (audio, visual, and caption text). By running an experiment on the participants watching captioned videos, the study proved that captioning is a useful technique to foster L2 vocabulary.

Peters (2019) found that EFL learners willingly spend way more time watching movies than reading in English. He argued that extensive audiovisual input could bring huge improvement in second language learning, especially when there is less authentic input involved, and that audiovisual input could benefit vocabulary learning method. He further claims that entertaining features of audiovisual materials bring about a higher engagement level among learners since the they are usually interested in understanding what is going on in the screen. Furthermore, due to the entertainment nature of watching movies, it may be more effective in reducing learners' anxiety.

Muñoz et al. (2021) tested vocabulary acquisition and abstract structures from audiovisual input. Frequent occurrence of vocabulary was the cause of better learning, thus supporting previous evidence that was suggestive of frequency as a sign of acquisition from audiovisual input (e.g., Peters, 2019; Peters & Webb, 2018). Though he addressed abstract constructions and structures, which means there were phrases with the abstract words dominating in the sentence.

One additional study was handled by Majuddin et al. (2021) about learning expressions that were longer than single words, in which learners were given multimedia input, running a comparison between no caption input and captioned one. The learners were exposed to a single episode from TV series. They found out that results in posttest have shown a significant outperformance for captioning group over no caption group. Additionally, the

results of the delayed posttest indicated that subtitles caused higher improvement in immediate recall compared to delayed recall.

In a later research, Muñoz and Pattemore (2022) examined the effects of extensive audiovisual input on learning L2 language, especially the frequency of L2 grammatical constructions. By scrutinizing the results of both groups, they concluded that subtitled audiovisual input results in immediate learning, but the keyword subtitling leads to a more long-term retrieval.

2.2 Receptive and Productive Knowledge Related Studies

In distinguishing between the receptive and productive aspects of word knowledge, the studies have mainly targeted vocabulary "knowledge" rather than "learning". In fact, as Bogaards and Laufer-Dvorkin (2004) stated, there are only five studies that target passive and active "learning". Most of the experimental research on receptive and productive vocabulary, has targeted vocabulary size in two categories (Laufer, 1998) or has explored the priority of achieving receptive knowledge prior to that of productive (Aitchison, 1994; Melka, 1997).

After a few years of study in the field, there emerged some worries on how exactly the receptive and productive vocabulary knowledge should be measured. That is why there came different test methods to tackle the challenge. The noteworthy point is that literally all receptive test types are variations of multiple-choice tests, and this means there is the possibility of guessing for correct answers, but most of the productive measures do not (Webb, 2014). We do not believe the researchers were negligent of the effects of guessing, and the ultimate change in the results cause by this issue, is negligible. However, all results given need to be viewed considering this warning.

Plethora of other studies (Fang et al., 2019; Laufer, 1998; Laufer & Paribakht, 1998; Waring & Nation, 2004) likewise concluded that receptive

word size is larger than productive one, thus approving the previous research. All these studies gauged receptive and productive vocabulary sizes via same methods. Receptive aspect was tested by the Vocabulary Levels Test (Nation, 1990), and the productive aspect was examined with the Productive Vocabulary Levels Test (Laufer & Nation, 1999). Additionally, one research conducted by Griffin and Harley (1996) noted that receptive knowledge yielded a substantial size of productive knowledge. They also added that the performance on the receptive knowledge was much greater than the productive scores.

Zhou (2010) conducted a study on a new aspect of vocabulary of Chinese EFL learners, namely the "academic vocabulary." He reported that no previous study had investigated that aspect and concluded that results show Chinese EFL learners benefit from sizeable receptive academic vocabulary and the sizes of receptive and productive are moderately correlated.

Webb (2014) examined the connection of receptive and productive vocabulary sizes but in various frequency levels. He concluded that receptive and productive sizes declined as word frequency declined, backing up the widespread belief that productive knowledge is preceded by receptive knowledge (Aitchison, 1994; Melka, 1997).

In a study not directly addressing receptive and productive aspect, Schmitt (2014) stated that experiment suggests lexical inference will assist learners in improving both their passive and active word knowledge. He further suggests that since the results proved the high improvement in productive field, productive vocabulary knowledge requires the learner to stay focused, more than it is actually needed in learning productive ones.

A relatively related study by Li and Hafner (2022) explored other methods of turning receptive knowledge of vocabulary into productive. They studied English word knowledge using mobile-based vocabulary cards, added

with traditional vocabulary cards in a Chinese university classroom. The results showed that using both vocabulary cards were beneficial in L2 vocabulary learning, but mobile application (app) resulted in greater outcomes.

The latest study up to now seems to be conducted by Edmonds et al. (2022), in which they focused on tests for active vocabulary sizes in L2 English. The analytic approach taken by the authors, led them to realize that there are two elemental bases, manifesting themselves while learning. These are receptive and productive facets of vocabulary. They also concluded developing a general understanding of the whole vocabulary knowledge, necessitates a clear division of receptive and productive word knowledge.

2.3 Concrete and Abstract Related Studies

Researchers and instructors always hypothesize about why some words of the language are more difficult to learn than others. The answer may be related to the word itself, that is some words are inherently difficult to be learned. There is consensus that some factors like the length of the word or abstractness cause relative difficulty. Almost everyone admits that abstract concepts are difficult to understand in language, at least harder than concrete ones that have relatively direct sensory referents. This feeling probably has been the main incentive for experimental studies about the distinction and it is actually supported by several studies empirically. Studying abstract sentences and texts incorporating abstract words, usually takes longer than studying concrete sentences (Schwanenflugel & Shoben, 1983). Also, several studies proved that the time needed for deciding whether the word is a real one in the language or not, is longer for abstract ones (Bleasdale, 1987; Kroll & Merves, 1986), which is suggestive of the fact that people face some obstacles in comprehending abstract sentences. This means that a word's concreteness level affects the amount of time it needs to be comprehended. Lexical

decision necessitates remembering associated semantic data from the mind. Therefore, the longer time needed for abstract words possibly proves a normative challenge in conceptualizing semantic data of that word. However, the reason for slower time needed for abstract vocabulary is not well explained and justified.

From long ago, L2 vocabulary learning related studies have proved that if words are mentally connected to actual objects they are learned more easily and faster than words without. Paivio (1991) argued that the mental images can possibly cause appropriate referential interconnections between L2 word representations in language and the imagery system.

In a study conducted by Mcfalls et al. (1996) about the word meaning influence on acquisition of vocabulary, the examiners tested word recognition speed and reading of abstract and concrete items via lexical decision task. They found that during the same time for both groups, abstract words items read less accurately than concrete items. They concluded that word meaning influences the time the learners need to enter the word to their lexis.

Degroot and Rosanne (2010) examined the acquisition and also long-term retention of the concrete and abstract vocabulary of the L2 language learners. The results they reached, suggested that learners had acquired more from the concrete words than their counterpart. Interestingly, after a delayed retest, they also found out that the forgetting functions were steeper for abstract than concrete words, which implies more attention must be paid to this class.

In line with the previous experimental research that implied the significance of mental images in vocabulary learning, Mahmoudzadeh (2014) tested the impact of using PowerPoint on Iranian EFL learners' understandings for abstract words, against traditional methods of instruction for abstract vocabulary. After analyzing the data by one-way ANOVA, they clearly stated that the participants in the PowerPoint group outperformed in

the word size test and that PowerPoint positively affected learners' abstract word knowledge.

Another experiment was conducted by Gilsang (2018), who investigated the effect of use of L1 definitions and mental image creating on retention of concrete and abstract words. Total number of 24 Chinese ESL students studied 32 abstract and 32 concrete words. The results suggested that the use of L1 definitions and creating mental images, caused longer retention of concrete words, but not of abstract words.

Finally, Reggin et al. (2021) studied how the abstract words are learned by language experience. They tested the abstract vocabulary learning by investigating whether words that appear in more apparently diverse linguistic contexts are earlier acquired. The results provided evidence that sensorimotor systems are important to learners' acquisition of abstract words, but they suggest there are possibly other factors involved to be researched and examined in the acquisition of abstract vocabulary. As it is evident in the existing literature, none of the aforementioned experiments considered the role of audiovisual input on learning different subcategories of vocabulary, namely receptive/productive and concrete/abstract. However, as it can be readily discerned, there is only one study that has primarily focused on abstract constructions and not vocabulary learning per se. That's why this study primarily focused on the impact of subtitled audiovisual input. Therefore, putting audiovisual input in perspective, this research intended to study the potential effect of audiovisual input on concrete and abstract words and delved into whether EFL learners learned receptive and productive vocabulary differently. To these ends, the researchers formulated the following research questions:

1. Does audiovisual input significantly affect EFL learners' receptive vocabulary?

2.Does audiovisual input significantly impact EFL learners' productive vocabulary?

3.Is there a significant difference between learning concrete and abstract words with audiovisual input?

3. Methodology

3.1 Participants

A total number of 24 Iranian English language learners, from a non-profit institute, participated in the process. Since the students had to be in one level and the instructor had to be the same in both groups. The participants included 12 males and 12 females, aged between 16 to 25 years. The participants were recently given Oxford Placement Test by the institute, so it was considered to maintain the integrity of the research results. They were all in upper-intermediate level. They had English learning experience of four to six years and were chosen through convenience sampling. They were all made sure that the results they would achieve, will not affect their scores in the institute and that the material taught were only supplementary sources for their own benefit. They were also asked for consent to share results without their names. The learners were divided into one experimental and one control group.

3.2 Instruments

The main instruments utilized in the procedure were as follows:

3.2.1 Oxford placement test

This placement level test is used to certify that the participants have the same level of proficiency. It is designed for non-native English speakers and provides reliable method of classification for the learners. It is suitable for students aged 16 and more, and also it can be given online, so students can take it at home or at school. Before the treatment, this test was utilized by the institute.

3.2.2 Receptive vocabulary levels test

The format of the pretest and posttest for receptive vocabulary was the same as Vocabulary Levels Test of Schmitt et al. (2001). It is a test in which the participants have to choose and match the right definition or synonyms. This method will give an approximate vocabulary size at each vocabulary frequency level and results in having an estimate of the size of the participants' academic word knowledge. The items and words in the test of this research were chosen from the selected materials.

3.2.3 Productive vocabulary levels test

The formats of the pre and posttest for productive vocabulary were the same as the one proposed by Laufer and Nation (1999), but the items were substituted by the words chosen from the selected materials. There were 15 sentences for each category of concrete and abstract words. The examinees had to fill in the blanks while the first letters of the words to be written, were given in advance. The evidence for the validity and reliability of both these two versions of the vocabulary levels test (VLT), is provided in Schmitt et al. (2001).

3.2.4 Vocabulary Levels Test

The Vocabulary Levels Test of Schmitt et al. (2001), measures general and academic vocabulary size of English language learners. Since the proficiency test was not administered by the researcher, this test was used to maintain the homogeneity of the groups in vocabulary knowledge.

3.3 Materials

There were two co-educational classes, that received audiovisual and written input. For this study, an appropriate movie, the text of which was also available was selected. It's a level 4 educational book published by Pearson Education Ltd in association with Penguin Books Ltd, based on the novel authored by *Anthony Bruno*. Since the participants were mostly aged from 16

to 25, there was a small chance they had watched a movie from the year 1995, named *Seven*, by *David Fincher*. It's a mystery crime movie about two detectives chasing a serial killer whose motive is the victims' deadly sins. The movie was an interesting source and well-suited for the students' age and their English proficiency level.

3.4 Data Collection Procedure

After the participants took the Oxford Placement Test (OPT), 24 upper-intermediate students out of all were selected for the study. Then, the vocabulary levels test of Schmitt et al. (2001) was given to guarantee they all roughly have the same amount of word knowledge. As it is proven by most of the previous studies, the knowledge of the 5000 most frequent words would suffice for a learner to be able to understand authentic reading tasks. This implies that the students with this level of vocabulary, are capable of inferring the meanings of the unseen words from the texts and they will recognize most of what is intended by the author. The scores in this test showed the participants are fairly homogeneous, and they had the vocabulary knowledge of between 4000 and 5000 words.

To reach a fixed set of vocabulary as the main and common testing items between the two materials (the book and the movie), a total number of 30 words were selected, 15 concrete and 15 abstracts. These items were selected and then put in the formats of receptive and productive test of Laufer and Nation (1999) and Schmitt et al. (2001) respectively. Prior to conducting the main treatment, the reliability index had to be determined. Regarding that, Cronbach's formula was used for the sub-tests separately by the help of two experts in the field. A number of 10 participants were selected and took the designed tests. The internal reliability values found (.72) were almost acceptable. Therefore, the researcher relied on the established reliability indices that ensured the internal consistency of the items.

Two weeks prior to the treatment, both receptive and productive items were put to test. At first, two papers of productive test, 15 concrete and 15 abstracts on each page, and then 2 receptive tests, with the same word items as before, but in receptive format, were distributed. Instructions of completing tests were provided at the top of each test page in English. In the receptive treatment, the examinees were simply told to connect the short definitions or synonyms to the right words, but in the productive test, they were told to complete the words that had only one or two beginning letters already provided. After the pretest, the papers were collected and 2 weeks after, the treatment began.

The two experimental groups received audiovisual and written input. The class under audiovisual treatment went through an eight-week instructional period. Forty minutes was dedicated to the movie in each session. The input was given with L2 subtitles for two main reasons. First, the subtitled audiovisual input was found to have a more significant effect on the vocabulary acquisition. Second, since the second experimental group were being taught the written book of the movie theme, the audiovisual input group had to be the closest as possible to them. This was done to reduce the effects of other possible extraneous factors involved. In each session, first the particular part of the movie was played with subtitles, then the students and the teacher discussed the theme, story, words and their pronunciations, structure and grammar of the dialogues of the part they watched together on TV. Among the words taught, were those 30 common words between the movie and the book, of which 15 were concrete and 15 were abstracts. This procedure continued for 8 sessions until the movie was fully watched and discussed.

The instructor first played the part, paused it and started asking some related questions. Based on the given responses of the learners, the discussion was formed. Some of the posed questions were:

-Why do you think the guy is dead?
-Do you think the victim has committed suicide?
-What is the doctor exactly doing in the crime scene?
-Can you repeat what the last sentence?
-Which conditional type is the sentence:
-Can you name some synonyms for the word "stomach"?

At the same time, in the written input group, the same teacher used the book of the movie available, also called *Seven*, by *Anthony Bruno*. During the eight weeks of instructional period, the teacher worked on the contents of the book, each session roughly for 40 minutes. During each session, the traditional way a written story is taught was applied. The student took turn each in reading parts of the book loud, and the teacher was also there for added information on the theme and story of the novel as well as teaching all the new words and their pronunciations, idioms, grammar points used, etc. Among the items taught, were those 30 common words. When students were done and over with reading, the teacher first asked for the correct pronunciations for some of the mispronounced words like "bruise" and "scene." Then some questions like these were posed:

- As you can see in the picture of page 7, there is a word written on the wall. Can you recognize it?
- Why does the book state: "He had to make himself look." What does this imply?
- What kind of a doctor was he at the scene?
- Why do you think the guy is dead?
- Do you think the victim has committed suicide?

- Which conditional type is the sentence: **"**Very possible, if the gun was pushed hard enough against the skin."?
- Can you name some synonyms for the word "stomach"?

For both groups during the process, the teacher explicitly stated that the movie and the book are only used as supplementary sources, reducing the stress level and the students fear of final exams. After the procedure was complete and materials were taught, there was a delayed post-test after a week. One important rule was considered during the pre and posttests. During and after each paper test was given, the students were not allowed to go back to check any of their answers while taking the tests to reduce the possibility of learning effect in the upcoming tests.

The delivered papers were checked thoroughly by two experienced teachers. One important point is that there were two possible options in productive tests scoring system. The responses in the productive test, could be scored at two levels of sensitivity. Sensitive and strict. While checking the results strictly, the examinees' answer could be considered correct only if the word was completely spelled correctly. Whereas in checking the scores sensitively, responses that manifested the learner has remembered the word were considered correct even though they were misspelled by a couple of letters or were in a wrong grammatical form. This was noticeable since there were not just a few instances of spelling mistakes. The words such as "precinct" and "gluttony" were sometimes misspelled, especially in pretests. The author chose to go for sensitive scoring system, therefore when the L2 word was misspelled or was grammatically wrong, but the graders agreed that the answer of the learner in the exam manifested L2 knowledge of the particular item, it was marked as correct. This matters most when we consider the fact that there is one perennial problem with virtually all receptive tests, because they incorporate different multiple-choice formats

and this means it is probable for the learner to score by guessing, whereas productive formats normally do not (Webb, 2008). If this was an advantage for the receptive test, so was the sensitive and not-strict scoring system chosen for the production items. This is how the author though he would raise the reliability in the two groups tests scores.

3.5 Data Analysis

To investigate audiovisual and written inputs effect on EFL learners' passive and active vocabulary and to determine the difference between learning the concrete and abstract words with audiovisual input, the researchers ran multivariate analysis of covariance (MANCOVA) to analyze the data.

4. Results

Table 1 shows the skewness and kurtosis indices of normality and their ratios over the standard errors. Since the ratios of skewness and kurtosis over their respective standard errors are lower than ±1.96, the assumption of normality is observed.

Table 1

Skewness and Kurtosis Indices of Normality

		N	Skewness			Kurtosis		
Group		Statistic	Statistic	Std. Error	Ratio	Statistic	Std. Error	Ratio
Written	Pre-Concrete	10	.330	.687	0.48	1.416	1.334	1.06
	Post-Concrete	10	-.944	.687	-1.37	.240	1.334	0.18
	Pre-Abstract	10	1.115	.687	1.62	.402	1.334	0.30
	Post-Abstract	10	-.181	.687	-0.26	-1.811	1.334	-1.36
	Pre-Receptive	10	.364	.687	0.53	-1.410	1.334	-1.06
	Post-Receptive	10	.205	.687	0.30	-1.473	1.334	-1.10
	Pre-Productive	10	-.212	.687	-0.31	-1.546	1.334	-1.16
	Post-Productive	10	-.525	.687	-0.76	-.908	1.334	-0.68
Audiovisual	Pre-Concrete	12	-.706	.637	-1.11	-.370	1.232	-0.30
	Post-Concrete	12	-.531	.637	-0.83	.622	1.232	0.50
	Pre-Abstract	12	.350	.637	0.55	-.355	1.232	-0.29
	Post-Abstract	12	-.973	.637	-1.53	1.032	1.232	0.84

Pre-Receptive	12	-.511	.637	-0.80	-.963	1.232	-0.78
Post-Receptive	12	-.497	.637	-0.78	.332	1.232	0.27
Pre-Productive	12	-.517	.637	-0.81	-1.194	1.232	-0.97
Post-Productive	12	-.688	.637	-1.08	.661	1.232	0.54

4.1 Exploring the First and Second Research Questions

The first research question intended to discern whether audiovisual input had a significant impact on EFL learners' passive vocabulary knowledge and the second question delved into the impact of audiovisual input on EFL learners' active vocabulary. MANCOVA was run to examine the audiovisual and written groups' means on posttests of productive and receptive vocabulary.

Table 2 shows the results of MANCOVA. The significant results of the MANCOVA (F (2, 17) = 26.66, $p < .01^2$, Partial η^2 = .758 representing a large effect size) pointed to noticeable differences between the audiovisual and written groups' means on overall posttests of receptive and productive vocabulary.

Table 2
Multivariate Analysis of Covance Posttests of Receptive and Productive Vocabulary by Groups with Pretests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.001	.01	2	17	.990	.001
	Wilks' Lambda	.999	.01	2	17	.990	.001
	Hotelling's Trace	.001	.01	2	17	.990	.001

	Roy's Largest Root	.001	.01	2	17	.990	.001
Pre-Receptive	Pillai's Trace	.35	4.73	2	17	.023	.358
	Wilks' Lambda	.64	4.73	2	17	.023	.358
	Hotelling's Trace	.55	4.73	2	17	.023	.358
	Roy's Largest Root	.55	4.73	2	17	.023	.358
Pre-Productive	Pillai's Trace	.59	12.37	2	17	.000	.593
	Wilks' Lambda	.40	12.37	2	17	.000	.593
	Hotelling's Trace	1.45	12.37	2	17	.000	.593
	Roy's Largest Root	1.45	12.37	2	17	.000	.593
Group	Pillai's Trace	.75	26.66	2	17	.000	.758
	Wilks' Lambda	.24	26.66	2	17	.000	.758
	Hotelling's Trace	3.13	26.66	2	17	.000	.758
	Roy's Largest Root	3.13	26.66	2	17	.000	.758

Table 3 shows the audiovisual and control groups' means on posttests of receptive and productive vocabulary after controlling for the effects of pretests. The results showed that the audiovisual group had higher means than the written group on posttests of receptive and productive vocabulary.

Table 3
Descriptive Statistics for Receptive and Productive Vocabulary by Groups with Pretests

Dependent Variable	Group	Mean	Std. Error	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Post-Receptive	Written	8.57	.52	7.47	9.68
	Audiovisual	11.14	.47	10.13	12.14
Post-Productive	Written	7.67	.36	6.92	8.43
	Audiovisual	11.43	.32	10.75	12.12

Table 4 shows the two groups' means on pretests, posttest of receptive and productive vocabulary, and also the two groups' means on posttests after keeping the pretest effects in check. That is why the means on posttest after controlling the pretest impact were slightly different from the means on posttest without controlling for pretest and as shown in Table 5 both groups showed improvement in their means on pretests to posttests.

Table 4
Descriptive Statistics for Pretests and Posttest of Receptive and Productive Vocabulary by Groups (and after controlling for the effect of pretest)

Group		N	Mean	
		Statistic	Statistic	Std. Error
Written	Pre-Receptive	10	5.25	.239
	Post-Receptive	10	8.05	.603
	Pre-Productive	10	5.80	.271
	Post-Productive	10	7.35	.506
	Posttest of	10	8.57	.427
	Posttest Productive	10	7.67	.478
Audiovisual	Pre-Receptive	12	6.04	.424
	Post-Receptive	12	11.58	.763
	Pre-Productive	12	6.00	.431
	Post-Productive	12	11.71	.689
	Posttest Receptive	12	11.14	.360
	Posttest Productive	12	11.43	.327

Table 4 demonstrates that the audiovisual group (M = 11.43) significantly outperformed the written group (M = 7.67) on posttest of productive vocabulary after keeping the pretest impact in check ($F (1, 18) = 56.46$, $p < .01$, Partial $\eta^2 = .758$ showing a large effect size).

Table 5

Tests of Between-Subjects Effects for Posttests of Receptive and Productive Vocabulary by Groups with Pretest

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Pre-Receptive	Post-Receptive	25.03	1	25.03	9.65	.006	.349
	Post-Productive	4.67	1	4.67	3.86	.065	.177
Pre-Productive	Post-Receptive	7.98	1	7.98	3.08	.096	.146
	Post-Productive	31.17	1	31.17	25.78	.000	.589
Group	Post-Receptive	31.77	1	31.77	12.25	.003	.405
	Post-Productive	68.26	1	68.26	56.46	.000	.758
Error	Post-Receptive	46.66	18	2.59			
	Post-Productive	21.76	18	1.20			
Total	Post-Receptive	2367.75	22				
	Post-Productive	2271.00	22				

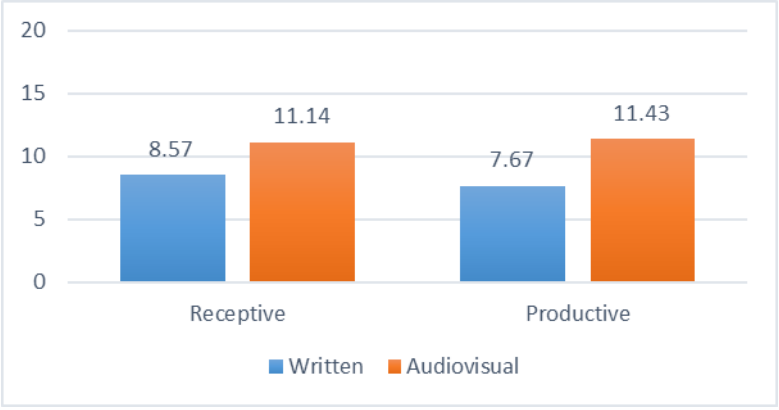

Figure 1. Means on posttests of receptive and productive vocabulary with pretests

4.2 Exploring the Third Research Question

The third question of the research was about difference between learning the concrete and abstract nouns with audiovisual input. MANCOVA was run to compare the audiovisual and written groups' means on posttests of abstract and concrete vocabulary.

Table 6 indicates the audiovisual and control groups' means on posttests of concrete and abstract vocabulary. The outcomes prove that the audiovisual class achieved higher means than the written side on posttests of concrete and abstract vocabulary.

Table 6

Descriptive Statistics for Concrete and Abstract Vocabulary by Groups with Pretests

Dependent Variable	Group	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Post-Concrete	Written	8.00	.411	7.14	8.87
	Audiovisual	11.32	.373	10.54	12.10
Post-Abstract	Written	8.27	.530	7.15	9.38
	Audiovisual	11.23	.481	10.22	12.24

Table 7 shows the two groups' means on pretests, posttest of concrete and abstract vocabulary, and also the two groups' means on posttests after controlling for the effect of pretests. That is why the means on posttest after controlling for the effect of pretest were slightly different from the means on posttest without controlling for pretest both groups showed improvement in their means on pretests to posttests; moreover, their means on posttests were slightly different from the posttests without controlling for the effect of pretest.

Table 2
Descriptive Statistics for Pretests and Posttest of Concrete and Abstract Vocabulary by Groups (and after controlling for the effect of pretest)

		N	Mean	
Group		Statistic	Statistic	Std. Error
Written	Pre-Concrete	10	5.75	.271
	Post-Concrete	10	7.70	.367
	Pre-Abstract	10	5.30	.271
	Post-Abstract	10	7.70	.768
	Posttest of Concrete After controlling for pretest	10	8.00	.441
	Posttest Abstract After controlling for pretest	10	8.27	.530
Audi-Visual	Pre-Concrete	12	5.96	.437
	Post-Concrete	12	11.58	.696
	Pre-Abstract	12	6.08	.363
	Post-Abstract	12	11.71	.729
	Posttest Concrete After controlling for pretest	12	11.32	.373
	Posttest Abstract After controlling for pretest	12	11.23	.481

Table 8 shows the results of Between-Subject Effects. According to these, and the descriptive statistics shown in Table 7 it can be said that the Audiovisual group (M = 11.32) significantly outperformed the written group (M = 8.00) on posttest of concrete vocabulary ($F (1, 18) = 33.11$, $p < .05$, Partial $\eta^2 = .648$ depicting a large effect size). The Audiovisual group (M = 11.23) significantly did better than the written one (M = 8.27) on posttest of abstract vocabulary ($F (1, 18) = 15.87$, $p < .05$, Partial $\eta^2 = .469$ which manifests a large impact size).

Table 8
Tests of Between-Subjects Effects for Posttests of Concrete and Abstract Vocabulary by Groups with Pretest

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Pre-Concrete	Post-Concrete	17.14	1	17.14	11.10	.004	.382
	Post-Abstract	10.65	1	10.65	4.14	.057	.187
Pre-Abstract	Post-Concrete	3.38	1	3.38	2.19	.156	.108
	Post-Abstract	19.43	1	19.43	7.56	.013	.296
Group	Post-Concrete	51.14	1	51.14	33.11	.000	.648
	Post-Abstract	40.77	1	40.77	15.87	.001	.469
Error	Post-Concrete	27.79	18	1.54			
	Post-Abstract	46.24	18	2.56			
Total	Post-Concrete	2279.00	22				
	Post-Abstract	2361.25	22				

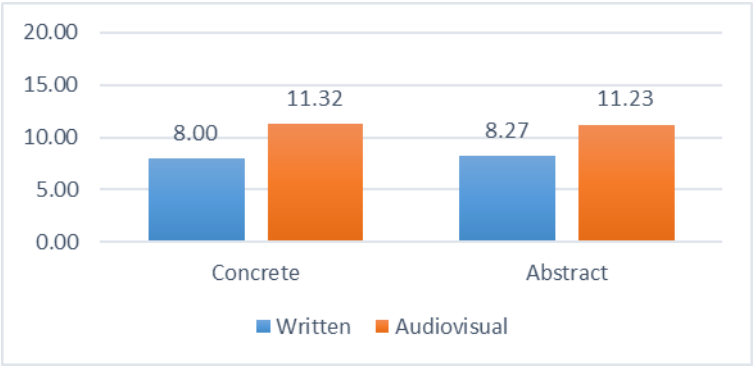

Figure 2. Means on posttests of concrete and abstract vocabulary by groups with pretests

5. Discussion

The role of contextual learning environment, especially the multimedia supported environment in learning vocabulary is undisputed and undeniable. However, the foremost concern of the current research was to explore the impacts of providing audiovisual input in learning two different vocabulary

classifications. The impact of providing multimedia supported environment in learning passive and active wisdom of concrete and abstract words was scrutinized. Three hypotheses were raised prior to the start of the treatment as the chief incentives behind the investigation. The first and second hypotheses that postulated no effect from audiovisual input on learners' passive and active vocabulary, were rejected by the outcome produced from the analysis of the scores collected before and after the input. The results proved that the audiovisual side bested the written group in both receptively and productively. The findings in the mentioned area of the study conform with those in earlier studies (e.g., Alharthi, 2020; Bisson et al., 2014; Munoz et al, 2021; Muñoz, 2022; Perego et al., 2010; Uchihara, 2022; Zanón, 2006) in the common conclusion that audiovisual input with subtitles is constructive in learning words.

There are several possible justifications for the predominance of audiovisual group over the written input group in learning receptive vocabulary. It could be one acceptable reason that audio visual input provides a contextual learning environment in which language is put to authentic use. Thus, dynamic materials like TV and computers fully activate learners' cognition in visual and auditory system together. This is what Low and Sweller (2014) found. They added that dynamic materials in classrooms prevent static learning, and this helps the process of recognizing a new word faster and more efficient. The findings were also in line with Berardo (2006), since the study experimentally proved that when the input is given in consistency with natural approach, the learner interacts with authentic material, and he will get used to input more easily.

One additional possible justification can be put forward by clarifying the fact that authentic audiovisual input can cause positive attitudes and interest in the target language. Since the author was the teacher in two groups, it was

obvious that the learners were more engaged when they were watching the movie and the number of the questions elicited in the audiovisual group was considerably more than the questions in the other side. This was consistent with Hobbs and Liu (2012), as they found out the enhancement of student engagement by online authentic materials when they compared two groups with different materials given as the source of their study.

Another likely argument for the advantage of audiovisual group over the written one, originates from the cognitive atmosphere of the instructional environment when the source of input is in authentic form. This is in line with Zanón (2006) and Perego et al. (2010), since grasping ideas naturally is more beneficial because the learner is attempting to learn the content, rather than attempting to memorize.

Finally, the results of the study are suggestive of simultaneous captioning usefulness in fostering L2 vocabulary, since the data to be learned is distributed among three different channels of input (audio, visual and caption text). This is in line with what Barón, and Celaya, (2022) asserted in beneficial aspect of captioning in fostering L2 vocabulary.

The analysis of the results testified that the audiovisual group had higher means than the written group on posttests of concrete and abstract vocabulary. One plausible justification can be the massive cognitive effect of subtitling in learning vocabulary. The results were in line with Perego et al. (2010), whose results indicated that there is good understanding of the film content and words, if the process is accompanied by a good level of word knowledge. This implies that image and text processing will not get mixed up in the cognition system of the learner, so it is possible for the learner to process video, audio and text simultaneously.

Moreover, the findings of the current research were another testimony to the power of subtitled audiovisual input, in comparison with the traditional

viewing without L2 captions. This was in line with Sydorenko (2010) and Montero Perez et al. (2014), that investigated differences in L2 learning in different conditions of audiovisual input. His findings testified that the students who had subtitled audiovisual input had larger vocabulary growth than the other groups. This is what justifies the better growth rate in audiovisual group.

There could be one further reasonable justification for the results. The learning situations advantaged by exposure to authentic audiovisual input, could cause greater L2 input. Because learners will be engaged more due to the entertaining features of these kinds of materials. Thus, the findings could be supportive of Peters (2018), who found that EFL learners willingly spend more time watching than reading in English. He also claimed that watching movies might also be more effective in reducing learners' anxiety, because of their entertainment nature. In the current study, the experiences the author had regarding the stress and anxiety levels of the groups in taking the tests, were totally different; since the audiovisual group were able to complete the tests in shorter time, but additional time was given to the written input group for completion of the post tests. This of course is a matter that can be explored more.

However, the findings were in contrast with those of the Talaván (2007), since his proved that to some extent, facing a real version of language which is spoken at normal speed rate is the cause of anxiety and frustration in the learners. But the study at hand, proved that watching subtitled audiovisual input can help rectify that problem and also provide a positive reinforcement to boost learners' confidence in learning from multimedia input.

One significant point was noticed when comparing the growth rate of the two groups between the pre and posttests in concrete and abstract vocabulary learning. Having a look at figure 4.2, we realize that in the audiovisual group,

the means on tests of the concrete vocabulary have increased from 8 in pretest to 11.32 in posttest, while those of abstract have increased from 8.27 to 11.23. This means, although both concrete and abstract words were significantly better in posttest after undertaking audiovisual input, the growth rate in concrete words was more than that of its counterpart during the same period. This implies that abstract words are harder to understand since they represent abstract concepts. But since there is availability of imaginal representations for concrete words, they will be better recognized. Also, this finding is in line with Degroot and Rosanne (2010) stating that more concrete words are learned than abstract ones. As they examined the long-term retention of the two kinds of vocabulary. of L2 language learners and reached same results. This is by far the most likely explanation in improvement of learning in audiovisual group.

Another possible justification for the audiovisual group outperforming the written group in learning concrete and abstract vocabulary is the fact that creating mental images assists recognition of the word. This is consistent with Mahmoudzadeh (2014) who tested the impact of visual input on learners' abstract vocabulary acquisition, concluding that creating mental images through visual assists, will improve recognition and retention of abstract words, let alone the concrete ones.

One additional argument that can be put forward, pertains to the impact of word meaning on learning the words themselves. When Mcfalls et al. (1996) examined the word recognition speed and veracity of concrete and abstract items by lexical exercises, they found that abstract words are read less accurately than concrete words. In line with the mentioned study, it can be implied that word meaning definitely influences the time and accuracy of word recognition.

This implication is also partially in line with Gilsang (2018), who proved that the use of L1 helps retention of concrete words. He investigated the effect of L1 definitions in creating mental images in retention of both concrete and abstract words and found that creating mental images caused longer retention of concrete words, but not abstract ones. This probably explains why the scores in concrete tests, surpassed abstract scores in delayed posttest.

6. Conclusion

The current study was planned and designed to practically examine the impact of audiovisual input on EFL learners receptive and productive vocabulary acquisition of concrete and abstract words. The results denote firm verification of the massive power of audiovisual input. The results indicated that although both audiovisual and written group exceeded their pretests after the procedure, there was meaningful dissimilarity between the growth rates. One main and novel concern of the current research was to investigate the impact of audiovisual input on learning concrete and abstract words, which as the results suggest, the learners mastered the concrete words quicker than their abstract counterparts. This can be the factor for taking mental imaging in vocabulary learning into consideration. The results also confirmed that the students were more engaged in audiovisual input and thus, they did better in acquiring receptive and productive knowledge.

The findings reached by the study, could have noteworthy pedagogical implications for curriculum designers, material developers, institute administrators, second or foreign language instructors and even the learners. Considering the findings, curriculum designers and material developers now realize how crucial it is to provide the right input for the learners of English language. They will consider the various vocabulary classifications while teaching them through audiovisual input. The power of audiovisual input

cannot be underestimated in teaching all categories of vocabulary. They likely have to include audiovisual input to the materials, adding an entertainment aspect to the process of learning. The findings also inform the instructors and learners to focus more on the ways vocabulary learning can be facilitated, especially by using subtitled audiovisual input and mental image creation.

The findings also possibly pave the way for a more detailed attention on how the categories and subcategories of vocabulary must be acquired. There were noteworthy dissimilarities between leaning receptive and productive items, as well as that of concrete and abstract. The effective methods to be put to good use for each of them were different. This is critical both for the instructors and learners.

The study at hand was not conducted without facing limitations. The main limitation was that in order to run a comparison between the two groups, there could possibly be different teaching methods, although the same teacher took both groups under treatment. The very nature of teaching based on a written text is different from audiovisual teaching, so other than just the materials, there was little chance of controlling other factors involved. Another limitation concerns the test formats used. Almost all methods measuring receptive vocabulary entail several multiple-choice forms, making the data biased in favor of the receptive words. It should also be acknowledged that striking a balance between the two groups was nearly impossible, since both groups were supposed to be coeducational.

.In the existing study, only two classifications of vocabulary were taken into consideration. There are many other criteria, based on which there will be various subcategories for vocabulary. Therefore, it is highly recommended to examine the effect of audiovisual input on other classifications and check how each subcategory is affected. In the conducted study, factors like age and

gender were nor taken into account, whereas other studies can possibly examine the effects of audiovisual input on learning concrete and abstract words, especially considering the differences genders have in cognition of various fields. Finally, it is suggested to further explore the strategies the learners themselves can work out on learning different categories of vocabulary, specifically concrete and abstract words. The methods used by the learners in learning subcategories of vocabulary need to be reconstructed.

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