CHAPTER III

RESEARCH METHODOLOGY

This chapter describes the method used in conducting the study. It explains more about approach and research design, population, sample, data and source of data, research instrument, data collection technique, and data analysis technique.

A. Approach and Research Design

This study used descriptive approach. According to Danim, descriptive method is describe situation or phenomena or characteristic of individual or group accurately. Also, descriptive method is describing the condition of existence and classifying the information.¹ Then, this study used quantitative research. Arikunto states that quantitative research involves data collection procedures that result primarily in numerical data which is then analyzed primarily by statistical methods.² According to Zolán Dörnyei that quantitative research was seen to offer a structured and high regulated way of achieving a macro-perspective of the overarching trends in the world.³ Meanwhile, Sukmadinata states that descriptive research aimed defining some situation or phenomenon naturally.

¹ Sudarwan Danim, *Menjadi Peneliti Kualitatif*, (Bandung: Pustaka Setia, 2002), 41.

² Zolán Dörnyei, *Research Method in Applied Linguistics*, (New York : Oxford University Press, 2007), 24

³ Zolán Dörnyei, Research Method in Applied Linguistics, (New York : Oxford University Press, 2007),29

Research design is one of concept to construct the idea and to plan about approach or method in the research. Research design is "a plan or a concept made by the researcher for the plan of action that will be conducted¹.⁴

B. Population

The population of this study was students of MA Bilingual Krian. There were 465 students. There were four classes on 12 grade, four classes on 11 grade and seven classes on 10 grade.

C. Sample

This study used purposive sampling technique. The sample should representative good scale of reading habit. Therefore, the questionnaire used to classify students' reading habit and it used to choose sample based on purposive sampling technique. To describe the questionnaire score, this study use likert scale that applied in questionneire. There are 1, 2, 3, 4, and 5 scale in questionnaire. Based on these scales, the scale was reject about 1 and 2. But the scale was accept about 3, 4, and 5 scale. Therefore, the sample in this study was students' who had good reading habit in scales 3, 4, and 5. The following table below about the percentage of students' reading habit.

⁴ Suharsimi Arikunto, "*prosedur penelitian suatu pendekatan praktik'*, (Jakarta: Rineka cipta,2006), 51

	Reading Habit Indicators	N	Scale										
No			1		2		3		4		5		Total
			F	Р	F	Р	F	Р	F	Р	F	Р	Percentage
1	Reading Frequency												
	Question 1	465	45	10%	32	7%	158	34%	129	28%	101	22%	84%
	Question 2	465	33	7%	55	12%	147	32%	137	29%	93	20%	81%
	Question 3	465	48	10%	64	14%	131	28%	147	32%	75	16%	76%
2	Reading Amount of Books												
	Question 4	465	24	5%	58	12%	154	33%	132	28%	97	21%	82%
	Question 5	465	39	8%	49	11%	146	31%	127	27%	104	22%	80%
	Question 6	465	56	12%	77	<mark>17%</mark>	123	<mark>26%</mark>	111	24%	98	21%	71%
3	Academic Reading												
	Question 7	465	39	8,%	54	12 <mark>%</mark>	1 <mark>43</mark>	31 <mark>%</mark>	126	27%	103	22%	80%
	Question 8	465	45	10%	75	16%	<mark>137</mark>	29 <mark>%</mark>	117	25%	91	20%	74%
	Question 9	465	37	8,%	68	15%	128	28 <mark>%</mark>	148	32%	84	18%	78%
4	Non Academic Reading												
	Question 10	465	32	7%	35	8%	134	29%	125	27%	139	30%	86%
	Question 11	465	54	12%	56	12%	156	34%	102	22%	97	21%	77%
	Question 12	465	56	12%	47	10%	145	31%	126	27%	91	20%	78%

Table 3.1The percentage of students' reading habit

Instruction :

- N : Number of Respondent
- F :Frequency of Students
- P : Percentage

The table above showed about scale of students' reading habit. The frequency of students and percentage showed that 465 students was good in reading habit. based on the percentage of students' reading habit above, the students chose scale 3, 4, and 5.

This study used 10 % sample of 465 students at MA Bilingual Krian. Because according to Gay and Diehl that the minimize sample of descriptive research is 10% of population.⁵ Then, according to Roscoe that the sample is true if the totatlity of sample about 30 until 500 sample for most of research.⁶ based on the both of theory above, the calculation of sample in this study is 465 x 10% = 46. Therefore, this study used 46 students as subject in this research. This subjects in this study were students who had good reading habit. Therefore, the sampling chose by result of questionnaire score.

D. Data and Source of data

This study uses two kinds of data based on aims of the problems. The first statement problem wants to know whether is the influence of reading habit to students' reading comprehension. Therefore the data is score resulted from students' test score. Whereas, the source of data is students at MA Bilingual Krian and document of test score. See appendix 5.

⁵ Gay, L.R. - Diehl, P.L, *Research Methods for Bussiness and Management*, (MacMillian Publishing Company : New York, 1992), 67

⁶ Uma Sekaran, *Metode Penelitian Bisnis*, (Salemba Empat : Jakarta, 2006) ,34.

The second statement problem wants to know the indicators of reading comprehension influenced by reading habit. Therefore the data is students' test score. Then, the source of data is students at MA Bilingual Krian and document of test score. See appendix 5.

E. Research Instrument

An instrument is' a device to get the data'.⁷ In this study, the researcher used two instruments. They were questionnaire and test. The following instruments were:

1. Questionnaire

The questionnaire used to collect non test data about reading habit indicators and it only used to classify the students who have good reading habit. Therefore, it did not use to answer first or second statement of research problems. This questionnaire used Julio Cesar's theory about reading habit indicators. According to Julio Cesar's, there were six indicators of reading habit. But in this reasearch, the researcher used four indicators only because the researcher used internal indicators in reading habit. It consist of 12 item questions which represented 4 indicators.

⁷ Gay, L.R, Geoffrey E.Mills, and Peter Airasian, *Educational Research* (MacMillian Publishing Company : New York, 1993) 126

- a. Reading amount of book
- b. Academic reading
- c. Reading frequency
- d. Non-academic reading ⁸

To measure the indicators above, the researcher use Likert Scale.⁹ There are five expressions that researcher uses to measure it. The following expressions are:

Table	3.2
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Likert Scale

Expressions	Point			
Strongly agree		5		
Agree		4		
Neither Agree / not disagree	1	3		
Disagree		2		
Strongly disagree		1		

2. Test

Test is second instrument in this research and it used to answer first and second statements of the problem. The researcher used Henry Guntur Tarigan's

⁸ Samrotul Muawanah, Thesis : " *The Relationship Between Students' Reading Habit and Their Reading Comprehension (A Correlational Study at The Second Grade Students of SMA Dua Mei Ciputat)*". (Jakarta: UIN Syarif Hidayatullah, 2014),20

⁹ Zolán Dörnyei, Research Method in Applied Linguistics, (New York : Oxford University Press, 2007), 105

theory for applied on the test. It consist of 14 questions which represented 7 indicators¹⁰. The following indicators were :

No	Reading Comprehension Indicators	Number of Items	Total item	Score
1	Reading for details	7	1	5
	3	9	1	5
2	Reading for main ideas	2	1	5
	Reading for main reeas	6	1	5
3	Panding for informance	3	1	5
	Reading for interences	11	1	5
4	Deading for elegativing	1	1	5
	Reading for classifying	8	1	5
5	Bading for comparing	5	1	5
	Reading for comparing	10	1	5
6	Boading for evaluating	4	1	5
	Reading for evaluating	12	1	5
7	Booding for comparing	13	1	5
/	Reading for comparing	14	1	5
		14	11	

Table 3.3Reading Comprehension Indicators

Based on table above, it showed that there were seven indicators of reading comprehension. Each indicator had two questions. The true answer got 5 score and the false answer got 0 score.

¹⁰ Henry Guntur Tarigan. (1979). Membaca Sebagai Suatu Keterampilan Berbahasa. Bandung: Angkasa.9

F. Data Collection Technique

To obtain the valid data, the researcher used questionnaire and test. but the questionnaire only used to classify students' reading habit into scales. The questionnaire used 12 questions that represented 4 indicators in questionnaire and it adapted of Julio Caser Theory. Therefore, the data collection technique for first statement of the problem is test. Then, the data collection technique for second is test. The test consist of 14 questions that represented 7 indicators and it adapted from Henry Guntur Tarigan theory about reading comprehension.

G. Data Analysis Technique

Data analysis is the process of systematically searching and arranging the result of the observation, recording, and other materials.¹¹ It used to make easier in understanding and interpreting the data.

In this study, there were some analyze to analyze the data. The first analyze was analyze the questionneire. But the questionnaire only analyze in population and sample not on the findings. The questionnaire used to classify the students based on their reading habit scales and it used to decide the sampling in this research. The students' reading habit devide into five scales. They are scale 1, 2, 3, 4, and 5. The scales aimed to know the grades of students' reading habit. The score was reject in 1 and 2 scales. The score was accept in 3, 4, and 5 scales. The questionnaire did not use to answer first and second research problems.

¹¹ Sugiyono, "Metode Penelitian Kuantitatif Kualitatif dan R&D", (Bandung: Alfabeta,2010), p. 80

The second analyze was decide the variable dependent and variable independent. The dependent variable was reading habit and the sub variables were reading frequency, reading amount of books, academic reading, and non academic reading. The independent variable was reading comprehension and the sub variables were reading main ideas, reading comprehend, reading sequences, reading inferences, reading classifying, reading evaluating , and reading comparing.

The third analyze was analyze the test. To analyze the test, this study used SPSS 18 (Statistical Package for the Social Science). This study used multiple linear regression and it has some test. The following steps were use to analyze:

- 1. Add the respondents and students' test score into Ms.Excel
- 2. Calculating the sum score of each number.

For example : detail number 1 + detail number 9

- Calculating the sum score of all indicators reading comprehension. For example : score of details + main ideas + inferences + classifying + comparing + evaluating + sequences.
- 4. Opening the SPSS 18 software
- 5. Putting the data in the 'Data View"
- 6. Changing the variables' name in the "Variable View"
- 7. Clicking "Analyze", choose "Regression", and choose "Linear"
- 8. Putting the dependent variable and take it into dependent variable column

45

- 9. Putting the independent variables and take them into independent variables column
- Clicking "Statistics", choose "Descriptive and Colliniearity Diagnosis" to know Tolerance and VIF score.
- 11. Clicking "Plots", putting ZPRED into Y column and ZRESID into X column to know heteroscedaticity.
- 12. Clicking "Save", choose "Unstandardized", continue, ok

After the output of SPSS showed, the next analysis are analyze the SPSS output. The output of SPSS are variables entered and removed, classic assumsion test (multicollinearity test, heteroscedaticity test, and normality test), and multiple regression linearity test (F test and T test). F test to answer first research problem and T test to answer second research problem. The following description about multiple regression linearity test.

1. Variables entered and removed

The variables entered and removed showed which one was variable entered and which one was variable removed. Then, it explain about the dependent and independent variables. The purpose of this table was to check and classify the variable based on method on the table below.

2. Classic assumtion test

Classic assumtion test showed about three type test and each test had each meaning. Classic assumtion test purpose to know the linear way of regression process and to know what was the regression accept or reject. They was multicollinearity test, heteroscedaticity test, and normality test.

a. Multicollinearity Test

Multicollinearity test uses to see a test whether regression model had correlation of each independent variables or not. The good regression model is not correlation of each independent variables. If the independent variables have correlation of each independent variables, it showed that the independent variables same with zero score. Based on explanation above, there are two analyses in multicollinearity test. The first analysis is analyze about tolerance value and the second analysis about VIP (Variance Inflation Factor) value.

Based on multicollinearity test, there was two hyphotheses. They are hyphotheses of tolerance value and VIP (Variance Inflation Factor) value. The following hyphotheses are about tolerance value and VIP value.

Tolerance value :

Ho : there was not multicollinearity, if the tolerance value bigger than 0,10(Tolerance value 0,10) Ha : there was multicollinearity, if the tolerance value smaller than 0,10(Tolerance value 0,10)

VIP value :

Ho: There was not multicollinearity, if VIF value smaller that 10,00

(VIF value 10,00)

Ha: There was multicollinearity, if VIF value bigger that 10,00

(VIF value 10,00)

b. Heteroscedaticity Test

There was residual on heteroscedaticity test, Residual is measurement of error sample. Whereas heteroscedaticity test (non constan test) is one of classic assumtion test. It purposes to know wheater in regression proccess consist of different variant from one residual to other residual. The good results of heteroscedaticity test if there is similiarity of variant from one observation residual to other observation residual. It is namely homoscedaticity. In addition, the good result of heteroscedaticity test should have constant variant residual.

In addition, to know the heterocedaticity good or not result, the residual point was in irregular pattern on figure. If the points spreads on negative and positive area without make a line or a shape , it means that good result. Then, if points spread on axis X and Y and it makes irregular pattern, it means the result is homocedaticity.

c. Normality Test

Normality test purposes to know the distribution of normal value. It means that normality test should have normal distribution. If the nomality test has not normal distribution, the conclusion of F test and T test is questionable to do multiple regression linear test. The result of normality test can showed with P-P Plot figure of normality test. Normal distribution of points in P-P Plot if the point spread in diagonal line or near the diagonal line (a) of P-P plot

3. Multiple regression linearity test

Multiple Regression Linearity analysis used to assess the association between two or more independent variables and a single dependent variable. Multiple Regression Linearity Test has two tests. They was F test and T test. Multiple regression linearity test hold with two test in this research. The Test was F test and T test. In this study, F test used to answer first research problem, and T test used to answer second research problem.

a. F Test

F test used to assess wheather the set of independent variables collectively influence the dependent variable. Then, this test used to get the answer of first research problem.

This test analyze dependent variable and independent variable as simultan. In this study, simultan was a activity that influence independent variable and dependent variable as together. The following hypothesis used to analyze F test based on degree of relience 0,05 and F test based on F value and F table.

- Ho: there was not significant influence between independent variables (sequences, main deas, inferences, details, comparing, classifying, evaluating) and dependent variable (reading habit) as simultan.
- Ha : there was significant influence between independent variables (sequences, main deas, inferences, details, comparing, classifying, evaluating) and dependent variable (reading habit) as simultan

To know the result of F test, there was two analyze.

1) F test based on degree of relience 0,05 :

Category :

- Ha reject if the results of significance of F value bigger than 0,05 (sig. F value 0,05)
- Ha accept if the results of significance of F value smaller than 0,05 (sig. F value 0,05)

2) Analysis based on F test based on F value and F table

Category :

- Ha reject if F value F tabel
- Ha accept if F value F table
- b. T Test

T test used to determine the significant of each predictor for each independent variable. In addition, T test used to know whether independent variables influence dependent variable as partial. T test used degree of reliance 0,05. The results of T test if T value is smaller than T table (T value T table), it means that alternative hypothesis is accept or independent variable has influence to dependent variable as partial. To obtain the result of T test, the research made hypotesis.

Hypothesis :

Ho : there was not significant influence between independent variables (sequences, main deas, inferences, details, comparing, classifying, evaluating) to dependent variable (reading habit) as partial

Ha : there was significant influence between independent variables (sequences, main deas, inferences, details, comparing, classifying, evaluating) to dependent variable (reading habit) as partial

Category

- Ha reject if T value T tabel
- Ha accept if T value T table

