

Effectiveness of Subtitles in Second Language Acquisition

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Abstract: *The effect of subtitles on second language acquisition can either have long-term or short-term effects, but the span of exposure to watching subtitled films might have major implications on the post-learning results of the viewer. This study aims to determine the effectiveness of subtitles in second language acquisition. The researchers conducted interviews to determine how the use of subtitles affected the respondents' comprehension of acquiring a second language. Also, the researchers provided a 7-item questionnaire that tested their short- and long-term memory in response to the movie they watched. Results reveal that the short-term memory effects of the movie with English subtitles to high school students aged 14 years old got the highest percentage in comparison to non-subtitled and Tagalog-subtitled films. For the long-term memory, the scores were not retained, but the movie with English subtitles still had the topmost percentage and highest effect on high school students' long-term memory.*

Keywords— subtitles, English-spoken films, second language acquisition, memory

1. INTRODUCTION

In the Philippines, a film that does not use Tagalog or any Filipino dialects as the medium of communication is referred to as a foreign film. It is said that Filipinos prefer to watch foreign movies because most Western movies have better cinematography, finer story plot, nicer graphics, and special effects, unlike some local shows and movies. The use of subtitles in such movies helps in facilitating comprehension of a movie's plot.

Subtitles are usually found on the bottom part of a movie, adding a further explanation to what is being seen or heard from the scene. They usually "exist in tandem with dialogue and is inseparable from the sound and images on the screen" (Bannon, 2010, p. 147). They are very much different from just a translation because they capture the characteristics of the conversation and replicate them as words shown on the screen, facilitating better immersion in the audio-visual nature of a movie (Bannon, 2010).

The use of subtitles is aimed at benefitting viewers who experience loss of hearing; however, their modern usage seems to suggest that they benefit a larger audience. Hence, to maximize their usage, some rules should be observed. These rules, according to Palay (2017), are: (a) should be synchronized with the exact moments of appearance and disappearance of the spoken words written in two lines of text, and (b) should be displayed for around 1.5 seconds unless there are fast conversations that are taking place, (c) should retain even words composed of two to three letters as they would also be crucial to understanding a particular dialogue, (d) should also show 'sound effect captions in lowercase italics enclosed in brackets'; and (e) should only use capital letters when there is a need to emphasize a word.

Alongside the popularity of English-spoken films with subtitles is the recognition that viewers can benefit from

second language acquisition (Muntane & Faraco, 2016). Watching subtitled films and series can facilitate the acquisition of a second language, improving knowledge of vocabulary and syntax. English is the most widely used foreign language across the globe; therefore, the acquisition of the language through watching subtitled films can have a social impact.

Some studies examine how watching subtitled film help viewers in Second Language acquisition. Some studies show that watching a film is far more interesting than listening to the teacher giving lessons on syntactic rules, the definition of words, and the principles of the target language. In particular, watching subtitled foreign films is one of the most popular ways of exposing learners to a second language and vocabulary acquisition. This is in line with the study of Zanon (2006) when it comes to the acquisition of a second language by means of subtitled foreign films.

In terms of the effective learning of the language, the exposure of students to comprehensible input (i.e., in the form of subtitles) leads to second language acquisition (Palaska, 2015). This is evident in how contextualized language structures become more authentic and meaningful to the learners when subtitled videos are shown to them (Mohammed, 2013). Many skills related to acquiring a second language through subtitle was mentioned in the study of Zanon (2006) including rapid reading, following the movie's plot easily, word recognition skills, and understanding English context-bound expressions.

The pursuance of this study is to look forward to the effectiveness of subtitles in the acquisition of a second language and to measure how subtitles affect second language acquisition. Another purpose of the study is to identify the short-term and long-term effects of subtitles on the memory of the viewers.

2. MATERIALS AND METHODS

To gather essential and necessary information on what is the role of subtitles in second language acquisition among 14-year-old students, the researchers used qualitative and quantitative research methods, made up of comprehension questionnaires and interview questions.

The study was conducted at the Secondary School in Bulacan. The participants were 10 high school students aged 14. The researchers decided to use 10 participants in accordance with the simple random sampling method. Also, the researchers chose high school students aged 14 years old because the Office of Communications (Ofcom) children's digital day report found out that older children (11-15 years old) are exposed to a variety of media; they do not only watch television shows but also view social media sites such as YouTube, Facebook, Vimeo, and Twitter.

For their background, the respondents were asked to give their personal information including age, sex, and birth date. The researchers decided to use simple random sampling wherein a subset of individuals is chosen by chance from a larger group or population. The comprehension questionnaire is composed of 7 items of questions as it was based on the magic number 7 of George Miller's theory of short-term memory.

The comprehension questionnaires were taken two times. The first take determined the short-term effect of each movie on the respondents' comprehension. The second take was done one week after the film was watched and this determined the long-term effect on the respondents' comprehension.

The interview questions determined the effectiveness of subtitled films, particularly with English and Tagalog subtitles, and the non-subtitled film in the respondents' second language acquisition. The responses to the interview questions were transcribed into written forms and used as examples to support the researchers' analysis. Do not use the word "essentially" to mean "approximately" or "effectively."

3. RESULTS AND DISCUSSIONS

The following discussion presents analyzes, and interprets data gathered among 10 high school students at age 14 who watched 3 films including an English subtitled film, Tagalog subtitled film, and a non-subtitled film. The researchers divided the 10 participants equally into 5 based on sex preferences, but the study is regardless of gender, this is only to make sure that the study has no gender bias and also assures that the respondents are divided equally based on comprehension capacity. The researchers gathered the participants' responses through short-term and long-term comprehension questionnaires and interview questions."

Section 1- Personal Background of the High School Students

Table 1 shows the frequency and percentage of their backgrounds like sex and age. It was shown that the high school students were equally distributed in terms of sex with five (5) or 50%. The ten (10) or 100% of high school students were in the same age group which is 14 years old.

Table 1. Distribution of respondents in terms of Personal Demographics

A. Sex	Frequency	Percentage
1. Male	5	50%
2. Female	5	50%
Total	10	100%
B. Age		
1. 14 years old	10	100%
Total	10	100%

Section 2- Refers to the questions addressing what kind of subtitle is more effective among viewers age 14 in acquiring the second language.

Table 2 represents which of the three movies was easiest to understand considering the subtitles used. It shows that in the English subtitled movie, 60% of the respondents agreed that it was the easiest while 10% or 1 respondent answered that the non-subtitled movie was effective in understanding the movie plot. For the movie, with Tagalog subtitles, 20% of the respondents agreed with its effectiveness. This indicates that English subtitled movie tends to have the highest percentage of effectiveness among the participants while the non-subtitled movie showed 10% effectiveness and 20% on the Tagalog-subtitled movie over the 100% percent of the participants. The results seem to be the same as the study of Trondheim, 2016 wherein it showed a higher mean score in the group of respondents who watched the English-subtitled film compared to the other films with Tagalog and no subtitles.

Table 2. Frequency and Percentage on which of the three movies was easiest to understand considering the subtitles used

Which of the three movies do you find easiest to understand, considering the subtitles used in each?	14 years old	
	Frequency	Percentage
The Shallows (English subtitle)	6	60%
The Call (No subtitle)	1	10%
The Tribulation (Tagalog subtitle)	2	20%
None of the three	1	10%
Total	10	100%

Examples:

Which of the three movies do you find easiest to understand, considering the subtitles used in each?

In this question, respondent 1 answered “The Shallows po.” (*The Shallows.*) in contrary to respondent 2, “Yung pangalawa po, yung The Call.” (*The second movie, The Call.*) while the respondent 3 answered “Wala kasi pag nagbabasa ko ng subtitle parang di ko rin naman nababasa lahat tapos laging sa tao pa ko nakatingin.” (*None because whenever I’m reading subtitles I can’t read everything then I’m always focusing on the characters.*).

Table 3 shows that most of the respondents do not observe any grammar or spelling errors in the subtitles used specifically with 80% among the respondents. However, 20% of the respondents answered that they have observed spelling errors in particular in Tagalog subtitled films.

The question and results used in this part have similarities with the study of Mohammed (2013) were in which focused on learning grammar skills with the aid of subtitles when watching foreign films. Grammar skills were proven by Mohammed (2013) to be acquired even more through watching subtitled films rather than the decontextualized demonstration of grammar structures in a classroom setting. The subtitle was proven by this result to have little grammar error which is beneficial for the viewers’ acquisition of a second language, particularly in the field of grammar skills.

Table 3. Frequency and Percentage of grammar or spelling errors in the subtitles used

Do you observe any grammar and spelling errors in the subtitles used?	14 years old	
	Frequency	Percentage
Yes	2	20%
No	8	80%
Total	10	100%

Examples:

Do you observe any grammar or spelling errors in the subtitles used?

In this question the respondent 1 answered “Yung sa Revelation po ang Tagalog dun rebelasyon pero dapat po pahayag.” (*The word revelation, the Tagalog translation there is rebelasyon but it should be pahayag.*) while most of the respondents answered “wala” (*none*).

Table 4 presents the frequency and percentage of new words added to the respondents’ vocabulary while watching the subtitled movies. 30% of the participants answered that they gain new words from the movie with the

aid of the subtitles while 70% of the participants answered none. This indicates that vocabulary widening can be aided as well by the use of subtitles since the above data showed that 3 out of 10 respondents learned new words from the movie with the aid of the subtitle used.

The above results are supported by the study of Palaska (2015) as he concluded that children provided with subtitles performed significantly better in vocabulary tests. Vocabulary enhancements in the aid of subtitled films may take quite a long time but as the viewer encounters new words from time to time, they tend to enhance vocabulary skills.

Table 4. Frequency and Percentage of any words added to the participants’ vocabulary while watching the movies

Are there any words added to your vocabulary while watching the movie’s subtitles?	14 years old	
	Frequency	Percentage
Yes	3	30%
None	7	70%
Total	10	100%

Examples:

Are there any words added to your vocabulary while watching the movies? From what movie was it?

In this question, respondent 1 answered “Yung shallows po” (*The Shallows*) while respondent 2 answered, “I’ll be there”.

Table 5 and figure 1 represent the frequency distribution of the multiple responses of the participants in the question of how the English subtitle helped in the understanding of the movie. Most of the respondents believed that the English subtitle helped them to slightly understand the way the characters speak as well as certain parts of the movie. However, two out of the frequency of the respondents agreed to answer that it’s hard to understand the movie with English subtitles which have been contradicted by a higher number of frequencies stating that an English-subtitled movie is easier to understand specifically whenever the character speaks fast.

Table 5. Frequency on how English subtitles helped the respondents to understand the movie plot.

How does using English subtitles help you understand the movie plot?	Frequency	Rank
It's easier to understand the plot by using subtitle	3	2.5
It's not helpful at all	1	5
I slightly understand the way the characters speak and some of the scenes	6	1
It does not help. It's hard to understand the movie with English subtitle	2	4
It's easier to understand particularly when the character speaks fast.	3	2.5

**Multiple responses*

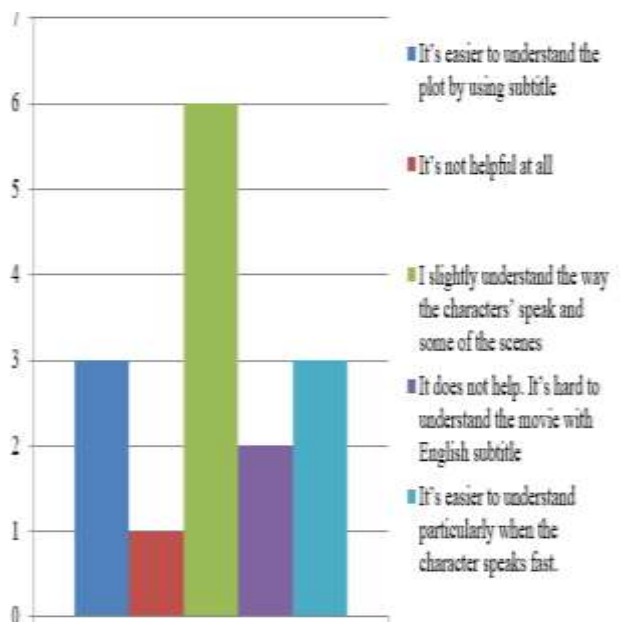


Figure 1. Graphical representation of how English subtitles helped in the understanding of the movie plot.

Examples:

How does using English subtitles help you understand the movie plot?

In this question the respondent 1 answered "Tumingin po ako sa subtitle pag di ko maintindihan yung pronunciation." (*I am looking at the subtitles if I didn't understand the pronunciation.*) and the respondent 2 answered "Nakatulong po yung English subtitle lalung lalo na pag galit sila, nagjo-Joke saka po pag nagsasalita sila ng mabilis tapos di ko naiintindihan nakatulong yung subtitle para maintindihan ko yung sinasabi nila." (*The English subtitle helps whenever the characters are getting angry, joking and when they are speaking fast and I can't understand but I was able to comprehend because of the subtitle.*).

Table 6 and Figure 2 represent the multiple responses of the participants in response to the question How the Tagalog subtitle helped in the understanding of the movie plot. Figure 2 indicates the highest frequency of the participant's answers to "It's not helpful because it made me bored" followed by the answer that "it's not helpful because it's too long to read". Figure 2 showed the least frequency of the answer that "it's easier" which indicates that using Tagalog subtitles is not helpful for many.

Table 6. Frequency of how Tagalog subtitles helped the respondents understand the movie plot

How does using Tagalog subtitles help you understand the movie plot?	14 years old
	Frequency
It's not helpful because it's too long to read.	4
It's not helpful at all	2
It helped me understand what the characters are saying	2
It's not helpful because it made me bored.	5
It's easier	1

**Multiple responses*

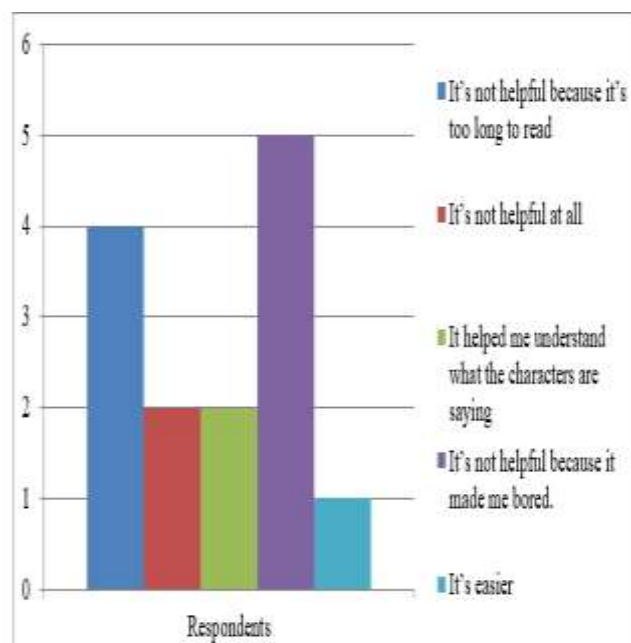


Figure 2. Graphical representation of how Tagalog subtitle helped in the understanding of the movie plot.

Examples:

How does using Tagalog subtitles help you understand the movie plot?

In this question, respondent 1 answered "Hindi nakatulong, boring, mahaba." (*It's not helpful because it's too boring and long.*), respondent 2 answered "Hindi ko

naintindihan. Inaantok ako.” (*I don’t understand. I got sleepy*).

Table 7. Frequency and Percentage of how often the participants read the subtitles in the movies.

How often do you read the subtitles in the movies?	14 years old	
	Frequency	Percentage
Always except for the movie which used Tagalog subtitle	1	10%
Not at all	1	10%
Sometimes when I don’t understand what the characters are saying	4	40%
The whole time	2	20%
I look more at the subtitles rather than at the scene.	2	20%
Total	10	100%

Table 7 present the Frequency and Percentage of how often the participants read the subtitles in the movies. 1 of the respondent answered not at all and another 1 or 20% answered that she always read the subtitle except for the Tagalog subtitled film. 40% of the respondents answered that they read the subtitles sometimes when they encounter difficulty in understanding what the characters are saying. 20% of the participants responded that the whole time they read the subtitles regardless of the language. 20% of participants responded that they read the subtitle more rather than watching the scene.

Examples:

How often do you read the subtitles in the movies?

In this question the respondent 1 answered “Mula simula hanggang huli.” (*From the start until the end.*), respondent 2 answered “kapag kinakailangan” (*When needed*), and respondent 3 answered “Medyo madalas.” (*Most of the time.*).

Section 3- Refers to determining up to what extent the respondents understood the movie and reveals both short and long-term effects on the respondents.

Table 8. Frequency distribution of short-term comprehension question results

After the Tribulation (Tagalog-subtitled movie)		
Item	No. of Correct Answers	No. of Incorrect Answers
1	8	2
2	5	5
3	5	5
4	10	0
5	5	5
6	4	6
7	5	5

Total	42	28
The Call (non-subtitled movie)		
Item	No. of Correct Answers	No. of Incorrect Answers
1	10	0
2	6	4
3	7	3
4	8	2
5	10	0
6	4	6
7	3	7
Total	48	22
The Shallows (English-subtitled movie)		
Item	No. of Correct Answers	No. of Incorrect Answers
1	3	7
2	10	0
3	10	0
4	9	1
5	9	1
6	9	1
7	8	2
Total	58	12

In Table 8, it is shown that the participants were able to give more correct answers than incorrect ones after watching the three movies. It is evident that the highest number of correct answers (n = 58) was reflected in the comprehension results for the English-subtitled movie. In contrast, the highest number of incorrect answers (n = 28) was shown in the results for the Tagalog-subtitled movie. The results are consistent with those of the study by Trondheim, (2013), which indicates that watching the clip with subtitles could largely improve the participants’ performance in their comprehension test.

Table 9. Frequency distribution of long-term comprehension question results

After the Tribulation (Tagalog-subtitled movie)		
Item	No. of Correct Answers	No. of Incorrect Answers
1	3	7
2	6	4
3	1	9
4	4	6
5	3	7
6	5	5
7	5	5
Total	27	43
The Call (non-subtitled movie)		
Item	No. of Correct Answers	No. of Incorrect Answers
1	5	5

2	10	0
3	10	0
4	7	3
5	4	6
6	8	2
7	9	1
Total	53	17
The Shallows (English-subtitled movie)		
Item	No. of Correct Answers	No. of Incorrect Answers
1	7	3
2	9	1
3	4	6
4	8	2
5	9	1
6	7	3
7	10	0
Total	54	16

As shown in Table 9, the participants had better long-term comprehension performance after watching a non-subtitled movie and an English-subtitled movie than after being exposed to a Tagalog-subtitled movie. The highest number of correct answers ($n = 54$) was still reflected in the results for the English-subtitled movie. Tagalog subtitles were not helpful as indicated by 43 incorrect answers provided by the participants.

4. CONCLUSIONS AND RECOMMENDATIONS

Based on the above findings and conclusions, the researchers recommended that students especially aged 11-15 years old may take into consideration watching English Movies with English subtitles for it will help them in acquiring a second language, particularly in word recognition, understanding movie plot, learning the language through meaning interaction with the target language and improvement of their vocabulary and grammar skills. It is recommended to watch English movies in particular to aid second language acquisition considering subtitled movies, non-subtitled can also be recommended though the effectiveness is higher when the movie is subtitled in English.

However, the effectiveness of watching English-subtitled films may take quite some time for it to be fully beneficial to individuals who are aiming acquisition of a second language through watching foreign films with the aid of subtitles. It is also recommended that the roles of subtitles can be still analyzed and further studied especially the English-subtitled films since it is not just used in English movies.

5. REFERENCES

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