

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter focuses on the presentation of the result of data analysis. This part discusses the description of data, data analysis, hypothesis testing, and discussion.

The research finding of this study were vocabulary test and motivation questionnaire score. The null hypothesis of the study is: “There is no significant difference on the mean score of vocabulary and motivation between the students who are taught by using animation video and non-animation video”. Meanwhile, the alternative hypothesis is conversely formulated as follows: “There is significant difference on the mean score of vocabulary and motivation between the students who are taught by using animation video and non-animation video.”

3.1 The Description of Students’ Vocabulary Mastery and Motivation Score of Experimental and Control Group

Descriptive statistics is used to present the number of data, minimum score, maximum score, mean, and standard deviation. After computing the data collected, it was found that the mean score of vocabulary test from experimental group was 73.33, while the control group was 66.75. The highest score of vocabulary test from experimental group was 84 and the lowest score was 52. Then, the highest score of motivation from experimental group was 81 and the

lowest score was 54. Meanwhile, the highest score of vocabulary test from control group was 80 and the lowest score was 48. Then, the highest score of motivation from control group was 75 and the lowest score was 45. The following table is the descriptive statistic of the result of vocabulary test and motivation between experimental and control groups:

Table 4.1 Descriptive Statistics of the Mean Score of Students' Vocabulary Mastery and Motivation of Experimental and Control Groups

Descriptives								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Vocabulary experimental	33	73.33	9.626	1.676	69.92	76.75	52	84
control	32	66.75	9.055	1.601	63.49	70.01	48	80
Total	65	70.09	9.852	1.222	67.65	72.53	48	84
Motivation experimental	33	70.39	6.548	1.140	68.07	72.72	54	81
control	32	62.56	6.594	1.166	60.19	64.94	45	75
Total	65	66.54	7.620	.945	64.65	68.43	45	81

4.2 Data Analysis of Students' Vocabulary Mastery and Motivation of Experimental and Control Group

This study used Kruskal-Wallis to analyze the research data, since it would like to investigate the effect of independent variable that is animation video on two dependent variables; they are vocabulary mastery and motivation which is not normally distributed. The researcher used SPSS Statistics 17.0 to analyze the research data. The criteria of Kruskal-Wallis are: if the significance value < 0.05 ,

the null hypothesis is rejected. Meanwhile, if the significance value ≥ 0.05 , the null hypothesis cannot be rejected. The following table is the output of Kruskal-Wallis testing:

Table 4.2 The Output of Kruskal-Wallis from Vocabulary Mastery and Motivation of Experimental and Control Groups

Test Statistics ^{a,b}		
	Vocabulary	Motivation
Chi-Square	6.354	7.772
df	1	1
Asymp. Sig.	.012	.005

a. Kruskal Wallis Test

b. Grouping Variable: Group

Based on the table above, the sig. value of vocabulary mastery was 0.012. It was less than 0.05. So, the null hypothesis is rejected. It means that there is significant difference on the mean score of vocabulary mastery between the students who are taught by using animation video and non-animation video. Then, the sig. value of motivation was 0.005. It was less than 0.05. Therefore, the null hypothesis is rejected. It means that there is significant difference on the mean score of motivation between students who are taught by using animation video and non-animation video.

4.3 Hypothesis Testing

The approach of this study is quantitative. So, the purpose of this study is to test the hypothesis. The null hypothesis of this study stated that “There is no significant difference on the mean score of vocabulary and motivation between

the students who are taught by using animation video and non-animation video”. The data analysis of this study is mainly used to test the null hypothesis above. The research data from vocabulary test and motivation questionnaire score were computed statistically by using SPSS to test whether the null hypothesis is rejected or cannot be rejected. If the null hypothesis is rejected, then the alternative hypothesis is accepted.

This study used Kruskal-Wallis on SPSS to analyze the numerical data. The criteria of Kruskal-Wallis stated: if the sig. value < 0.05 , the null hypothesis is rejected, meanwhile if the sig. value ≥ 0.05 , the null hypothesis cannot be rejected. From the result of Kruskal-Wallis computation it was found that the sig. value of vocabulary mastery was 0.012. It was less than 0.05, so it could be concluded that the null hypothesis is rejected. Meanwhile, the sig. value of motivation was 0.005. It was also smaller than 0.05 and fulfilled the criteria to reject the null hypothesis.

The hypothesis testing above indicated that the Null hypothesis (H_0) from two dependent variables (vocabulary mastery and motivation) was rejected. So, this study accepted the alternatives hypothesis that stated “There is significant difference on the mean score of vocabulary and motivation between the students who are taught by using animation video and non-animation video.” It means that the use of animation video has significant effect or differences toward the students’ vocabulary mastery and motivation.

4.4 Discussion

The discussion of this study explains the answer of research problem that was formulated in chapter I. The research problems of this study are: (1) Is there any difference on the mean score of vocabulary mastery and motivation between the students who are taught by using animation video and non-animation video? (2) Is there any significant difference on the mean score of vocabulary mastery and motivation between the students who are taught by using animation video and non-animation video?

Based on the result of descriptive statistics above, it can be found that the mean score of vocabulary test from experimental group was 73.33, while the control group was 66.75 and the mean score of motivation from experimental group was 70.39, while the control group was 62.56. The description of data above showed that there was any difference on the mean score of vocabulary mastery and motivation between the students who are taught by using animation video and non-animation video.

From the data analysis using Kruskal-Wallis on SPSS, it was found that the significance value of vocabulary mastery was 0.012 and motivation was 0.005. The significant value of both of the dependent variables was less than 0.05. It means that the null hypothesis was rejected. So, it can be concluded that the use of animation video has a significant difference on the mean score of vocabulary mastery and motivation between the students who are taught by using animation video and non-animation video at SMPN 2 Sumbergempol in 2018/2019 academic years.

The use of animation video has significant effect toward the students' learning outcomes. This is proved by the increasing of the vocabulary test score of students in the experimental group from the pretest to the posttest. Besides that there was also a significant difference between posttest scores from the experimental group and the control group, where the mean and total number of values from the experimental group was greater than the control group. Based on the data analysis using Kruskal-Wallis in SPSS Statistics 17.0, the null hypothesis (Ho) that states "There is no significant difference on the mean score of vocabulary and motivation between the students who are taught by using animation video and non-animation video" is rejected. So, the alternative hypothesis (Ha) that states "There is significant difference on the mean score of vocabulary and motivation between the students who are taught by using animation video and non-animation video" is accepted. It indicates that the use of animation video can give significant difference toward the students' vocabulary learning outcomes and also their motivation. This is in line with some previous studies about the use of animation video as teaching media. The study from International Journal of English Language Teaching by Wang (2015) explained that the students' language ability, mindfulness in the culture, and aesthetic respect can be improved by using video materials with the clear goals and the good plan of the teaching method and strategy. According to Munir (2016), teaching vocabulary on young learners by using cartoon film was effective. Next, the study from International Journal of Education and Research by Galvez (2018) stated that the use of visuals animated were effective in teaching chemical

bondings. Then, the study from International Journal of Education and Research by Budisugiarto, et. al. (2019) found that the learning outcomes of students who were taught by using animation teaching media was greater than the learning outcomes of students who were taught by using conventional teaching media. Furthermore, the study from International Journal of Education and Research by Markoglou (2019) revealed the significant differences on the achievement between the students who were taught by using cartoons and conventional media for both of girls and boys.

The use of animation video in vocabulary learning is not merely has significant effect on the students' vocabulary mastery, but it also has significant impact toward the students' motivation in the classroom. It can be seen from their attitude and enthusiasm to participate the vocabulary learning by using animation video. They are very happy and interested in the process of vocabulary learning by using animation video. There is no boredom and anxiety on the students' face. All students give good attention to the vocabulary materials that are delivered by using the animation video. It indicates that the students' motivation towards vocabulary learning increases due to the use of animation video. This is in line with Sukmadinata (2006) who found that teaching media that is used by the teacher can stimulate the students in learning.