CHAPTER III

METHOD OF THE RESEARCH

A. Research Design

The type of this research is a Causal-Comparative research. Gay states that: "the basic causal-comparative design involves selecting two groups differing on some independent variable and comparing them on some dependent variable". [1] In other words, there were two different groups of independent variable which was compared on the dependent variable. In this research, they were using authentic and non-authentic materials that were compared on students' reading motivation. In this case, the researcher tried to find out whether there is or no a significant difference between using authentic and non-authentic materials on students' reading motivation of the eleventh grade at Senior High School 2 Pekanbaru.

B. The Location and Time of the Research

This research was conducted at State Senior High school 2 Pekanbaru. This research was carried out on May 2014.

C. The Subject and Object of the Research

Subject of this research was the eleventh grade students of State Senior High School 2 Pekanbaru in 2013/2014 academic year. Thus, object of this research was comparison reading motivation of using authentic and non-authentic materials.

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[1] Gay, L.R., and Peter Airasian. *Educational Research: Competencies for Analysis and Application, 6th edition.* (New Jersey: Prentice-Hall, Inc. 2000), 353.

D. The Population and Sample

The population of this research was taken homogenously. The population of this research was the eleventh grade students of State Senior High School 2 Pekanbaru in 2013-2014 academic years. The school had 7 classes which consisted of 4 classes for science department and 3 classes for social department. The target of population in this research was the eleventh grade students of science department. The number of the eleventh grade students of State Senior High School 2 Pekanbaru in 2013-2014 was 232 students.

Table III. 1

The Total Population of the Eleventh Grade Students at State Senior High School 2 Pekanbaru

No	Class	Total
1	XI IPA 1	31
2	XI IPA 2	31
3	XI IPA 3	33
4	XI IPA 4	31
5	XI IPS 1	36
6	XI IPS 2	35
7	XI IPS 3	35
Total		**232**

Based on the research design, the researcher took only two classes of seven classes for the samples taken by purposive sampling. According to Gay and Airasian, they state that: "the researcher selects a sample based

on his or her experience or knowledge of the group to be sampled".[2] So, the number of sample in this research was 62 students (XI IPA 2 and XI IPA 4).

E. The Technique of Data Collection

In order to get some data that were needed to support this research, the researcher applied the technique of collecting data by using questionnaire. Questionnaire is a set of questions on a topic or group topics designed to be answered by a respondent.[3] In this research, the writer used MRQ (Motivation Reading Questionnaire) designed by Baker and Wigfield. To measure the data of questionnaires, the researcher used Likert scale.

Table III. 2
The Blue Print of Questionnaire

No	Indicators	Number of items
1.	Students have belief to be successful in reading. (Self efficacy)	1, 11
2.	Students have the willingness to take on difficult reading material. (Challenge)	2, 12
3.	Students have the desire to read about a particular topic. (Curiosity)	3, 13
4.	Students are able to enjoy in reading certain kinds of literacy or informational texts. (Involvement)	4, 14
5.	Students have belief that reading is valuable. (Importance)	5, 15
6.	Students have a pleasure in receiving a definite form of recognition for success in reading. (Recognition)	6, 16
7.	Students have desire to be favorably evaluated by the teacher. (Grades)	7, 17

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[2] *Ibid.*, p. 138.
[3] Jack C. Richards, and Richard Schmidt, *Longman Dictionary.* (Oxford University Press: Oxford, 1987), p. 449

8.	Students have desire to outperform others in reading. (Competition)	8, 18
9.	Students are able to construct and share the meanings gained from reading with friends or family. (Social)	9, 19
10.	Students are able to meet the expectations of others in reading. (Compliance)	10, 20

F. Validity and Reliability

1. Validity of the Data

Questionnaire is a set of questions on a topic or group topics designed to be answered by a respondent.[4] Questionnaire is a tool to measure motivation, interest, etc. The writer provided the construct validity to measure whether tests taken for this research are valid or no valid. In measuring the validity of the tests, the researcher used the SPSS 16.0 application to find out the validity of the tests. Then the result is shown. Here is the output table:

Table III. 3

The Result of Validity Test

Correlations

		Score 1	Score 2
Score 1	Pearson Correlation	1	.706[**]
	Sig. (2-tailed)		.000
	N	31	31
Score 2	Pearson Correlation	.706[**]	1
	Sig. (2-tailed)	.000	
	N	31	31

**. Correlation is significant at the 0.01 level (2-tailed).

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[4]*Ibid*

Based on the table above, it was clear that the validity value was 0.706. According Hartono, the score of validity values is 0.70– 0.90, it can be called high[5]. It shows that the validity value in the table above includes in 0.70-0.90, it means that the test was valid.

2. Reliability of the Data

Reliability of the test can be measured from the consistency and dependability of the test. Relation to the statement stated by Brown, he stated that a reliable test is consistent and dependable[6]. Of course, the consistency and dependability of the test can be measured through the scores given; it is one of the ways provided by Brown. According to Cohen, there are three types of reliability: stability, equivalence and internal consistency.[7]

The writer tried to find out the reliability of the test through the scores of questionnaires. The writer used the SPSS 16.0 application to find out the reliability of the test based on Cronbach Alpha technique. Then the result is shown.

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[5]Hartono, Statistik Untuk Penelitian, (Yogyakarta: Pustaka Pelajar, 2010), p. 87
[6]Douglas H. Brown. *Language Assesment: Principles and Classroom Practice.* (NewYork: Pearson Education 2004).,pp. 20
[7]Louis, Cohen,et al, *Research Methods in Education*, (New York: Routledge, 2007), pp. 146

Here is the output table:

Table III. 4

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.778	.828	2

Based on the previous table, it was clear that the reliability value was 0.778. According to Pallant, if cronbach's alpha above 0.7, so the scale can be considered reliable with our sample[8]. It means that the test was reliable.

G. Normality of the Data

Abell stated that the Kolmogorov-Smirnov Z test was typically used to assess univariate normality.[9] In order to ensure that the data are normally distributed, the writer used the Kolmogorov-Smirnov Z test. The normal distribution of data was computed by using SPSS 16.

Then the result is shown. Here is the output table:

Table III. 5

The Result of Normality of the Data

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
authentic	31	75.00	5.273	63	89
nonauthentic	31	60.52	6.434	46	74

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[8]Julie Pallant, *SPSS Survival Manual; A Step by Step Guide to Data Analysis Using SPSS for Windows (Version 10 and 11)*, (Philadelphia: Open University Press, 2001), p. 85

[9] Niel Abell, et. al. Developing and Validating Rapid Assesment Instrument, (Madison Aenue, New York: Oxford University Press, Inc., 2009), pp. 121

One-Sample Kolmogorov-Smirnov Test

		authentic	nonauthentic
N		31	31
Normal Parameters[a]	Mean	75.00	60.52
	Std. Deviation	5.273	6.434
Most Extreme Differences	Absolute	.126	.095
	Positive	.126	.095
	Negative	-.095	-.093
Kolmogorov-Smirnov Z		.704	.528
Asymp. Sig. (2-tailed)		.705	.944

a. Test distribution is Normal.

The SPSS result of normality test of data was computed by using SPSS 16.0 got *p*-value 0.705 for authentic material class and 0.944 for non-authentic class. Both *p*-values were higher than 0.05.

0.705>0.05 = authentic material class data were

normal

0.944>0.05 =non-authentic class data were normal

It could be concluded that the data of students' reading motivation questionnaire scores in the authentic and non-authentic materials class were normal.

H. The Technique of Data Analysis

In order to find out whether or not there is a significant difference of reading motivation between the students who are taught by using authentic and non-authentic materials, the data were analyzed by using SPSS version 16. The different mean was analyzed by using Independent T-test formula

through using SPSS 16.0 version. To analyze the level of students'

motivation in reading class, the researcher used the following formula:[10]

$$P = \frac{F}{N} \text{x } 100\%$$

Where:

P = total percentage

F = Frequency

N = Total

The interpretation of the formula above is as follows[11]:

Table III. 6

The Classification Students' Reading Motivation

No	Categories	Score
1.	Very strong	81%-100%
2.	Strong	61%-80%
3.	Enough	41%-60%
4.	Low	21%-40%
5.	Very low	0%-20%

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[10] Anas Sudijono, *Pengantar Statistik Pendidikan,* (Jakarta: PT Grafindo Persada, 2000), pp. 43

[11] Riduwan, *Skala Pengukuran Variable-Variable Penelitian.* (Bandung: Alfabeta, 2000), pp. 15