

CHAPTER III

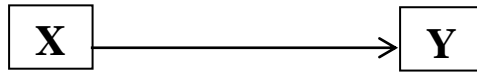
METHOD AND PROCEDURES

This chapter presents: (1) research design; (2) research variables; (3) operational definitions; (4) population and sample; (5) technique for collecting the data; (6) data instrument analysis; (7) data analysis.

3.1. Research Design

In conducting this research, the researcher used correlational research in terms of explanatory design to find out the correlation between variables and explain the results that may appear. In this study, the researcher used correlation research to find out the correlation between students' self-concept and their reading comprehension achievement of English Education Study Program Students' of UIN Raden Fatah Palembang. The formula of correlation used in this research was Pearson Correlation r product-moment.

The procedure was that, first; the researcher identified the students' self-concept by using questionnaire. Second, the researcher used reading comprehension achievement test. The next step was that the researcher found the correlation between variables through Statistical Package for Social Science (SPSS) based on the results of the questionnaire and reading comprehension achievement test and how much was the contribution of the variable. Last, explanation of the results were discussed. The research design is as follows:



X = Students' Self-Concept

Y = Students' Reading Comprehension Achievement

3.2. Research Variables

Creswell(2005) states that a variable is a characteristic or attribute of an individual or an organization that (1) researchers can measure or observe, (2) varies among individuals or organizations studied. Creswell (2005)states that there are two kind of variables, independent variable, and dependent variable. An independent variable is an attribute or characteristic that influences or affects an outcome or dependent variable while a dependent variable is an attribute or characteristic that is dependent on or influenced by the independent variable (p. 115-116).

In this research, the independent variable is self-concept while the dependent variables is reading comprehension achievement of English Education Study Program Students' of UIN Raden Fatah Palembang.

3.3. Operational Definitions

To avoid the possibility of misinterpretation about some terms in this research, especially those used in the title, the definition are provided.First, the word *correlation* means the relationship between one or more variables to the other variables. In this research, therefore, the word

correlation refers to the relationship between self-concept and reading comprehension achievement.

Second, the word *self-concept* refers to perception and view of ability someone hold formed through individual experience and interaction with the environment. Therefore, the word *students self-concept* refers to a students' self-perception and views of their academic ability formed through individual experiences and interactions with the environment which indicated by their perception, feeling, and attitude. To measure the students self-concept, a questionnaire will be used.

Third, the word *reading comprehension achievement* is described as understanding a text that is read, or the process of constructing meaning from a text and refers to the scores of the students in reading. To measure the reading comprehension of the students, reading comprehension test taken and compiled from TOEFL practice (Educational Testing Service, 1988 and 1989) will be used.

3.4. Subject of the Study

3.4.1. Population of the Study

Creswell (2005) argue that population is a group of individuals who have the same characteristics. A group of individuals (or a group of organizations) with some common defining characteristic that the researcher can identify and study is called target population. According to Fraenkel, Wallen, and Hyun (2012) state that population is the group of interest to the

researcher, the group to whom the researcher would like to generalize the results of the study. Punch and Oancea (2014) state that population is the total target group who would, in the ideal would, be the subject of the research, and about whome the researcher is trying to say something.

The population of this study was the students of English education study program semester II, IV, VI, VIII, in the academic year 2017-2018 from UIN Raden Fatah Palembang. The total number of the students in the population is 457 as presented in the following table.

Table 2. Population of the Research

No	Semester	Number of Students
1	II	115
2	IV	134
3	VI	106
4	VIII	102
Total		457

English Education Study Program Students' of UIN Raden Fatah Palembang

3.4.2. Sample of the Study

According to Creswell (2005) sample is a subgroup of the target population that the researcher plans to study for generalizing about the target population. Punch and Oancea (2014) state that sample is the actual group who are included in the study, and from whom the data are collected. While, Best and Kahn (1993) state that a sample is a small proprtion of a population

selected for observation and analysis.

The sample of this research was taken by using purposive sampling. Johnson and Christensen (2012) Purposive sampling (judgmental sampling) is nonrandom sampling technique in which the researcher solicits persons with specific characteristics to participate in a research study. According to Punch and Oancea (2014), purposive sampling is the sample is drawn from the population in a deliberate or targeted way, according to the logic of the research. In purposive sampling, the researcher specifies the characteristics of a population of interest and then tries to locate individuals who have those characteristics. According to Fraenkel, Wallen, and Hyun (2012), purposive sampling method is a method where investigators use personal judgement to select a sample.

In order to know the students' reading comprehension achievement, a group of students who had already taken all the reading courses (Reading I, Reading II, Reading III, and Reading IV) from the population considered as the sample. The eighth semester students were not chosen because most of them were doing KKN and the tenth semester students had already finished all of the lecturers in the class and they were working on their thesis. For the reasons above, only the sixth semester students became a sample. The distribution of the sample can be seen in Table 3.

Table 3. Sample of the Research

No	Class	Semester	Number of Students
1.	PBI A	VI	28
2.	PBI B	VI	27
3.	PBI C	VI	26
4.	PBI D	VI	25
Total			106

English Education Study Program Students' of UIN Raden Fatah Palembang

3.5. Technique for Collecting the Data

In order to obtain the information on the student's self-concept and reading comprehension achievement, the writer utilized questionnaires and reading comprehension test.

3.5.1. Self-Concept Questionnaire

The questionnaire was used to measure students' self-concept (See Appendix). I gave the questionnaire to obtain students' self-concept and to gain information whether or not students' self-concept influence their reading comprehension achievement, I used TOEFL test.

The researcher used ready-made questionnaire namely Academic Self-Concept Scale (ASCS) developed by Reynold, Ramirez, Magrina and Allen (1980). The questionnaire consists of 40 Likert-type items and consist of 4 Likert-scale ranging from 1 "strongly disagree" to 4 "strongly agree". Reynolds tentatively named the seven factors as grade and effort dimension (8 items), study habits/ organizational self-perceptions (6 items), peer evaluation of academic ability (8 items), self-confidence in academics (3 items), satisfaction with school (4 items), self-doubt regarding ability (8

items), and self-evaluation with external standards dimension (3 items). The questionnaire consist of 6 negative statements (4,5, 8, 34, 39, and 40). the questionnaire were responded by students in about 20 minutes.

3.5.2. Reading Comprehension Test

In this study, reading comprehension's test was used to measure students' reading comprehension achievement. I used reading TOEFL reading comprehension passages. The reading comprehension passages consists of 50 items of reading comprehension questions were taken from The Templete Guide to the TOEFL Test PBT Edition by Bruce Rogers (2011). The test distributed to the sample. The kind of the question is multiple choice questions. The time allocation is 55 minutes. The students were not allowed to open dictionaries in this section.

3.6 Data Instrument Analysis

Fraenkel, Walen and Hyun (2012) state that validity and reliability are important to consider when in comes to the selection or design of the instruments a researcher intends to use (p. 147).

3.6.1 Test Validity

Creswell(2012)states that validity is the development of sound evidence to demonstrate that the test interpretation (of scores about the concept or construct that the test is assumed to measure) matches its proposed use. According to Fraenkel, Wallen, and Hyun (2012), validity is the most

important idea to consider when preparing or selecting an instrument for use.

3.6.1.1 Validity of the Questionnaire

In this study, validity is the development of sound evidence to demonstrate that the test interpretation (of scores about the concept or construct that the test is assumed to measure) matches its proposed use (Creswell, 2012). According to Fraenkel, Wallen, and Hyun (2012), the term “validity” refers to the appropriateness, correctness, meaningfulness, and usefulness of the specific inferences researchers make based on the data they collect. It means that validity test is used to measure whether the instruments are used valid or not.

In addition, the researcher used ready-made questionnaire from Academic Self-concept Scale by Reynold (1988). The questionnaire has been validated by Reynold, these 59 items constituted the initial form of the Academic Self-concept Scale (ASCS) on the basis of item-total scale correlations, corrected via Cureton’s (1966) technique, 19 items were eliminated. The result was a 40-items scale. So it does not need to be tried out.

3.6.1.2 Validity of the Reading Test

The TOEFL reading test was an objective and reliable measure English communication skill. The reading section contains passages on a variety of subjects. Following each passage were several questions about the passage. Students answered from 36 to 70 questions in this section, and they had 60 to 100 minutes to read the passages and answer the questions. TOEFL reading’s

validity was not be checked because it is a standardized test.

3.6.2 Test Reliability

3.6.2.1 Reliability of Questionnaire

In accordance with Fraenkel, Wallen, and Hyun (2012), reliability refers to the consistency of the scores obtained how consistent they are for each individual from one administration of an instrument to another and from one set of items to another. According to Creswell (2012), reliability means that scores from an instrument are stable and consistent. Fraenkel, Wallen, and Hyun (2012) stated that when used to check reliability of scores, the coefficient should be at least 0.70, preferably higher. Therefore, the questionnaire was reliable if the coefficient is 0.70 or higher.

Reynold (1988) used Test-retest reliability technique which was brought out by using SPSS to find out the internal consistency reliability of the questionnaire. Cronbach alpha of .91 was obtained. It was valid questionnaire. In addition the correlation of the score with social desirability (Marlowe-Crowne) scale for 82 college students was .47 obtained.

It can be concluded the internal consistency of Cronbach alpha of .91 (high reliable). The correlation with the social desirability (Marlowe-Crowne) scale for 82 college students was .47. The ASCS was valid and reliable.

3.6.2.2 Reliability of Reading Comprehension Test

The TOEFL reading test is an objective and reliable measure of English communication skill. The TOEFL reading's reliability will not be checked because it is a standardized.

3.7 Technique for Analysis the Data

After distributing the questionnaire and test, the researcher checked and analyzed the collected data.

3.7.1. Analysis of Questionnaire

Self-concept questionnaire was developed by Reynold (1988). In this four-Likert-scale ranging from 1 "Strongly Disagree" to 4 "Strongly Agree" was used as shown in Table 4 below.

Table 4. The Scoring of the Questionnaire

Response	Score	
	Positive	Negative
Strongly Agree	4	1
Agree	3	2
Disagree	2	3
Strongly Disagree	1	4

In deciding the interval between points on the scale, the researcher used formula: range of the score divided by the number of level. Since the total items was 40, the possible highest score will be 160 (the students get 4 points for each statement), and the possible lowest score will be 40 (the

students get 1 points for each statement). In this research, the researcher divided the category into 3 levels. The calculation was 160 minus 40 which were 120. Then the score 120 was divided by 3 which was 40. It means that the interval between scores was 40. From the calculation, the researcher used score interval as presented in Table 5.

Table 5.The Categories of Self-Concept Scale

Score Interval	Category
121 – 160	High
81 – 120	Average
40 – 80	Low

Source: Modified from Best & Kahn (1993)

3.7.2. Analysis of Reading Test

In this study, reading comprehension achievement was analyzed. There were 50 items of the questions in the form of multiple choices, each correct answer was multiplied by 2 to make the highest score 100. The result was classified to reading categories. The following chart is the category of the students' reading comprehension achievement. The interval is shown in table below.

Table 6.The Categories of Reading Test Scale

No.	Interval Nilai	Categories
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1	80.00 - 100.00	A	Very Good
2	70.00 - 79.99	B	Good
3	60.00 - 69.99	C	Average
4	50.00 - 59.99	D	Poor
5	0.10 - 49.99	E	Very Poor

3.7.3. Data Descriptions

3.7.3.1. Distribution of Frequency Data

In distributions of frequency data, the score from self-concept questionnaire and reading test were analyzed. SPSS Statistics Program was used to get the result of frequency data.

3.7.3.2. Descriptive Statistics

In descriptive Statistics, number of sample, the score of minimal, the score of maximal, mean, standard deviation, and standard error of mean were obtained. Descriptive statistics have got from the scores of questionnaire and reading test. Then, SPSS Statistics Program was used to get the result of analysis descriptive analysis.

3.7.4. Pre-requisite Analysis

In term of correlation and regression, it was necessary to know wheter the data was normal for each valiable and linear between two variable.

3.7.4.1. Normality Test

Basrowi (2007) states that normality test is used to see if the distribution of all data are normal; the data from questionnaire and test. The data can be classified into normal when the p-output is higher than 0.05 level (p. 85). in analyzing the normality test, *I- Sample Kolmogorov-Smilnov Test* was used.

3.7.4.2. Linearity Test

Basrowi and Soenyono (2005) states that Linearity test is used to see if the data from tests are linear. The data can be calssified into linear when the p-output is higher than 0.05 level (p. 106). To find out the linearity from both questionnaire and test, *Test for Linearity* in Statistical Package for Social and Science (SPSS) was used.

3.7.5. Correlation Analysis

According to Creswell (2012), correlation design is procedures in a quantitative research in which investigators measures the degree of association (or relationship) between two or more variables using the statistical procedure of correlation analysis.

The Statistical Package for Social and Science (SPSS) computer program was employed to find out the correlation between students' self-concept and students' reading comprehension achievement Pearson-Product Moment Correlation Coefficient.

3.7.6. Regression Analysis

Regression analysis is a method for explanation of phenomena and prediction of future events. A coefficient of correlation between variables X (Self-concept) and Y (Reading comprehension achievement) is a quantitative index of association between these two variables. In this *squared* form, as a coefficient of determination, indicates the amount of variance (information) in the criterion variable Y that is accounted for by the variation in the predictor variable X.

Regression Analysis was used to find out whether or self-concept influenced students' reading comprehension achievement. Simple regression analysis was used to measure two variables. The score of self-concept as independent variable and students' reading comprehension achievement as dependent variable were calculated by SPSS. The significance of influence was determined by comparing the R-Square with 0.05. The influence was significant if R-Square is higher than 0.05.