

CHAPTER III

RESEARCH METHOD

This chapter covers the description of research design, population and sampling, variables, data collection method and instrument, validity and reliability, normality test, and data analysis.

A. Research Design

The design of the research was correlational research. According to Ary (2006:27) stated **Correlational research** gathers data from individuals on two or more variables and then seeks to determine if the variables are related (correlated). *Correlation* means the extent to which the two variables vary directly (positive correlation) or inversely (negative correlation). The degree of relationship is expressed as a numeric index called the *coefficient of correlation*.

Meanwhile, Fraenkel and Wallen (2006:335) stated as follows:

Correlational research, like causal-comparative research, is an example of what is sometimes called *associational research*. In associational research, the relationships among two or more variables are studied without any attempt to influence them. In their simplest form, correlational studies investigate the possibility of relationships between only two variables, although investigations of more than two variables are common. In contrast to experimental research, however, there is no manipulation of variables in correlational research. Correlational research is also sometimes referred to as a form of descriptive research because it describes an existing relationship between variables.

When a correlation was found to exist between two variables, it means that scores within a certain range on one variable were associated

with scores within a certain range on the other variable. You will recall that a positive correlation means high scores on one variable tend to be associated with high scores on the other variable, while low scores on one were associated with low scores on the other. A negative correlation, on the other hand, means high scores on one variable are associated with low scores on the other variable, and low scores on one were associated with high scores on the other. If the coefficient had a positive sign, this means that as one variable increases, the other also increases. A negative coefficient indicates that as one variable increases, the other decreases.

Ary (2006:350) states as follows:

The size of the correlation coefficient indicates the strength of the relationship between the variables. The coefficient can range in value from +1.00 (indicating a perfect positive relationship) through 0 (indicating no relationship) to -1.00 (indicating a perfect negative relationship). A perfect positive relationship means that for every z -score unit increase in one variable there is an identical z -score unit increase in the other. A perfect negative relationship indicates that for every unit increase in one variable there is an identical unit decrease in the other. Few variables ever show perfect correlation, especially in relating human characteristics.

The basic design for correlational research was straightforward. First, the researcher specified the problem by asking a question about the relationship between the variables of interest. The variables selected for investigation were generally based on a theory, previous research, or the researcher's observations (Ary, 2006:352). The researcher specified his or her population of interest and draws a purposive sample from that population. Finally, the researcher collected the quantitative data on the

two or more variables for each of the students in the sample and then calculated the coefficient(s) of correlation between the paired scores.

B. Population and Sampling

The population in this research were the student at second year of SMPN 1 Gandusari Trenggalek the number of population were 249 students that was divided into eight (8) classes.

Sampling was the procees of taking sample. Ary (2002:163) stated “The purpose of sampling is to obtain information concerning the population”. The researcher used purposive sampling to take sample from population and it represented the entire population. Ary (2002:169) stated “Purposive sampling-also referred to as judgment sampling-sample elements judged to be typical, or representative, were chosen from the population”. Sample in this research were students E class at second year of SMPN 1 Gandusari Trenggalek. Number of students 30 students (16 males and 14 females). The researcher conduct the research for this class because they had better ability to speak english than the other classes.

C. Variables

According to Ary (2006:37) stated “A **variable** is a construct or a characteristic that can take on different values or scores.” Based on the statement the researcher use two variables they are *students’ interest in watching english movie* and *students’ speaking achievement*. Both variables were included in independent variable, because both of them

were connected indirectly or we can call them as a symmetrical associative correlation.

D. Data Collection Method and Instrument

In this research, the researcher used some method of collecting data to get the needed data by using the following instrument, they were questionnaire and test.

1. Questionnaire

According to Arikunto(2010:194) stated that “Questionnaire is a number of letterally questions that is used to get the information from the respondent in term of personality/self-report or about the thing she or he knows.” The researcher was given the questionnaire to student. Closed questionnaire serves the answer, thus the respondent just needed to choose one of the available option. In this research, the researcher used closed questionnaire in which the questions in the questionnaire was written in Indonesian language. It conducted in order to make easier the respondents to answer the questions.

The questionnaire was about 20 questions in form of multiple choice. The researcher asked students to choose one option that they wanted. The researcher provided (5) five options for each question. A,B,C,D, and E. To make easy to determine the interval score of the questionnaire set, all answer of the questionnaire would be changed become score by using Likert scale.

According to Ary (2006:209) stated as follow:

“Likert scale assesses attitudes toward a topic by presenting a set of statements about the topic and asking respondents to indicate for each whether they strongly agree, agree, are undecided, disagree, or strongly disagree. The various agree - disagree responses are assigned a numeric value, and the total scale score is found by summing the numeric responses given to each item. This total score assesses the individual’s attitude toward the topic.”

Based on the Likert scale, the score of each student would be marked as follows:

- a. Score 5 for A,
- b. Score 4 for B,
- c. Score 3 for C,
- d. Score 2 for D, and
- e. Score 1 for E

Every choice indicated that if respondent chose option “A” the students’ interest in watching English movie was very good, B indicated the students’ interest in watching English movie was good, C indicated the students’ interest in watching English movie was fair, D indicated the students’ interest in watching English movie was poor, and E indicated the students’ interest in watching English movie was very poor.

Finally the total scores of students’ answer in questionnaire would present their interest in watching english movie. Based on standard score above, the highest score of the questionnaire is 100 and the lowest score is 20.

2. Test

To measure the students' speaking ability the researcher used test. According to Ary (2006:201) stated that A **test** is a set of stimuli presented to an individual in order to elicit responses on the basis of which a numerical score can be assigned. This score, based on a representative sample of the individual's behavior, is an indicator of the extent to which the subject has the characteristic being measured.

As a research instrument to know the students' score, the writer together with the English teacher gave speaking test. The test was based on the lesson that the students had learned. It was oral interview that they had to perform. It was describing people about their favourite actor in English movie, the researcher provide the instruction before answer orally, the instruction of the test was :

Think about your favorite English movie and then answer the question orally !

- a. Who is your favorite actor in that movie?
- b. What does she or he looks like?

and also the researcher use oral scoring rubric to measure their speaking aspect. The criteria of succes of the students' speaking ability adapted from O'Malley (1996:68) see **Table 3.1**

Table 3.1 Scoring rubric for speaking

Score	Criteria
	<i>Fluency</i>
1	Repeats words and phrases
2	Speaks in single word utterances and short patterns
3	Speaks hesitantly because of rephrasing and searching for words
4	Speaks with near native fluency; any hesitation do not interfere with communication
5	Speaks fluently
	<i>Structure</i>
1	Use basic structures with frequent errors
2	Use predominantly presentence verbs, demonstrates errors of omissions (leaves words out, word endings off)
3	Uses some complex sentences, applies rules of grammar but lacks control of irregular forms (e.g., runned, mans, not never, more higher)
4	Uses a variety of structures with occasional gramatical errors
5	Masters a variety of gramatical structures
	<i>Vocabulary</i>
1	Uses few vocabulary inappropriately
2	Uses limited vocabulary
3	Uses adequate vocabulary; some word usage irregularities
4	Uses varied vocabulary
5	Uses extensive vocabulary but may lag behind native-speaking peers
	<i>Pronunciation</i>
1	Almost all pronunciation seriuosly influenced by mother tongue
2	Pronunciation is influenced by the mother tongue but only a few serious phonological errors
3	Pronunciation is still moderately influenced by the mother tongue but no serious phonological errors
4	Pronunciation is slightly influenced by the mother tongue but most utterances are correct
5	Pronunciation is only very slightly influenced by the mother tongue

To asses the speaking ability, the researcher used scoring table and students' clasification see **Table 3.2** and **Table 3.3**

Table 3.2 Scoring table

Name of Students	Score of the students' speaking ability for each criteria			
	Fluency	Structure	Vocabulary	Pronunciation

To make easy for reader to understand the whole aspect that was measured, the researcher separated the score of speaking based on each aspect or criteria. The maximal score for each criteria was 5 points and the minimal score was 1.

Table 3.3 The students' classification

No.	Total Score	Qualification
1.	0-20	Very poor
2.	21-40	Poor
3.	41-60	Enough
4.	61-80	Good
5.	81-100	Very Good

To make easy for the reader to interpret whether the speaking achievement was good or not. The researcher separated the qualification of students' speaking achievement into 5 qualification. Students who got 0-20 were very poor, students who got 21-40 were poor, students who got 41-60 were enough, students who got 61-80 were good, and students who got 81-100 were very good.

E. Validity and Reliability

Sugiyono and wibowo (in Sujianto 2006:94) states “ the validity of instrument is instrument that is used to obtain the data that is credible and it can measure what are going to mesure. The reliability of instrument

means the instrument that obtain the similar data and finding eventhough the instrument are used many times. To know whether the instruments were valid or not, the researcher conducted validity and reliability test as follows:

1. Validity

Hammersley in Ary (2002:452) states “ an account is valid or true if it represents accurately those features of the phenomena that it is intended to describe, explain, theorize”. Before being distributed to the sample. The instruments were checked by the expert that was Erna Iftanti the lecturer from IAIN Tulungagung as a validator to get the validation. Also the instruments were trying out to the other class The criteria of validation included the accuracy of using word, the suitability of question with the research, the questions proposed enable the researcher to answer the research problem, and the clarity of aim in question.

2. Reliability

Azwar (in Sujianto 2009:97) state “*reliability* means consistency”. The result of measurement can be trusted if in several times of conducting measurement in same sample are relatively same, since the aspect that is measured are not change.

The reliability of instrument was the result of measurement that can be trusted. It was necessary to get the data based on the purpose of measurement. To attain that, the researcher conducted the reliability test by Alpha Cronbach’s table 0 until 1.

Triton (in Sujianto 2009:97) state “ if the scale grouped by 5 class with the same range, jika skala itu dikelompokkan ke dalam 5 kelas dengan reng yang sama, so the consistency of can be interpreted as follows:”

Table 3.4 Cronbach scale

Cronbach values	Interpretations
0,00 – 0,20	Less reliable
0,21 – 0,40	Rather reliable
0,41 – 0,60	Quite reliable
0,61 – 0,80	Reliable
0,81 – 1,00	Very reliable

The instrument that had value between 0,00-0,20 were less reliable, the instrument that had value between 0,21-0,40 were rather reliable, the instrument that had value between 0,41-0,60 were quite reliable, the instrument that had value between 0,61-0,80 were reliable, and the instrument that had value between 0,81-0,100 were very reliable.

Before being distributed to the sample, the instruments were trying out to the other class to get the reliability.

From the answer of students’ response in questionnaire the researcher then analyzed using reliability test based on Cronbach’s Alpha. The result of reliability test is:

Table 3.5. Reliability statistics

Reliability Statistics

Cronbach's Alpha	N of Items
.821	20

From the data reliability statistics (see Table 3.5) shows that the Cronbach Alpha reliability of the instrument was 0,821. Based on the Cronbach scale in table 3.4 it lies on the cronbach value between 0,81-1,00. So, it can be said that the instrument was very reliable.

F. Normality test

Sujianto (2006:77) states that normality testing is test to measure whether the data have normal distribution so it can be used in parametric statistic.

Based on the definition above, the purpose of the conducting normality test was to know whether a certain variable normal or not. The data that was normal means the distribution data were normal was one of the condition to conduct parametric test. For the data that abnormal should analyze by using non-parametric test. Santoso(2006), normality test data is usual thing that is conducted before statistics method are applied.

AccordingTo know wheteher the distribution was normal or not, can be known from:

1. Nugroho (in Sujianto 2006: 78) states “ the normality of the data can be seen from skewness and *P-P Plots*.

2. Santoso (in Sujianto 2006: 78) states “ the normality of the data can be detected from skewness ratio, kurtosis ratio, histogram, Kolmogorov-Smirnov, and Shapiro-Wilk.
3. Akbar (in Sujianto 2006:78) states “ Kolmogorov-Smirnov is statistical testing that conducted to know the distribution of a certain data that has ordinal. Whereas Chi-square for the data that has nominal scale. Santoso (2006:78) states “if the *Sign.*-value or probability value $>0,005$ the distribution is normal (symmetrical).

The result of Normality testing by using *SPSS 16.0* (see Table 3.6 & 3.7)

Table 3.6 The Descriptive statistics of try out the Instrument

		Statistics	
		minat movie	speaking test
N	Valid	27	27
	Missing	0	0
Mean		46.9630	44.2593
Std. Error of Mean		1.43767	2.74386
Median		47.0000	45.0000
Mode		43.00 ^a	30.00
Std. Deviation		7.47036	14.25750
Variance		55.806	203.276
Range		28.00	55.00
Minimum		33.00	20.00
Maximum		61.00	75.00
Sum		1268.00	1195.00

a. Multiple modes exist. The smallest value is shown

Based on Table 3.6, it can be seen that there were 27 students involved to know whether the data were normal or not. The mean of

students' interest in watching english movie was 46,97 whereas the mean of students' speaking test was 44,25. The median of students' interest in watching english movie was 47 whereas the median of students' speaking test was 45. The mode of students' interest in watching english movie was 43 whereas the mode of students' speaking test was 30. The range of students' interest in watching english movie was 28 whereas the mean of students' speaking test was 55. The minimum score of students' interest in watching english movie was 33 whereas the minimum of students' speaking test was 20. The maximum score of students' interest in watching english movie was 61 whereas the maximum score of students' speaking test was 75. And the total score both students' interest in watching english movie and students' speaking test were 1268 and 1195.

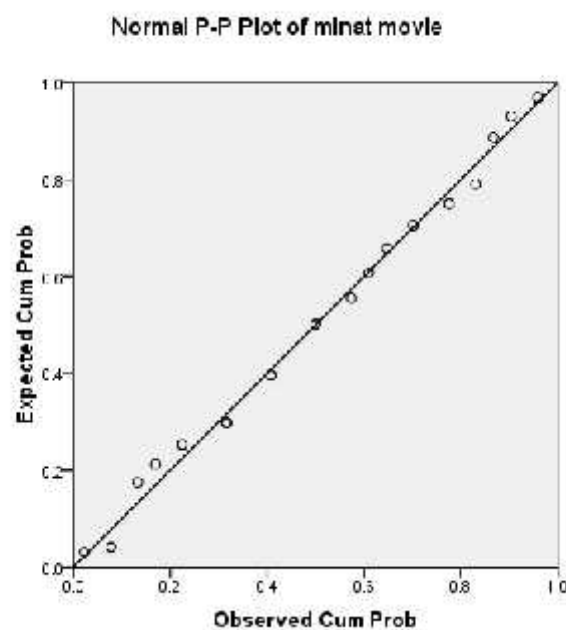
Table 3.7 Normality Testing

One-Sample Kolmogorov-Smirnov Test			
		minat movie	speaking test
N		27	27
Normal Parameters ^a	Mean	46.9630	44.2593
	Std. Deviation	7.47036	14.25750
Most Extreme Differences	Absolute	.072	.146
	Positive	.072	.146
	Negative	-.068	-.122
Kolmogorov-Smirnov Z		.377	.758
Asymp. Sig. (2-tailed)		.999	.613
a. Test distribution is Normal.			

Based on the table 3. It can be seen that the score Asymp. Sig. (2-tailed) in variable x (interest in english movie) was 0,999 and the score Asymp. Sig. (2-tailed) in variable y (speaking test) was 0,613. Both of them were larger than significant value= 0,05. So it can be concluded that both variable x and variable y were normal

While the result of normality test can be seen from *P-P Plot* (see graphic 3.1).

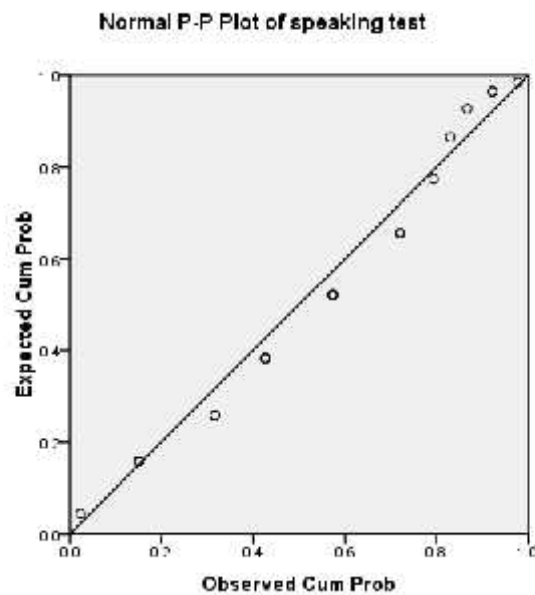
Figure 3.1 P-P Plot of interest in English movie



Based on the Figure 3.1. The data in variable that was used called normal or closely normal. A certain variable were normal if the picture of

the distribution with data points were spread around the diagonal line and the points dispersion of the data were one way diagonal line. So, it can be said that Figure 3.1 is normal because it was eligible.

Figure 3.2 P-P Plot of speaking test



Based on the Figure 3.2. The data in variable that was used called normal or closely normal. A certain variable were normal if the picture of the distribution with data points were spread around the diagonal line and the points dispersion of the data are one way diagonal line. So, it can be said that Figure 3.2 was normal because it was eligible

So, it can be said that both Figure 3.1 and 3.2 were normal because both of them were eligible.

G. Data Analysis

Because the purpose of the research was to measure the correlation between interest on watching english movie and speaking of second year students, the researcher used statistics method. In this research all the data were gained from the result of questionnaire and the test in the form of number. All the data analyzed quantitatively. Since this research was to know the correlation between two variables, the researcher applied bivariate correlation analysis by using pearson product moment in *SPSS 16.0*