

CHAPTER III

RESEARCH METHOD

A. Research Design

The design of this research was an experimental research. According to Gay (2003:355), the purpose of experimental research is to identify cause-effect relationship both two variable. Basically, experimental research has three kinds of design: one short time case study, pre test-post test and post test only. In this research, the researcher used pre test- post test design.

There are two groups involve the one is experimental and the other one is control group. Before given the treatment the teacher gave the pre test. Researcher gave pre test in experiment class and control class. After that the reseacher gave the treatments, the students is functioned as experimental group provided some treatments Describe and Identify Game in teaching speaking and control group provided some treatments by teaching technique or strategy used in the target school and target grade exactly. The treatment was given to experimental group five meetings and also five meetings in control group. At the end of the research, the researcher gave post test to the students to know their abilities in speaking.

Table 3.1

Research Design

E	0₁ X 0₂
C	0₁ - 0₂

Where:

E = Experimental group

C = Control group

X = Experimental treatment (D and I Game)

01 = Pre-test

02 = Post-test

By doing this research, researcher gave pre test before giving the treatments, after that researcher provide some treatments by using Describe and Identify Game. At the end of the research, the researcher gave post test to know students' speaking skill.

B. Population and Samples

1. Population

Gay (1987: 102) says that population is a group to which the researcher would like the results of the study to be generalize able and sampling is the processes of selecting a number of individuals for a study in such a way that the individuals represent the large group from which they were selected. In this research, the population is students in class VIII at Junior High School 3 sutera in academic year 2017-2018 which was grouped into four classes, there are VIII_A, VIII_B, VIII_C, and VIII_D total population was about 83 students.

Table 3.2**Total of Students in Class VIII at Junior High School 3 Sutera**

No	Class	Total
1	VIII A	21
2	VIII B	21
3	VIII C	20
4	VIII D	21
	Total	83

They would be chosen as the population based on the assumption that they had a basic knowledge in speaking. They also are taught with the same material and syllabus.

2. Sample

According to Gay (1987:101) sampling is the process of selecting a number of individuals for a study in such a way that the individuals represent the larger group from which they are selected. He also states that a good sample is the one that representative of the population from which is selected.

In order to get sample, the sample of this research has been taken by cluster random sampling. According to Gay (1987:110) cluster random sampling is sampling in which groups, not individuals are randomly selected that have similar characteristics and in which subjects can be found. The sample of this research has been taken by cluster random sampling.

To get the sample of the research, the researcher used the lottery to get a class for the sample. Such as class VIII_A lottery A, VIII_B lottery B, VIII_C lottery C, and VIII_D lottery D. All lotteries were put in the box and then the writer shake it and removed a lottery. The one which removed was chosen as the sample of the research. In this case, VIII_D as experimental class and VIII_C as control class.

According to Gay (2012:135) cluster sampling is sampling in which individuals, not groups are randomly selected that have similar characteristics and in which subjects can be found. To get the representative sample of this research the following steps:

1. Collecting the score MID test scores the entire students class VIII from the teacher.
2. Test of normality

Normality test had an objective to know the population normal or not. In this research, researcher was used Kolmogorov Smirnov and Shapiro Wilk to know the sample normal or not. Based on analyzed by SPSS (*statistical product and service solution*) 20.0 program all of the groups of population the result of P-value higher than 0.05, it means that the data was normal.

Tests of Normality

	VAR0002	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
	1	,267	21	,000	,901	21	,036
VAR00001	2	,120	19	,200	,963	19	,643
	3	,162	20	,180	,942	20	,263
	4	,215	21	,013	,922	21	,094

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

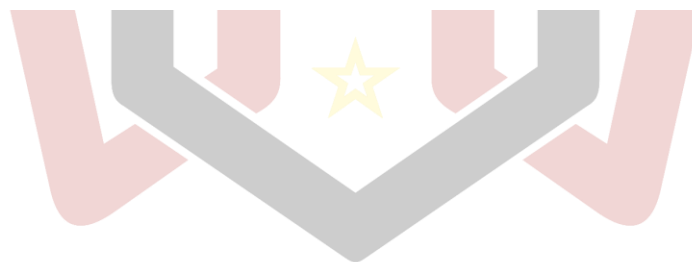
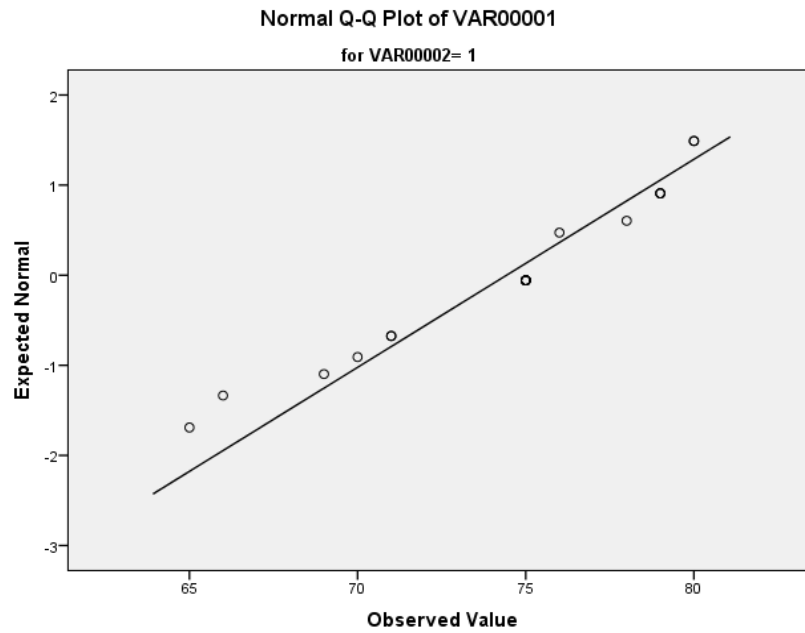
Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
VAR00001	Based on Mean	1,090	3	77	,358
	Based on Median	,916	3	77	,437
	Based on Median and with adjusted df	,916	3	63,932	,438
	Based on trimmed mean	1,198	3	77	,316

Based on the table, can be seen that the significance or probability score of all the classes bigger than 0.05 in both Kolmogorov-Smirnov and Shapiro-Wilk.

To see whether the sample normal or not in distribution, researcher also use normal graphic of Q-Q plot, the data is normal if the distribution of data plot be in the surrounding of aslant and

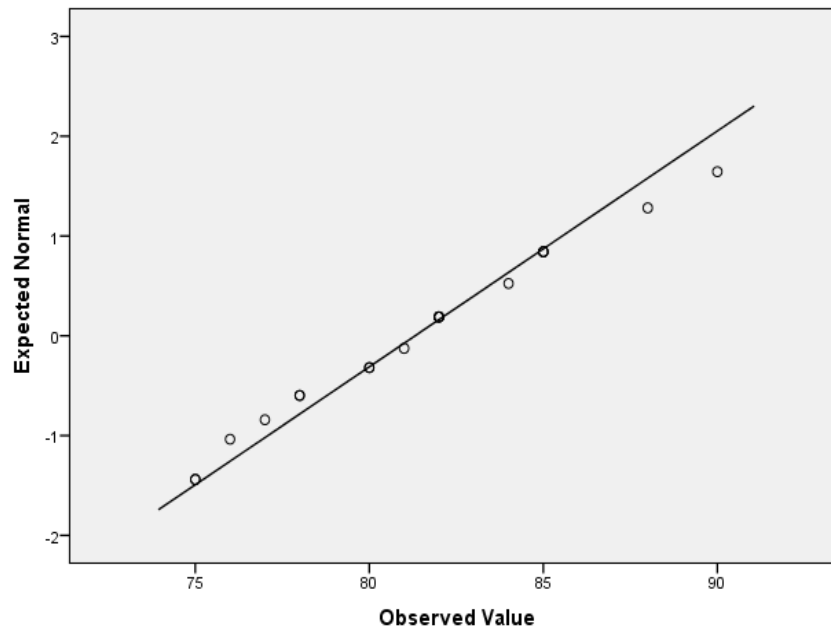
athwart line. From the normality test, researcher got the output as below:



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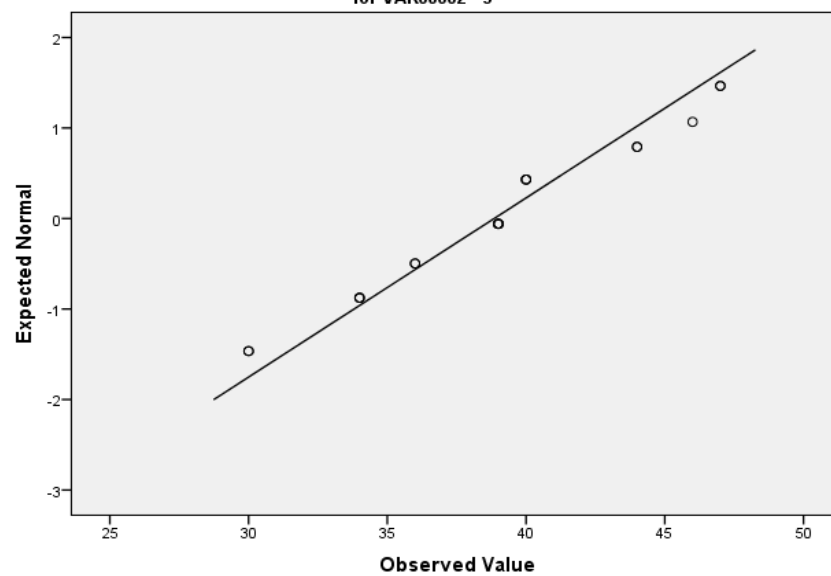
Normal Q-Q Plot of VAR00001

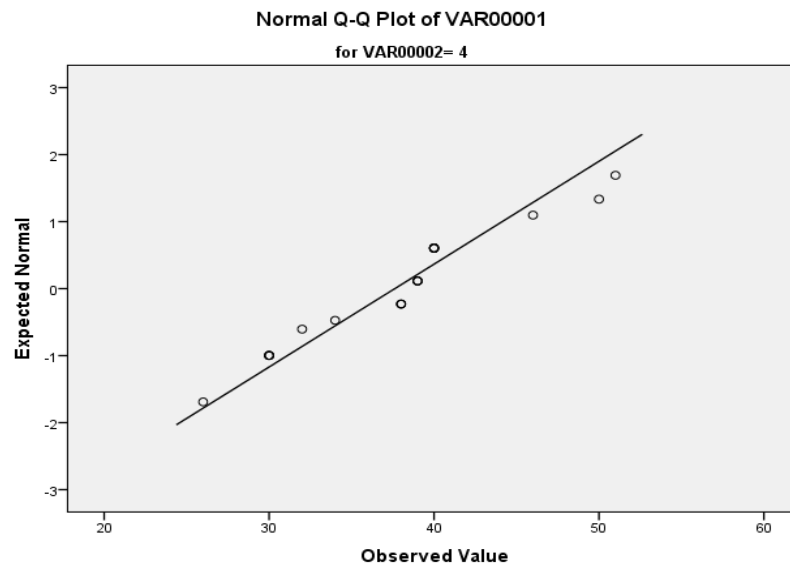
for VAR00002= 2



Normal Q-Q Plot of VAR00001

for VAR00002= 3





From the graphic above can be seen that the drops spread around the line. So, it can be concluded that the distribution of all the population were normal.

3. Test of Homogeneous Variances

After did the normality test, then researcher analyzed the homogeneous variation test. This test had an objective as to know the sample homogeny or not. This test used SPSS with test, if the data significant or the data more than 0.05 it mean the data was homogeneous.

4. After getting the class, the sample of this research consisted of two groups: an experimental group and control group. Then the researcher chose two classes as the sample. In determining experimental group and control group, the researcher used cluster random sampling. So, Class VIII D as experiment class and Class VIII C as control class.

Table 3.3
Sample of the Research

No.	Class	Description
1.	VIII D	Experimental class
2.	VIII C	Control Class

C. Place and Time of Research

The research had been held at Junior High School 3 Sutera. It was conducted on January 2018. This research was conducted on five meetings in several weeks by applying Describe and Identify Game to see the effect on students' speaking skill.

D. Instruments of Research

The objective of teaching speaking was to improve the students' speaking skill in English actively and fluently. There were two tests that used in this reseach, pre test and post test. The reseacher gave the pre test before giving the treatment. The research did the treatment during the five times then gave the post test in finally.

The test was set based on the goal of teaching and learning that will be achieved. Pre test used to know the students' speaking skill at the beginning and post test used to know the development of the students' speaking skill in the ending after using Describe and Identify Game in teaching and learning speaking skill.

The instrument in this research was oral test. The researcher used oral test formed interview as instrument. The researcher gave the some question to

the students one by one in front of the class about two until four minutes and then students answer the teacher question orally. After that the researcher records the students' speaking. Then, researcher values the students' pronunciation, vocabulary, grammar, fluency and comprehension, after that the researcher gave score towards students' speaking performances.

While, in scoring the pre test and post test, researcher used the Hughes categories (2003:132), criteria 1-6 in scoring test, such as pronunciation, grammar, vocabulary, fluency, and comprehension.

Those criteria can be seen from table below:

Table 3.4
Weighting Table

Criteria	1	2	3	4	5	6
Accent	0	1	2	2	3	4
Grammar	6	12	18	24	30	36
Vocabulary	4	8	12	16	20	24
Fluency	2	4	6	8	10	12
Comprehension	4	8	12	16	20	23
Total Score	16	33	50	66	83	99

Source: Hughes, 2003

E. Procedure of Doing Research

Teaching speaking process should be implemented as creative and communicative as possible the speaking since speaking was interactive skill that acquires the teacher and students responses to all the activity. That's why Describe and Identify Game applied in teaching and learning speaking in the classroom to be more interactive and communicative.

In this research, the researcher used two classes to conduct the research. They were experimental class and control class. Both of classes was taught by the same material and the same teacher, the same length of time, but different treatment of the experimental class use Describe and Identify Game in teaching speaking, while the control class use teacher technique (conventional). In short, the reseacher had proposed this procedure.

1. Determining the research time.
2. Prepare the lessons plan arranged by curriculum.
3. Doing the pre-test
4. Doing treatment for both experimental and control classes.

Table 3.5

Treatment Procedure for Experimental Class

No	Time	Teaching Activity	Teacher Activity	Students Activity
1	15 Minutes	Pre Activity	<p>(Apperception)</p> <ol style="list-style-type: none"> a. Teacher greets the students b. Teacher checks student attendance c. Teacher ask the students about the last material <p>(Motivation)</p> <ol style="list-style-type: none"> a. Teacher give the students motivation b. Explain the new material 	<ul style="list-style-type: none"> • Respond to teacher • Present • Review last material • Students pay attention to the teacher

2	60 Minutes	Main Activity	<p>(Exploration)</p> <p>1. Choosing an appropriate topic</p> <p>a. The teacher identifies an appropriate topic for Describe and Identify implementation</p>	<ul style="list-style-type: none"> • Students choose the topic
			<p>(Elaboration)</p> <p>b. Explaining and modeling the Describe and Identify Game</p> <p>a. The teacher asked each of students to describe a particular picture from choice of at least five.</p> <p>b. The teacher asked to encourage the students the rest of the class to identify which picture has been described.</p> <p>c. The teacher ask all the students to stand</p>	<ul style="list-style-type: none"> • Students read example of the describe and identify • Students sit in their chair and get the topic that has teacher prepare and discuss with the teacher who as a host and guest • Students do practice describe

			<p>up and note down how often their listener can accurately identify the things described.</p> <p>d. The teacher asked some of students to read out their description to the whole class.</p>	<p>and identify by individual and the other friends pay attention and become the audience and then give the additional question for the student that practice</p>
			<p>(Confirmation)</p> <p>c. Giving the group guided practice</p> <ul style="list-style-type: none"> • Teacher ask the students to practice in front of the class to get the value 	<ul style="list-style-type: none"> • Students do practice in front of the class became the audience and give the additional question for the friends that practice in front of the class
3	15 Minutes	Post Activity	<ul style="list-style-type: none"> • Teacher and student review and conclude the lesson • Teacher give reflection • Teacher tell the next material 	<ul style="list-style-type: none"> • Students conclude the material • Students response about the lesson • Students pay attention

			<ul style="list-style-type: none"> • Teacher close the class 	
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Table 3.6
Treatment Procedure for Control Class

No	Time	Teaching Activity	Teacher Activity	Students Activity
1	15 Minutes	Pre Activity	<p>(Apperception)</p> <ul style="list-style-type: none"> • Teacher greets the students • Teacher checks student attendance • Teacher ask the students about the last material <p>(Motivation)</p> <ul style="list-style-type: none"> • Teacher give the students motivation • Explain the new material 	<ul style="list-style-type: none"> • Respond to teacher • Present • Review last material • Students pay attention to the teacher
2	60 Minutes	Main Activity	<p>(Exploration)</p> <ul style="list-style-type: none"> • Teacher Encourage students to speak English such as: have you ever hear about narrative text? 	<ul style="list-style-type: none"> • Students Respond • Students see the topic on the

			<ul style="list-style-type: none"> • Teacher write a topic of on the whiteboard 	whiteboard
			<p>(Elaboration)</p> <ul style="list-style-type: none"> • Teacher divide students in to several groups • Teacher identifies the characteristic of the narrative text and ask the students about what tenses use in narrative text • Teacher and students discuss and make brainstorm text narrative about their experience in the past 	<ul style="list-style-type: none"> • Students sit in their group • Students discuss with teacher about the text and answer the teacher question • Students discuss in their group to make brainstorm about experience in the past
			<p>(Confirmation)</p> <ul style="list-style-type: none"> • Teacher ask students to perform their speaking in front of the class individually 	<ul style="list-style-type: none"> • Students perform their speaking in front of the class
3	15 Minutes	Post Activity	<ul style="list-style-type: none"> • Teacher and student review and conclude the lesson • Teacher give reflection 	<ul style="list-style-type: none"> • Students conclude the material • Students response about the lesson

			<ul style="list-style-type: none"> • Teacher tell the next material • Teacher close the class 	<ul style="list-style-type: none"> • Students pay attention
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5. After the treatment, each of the students would be tasted.

After doing the learning process, so the final test was post-test about Descriptive text. The test was given to the students in experimental and control classes. The test was oral test formed interview.

6. The result was calculated using the percentage of improvement.

The reseacher scores based on criterion speaking by Hughes (1996:111-112), criteria 1-6, such as: pronunciation, grammar, vocabulary, fluency, and comprehension. According to Gay (1987: 161) validity is the most important characteristic a test or measuring instrument can process. It is concerned with the appropriateness of the interpretation made from test scores. Validity is important in all forms of research and all types of test and measures

Then, reliability was the consistency of the test score. It means that the students' score was rather similar if the test is administered in two different occasions. The researcher tries out the test to other class to validate and make the test reliable. In testing students, researcher formulate questions into instruction items which constructed by speaking test. Then the questions were tested the content validity.

F. Technique of Data Collection

In this research, the techniques and method which can be used to gather evidence in action research are as follows: tape recording (handphone) and transcript, and interviewing (test). Data of the test consist of students' scores in pretest and post-test. Researcher gave the pretest, and then five times treatment and post-test was given at the end of the research to both of the classes. The test was oral test formed interview. In the test, the researcher gave the some questions to students and then the students answer orally.

While, post-test was the process of giving the test after giving the treatment. It aims to conclude the contribution of Describe and Identify in teaching and learning speaking process to students' speaking skill. The scoring of this research based on students skills in speaking such as; pronunciation, vocabulary, grammar, fluency and comprehension. There were many scoring in speaking skill according Hughes.

G. Technique of Data Analysis

The researcher used the statistical procedures to analyze the scores. It gives a way to analyze the differences of speaking achievement between control group and experimental group. To find the standard deviation in experimental and control class, the writer will use the formula of t-test.

In this case, T-test means a statistical procedure which is used to determine, whether there is any significant difference between the means of the two sets score from control and experiment class. In analyzing the students' test score, there are some steps that will be done before analyzing the different mean by using t-test formula as follows:

- a. This formula applied to decide mean of students' test score in experiment and control group:

$$\bar{X}_1 = \frac{\sum F_1 X_1}{\sum F_1} \quad (\text{Experimental group})$$

$$\bar{X}_2 = \frac{\sum F_2 X_2}{\sum F_2} \quad (\text{Control group})$$

- b. This formula will be used to decide standard deviation of experimental group;

$$S_1^2 = \frac{n_1 \sum F_1 x_1^2 - (\sum F_1 X_1)^2}{n_1 (n_1 - 1)}$$

- c. This formula will be used to decide standard deviation of control group;

$$S_2^2 = \frac{n_2 \sum F_2 x_2^2 - (\sum F_2 X_2)^2}{n_2 (n_2 - 1)}$$

The formula of t-test as follows (Sudjana, 1996; 239)

$$t = \frac{\bar{X}_1 - \bar{X}_2}{S \sqrt{\frac{1}{N_1} + \frac{1}{N_2}}}$$

$$S^2 = \frac{(n-1)S_1^2 + (n-1)S_2^2}{n_1 + n_2 - 2}$$

Note:

t = The value of t calculated

\bar{X}_1 = Mean of gain score experimental group

\bar{X}_2 = Mean of gain score of control group

S_1^2 = Standard deviation of gain score experimental group

S_2^2 = Standard deviation of gain score control group

n_1 = Number of experimental group

n_2 = Number of control group

The t_{table} would be employed to see whether there was a significant difference between the mean score of both experimental group and control group. The value of $t_{\text{calculated}}$ will be consulted with the value of t_{table} at the degree of freedom $(n_1-1) + (n_2-1)$ and the level of confidence of 95% = 0.05. If the value of $t_{\text{calculated}}$ is less than the value t_{table} , the null hypothesis was not accepted; on the contrary, if the value of $t_{\text{calculated}}$ is equal or bigger than value of t_{table} , the alternative one is accepted.

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