

CHAPTER IV

RESULTS AND DISCUSSION

This chapter, presents and discusses the research findings and discussion. It concentrates on the results of observation, questionnaire, test, and hypothesis testing. It also deals with discussion on the findings that answered the research questions.

4.1 Results

4.1.1 Results of Observation

Observation is one of the methods used by researchers to collect data when conducting research. Prior to conducting the observation and implementing the treatment, the researcher and the teacher engaged in a discussion regarding the frequency of the researcher's presence in both the experimental and control classes. This pertains to the parameters of the class that will be designated as the experimental group and the control group. Observation and research activities consist of the following:

Table 4.1 Observation and research activities' schedule

No.	Class	Activities	Date
1.	Experimental	Pre-test	August 21 st , 2023
2.	Experimental	Treatment	August 28 th , 2023
3.	Experimental	Treatment	September 4 th , 2023
4.	Experimental	Treatment	September 11 th , 2023
5.	Experimental	Post-test	September 14 th , 2023

The researchers conducted a series of observational activities, consisting of a total of five meetings. During the initial meeting, the researcher conducted pre-test procedures and evaluated the adequacy of the classroom resources that facilitated research activities. This aligns with the activities conducted during the fifth meeting, wherein researchers administered post-tests as part of the post-treatment procedures. The instructional materials employed for the pre-test and post-test consisted of a video derived from a short English film accompanied by English subtitles. The activity was conducted without the presence of subtitles during the pre-test, whereas subtitles were included during the post-test.

During observation and treatment activities, researchers carried out a number of activities. The subsequent section provides a summary of various instructional activities conducted during the observation according to checklists (see appendix 5) and intervention period in the experimental class.

- Pre-activity

Students begin the activity by reading a prayer and conducting attendance checks at the beginning of the lesson. This action is undertaken with the objective of determining the count of students who were in attendance and those who were absent on the specified day. Following the verification of attendance, the researcher proceeded with the start of the primary learning activities.

- Main Activity

During the implementation of main courses of study, the teacher enhances the pedagogical process by incorporating English subtitles

into video footage sourced from English films. Following that, students are prompted to describe the main idea along with key words presented in the video. Later on, the students were also instructed to create sentences utilizing the keywords they had previously identified.

- **Post Activity**

At the end of the learning activity, students are reminded of the material they have previously studied in order to retain it. Afterwards, the teacher concluded the learning activity with greetings.

Through a series of five meetings, researchers conducted observation and treatment activities to look into the students' ability to understand and apply subtitles in the context of English language learning. The findings revealed that the students demonstrated ability in explaining the purpose and application of subtitles during their language learning activities. The utilization of subtitles as a multimodal learning tool has the potential to enhance students' listening comprehension abilities, offering it an appealing option for those seeking to acquire ability in the English language.

4.1.2 Results of Questionnaire

The researcher distributed questionnaires to class X PPLG 1 as the experimental group sample in order to determine the perspectives and opinions of the sample utilizing English subtitles as a treatment. Before distributing the questionnaire with ten items, the researcher conducted plotting, followed by a test of the questionnaire's validity and reliability. As supporting evidence, the

following are the results of the validity and reliability tests conducted on the research questionnaire.

4.1.2.1 Validity Test of Questionnaire

Before distributing the questionnaire, the researcher conducted a test of its validity. In order to prevent biased results, the researcher distributed questionnaires to students in classes other than the experimental and control classes during the plotting test. The following are the results of the questionnaire instrument's validity test.

Table 4.2 Results of Questionnaire's Validity Test

Questionnaire Items	Results
1, 2, 3, 4, 5, 6, 7, 8, 9, 10	Valid

The table above displays the results of the questionnaire instrument's validity test, which indicates that a single test, conducted on August 2, yielded a total of ten valid items. The results of the validity test can be seen from the p-values, which are less than Sig. (2-tailed), which is 0.05, with eight out of ten items showing a value of 0.00, indicating that these items are valid (see appendix 9).

4.1.2.2 Reliability Test of Questionnaire

After conducting a validity test, the researcher must conduct a reliability test to determine the dependability of the questionnaire to be distributed. The results of the questionnaire's reliability test are provided below.

Table 4.3 Results of Questionnaire's Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
.802	10

The results of the reliability test are displayed in the table above. When conducting a reliability test and determining the results, we must know the alpha value, which indicates that the results of the reliability test are trustworthy. If the reliability results are greater than 0.60, then the results can be considered reliable. This reliability test produced a result of 0.802, indicating that the used questionnaire is reliable.

4.1.2.3 Analyze of Questionnaire

On September 14, when the researcher held the final meeting for the experimental class, X PPLG 1, the link to the questionnaire was distributed. They completed the link with thirty-six students after completing treatment activities and a post-test. Ten Likert scale questions are included in the questionnaire. There are four levels of agreement: strongly agree (SA), agree (A), disagree (D), and strongly disagree (SD). This questionnaire was used to determine their perspective after receiving treatment to improve their listening skills using English subtitles.

The following are student responses to the distributed questionnaire:

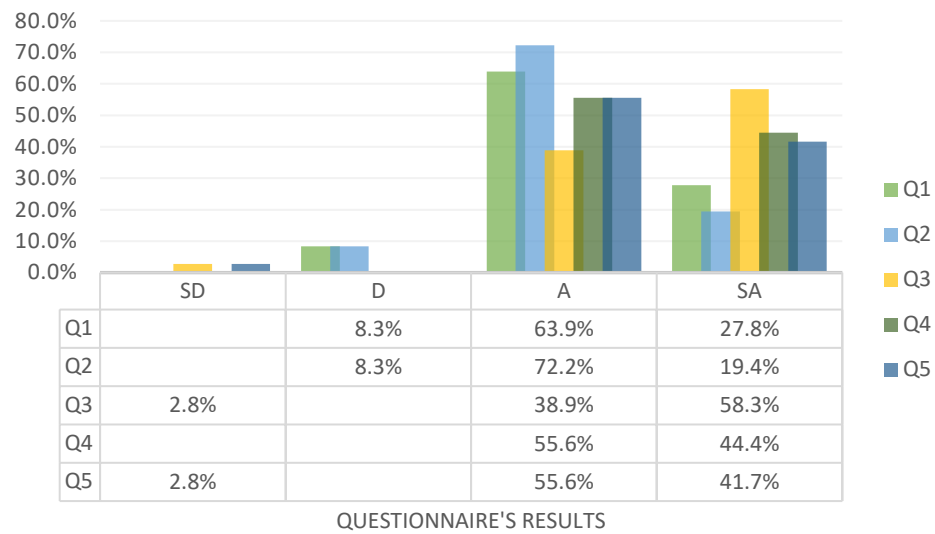


Chart 4.1 Distribution of questionnaire's item 1 to 5

The provided chart illustrates the distribution of each item within the range of item numbers one to five. In the first item, a total of 8.3% of students expressed disagreement, while 63.9% indicated agreement, and the remaining 27.8% strongly agreed with the statement presented in item one. Moreover, a notable proportion of students, specifically 8.3%, expressed their disagreement, while a majority, accounting for 72.2%, indicated their agreement. Additionally, a significant percentage of students, amounting to 19.4%, strongly affirmed their agreement. (see apendix 7)

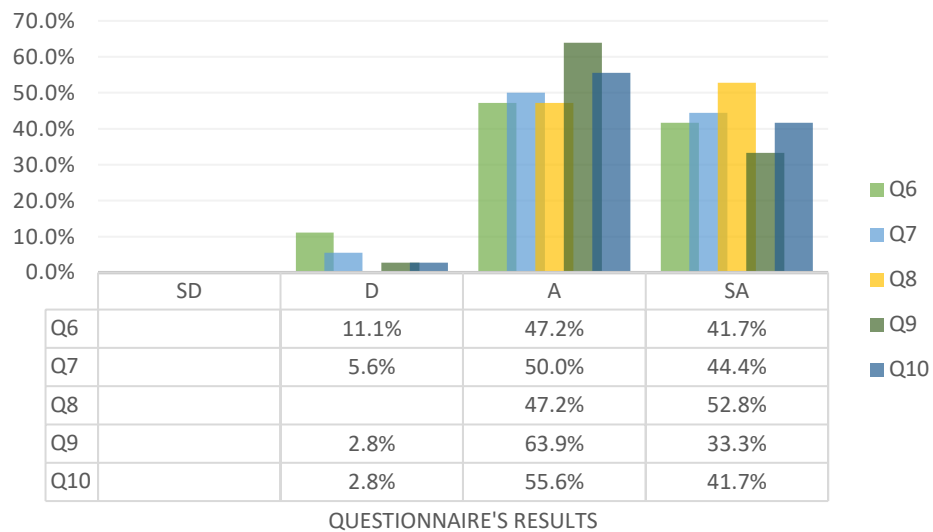


Chart 4.2 Distribution of questionnaire's item 6 to 10

The chart above displays how students perceive the use of English subtitles in English movies to improve their listening abilities. The data presented in the table above represent frequency data from previously distributed questionnaires and the opinions of students who received treatment during the research. (see appendix 10)

4.1.3 Results of Test

Pre-tests and post-tests are crucial for determining the outcomes of experimental research. This relates to the data from these two roles regarding the development of the sample prior to and following research treatment. Taking tests at the beginning and end of the meeting is therefore one of the most important aspects of research.

Before carrying out test activities, of course, researchers are required to carry out instrument tests in the form of validity tests and reliability tests. This is done

to ensure that data collection activities conform to established procedures. The following are the results of validity and reliability tests conducted on questions used to collect data for research.

4.1.3.1 Validity Test of Test Instrument

Before conducting the treatment and distributing test questions, the researcher must conduct a validity test to ensure that the questions will be valid. In this activity, the researcher conducted two validity tests on the twenty-item question sheet that was to be administered.

Table 4.4 Results of first try out

Items of Test	Results
1, 2, 4, 7, 8, 9, 10, 11, 13, 15, 16, 17, 19, 20	Valid
3, 5, 6, 12, 14, 18	Invalid

The results of the initial trial of the test instrument are displayed in the table above. The above results were obtained in the first experiment conducted on August 2nd, 2023, using significance analysis (2-tailed) with a probability of 0.05. According to George and Mallery (2019), the results are valid if the significance value is less than 0.05. In contrast, if the significance value is greater than 0.05, the results will be considered invalid. Six questions out of a total of twenty resulted in invalid results, which requires a second test of the test instrument. In the second try out conducted on August 9th, 2023, after correcting the invalid questions, the results revealed that the remaining six questions had

significance level values less than 0.05, which explains why these questions were considered valid and could be used. (see appendix 8)

4.1.3.2 Reliability Test of Test Instrument

After conducting a validity test, researchers must then conduct a reliability test. This process is carried out in order to determine the dependability of the questions that will be used as research instruments. The following are the results of the validity-tested questions' reliability test.

Table 4.5 Reliability of tests

Reliability Statistics	
Cronbach's Alpha	N of Items
.801	20

The results of the reliability test are displayed in the table above. When analyzing test results for reliability, we must be able to determine whether the results are reliable or not. If the alpha value of the Cronbach Alpha coefficient is greater than 0.6, the results of the reliability test are reliable. With the results presented above, it is possible to conclude that the reliability test results of the test instrument can be stated reliable. (see apendix 9)

4.1.3.3 Results of Hypotheses Testing

A. Results of Pre-test and Post-test

By conducting test activities, researchers can determine the results of the pre-test and post-test. Before conducting research treatment, there are tasks, such as a pre-test that researchers must complete. Then, at the conclusion of the research activity, researchers must administer post-tests to the students.

This is also done to determine the effects of treatment on the abilities of students. The results of the test for experimental and control group are as follows:

Table 4.6 Result of Pre-test and Post-test in Experimental and Control

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pre-test Experimental	36	35	65	50.83	8.150
Post-test Experimental	36	60	90	74.03	8.351
Pre-test Control	36	25	70	45.56	9.470
Post-test Control	36	45	75	59.03	6.951
Valid N (listwise)	36				

In the experimental group where the researcher administered class X PPLG 1 and the results of the experimental group's test scores are shown in the table above. With 36 students in the experimental class, the mean score on the pre-test was 50,83 and the mean score on the post-test was 74,03. The minimum score on the pre-test was 35, while the minimum score on the post-test was 60. In the meantime, the highest score on each test is 65 for the pre-test and 90 for the post-test. (see appendix 3)

As a control group, class X AKL 4 did not receive treatment, unlike the experimental group. The score results for the control group of 36 students are also shown in the table above. The mean score on the pre-test is 45,56, while the mean score on the post-test is 59,03. The pre-test minimum score is 25, while the post-test minimum score is 45. The highest score on the pre-test for the control group is 70, while the highest score on the post-test is 75. (see appendix 3)

B. Normality Test

The results of the normality test for the experimental group and the control group are presented in the table below.

Table 4.7 Normality Test Results

Normality Test							
	Class	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Results of Students' Score	Pre-test Experimental	.140	36	.073	.949	36	.096
	Post-Test Experimental	.130	36	.132	.951	36	.116
	Pre-test Control	.138	36	.081	.970	36	.420
	Post-test Control	.139	36	.076	.953	36	.127
a. Lilliefors Significance Correction							

In the table showing the results of the normality test, the significance value of Kolmogorov-Smirnov for the pre-test from the experimental group is 0.073, while the value for the post-test from the same group is 0.132. In the control group, the pre-test significance value was 0.081, while the post-test significance value was 0.076. According to Pallant (2016) which states that if the significance value of the normality test results is greater than 0.05, then the normality test results qualify as normal, it can be concluded that the distributed data is normally distributed considering the value showed is greater than 0.05.

C. Homogeneity Test

To determine the results of the homogeneity test, the score of the post-test as a measuring instrument used for assessing whether the data is homogeneous must be identified. This table shows the results of the homogeneity test.

Table 4.8 Homogeneity Test Results

Homogeneity of Variance Test					
		Levene Statistic	df1	df2	Sig.
Results of Students' Score	Based on Mean	1.739	1	70	.192
	Based on Median	1.646	1	70	.204
	Based on Median and with adjusted df	1.646	1	69.386	.204
	Based on trimmed mean	1.784	1	70	.186

The variance homogeneity value presented above indicates a value of 0.192 based on mean. In accordance with this, Pallant (2016) explains that if the displayed p-value is greater than 0.05, then the data supports the homogeneity of the variants' distribution. As the p-value was 0.192, which was greater than 0.05, it can be concluded that the homogeneity test conducted by the researchers was successful in producing homogeneous data.

D. Independent Sample t-test

To determine whether there were significant differences between the experimental group and the control group, researchers performed a t-test on independent samples. The following are the results of the researcher's independent sample t-test.

Table 4.9 Independent Sample t-test Results

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Results of Students' Score	Equal variances assumed	.842	.362	5.812	70	.000	10.972	1.888	7.207	14.738
	Equal variances not assumed			5.812	65.977	.000	10.972	1.888	7.203	14.742

The significance of the p-value displayed in the table above is 0.00. According to Rumsey (2014), if the significance level of the p-value is less than the alpha level (or alpha value) of 0.05, then the value of the independent t-test supports rejecting the null hypothesis. With a value that shows a low level below the alpha value, which is 0.05 in the independent sample t-test, which serves as part of hypothesis testing, and 0.00 as the p-value in Sig. 2-tailed, it can be concluded that there is a significant difference between the experimental group and the control group regarding the use of English subtitles in English language movies to improve hearing ability.

4.2 Discussion

4.2.1 Implementation of English Subtitles

Over the course of five meetings, researchers observed many things, one of which was the use of discovery-based learning. The treatment consists of three

steps: an opening before learning begins, or pre-activity, a main activity, or primary activity, and a closing, or post-activity. Throughout treatment and learning, the researcher provided treatment implementation, specifically the use of English-language movies with English subtitles.

The main activity consists of four sub-activities. In the first, students watch video clips from a film without subtitles, which is followed by the addition of subtitles. Following that, students are asked to identify keywords in the subtitles and the central idea of the displayed video clip. According to Alabsi (2020), using subtitles helps students develop their ideas, become more familiar with new words, and make sure they spell and say these words correctly. By using English subtitles and English movies, students can learn how to correctly pronounce and express themselves with words they have never encountered before.

Aside from students finding the unfamiliar words they encounter in keywords, teachers can attract students' attention in this research treatment by showing video clips from a film, allowing students to not only discover new vocabulary but also the definition of the words. In addition, students and teachers can use interaction patterns described by Rost (1994) as cited by Yildirim and Yildirim (2016) in the important role of listening in the classroom. This allows for effective communication because students participate in activities that require them to listen carefully.

By utilizing subtitles as a pedagogical tool, students are afforded an opportunity to enhance their listening comprehension skills through the utilization

of an additional media. According to the research conducted by Dumlao, Alfonso, Paguirigan, and Subia (2020), it has been observed that the utilization of subtitles can enhance individuals' listening skills. The researchers provided an explanation that the outcomes of their study confirmed the efficacy of including subtitled movies as a means of enhancing students' listening comprehension skills within an educational setting. Videos that include subtitles have been found to be a valuable instructional tool for enhancing students' listening abilities in the context of English language learning.

Based on the findings, it can be concluded that this study has successfully aided in the enhancement of EFL students' listening abilities within the educational setting through the implementation of innovative instructional materials, specifically videos combined with English subtitles.

4.2.2 Effects of Using English Subtitles

To determine the results of hypothesis testing, researchers must conduct a t-test on independent samples. It can be seen from table 4.9 that the significance value is 0.00. The alternative hypothesis can be accepted and the null hypothesis can be rejected if the Sig value (2-tailed) is less than 0.05. This could suggest that the treatment administered to the experimental group during the study had a significant impact.

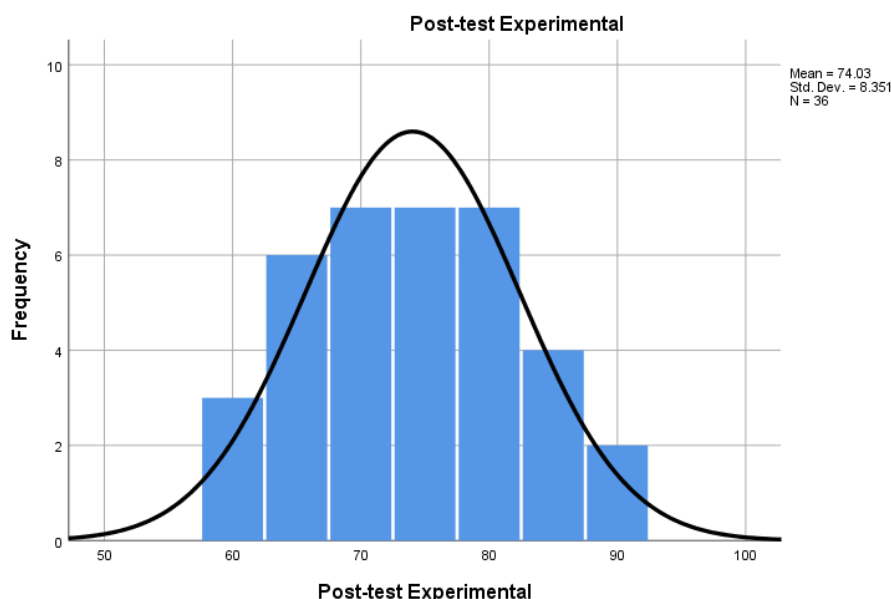


Chart 4.3 Bell curve of post-test experimental group's results

The results of the experimental group's post-test are depicted in the bell curve above, which is a normal distribution curve for test scores. Both the right and left areas of the chart have a value of 0.025 each. When these values are combined, they form a 2-tailed value of 0.05. As stated by Rumsey (2014), when the p-value is less than the alpha value of 0.05, the null hypothesis is rejected and the alternative hypothesis is accepted in hypothesis testing. The independent t test, as presented in Table 4.9, indicates that the 2-tailed significance results yield a value of 0.00, indicating that the p-value is less than the alpha value of 0.05. Thus, it can be concluded that the use of English subtitles in English films has significant effects, and that the use of English subtitles improves students' listening skills.

4.2.3 Students' Perceptions on the Use English Subtitles

Through the use of a questionnaire, researchers can determine how students view the use of English subtitles in English movies to improve listening skills.

According to table 4.4, a total of 96% of students had a positive view of the administered treatment. Among the ten items that can be summarized as positive are the following:

1. Students could understand the whole context of video using the subtitles;
2. Listening skills are increased after watch the video using subtitles; and,
3. Students find it interesting on the use of English subtitles as new media for learning English, especially improving their listening skills.

The results from Table 4.4 in the form of percentages of responses from students who filled out the questionnaire are supported by graphs in the following statements. With four levels of agreement, with SD representing strongly disagree, D representing disagree, A representing agree, and SA representing strongly agree. The following statements are representative of positive questionnaire results:

- 1. Students could understand the whole context of video using the subtitles**

The following chart displays the proportion of students who perceive their comprehension of the overall context to be enhanced after viewing a video with subtitles.

Students could understand the whole context of video using the subtitles

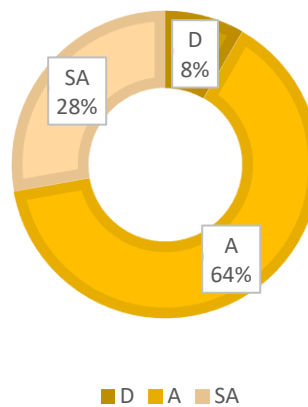


Chart 4.4 First item of questionnaire

The percentage of students who disagree with the statement is depicted in the preceding bar graph as 8%. 64% of students agreed with the statement that using subtitles allowed them to comprehend the entire context of the video. Following that, 24% of students strongly agreed that subtitles assisted them in comprehending the context of a video. Kusumawati (2018) explains that subtitles bridge the gap between the needs of the audience and the context of the film. This enables students to comprehend the film's context, allowing them to use subtitles as an alternative method for learning English.

2. Listening skills are increased after watch the video using subtitles

The following chart illustrates the percentage of students who reported an improvement in their listening proficiency after viewing videos with subtitles.

Listening skills are increased after watch the video using subtitles

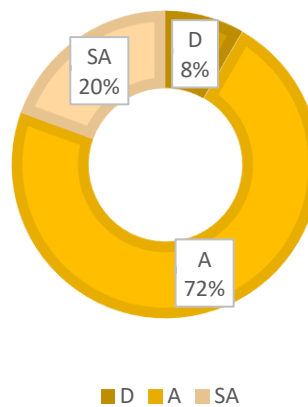


Chart 4.5 Second item of questionnaire

Following the viewing of videos with subtitles, 8% of students disagreed that their listening skills improved. In contrast, 72% of students agreed and 20 percent strongly agreed that their listening skills improved after watching videos with subtitles. According to Liando, *et al.* (2018) the extensive use of film scripts, which can be used as a learning tool, can enhance the listening skills of students. Afterwards, this explanation is supported by Sari (2008) as cited by Listiyaningsih (2017), that there are several critical aspects to learning a foreign language through hearing, one of which is the use of visual media. In his study, Pamungkas and Adi (2020) found that the majority of respondents found it easier to learn to listen through movies than through traditional learning methods. This encourages the use of English subtitles in English-language movies both inside and outside of the classroom as a learning tool or medium.

3. Students find it interesting on the use of English subtitles

The final chart presented below displays the proportion of students' perceptions regarding their inclination towards utilizing English subtitles as a novel tool for enhancing their English language proficiency, particularly in terms of improving their listening abilities.

Students find it interesting on the use of English subtitles

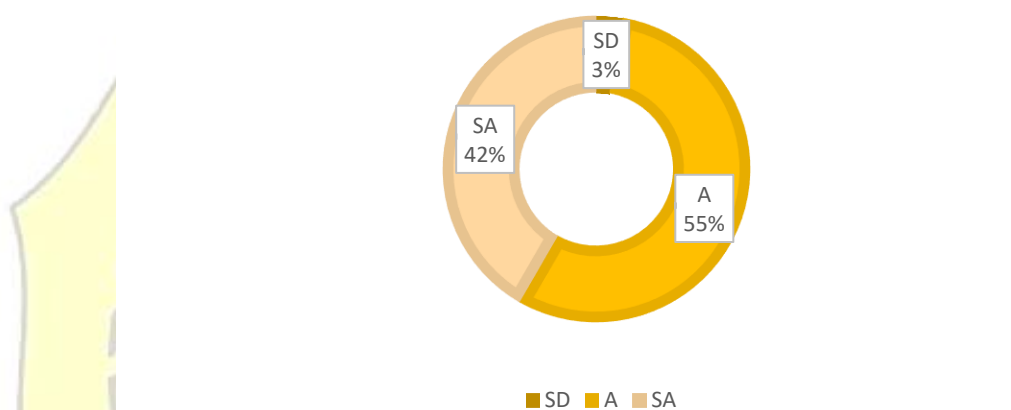


Chart 4.6 Third item of questionnaire

In the table above, 3% of students strongly disagreed that they would be interested in using English subtitles as a new learning medium, particularly to improve their listening skills. On the other hand, 55% of student respondents agreed and 42% strongly agreed that they were interested in using English subtitles as a new medium for learning, particularly for improving listening skills. Accordingly, Pham (2021) explains that the use of sound can pique students' interest in the medium employed. Pamungkas and Adi (2020) found in his research that the majority of respondents felt that using English movies with English subtitles in listening lessons was beneficial and easy to comprehend. As

a result, researchers encourage the use of English subtitles as a new medium for learning, particularly to improve students' listening skills, as the majority of students expressed an interest in employing this medium.

With the three statements above, which represent the results of the questionnaire and the positive responses from respondents, it is clear that the majority of students believe that the use of English subtitles can help them improve their listening skills and can be an engaging new learning medium for students. According to Gilakjani and Sabouri (2016), there is a connection between listening to language and language acquisition; therefore, listening can be a step for students to acquire information. In accordance to the questionnaires, English subtitles can help students learn English as a medium and improve their listening skills. With this information, researchers can conclude that the use of English subtitles in English movies can aid in the improvement of students' language skills.

4.2.4 Students' Problems When Using English Subtitles

There are a variety of obstacles that can be encountered on the spot during observational activities. The challenges that are faced by students can make them feel uneasy while engaging in learning activities. This issue can be caused by a variety of factors, such as voices that cannot be heard during treatment or a classroom environment that is not conducive to learning.

In its implementation, the use of English-language movies with a length that is too long can cause students to become bored, thereby decreasing their desire to learn English. According to Liando, *et al.* (2018) explanation, movies have

advantages in terms of sensory experience, but they also have disadvantages, which is that the activity cannot be conducted if the film cannot be implemented in experimental classes. With this, teachers are required to choose movies carefully in order to engage students in learning activities.

In other situations, students' anxiety regarding English learning is unquestionably a problem. In accordance to the findings of Hwang, Hsu, & Hsieh (2018), even if students are given supporting evidence, their anxiety will not decrease. There were still students in the treatment who were concerned about making mistakes when the researcher instructed them to explain the main ideas they discovered in the video. Therefore, they tend to refrain from responding because they fear making a mistake. Thus, it can be concluded that when students use English subtitles in English movies to improve their listening skills, the problems that can arise during treatment are the selection of movies to be used in learning activities, students' anxiety about making mistakes, and improper implementation of the use of movies as a medium.