CHAPTER III

RESEARCH METHODS

In this chapter, the researcher discussed Method of Study, Operational Definition, Research variable, Population and Sample, Technique for Collecting Data, and Technique for Analyzing the Data.

A. Method Of Study

In this research, the researcher used experimental method. According to Hamdayana (2017) the experimental method is method of giving opportunities to individual students or groups to be trained to carry out a process or experiment. Through By applying this method, students are expected to be fully involved planning experiments, conducting experiments, finding facts, collect data, control variables, and solve problems that he actually faced. The reason for using this research method is because an experiment is conducted in one class by providing treatment in the form of using humor stories to look at the effect on improve students reading skill.

Furthermore, the researcher apply pre-experimental research. This research was a pre-experimental research, which is employed one group pre- test – post-test. This research is conducted through four steps of process: give try out to class non experiment, pre-test- treatment-post-test to investigate the improvement of the students. Pre-test is conducted

to measure the students" reading skill before conducting the treatment. The treatment is the learning process in which humorous stories will be implemented as method to improve the students reading skill. After the treatment using humorous stories, post-test is given to measure the students reading skill after the implementation of Humorous stories. The research design that be used in this research as following table below:

Tabel 3.1 Research Design of One Group Pre-Test and Post Test

O1	X	O2
Pre-Test	Treatment	Post-Test

Source: Cohen, et al (2015)

The experiment steps were:

1. Pre-test administered

2. The treatment

3. Post-test administered

B. Operational Definition

The title of this study is "The Effectiveness of Using Humor Stories to Improve Students Reading Skill at Tenth Grade SMK Sentosa Bhakti Baturaja". And the following terms necessary to be define;

1. Effectiveness is a condition that indicates the level of success or achievement of an objective as measured by quality, quantity and time, according to what was previously planned.

2. Reading is a process that is carried out and used by the reader to get the message that the writer wants to convey through the medium of words or written language to the reader.

3. Humor stories is something that is considered funny, which is able to invite laughter for the reader of the story.

C. Variables of Research

According to Sugiyono (2017) research variable is an attribute or characteristic or value of people, objects or activities that have certain variations determined by researchers to study and then draw conclusions. In this study, the variables used are independent variables (X) and the dependent variable (Y).

1. Independent variables

   According to Sugiyono (2017) the definition of independent (free) variable is a variable that influences or causes a change or the emergence of a dependent (bound) variable. In this research, the independent variable (X) is humor stories.

2. Dependent variables

   According to Sugiyono (2017) the definition of the dependent variable is the variable that is affected or becomes the result, because of the independent variables. Dependent variable (Y) , observer in this research is reading skill.

D. Population and Sample of Study

1. Population of Study

Population is a generalization of the area consisting of: objects/subjects that have specific quantities and characteristics determined by researchers to be studied and then conclusions drawn (Sugiyono, 2017). The population of this research is the tenth grade students' in SMK Sentosa Bhakti Baturaja. Based on the researcher experienced due to PPLK activities on SMK Sentosa Bhakti Baturaja, there are seven classes of the tenth grade students are 177 students. The following table is the number of the tenth grade students:

Table 3.2. The Population of Tenth Grade

Student of SMK Sentosa Bhakti Baturaja

No.	Classes	The Number of Students
1.	X TKJ 1	32
2.	X TKJ 2	16
3.	X TMM	16
4.	X TL	9
5.	X TITL	13
6.	X TSM 1	30
7.	X TSM 2	30
8.	X TKR	31
Total		**177**

Source: SMK Sentosa Bhakti Baturaja

2. Sample of Study

According to Siyoto, Sodik (2015), a sample is part of the number and characteristics possessed by the population, or a small part of the population members taken according to certain procedures so that they can represent the population. In this research, the researcher uses purposive

sampling. According to Sugiyono (2017) Purposive sampling is a sampling technique with consideration. The researcher used purposive sampling technique and chose X TKJ 1 class as experiment class because students in the X TKJ 1 class that relatively have lower score other class. In which class, the researcher used one class to conducted this research, that is class X TKJ 1 which has a total of 32 students which can be seen in the table below:

Table 3.3. Sample of the Research

No.	Classes	Group Categorize	Number of Students
1.	X TKJ 1	Experiment	32
		Total	**32**

Source: SMK Sentosa Bhakti Baturaja

E. Technique for Collecting the Data

According to Sugiyono (2017) state that data collection techniques is the most strategic step in research, because the main goal of research is to obtain data. Without technique for collecting the data, researcher was not got the expected data. In this research the researcher used Test as the technique for collecting the data, with 30 questions multiple choice. In this study, researcher used instruments test adopted from Hidayati Nur Diah (2016) with the title "Supersmart Books Bahasa Inggris SMA/Sederajat kelas X, XI, XII".

The research design in this study used the pre-experimental method, with the one group pre-test and post-test design. Researcher used a one-group pre-test post-test design usually involving four steps:

a. The researcher tried out to class non experiment, in X TKJ 2 and X TMM with 32 students on 06th April 2023 (Attached documentation).

b. The researcher gave a pre-test to class experiment X TKJ 1on 10th April 2023 (Attached documentation).

c. The researcher conducted four meetings (3x30 minutes) for treatment using humor stories to improve students reading skill in class X TKJ 1 as an experiment class.

d. First meeting on 11th April 2023, with "Nasreddin's Coat material (Lesson Plan Attached).

e. Second meeting on 02th Mei 2023, with "Penguin in the Park" material (Lesson Plan Attached).

f. Third meeting on 08th Mei 2023, with "For the Gun" material (Lesson Plan Attached).

g. Fourth meeting on 09th Mei 2023, with "My Husband" material (Lesson Plan Attached).

h. After the treatment, researcher gave a post-test on 10th Mei 2023 (Attached Documentation)

i. To see the value of the treatment result of the post-test whether it is better than the result of the pre-test. To measure students effectiveness,

the researcher will compare the result of pre-test and post-test using SPSS 21.

F. Instrument Validity

According to Saptutyningsih and Setyaningrum (2019) validity is the accuracy of a measuring instrument in measuring an object. Validity is carried out to find out how well a measurement test is in measuring the object that should be measured. An instrument that is considered valid if the tool used can properly measure the measuring object. The results of the measurement of a test to be checked for the level of validity are compared with a criterion. The comparison result which is the validity coefficient can be calculated using certain statistical techniques. The researcher carried out the validity of the criteria by distributing the research instrument tried out in X TKJ 2 and X TMM.

Table 3.4 Specification Table of Instrument Validity

Standard Competence	Indicator	Material	Item Number	Type of Test
Understanding the meaning of short functional texts and monologues of spoof text in the context of everyday life	1. Identify the generic structure of the spoof text 2. Determine the main idea in each paragraph 3. Identify the meaning of words in the text read 4. Identify the meaning of sentences in the text read	Spoof Text: 1. Nasreddin's Coat 2. Penguin in the Park 3. For the Gun 4. My Husband	1,6,7,8,14,15,22,23, 27 2,9,13,16,24,28,29 5,11,17,19,21,26,30 3,4,10,12,18,20,25	Multiple choice
Total			30	

To check whether the instrument has a good validity or not, the writer checked the difficulty index of the instruments. The writer used the SPSS version 21.00. The writer used non sample class for trying out the instrument, which was consisted of total 32 students of class X TKJ 2 and X TMM. To analyzed the validity of the instrument based on SPSS, the writer determined the Significance level (α) of the test was 0,05 or 5% from the confidence interval 95%, and the value r_{table} of this test was 0,349 with (df= N-2= 30) . Which the writer concluded two hypothesis first if the critical value ($r_{obtained}$) was positive and more than r_{table}, it meant that the item was valid. The second if the critical value ($r_{obtained}$) was negative and less than r_{table}, it means that the item was invalid.The result of validity in the test for tryout was:

Table 3.5 Validity of the Instrument

No.	Questions Item	Critical Value (r Obtained)	r Table	Conclusion
1	Item 1	.584	.349	Valid
2	Item 2	.825	.349	Valid
3	Item 3	.756	.349	Valid
4	Item 4	**-.043**	**.349**	**Invalid**
5	Item 5	.584	.349	Valid
6	Item 6	.584	.349	Valid
7	Item 7	.839	.349	Valid
8	Item 8	.749	.349	Valid
9	Item 9	**-.018**	**.349**	**Invalid**
10	Item 10	.756	.349	Valid
11	Item 11	.584	.349	Valid
12	Item 12	.584	.349	Valid

13	Item 13	.819	.349	Valid
14	Item 14	.749	.349	Valid
15	Item 15	.584	.349	Valid
16	Item 16	.825	.349	Valid
17	Item 17	.756	.349	Valid
18	Item 18	.749	.349	Valid
19	Item 19	.584	.349	Valid
20	Item 20	.749	.349	Valid
21	Item 21	.584	.349	Valid
22	Item 22	.749	.349	Valid
23	Item 23	**.327**	**.349**	**Invalid**
24	Item 24	.832	.349	Valid
25	Item 25	.742	.349	Valid
26	Item 26	.756	.349	Valid
27	Item 27	.584	.349	Valid
28	Item 28	.584	.349	Valid
29	Item 29	.756	.349	Valid
30	Item 30	.839	.349	Valid

Based on the distribution of the table above, the writer found there were 3 items were in valid they were item 4, item 9, and item 23, and there were 27 items were valid. So, the writer used 27 items for the research instrument.

G. Instrument Reliability

A test is said to be reliable if the test shows the determination of the test results or changes that are not meaningful if the test is tested many times. According to Creswell (2012), Reliability means that scores from an instrument are stable and consistent. In this case, a reliable test means a

test that can be trusted to be used as a data collection tool. To know that the test used is reliable, the researcher used Cronbach Alpha with the help SPPS program. A research instrument is reliable if the Cronbach's Alpha value is >0.70 (Ghozali, 2016). The result of tryout on April 06, 2023th was presented on the table below:

Table 3.6 Result of Tryout

Student's code name	Number of Item	Total Answer		Score
		Correct Answer	In Correct Answer	
ABS	30	20	10	66.67
A	30	13	17	43.33
AA	30	30	0	100.00
AA	30	20	10	66.67
DGA	30	13	17	43.33
DSL	30	3	27	10.00
FPC	30	30	0	100.00
HO	30	2	28	6.67
JDS	30	2	28	6.67
JR	30	2	28	6.67
MDAA	30	28	2	93.33
NO	30	2	28	6.67
N	30	2	28	6.67
RA	30	12	18	40.00
RAW	30	2	28	10.00
RPS	30	12	18	40.00
S	30	11	19	36.67
SA	30	30	0	100.00
SRD	30	20	10	66.67

AA	30	27	3	90.00
AS	30	16	14	53.33
BCL	30	28	2	93.33
DP	30	15	15	50.00
DK	30	18	12	60.00
DIS	30	29	1	96.67
FRWP	30	28	2	93.33
IRS	30	17	13	56.67
KEP	30	28	2	93.33
LAW	30	28	2	93.33
LA	30	19	11	63.33
NDS	30	18	12	60.00
PA	30	27	3	90.00
TOTAL	960	552	408	1836
MEAN	30	17.2500	12.75	59.58

Based on the table 3.6, it was found that the students mean score was 59.58. And the result of reliability of tryout was:

Table 3.7 Reliability Statistics

Cronbach's Alpha	N of Items
.961	30

The table 3.7 showed that the Cronbach's Alpha Point was 0,961, it was more than 0,70. So, it meant that the items of the instruments were reliable and could be used as the instrument of the research.

H. Index Difficulty of the Test

Index of difficulty is the percentage of students answering correctly each item in the test.

$$P = \frac{B}{JS}$$

Where :

P   : Proportion / Index of Difficulty

B   : Numbers of students who have right answer

JS   : Number of students taking the test

Dealing with index of difficulty, Nurgiyantoro (2010), present the criteria of difficulty used that "difficult, Middle, Easy". The criteria of index difficulty as follows:

Table 3.8 Index Difficulty of Question

Index of Difficulty	Interpretation
0,20 - 0,40	Difficult
0,41 - 0,60	Middle
0,61 - 0,80	Easy

Source: Nurgiyantoro (2010)

The result of difficulty index of tryout was.

Table 3.9 Difficulty Index of Try Out

Number of Student	Correct Answer of each Item	Difficulty Index	Criteria
32	16	0.50	Middle
32	19	0.59	Middle
32	18	0.56	Middle
32	28	0.88	**Easy**
32	16	0.50	Middle
32	16	0.50	Middle
32	19	0.59	Middle
32	19	0.59	Middle
32	30	0.94	**Easy**
32	19	0.59	Middle
32	16	0.50	Middle
32	16	0.50	Middle
32	19	0.59	Middle
32	19	0.50	Middle
32	16	0.59	Middle
32	19	0.59	Middle
32	19	0.59	Middle
32	19	0.59	Middle
32	16	0.50	Middle
32	19	0.59	Middle
32	16	0.50	Middle
32	19	0.59	Middle
32	12	0.38	**Difficult**
32	19	0.59	Middle

32	19	0.59	Middle
32	19	0.59	Middle
32	16	0.50	Middle
32	16	0.50	Middle
32	19	0.59	Middle
32	19	0.59	Middle

The Result Index Difficulty of Question was tabulated on the table below:

Table 3.10 The Result Index Difficulty of Question

Percentage	Level of difficulties	Number of Question	Total Number of Question
0,20 - 0,40	Difficult	23	1
0,41 - 0,60	Middle	1,2,3,5, 7, 10,12,13,14,15,16,17,18,19,20,21,22, 24,25,26,27,28,29,30	27
0,61 - 0,80	Easy	4,9	2
Total			**30**

Based on table above it could be seen for the instrument of test, the writer found some questions in some level of difficulties which there was 1 difficult questions, 27 middle questions, and 2 easy questions. So, it meant that there were 27 questions that have a good validity.

I. Technique for Analysis the Data

Test data analysis is carried out using the average value and percentage of learning completeness.

1. Scoring the students' correct answers of test:

$$X = \frac{B}{t} \times 100$$

Where:

X= the total students score

B= total of students correct answer

T= total of test item

Source: Sudjiono (2012)

2. Percentage Students Answer

The researcher calculated the percentage of students' score in pre-test and post-test by used the following formula:

$$P = \frac{F}{N} \times 100\%$$

Where:

P= Percentage of students answer

F= Frequence of Student Answer Score

N= Total of sample

Source: Sudjiono (2012)

3. Classifying the score of the students by using the following scale:

Table 3.11. The Description of Students Score Classification

Score Range	Predicate
80 – 100	Very Good
66 – 79	Good
56 – 65	Fair
41 – 55	Poor
00 – 40	Very Poor

Source: Arikunto (2012)

J. Statistical Analysis

After getting the students' scores, to analyzing the data, the writer used paired t-test in SPSS version 21. The researcher used SPSS version 21 (Paired Sample t-test) together result of the investigation order to know the significance the treatment test. There are two hypothesis as the conclusion of this analysis steps:

Ha : It is significant effective of using humor stories to improve students reading skill at tenth grade student of SMK Sentosa Bhakti Baturaja.

H0 : It is not significant effective of using humor stories to improve students reading skill at tenth grade student of SMK Sentosa Bhakti Baturaja.