CHAPTER IV

FINDINGS AND DISCUSSIONS

This chapter presents the results of the research and provides an interpretation of the collected data to understand the study's outcomes. The research employed a pre-experimental design involving pre-test and post-test assessments. After the data were collected, statistical analyses were conducted to test the hypotheses and interpret the findings.

A. Research Findings

This section presents the results of the statistical analysis conducted in this study, aiming to provide a clear understanding of students' listening comprehension performance. The analysis focuses on measuring the level of listening comprehension before any treatment was applied, establishing a baseline to compare students' initial abilities. This first aspect allows the researcher to identify strengths and weaknesses in students' listening skills prior to the implementation of animated movie clips.

The second aspect of the analysis examines students' listening comprehension after they were exposed to the animated movie clips during the treatment sessions. By analyzing the post-test results, the study evaluates the improvement in students' comprehension, considering both general trends and individual progress. This step is crucial to determine how effective the use of animated movie clips is in enhancing listening skills and to identify which areas of listening comprehension such as understanding the main idea, recognizing details, or making inferences show the most improvement.

The third aspect investigates whether there is a significant difference in students' listening comprehension before and after the use of animated movie clips. Statistical tests, such as the paired-sample t-test, are conducted to assess the significance of the observed changes. By comparing pre-test and post-test scores, the study provides empirical evidence regarding the effectiveness of the

intervention, demonstrating whether the use of animated movie clips leads to measurable improvements in students' listening comprehension.

1. Students' Listening Comprehension Before Using Animated Movie Clips

a. Pre-Test

The pre-test was conducted on Monday, 1 September 2025. This test was administered to assess and understand the students' listening comprehension skills before the treatment. A total of 35 students participated in the pre-test, which consisted of 20 multiple-choice questions. The pre-test questions had previously undergone validation and reliability testing. Students were given one hour to complete the questions independently. The results of the pre-test are presented in the table below.

Table 4.1 Pre-Test Score

No	Students	Pre-Test Score
1	Student 1	75
2	Student 2	75
3	Student 3	70
4	Student 4	70
5	Student 5	75
6	Student 6	80
7	Student 7	80
8	Student 8	85
9	Student 9	60
10	Student 10	90
11	Student 11	90
12	Student 12	85
13	Student 13	70
14	Student 14	85
15	Student 15	70
16	Student 16	55

17	Student 17	55
18	Student 18	45
19	Student 19	60
20	Student 20	90
21	Student 21	80
22	Student 22	30
23	Student 23	30
24	Student 24	40
25	Student 25	45
26	Student 26	20
27	Student 27	80
28	Student 28	90
29	Student 29	80
30	Student 30	80
31	Student 31	70
32	Student 32	65
33	Student 33	50
34	Student 34	70
35	Student 35	60

After the pre-test data was collected, the researcher conducted statistical data analysis to find out range, minimum score, maximum score, total score, mean, standard deviation, and variance of the data. SPSS version 27 was used by researcher to do descriptive statistics analysis.

Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Pre	35	30.00	90.00	2360.00	67.4286	16.86327
Valid N (listwise)	35					

Figure 4.1 Descriptive Statistics Pre-Test

Figure 4.1 presents the students' pre-test scores. Based on the figure, the range is 60, the lowest score is 30, and the highest score is 90. The total score obtained is 2360, with a mean score of 67.4, and a standard deviation of 16.86. These pre-test results provide an overview of the students' listening comprehension skills before the treatment using animated movie clips.

2. Implementing Treatment

a. First Treatment

Figure 4.2 First Treatment

The first treatment took place on Thursday, October 9th, 2025. In this initial session, students focused on identifying specific information from characters' conversations in the animated movie clips. They listened carefully to the dialogues and were guided to notice details such as what each character said and did. The researcher provided several short clips, and students completed exercises that required them to recall and recognize key pieces of information. This activity helped strengthen their basic listening skills by training them to pay attention to important details while watching and listening simultaneously.

b. Second Treatment

Figure 4.3 Second Treatment

The second treatment was conducted on Thursday, October 16th, 2025. During this session, students practiced summarizing the storyline from the animated clips. After watching the selected scenes, they were asked to retell the story in their own words, highlighting the main events and sequences. The researcher facilitated the activity by giving guiding questions to help students identify important developments. This exercise allowed students to demonstrate their understanding of the content while practicing how to organize information logically and coherently.

c. Third Treatment

Figure 4.4 Third Treatment

The third treatment took place on Thursday, October 23rd, 2025. In this session, students worked individually to identify the main ideas of the story using guided questions provided by the teacher. They watched the animated movie clips and focused on understanding the essential points rather than specific details. The activity required them to recall the core message and recognize key elements of the storyline. This session reinforced their ability to extract meaningful information and improved their comprehension of the overall content.

d. Fourth Treatment

Figure 4.5 Fourth Treatment

The fourth treatment was held on Thursday, October 30th, 2025. In this final session, students engaged in group activities to analyze and conclude the story presented in the animated movie clips. They worked together to discuss the main events, character actions, and the message conveyed by the scenes. By comparing ideas and sharing interpretations, students were able to deepen their understanding and develop more critical thinking about the content. The teacher also reviewed students' listening progress throughout the previous sessions, encouraging them to reflect on the improvements and challenges they experienced during the learning process.

3. Students' Listening Comprehension After Using Animated Movie Clips
a. Post-Test

The post-test was conducted to assess students' listening comprehension after the four treatment sessions. A total of 35 students participated in the post-test, which consisted of 20 multiple-choice questions. The answer choices were presented in a randomized order to minimize the potential for memorization. The audio used for the post-test was sourced from a different material to ensure that the test measured students' general listening comprehension skills. The topics and level of difficulty of the audio remained relevant and comparable to the materials used during the treatment sessions, maintaining consistency with the instructional goals. Students were given one hour to complete the test independently.

Table 4.2 Post-Test Score

No	Students	Post-Test Score
1	Student 1	75
2	Student 2	75
3	Student 3	70
4	Student 4	70
5	Student 5	75
6	Student 6	80
7	Student 7	80

9	Student 9	60
10	Student 10	90
11	Student 11	90
12	Student 12	85
13	Student 13	70
14	Student 14	85
15	Student 15	70
16	Student 16	55
17	Student 17	55
18	Student 18	45
19	Student 19	60
20	Student 20	90
21	Student 21	80
22	Student 22	30
23	Student 23	30
24	Student 24	40
25	Student 25	45
26	Student 26	50
27	Student 27	60
28	Student 28	90
29	Student 29	80
30	Student 30	80
31	Student 31	65
32	Student 32	65
33	Student 33	50
34	Student 34	70
35	Student 35	60

After collecting the post-test data, the researcher performed statistical analysis to determine the range, minimum score, maximum score, total score, mean, and standard deviation. Descriptive statistics were analyzed using SPSS version 27

Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Post	35	60.00	95.00	2940.00	84.0000	9.29896
Valid N (listwise)	35					

Figure 4.6 Descriptive Statistics Post-Test

The post-test was administered to 35 students. The descriptive statistics are as follows: the minimum score obtained was 60 and the maximum score was 95, resulting in a range of 35. The total sum of all scores was 2940, with a mean score of 84. The standard deviation was 9.298. The mean score of 84 indicates that, on average, students performed satisfactorily on the post-test. The standard deviation of 9.298 suggests a moderate level of dispersion, indicating that most students' scores were relatively close to the mean. Although there were differences between the highest and lowest scores, these variations were not extreme.

In summary, the descriptive statistics suggest that the post-test performance of the students was generally good, with moderate variability among individual scores. This implies a relatively consistent level of achievement across the majority of students, while still allowing for some differences in performance.

4. **The Significant Difference on Students' Listening Comprehension Before and After Being Taught using Animated Movie Clips**

This section addresses the third research question, which aims to examine whether there is a significant difference in students' listening comprehension before and after being taught using animated movie clips. The analysis was conducted based on students' pre-test and post-test scores, which were statistically processed using SPSS version 27. Initially, a normality test was performed using the One-Sample Kolmogorov-Smirnov method to ensure the data were suitable for parametric testing. Subsequently, a Paired Sample t-Test was conducted to

determine whether the observed improvement in listening comprehension was statistically significant.

a. Normality Test

The normality test is conducted to examine whether the data follow a normal distribution. According to Aminuddin (2024), normally distributed data are a requirement for conducting parametric tests. If the data are not normally distributed, parametric tests cannot be applied, and non-parametric tests should be considered instead. In this study, the One-Sample Kolmogorov-Smirnov test was employed to assess the normality of the data, as it is suitable for small sample sizes, particularly when the number of participants is less than 50. A p-value greater than 0.05 ($p > 0.05$) indicates that the data are normally distributed, whereas a p-value less than 0.05 ($p < 0.05$) suggests that the data are not normally distributed.

One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			35
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		7.52151300
Most Extreme Differences	Absolute		.141
	Positive		.141
	Negative		-.123
Test Statistic			.141
Asymp. Sig. (2-tailed)[c]			.076
Monte Carlo Sig. (2-tailed)[d]	Sig.		.080
	99% Confidence Interval	Lower Bound	.073
		Upper Bound	.087

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 926214481.

Figure 4.7 Normality Test Result

As shown in Figure 4.7, the p-value (Asymp. Sig. 2-tailed) is 0.076, which is greater than the conventional significance level of 0.05 ($p > 0.05$). This indicates that the data do not significantly deviate from a normal distribution. Therefore, the data can be considered normally distributed, and parametric tests are appropriate for further analysis.

Based on this result, the researcher proceeded to analyze the difference between pre-test and post-test scores using the Paired Sample t-Test to determine whether the use of animated movie clips effectively improves students' listening comprehension skills.

b. **Homogeneity Test**

The purpose of conducting the homogeneity test is to determine whether the variances of students' listening comprehension scores are consistent between the pre-test and post-test. This assumption must be met before performing parametric analyses such as the paired sample t-test. As stated by Creswell (2012), statistical assumptions like normality and homogeneity of variances need to be satisfied to maintain the accuracy and validity of inferential statistical analyses. If the equality of variances assumption is not met, the subsequent results may be unreliable. To verify this assumption, Levene's Test for Equality of Variances was employed, and the findings are displayed in the following figure.

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Pre	Based on Mean	.999	5	28	.436
	Based on Median	.406	5	28	.841
	Based on Median and with adjusted df	.406	5	19.172	.839
	Based on trimmed mean	.827	5	28	.541

Figure 4.8 Homogeneity Test Result

Based on the results of the test of homogeneity of variances using Levene's test, the significance values obtained were 0.436 (based on the mean), 0.841 (based on

the median), 0.839 (based on the median with adjusted degrees of freedom), and 0.541 (based on the trimmed mean). Since all significance values are greater than 0.05 (p > 0.05), it can be concluded that the variances among the groups are homogeneous. Therefore, the assumption of homogeneity of variances is fulfilled, and the ANOVA analysis can be continued.

c. **Hypothesis Test**

The purpose of the hypothesis testing is to determine whether there is a significant difference in students' listening comprehension before and after being taught using animated movie clips. To analyze this, a paired sample t-test was employed. This statistical test compares the obtained t-value (t-count) with the critical t-value (t-table) to evaluate the significance of the difference. It aims to determine whether the mean scores of the pre-test and post-test differ significantly. The results of the hypothesis testing are presented in the following figure.

Paired Samples Test

| | | | | | 95% Confidence Interval of the Difference | | | | |
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Pre - Post	-16.57143	13.65388	2.30793	-21.26170	-11.88116	-7.180	34	<.001

Figure 4.9 Hypothesis Test Result

Based on the results of the Paired Samples t-test, the mean difference between the Pre-Test and Post-Test scores was -16.57, with a standard deviation of 13.65 and a standard error mean of 2.30. The t-value obtained was -7.180 with 34 degrees of freedom (df = 34), and the significance value (Sig. 2-tailed) was less than 0.001, which is lower than the 0.05 threshold (p < 0.05). According to the hypothesis testing, the null hypothesis (H$_0$), which stated that the use of animated movie clips is not effective in improving students' listening comprehension, was rejected, while the alternative hypothesis (H$_a$), stating that animated movie clips are effective, was accepted. The negative mean difference indicates that the Post-Test mean score was higher than the Pre-Test mean score. Therefore, it can be concluded that the use of

animated movie clips had a statistically significant effect on improving the listening comprehension of the eighth-grade students at SMPN 63 Bandung.

d. **N-Gain**

Table 4.3 N-Gain Test Result

No	PreTest	PostTest	Post - Pre	Skor Ideal - Pre	N-Gain	N-Gain (%)
1	75	80	5	25	0.20	20
2	75	90	15	25	0.60	60
3	70	90	20	30	0.67	67
4	70	75	5	30	0.17	17
5	75	95	20	25	0.80	80
6	80	90	10	20	0.50	50
7	80	90	10	20	0.50	50
8	85	90	5	15	0.33	33
9	60	80	20	40	0.50	50
10	90	95	5	10	0.50	50
11	90	95	5	10	0.50	50
12	85	90	5	15	0.33	33
13	70	75	5	30	0.17	17
14	85	95	10	15	0.67	67
15	70	85	15	30	0.50	50
16	55	60	5	45	0.11	11
17	55	75	20	45	0.44	44
18	45	90	45	55	0.82	82
19	60	80	20	40	0.50	50
20	90	95	5	10	0.50	50
21	80	90	10	20	0.50	50
22	30	90	60	70	0.86	86
23	30	75	45	70	0.64	64
24	40	70	30	60	0.50	50
25	45	75	30	55	0.55	55
26	50	70	20	50	0.40	40
27	60	80	20	40	0.50	50
28	90	95	5	10	0.50	50
29	80	85	5	20	0.25	25
30	80	90	10	20	0.50	50
31	65	70	5	35	0.14	14
32	65	75	10	35	0.29	29

33	50	80	30	50	0.60	60
34	70	85	15	30	0.50	50
35	60	95	35	40	0.88	88
Mean	**67.43**	**84.00**	**16.57**	**32.57**	**0.48**	**48**

The N-Gain analysis was used to determine the effectiveness of using animated movie clips in improving students' listening comprehension skills. Based on the results, the mean N-Gain score reached 0.48, which is categorized as moderate according to Hake's (1999) criteria. This indicates that the use of animated movie clips provided a meaningful contribution to students' improvement from the pre-test to the post-test. Several students demonstrated significant progress, particularly those who initially had low pre-test scores. Their high N-Gain scores show that animated movie clips successfully helped them better understand vocabulary, identify sounds, and interpret meaning from spoken text.

Table 4.4 N-Gain Categorization (Hake, 1998)

Range	Categorization
> 0.7	High
0.3 – 0.7	Medium
< 0.3	Low

Based on the categorization table, the average N-Gain percentage of 0.48 or 48% further confirms the moderate effectiveness of animated movie clips in enhancing listening comprehension. Students with higher pre-test scores tended to show smaller gains, which is expected because their opportunity for improvement was lower. Meanwhile, students with lower pre-test scores benefited greatly from the visual and auditory support provided by animated clips, which helped them follow conversations, recognize intonation patterns, and understand contextual clues more easily. These findings indicate that animated movie clips are an effective and engaging medium for supporting students' listening development.

B. Discussion

The findings of this study reveal a noticeable improvement in students' listening comprehension after the implementation of animated movie clips as the learning media. The descriptive statistics of the pre-test show that students initially had varied levels of listening ability, indicated by the wide score range of 60 and a relatively high standard deviation of 16.86. These results imply that before the treatment, students' listening comprehension skills differed significantly across the class. This condition is commonly found in EFL contexts, where students have diverse exposure to spoken English. Such variability also highlights the need for engaging and supportive instructional media, such as animated movie clips, to address these differences effectively.

Following the treatment, the post-test results show that students' listening comprehension improved substantially. The mean score increased from 67.4 in the pre-test to 84 in the post-test. This finding aligns with previous research indicating that multimedia learning, particularly through animated visuals, helps students process spoken information more efficiently by providing contextual clues, facial expressions, and clear sound cues that support comprehension.

Before conducting further statistical analyses, the normality and homogeneity tests were performed to ensure that the assumptions for parametric testing were met. The normality test results ($p = 0.076 > 0.05$) indicate that the data were normally distributed, which supports the use of parametric tests such as the paired samples t-test. Similarly, the homogeneity test through Levene's test showed significance values greater than 0.05 in all categories, suggesting that the data had homogeneous variances. Meeting these assumptions strengthens the reliability of the subsequent hypothesis testing and ensures the accuracy of the statistical conclusions.

The paired samples t-test further supports the effectiveness of the animated movie clips. The t-test results show a significant difference between the pre-test and post-test scores ($t = -7.180$, $p < 0.001$), indicating that the improvement in students' performance was not due to chance. The negative mean difference of -16.57 confirms that the post-test scores were substantially higher than the pre-test scores.

This significant improvement suggests that animated movie clips successfully enhanced students' listening comprehension by providing multisensory input that supports bottom-up and top-down processing, including sound recognition, vocabulary understanding, and contextual interpretation.

In addition to the t-test, the N-Gain analysis was used to measure the effectiveness of the intervention relative to the students' potential maximum improvement. The average N-Gain score of 0.48 falls within the moderate category, demonstrating that animated movie clips contributed meaningfully to students' learning progress. Students with lower initial scores showed the most notable N-Gain values, reflecting that the media was particularly beneficial for struggling learners. This aligns with multimedia learning theory, which states that visuals paired with audio input make linguistic information more accessible to learners with limited prior knowledge.

A review of previous studies consistently shows that various forms of audiovisual media such as movies, animated films, and conversational videos are effective in improving students' listening comprehension. Daulay (2025) found that audiovisual input supports students' understanding of spoken English, although its implementation depends on classroom resources. Likewise, Manurung, Butar-Butar, and Simbolon (2022) demonstrated significant improvement in students' listening scores after being taught with movies, supported by increased motivation. Studies by Nurdiawati (2019), Arbain, Ramadani, and Hartatya (2023), and Muslem et al. (2018) further confirmed that animated movies, online video platforms, and authentic video clips enhance comprehension by providing contextual cues and authentic language exposure. While these studies emphasize the effectiveness of audiovisual media in general, few have specifically examined the use of short animated movie clips within a pre-experimental one-group pre-test and post-test design for junior high school learners. Therefore, the present study extends previous research by focusing on the effectiveness of animated movie clips in improving the listening comprehension of eighth-grade students at SMPN 63 Bandung.

Overall, the statistical results consistently indicate that animated movie clips are an effective instructional tool for improving students' listening comprehension. The combination of engaging visuals, contextual cues, and authentic spoken language provides a rich learning environment that supports comprehension and retention. The significant improvement in students' scores, balanced by the moderate N-Gain outcome, suggests that animated movie clips not only help students understand spoken English better but also enhance their motivation and engagement during listening activities. Therefore, animated movie clips can be considered a valuable educational media for EFL teachers aiming to improve listening comprehension in the classroom.