

III. RESEARCH METHOD

This chapter is concerned with the method of the research. It includes further description of design of research, population and sample, research procedures, data collection technique, validity and reliability of the instrument, scoring system, data analysis and hypothesis testing.

3.1 Research Design

This research is intended to investigate the effect of students' self-esteem on their English speaking ability. This is a quantitative research, the writer has used a quantitative method because it is very useful for providing factors connected with second language development. Setiyadi (2006) cites that quantitative research is associated with social survey technique like structural interviewing and self administered questionnaires, experiment structures observation, context analysis of official statistic that implies the application of measurement predetermined of quantitative study that can examine broader issues, in a wide geographical spread of representative sample, and sometimes called macro approach. It also has been chosen because the problem solved is actual, existing on the facts and it occurs in recent time. The writer used ex post facto design, because the writer gave no treatment but collected the data and saw the relation between two variables that happened. So the research aims to collect the data in order to answer the question

about the current status of the object in which the researcher did not have control of the independent and dependent variable. Hatch and Farhady in Setiyadi (2006) states :

Ex post facto design is often used when the researcher does not have control over the selection and manipulation of the independent variable.

Ex post facto design as follow :

X \longrightarrow Y

(Hatch and Farhady, 1982:27)

X : Students' self-esteem

Y : English speaking ability

The data of this research are students' self-esteem and English speaking ability. Self-esteem is psychological factor symbolized as 'X' variable scored by using Rosenberg Self-Esteem scale. English speaking ability is one of the language skills tested by responsive speaking test and the result is students' English speaking ability scores symbolized as 'Y'.

In this research, the writer measures the relation between two variables, they are dependent and independent variables. The dependent variable is the variable which the writer observed and has been measured to determine the effect of independent variable.

1. Independent Variable

Self-esteem is classified as independent variable because it is assumed that self-esteem has effect on students' speaking ability.

2. Dependent Variable

Students' speaking ability is classified as dependent variable because it is assumed that students' speaking ability is affected by self-esteem.

3.2 Population and Sample

The population of this research is the second year students at SMP N 14 Bandar Lampung. There are 6 classes with the total number of 180 students. The sample has been taken through probability sampling by using simple random sampling, where every individual in population has a chance to be chosen as sample. The writer took 5 students from each class to be chosen as sample by using lottery and then collected them into one class when the research was held, with the total of 30 students. The use of this method is to fulfill the external validity aspect and to get normal distribution data.

3.3 Research Instrument

To collect the data, the writer uses questionnaire to measure students' self-esteem and simulation technique to score their ability in speaking English as the instruments.

1. Test of Self- Esteem

The writer used questionnaire developed by Morris Rosenberg to measure students' self-esteem. The questionnaire for self-esteem test has been taken from the test that has been used many times to measure self-esteem. Questionnaire is an

instrument which is very effective to measure aspects and variables in associated with personality, psychology or sociology aspect (Setiyadi, 2006). The questionnaire is made up of 10 items that refer to self-esteem and self-acceptance rated on a 4-point Likert-type scale, ranging from strongly agree to strongly disagree. Items 1, 2, 4, 6, and 7 are positively worded, and items 3, 5, 8, 9, and 10 are negatively.

Below is a list of statements dealing with the general feelings about self :

SA : Strongly Agree

A : Agree

D : Disagree

SD : Strongly Disagree

1.*	I feel that I am a person of worth, at least on an equal plane with others	SA	A	D	SD
2.*	I feel that I have a number of good qualities	SA	A	D	SD
3.	All in all, I am inclined to feel that I am a failure	SA	A	D	SD
4.*	I am able to do things as well as most other people	SA	A	D	SD
5.	I feel I do not have much to be proud of	SA	A	D	SD
6.*	I take positive attitude toward myself	SA	A	D	SD
7.*	On the whole, I am satisfied with myself	SA	A	D	SD
8.	I wish I could have more respect for myself	SA	A	D	SD
9.	I certainly feel useless at times	SA	A	D	SD
10.	At times, I think I am no good at all	SA	A	D	SD

Scoring :

The positive statements, with an asterisk (*) will be scored :

SA : Strongly Agree (SA) : score = 4

A : Agree (A) : score = 3

D : Disagree (D) : score = 2

SD : Strongly Disagree (SD) : score = 1

While the negative statements will be scored as follows :

SA : Strongly Agree (SA) : score = 1

A : Agree (A) : score = 2

D : Disagree (D) : score = 3

SD : Strongly Disagree (SD) : score = 4

Sum of the scores for 10 items: the higher the score, the higher the self-esteem.

The total score 0-20 are categorized into low self-esteem, total score 21-30 are categorized into normal self-esteem, total score 31-40 are categorized into high self-esteem (Rosenberg : 1965).

2. Speaking Test

Simulation technique is used to asses English speaking ability of the students. In this technique, the students played role as a journalist and famous person. They chose one of the famous person pictures and pretend to be that famous person.

As speaking is highly subjective measurement, the great weakness of oral ratings is their tendency to have rather low reliability, and to make sure the consistency of rating of that subjective measurement, the inter rater reliability is used as it is related to this study. In scoring the test, the writer used two raters; the writer and the English teacher in the school, Mr. Anton Hamidi, S.Pd.

The following table is the oral ability scale proposed by Heaton (1991) used as the scoring standard for the students' speaking ability.

Range	Pronunciation	Fluency	Comprehensibility
90-100	Pronunciation only very slightly influenced by mother-tongue.	Speaks without too great an effort with a fairly wide	Easy for listener to understand the speaker's intention

		range of expression. Searches for words occasionally but only one or two unnatural pauses.	and general meaning
80-89	Pronunciation is slightly influenced by the mother tongue. Most utterances are correct.	Has to make effort at times to search for words. Nevertheless very smooth delivery on the whole and only a few unnatural pauses.	The speaker's intention and general meaning are fairly clear. A few interruptions by listener for the sake of clarification are necessary.
70-79	Pronunciation is still moderately influenced by the mother tongue but no serious phonological errors.	Although she/he has made an effort and search for words, there are not too many unnatural pauses. Fairly smooth delivery mostly.	Most of the speakers say is easy to follow. His intention is always are clear but several interruptions are necessary to help him to convey the message or to see the clarification.
60-69	Pronunciation is influenced by the mother tongue but only a few serious phonological errors.	Has to make an effort for much of the time. Often has to search for the desired meaning. Rather halting delivery and fragmentary.	The listener can understand a lot of what is said, but the must constantly seek clarification. Cannot understand many of the speaker's more complex or longer sentences.
40-59	Pronunciation is influenced by the mother tongue with errors causing a breakdown in communication.	Long pauses while he searches for the desired meaning. Rather halting delivery and fragmentary.	Only small bits (usually short sentences and phrases) can be understood – and then with considerable effort by someone who is used to listening to the speaker.
30-49	Serious pronunciation errors. No evidence of having mastered any of the language skills and areas practiced in course.	Full of long and unnatural pauses. Very halting and fragmentary delivery. At times	Hardly anything of what is said can be understood. Even when the listener makes a great effort

		gives up making the effort.	or interrupts, the speaker is unable to clarify anything he seems to have said.
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Scoring System :

The focuses of speaking skill assessed are :

1. Pronunciation
2. Fluency
3. Comprehensibility

The criterion is based on Heaton's scale above. The score is in scale 41 to 90 for each skill. For example if a student gets 76 for fluency, 80 for pronunciation and 78 for comprehensibility so the score will be :

$$\begin{array}{r}
 \text{Pronunciation} \quad : 80 \\
 \text{Fluency} \quad : 76 \\
 \text{Comprehensibility} \quad : 78 \quad + \\
 \hline
 234 : 3 = 78
 \end{array}$$

Therefore the score was 78

3.4 Validity and Reliability of the Instrument

“A test can be said valid if the test measures the object to be measured and suitable with the criteria” (Hatch & Farhady, 1982:250). On the other hand, reliability refers to whether the test is consistent in its score and gives us an indication of how the test score is accurate (Shohamy, 1985:70). Reliability can be defined as the extent to which a test produces consistent results when it is

administered under similar condition (Hatch and Farhady, 1982:243). That is why validity and reliability in this research are important to be measured.

3.4.1 Validity of the Test

Since the purpose of this test is to measure as well as to investigate students' self esteem, the writer applies a test in questionnaire that deals with self-esteem, developed by Morris Rosenberg. Because the test arranged by Rosenberg was based on the uses to measure self-esteem, the writer assumes that the self-esteem questionnaire is valid, besides, the writer used items validity analysis to measure the validity of the questionnaire, from the validity analysis, most items of questionnaire have good validity and representative to measure self-esteem level of the students (see appendix 5)

As well as for the speaking test, to claim it is valid, the writer takes the topic that has been discussed by the students to measures their English speaking ability. Speaking test is adapted from students' hand book based on the appropriate curriculum, it means that the validity of the speaking test in this research is valid because the speaking test used in this research is based on the curriculum of the second year students of junior high school.

The writer also used the oral ability proposed by Heaton (1991) as guidance for scoring students' speaking test that implemented holistic scoring which covers accuracy, fluency, and comprehensibility.

3.4.2 Reliability of the Tests

Rosenberg self-esteem scale test has been applied to 5,024 Junior and Senior High School, students from 10 randomly selected school in New York State in English version. In this research, the writer translated the test to Indonesian language and find whether the test is reliable or not by using Cronbach Alpha.

Items of the questionnaire are analyzed by using *Cronbach Alpha* to indicate that the reliability of questionnaire are reliable and applicable for measuring self-esteem level of the students. From the calculation of reliability analysis, alpha is 0.820 (see appendix 4). It means that the questionnaire has high reliability. It indicates that the questionnaire used in this research is reliable and applicable instrument to measure self-esteem level of the students.

For speaking test, to ensure the reliability of scores and to avoid the subjectivity of the research, the writer uses inter-rater reliability. Inter-rater is used when scores of the test are independently estimated by two or more judges or raters. It means that there is another person who scores the test besides the writer herself, that is the English teacher of the school, Mr. Anton Hamidi, S.Pd. From the calculation of inter-rater, it has been found that the result of reliability of the speaking test was 0.994 (see appendix 6). It can be clearly seen that the speaking test was suitable to be used because the reliability was very high.

3.5 Research Procedure

In conducting the research, the writer used the steps as follows :

1. Determining research problems

The research problems of this research are :

- a. To find out the effect of students' self-esteem on their English speaking ability at the second year of SMP N 14 Bandar Lampung.
- b. To find out which is better among high, normal, and low self-esteem on students' English speaking ability at the second year of SMPN 14 Bandar Lampung ?

2. Determining the research design

In conducting this research, the writer uses ex-post facto design with two variables, students' self-esteem as independent variable (X) and students' English speaking ability as dependent variable (Y).

3. Determining the population and sample

The population are all the second year students' at SMPN 14 Bandar Lampung . There are 6 classes with the total number of 180 students. The writer took 5 students from each class to be chosen as sample by using lottery, with the total sample 30 students.

4. Determining research instruments

- a. Test of Self- Esteem :

The test uses a questionnaire consisting of 10 items of Likert scale with item answered on a four point scale from strongly agree to strongly disagree to determine students' self-esteem.

b. Test of speaking ability :

The test uses simulation technique, where the students are invited to play a role as journalist and famous person. The material of speaking test is based on the school based curriculum (KTSP) for the second grade to determine students' English speaking ability.

5. Trying-out the instruments

The try-out was conducted to measure the validity and reliability of the questionnaire. It was administrated to find out the quality of the questionnaire before it is used.

6. Administrating self-esteem test

The writer gave the questionnaire to the students about self-esteem. The questionnaire is distributed to the students directly after the students finish the speaking test.

7. Administrating English speaking test

The students were subjected to the test without any treatment. The writer conducts English speaking test by recording the dialogue. The dialogue is rated by the rater and the inter-rater.

8. Collecting the data

After administrating the tests, the data from both tests would be collected.

9. Analyzing the data

The data from speaking test and questionnaire are analyzed by using *One Way Anova* in order to investigate whether self-esteem has effect on students' speaking ability or not.

3.6 Data Analysis

This research has two variables, dependent and independent. In order to collect the data, the writer only uses tests for those two variables. They are speaking ability test and self-esteem test. The writer classifies self-esteem as independent variable because she assumes that self-esteem has an influence to the language achievement. The data from the speaking performance test are classified as a dependent variable because speaking ability is influenced by self-esteem.

After collecting the data of self-esteem, the writer correlates it with the data of students' speaking ability in order to investigate the effect of students' self-esteem on their speaking ability by using *One-Way Anova*.

3.6 Hypothesis Testing

After finding the effect between students' self-esteem and their English speaking ability and the coefficient influences value of students' self-esteem and their speaking ability, the writer finds out the criterion of the hypothesis acceptance. To determine whether the first hypothesis is accepted or rejected, the following criterion acceptance is used :

$$H_0 = f_{\text{value}} < f_{\text{table}}$$

$$H_1 = f_{\text{value}} > f_{\text{table}}$$

Notes :

- a. H_0 . There is no effect of students' self-esteem on their speaking ability. We could accept this hypothesis if f value is lower than f table.
- b. H_1 . There is effect of students' self-esteem on their speaking ability. We could accept this hypothesis if f value is higher than f table.