

CHAPTER III

RESEARCH METHOD

In general, research methods discussed how the research was done. This chapter presented the researcher design, population sample and sampling, research instrument, validity, and reliability testing, data collecting method, data analysis and hypotheses testing. All of them concluded as below.

A. Research Design

In this research, the researcher used quantitative research. According to Creswell (2002:12) in quantitative research consisted of three design, they were experimental, correlation and survey. The researcher used the experimental design in this research. The experiment was a procedure for testing a hypothesis by setting up a situation in which the strength of the relationship between variable can be tested. Also, it established a possible cause and effect between the independent and dependent variable. The design of this research was pre-experimental research, which was intended to find out the difference on students' reading comprehension in recount text between taught before using DRTA strategy and those taught after using DRTA strategy. In addition, the experimental research design was research in which the investigator determines whether the activity or materials make a difference in result for the participant. This research was focused on the pre experimental group.

In this research, there were two variables; the independent variable (X) was a condition that influences other variable and the dependent variable (Y) was a condition influenced by experimental. In the dependent variable before the

manipulation of the independent X, it was usually a pre-test (before the experimental group is given treatment) and after the manipulation of the independent variable X, it was usually a post-test (after the experimental group is given treatment), stated by Donald (2010). The two variables as follows:

1. Independent Variable (X): DRTA (Direct Reading Thinking Activity) Strategy as a strategy in teaching reading.
2. Dependent Variable (Y): Reading comprehension skill of students in recount text.

The researcher chose pre-experimental as this research because in this school consisted of one class in the second grade of junior high school. This group was viewed from the different effect between using treatment with measuring the pretest and the post-test. The researcher used this class as a sample because it had some difficulties in reading comprehension as told on the background above. The students felt bored and not interested in joining the reading lesson. Besides that, the material chosen by the researcher was a recount text because the material was appropriate with the curriculum and level students ability. Therefore, the researcher took this class as a sample because of recount text tough in the second grade of junior high school. This material was also written in the newest curriculum at the last chapter. This school had one class in the second grade of junior high school level. So, the research took one group as a sample of the research.

The One Group Pretest-Posttest Design as follows:

Table 3.1 The One Group Pretest-Posttest Design

Pretest	Independent	Posttest
Y_1	X	Y_2

Where:

Y_1 : Pre-test

Y_2 : Post-test

X : Treatment on the experimental group

This research intended to investigate the effectiveness of using DRTA (Direct Reading Thinking Activity) Strategy towards reading comprehension skill at Second Grade of MTs Imam Al Ghozali Panjerrejo Rejotangan. This research intended to investigate the result using treatment at the dependent variable. The goal of the treatment was proving that the effect of the students reading comprehension skill. So, the effectiveness of that treatment was known as the significant score when the students taught using DRTA Strategy.

B. Population, Sampling, And Sample

The population was the large group about the generalization. Gay (1992: 124) stated population was the group of interest to the researcher, the group to which she or he would like the result of the study to be generalizable. On the other hand, the population was defined as all members of any well-defined class of people, events, or objects (Ary, et. Al, 2010: 148). Thus, the research held in MTs Imam Al Ghozali in the second grade of junior high school. Thus school was

taken for research to adjust to the vision and mission of the school. The school's vision was to synergize intellectuals with akhlakul kharimah. To achieve the intellectual categories, the strategy in teaching must be developed by the teacher in teaching learning process. Intellectual could be achieved if the students read the book and joining the classroom activity. Reading was one of many activity that could be become a media to get much information. One of the goals in reading was reading comprehension. The researcher gave the treatment used DRTA strategy toward the students in reading comprehension.

The one of the mission was to prepare the students to mastering, developing knowledge and technology. As the researcher told above, the developing strategy in teaching process was important to get the good result for the students. One of many ways to get it was used DRTA strategy to learn reading comprehension. DRTA strategy made the students learned reading comprehension specifically.

1. Population

Before the sample was collected, the researcher had to determine the population. The population was a whole subject were data collected. Ary et al (2010:148) stated population was all members of the well-defined class of people, event, or object. Therefore, the population was all of the subject where the data collected. This research conducted at MTS Imam Al Ghozali. This research was intended for the second grade of junior high school at MTs Imam Al Ghozali in academic year 2018/2019.

2. Sampling

In selecting the sample of the study, the researcher used a purposive sampling technique. According to Cohen et al., (2007) in the purposive sampling technique, the sample was satisfactory to specific needs. As its name suggests, the sample has been chosen for a specific purpose. The researcher took the eighth grade as the sample of the study because this class was low in reading.

3. Sample

The sample was a group of units selected from a large group (population) to represent it Fraenkel and Wallen (2009: 90). It means that a good sample must be representative of the entire as possible so that the generalization of the sample as true as population. Because in this school there was one class in the second grade of junior high school. Automatically, VIII Class took as a sample that consisted of 25 students. There were 10 male and 15 female at MTs Imam Al Ghozali in academic year 2018/2019 and it was the experimental and control class.

Table 3.2 Sample of Research

Sample of VIII		Total Participants
Male	Female	
10 students	15 students	25 participants

C. Research Instrument

The research instrument was a tool that was chosen and used by the researcher in their activities to gather for the activity to be systematic and facilitated by it. Data collection instruments were ways that researchers can use to collect data. Arikunto (1998: 130) stated that; the test questions, which used to measure the skills, knowledge, intelligence, achievement aptitude, and another capability of someone or a group of people. Based on the theories, it can be concluded that test is an assessment intended to measure test-takers knowledge, skill, aptitude, physical fitness, or classification in many other topics. It is in line with what Brown (1994: 253) stated that a test has a purpose of measuring a test measures a person's ability or knowledge. As experimental research, the instrument used in this research was a test, especially in reading test. According to Ary et al (2006:201) test was a set of stimuli presented to an individual in order to elicit responses on the basis of which a numerical score can be assigned. In other word, the stimuli gave an effect to the subject that can be seen from the measuring the numerical score from the result of giving stimuli. On this research, researcher chose a test as an instrument to see the different score after gave the treatment.

There were two kinds of tests in this study, those were pre-test and post-test. A pre-test was intended to measure students' reading achievement in recount text before the treatment given. While post-test was to measure students' reading achievement after the treatment given. The tests were in the form of subjective test reading recount text to measure students' reading achievement.

Those were some instruments that given to the students conclude that tryout, pretest and post-test as follows:

a. Try out

The tryout is an instrument that held before pretest and posttest was given to the chosen class. The purpose was to measure the validity and reliability of the instrument. Try out was administered in another class which was not involved during the research process. If the class that administrated just one, it can be used for another school but at the same level. In this research, the researcher used another school to hold the try out but still on the same level.

b. Pretest

The pretest was an instrument that given after getting validity and reliability instrument in try out and held before instrument posttest. The goals of this instrument were to measure the understanding students in reading comprehension especially in recount text. This test consisted of 25 question and multiple choice form.

c. Posttest

Posttest in the last instrument that administered to the students in the class. The aim was to look changeable on students reading comprehension material between the learning process with explanatory strategy and learning process through DRTA strategy. There were 25 questions in this test at the form of multiple choice.

To get the best result of the test. There were some steps that show the order of instrument administered (Arikunto: 2010). They were as follows:

1. Review of Literature

The first step is to get validity and reliability at reading comprehension in junior high school. So, the researcher observed the syllabus and textbook that use in the second-grade junior high school, especially in English lesson. The aim was to get some drafting of information related to the material in the class. The researcher also consultancy with the teacher about deciding the material appropriate with the syllabus.

2. Drafting Instrument

After getting some information from reviewing literature, the researcher starts to draft an instrument that appropriates with the materials of junior high school.

3. Expert Validating

After finishing the drafting instrument, the instrument should be validated by the expert like Lecturer or English Teacher who master the reading materials especially recount text. The purpose of the expert validating was to know how much valid the instrument was either related to its construct validity, face validity, or content validity. So, in these steps the researcher got agreement from the English teacher to conduct the tryout.

4. Conducting Try-Out

After revising the draft of the instrument, the researcher was conducted try-out to the eight grade students of SMP Terpadu Al Anwar Durenan, on 07 March 2019. The tryout test has been conducted to the VIIIIB class, which consisted of 32 students, then the researcher found the validity, and reliability at this moment.

To know the result of the tryout, the researcher used a scoring rubric to measure the result of the tryout. The scoring was only one correct answer for each item. According to Affandi (2013:69), the scoring guide was the formula below:

$$\text{Score} = \frac{\text{number of correct items}}{25} \times 100$$

(number of the question)

So, this multiple choice was valid by 25-question item checked by used SBM SPSS v18.0 by using the form of *Product Moment Correlation*, and valid as reliability analyzed using Alpha Cronbach. Then, the researcher took 25 questions to make it valid as a pre-test and post-test.

5. Final Draft Instrument

The last step was the final instrument means that the instrument has a good or best quality where the instrument is appropriate.

D. Validity and Reliability Testing

Validity was defined as the extent to which a concept is accurately measured in a quantitative study. For example, a survey was designed to explore depression but actually measures anxiety would not be considered valid. The following was reliability testing which measure of quality in a quantitative study or the accuracy of an instrument. In other words, the extent to which a research instrument consistently has the same results if it was used in the same situation on repeated occasions. In this research, reading comprehension in recount test used to measure the students' achievement in reading comprehension after they have been taught by using DRTA strategy. Validity and reliability testing of this test was very important to know scores derived from instruments used in the research.

1. Validity

Fraenkel and Wallen (2005:113) stated that a valid instrument is measuring what it supposed to measure. Validity is the most important idea to consider when preparing or selecting an instrument for use. An instrument or a test can be called valid if it at least consisted of the content and constructs validity. Therefore, in this study, the researcher used content validity, construct validity and face validity to know the validity of the test.

a. Face Validity

Face validity becomes one of the validity types that can be established. Validity was a measurement that showed the validity level of the instrument Arikunto (1998: 160). Face validity was hardly a scientific concept that very important. Test takers, teachers, education,

authorities or employers may not accept a test, which does not have face validity. In this test, some aspects should be considered from this test to make a good test based on the advisor lecturer and the teacher of the second grade of junior high school.

b. Content Validity

Content validity means there was a correspondence between curriculum objectives and the objectives being tested. It means that the test said to have content validity if its objectives were same with the curriculum objectives. The researcher developed the test by referring to the syllabus that contained standard competence and basic competence. In this case, the researcher also checked the curriculum set to know what students must be able to do in a certain level, especially in the second grade of junior high school, and the researcher found that in the second semester they have to be able to identify the recount text. Those were the content validity which was made by the researcher.

Table 3.3 Content validity of pre-test and post-test

No	KD	Indicators	Test items	Total
1	<i>3.11. Membandingkan fungsi sosial, struktur teks, dan unsur kebahasaan beberapa teks personal recount lisan dan tulis dengan memberi dan meminta informasi terkait pengalaman pribadi di waktu lampau, pendek dan sederhana, sesuai dengan konteks penggunaannya.</i>	Be able to determine certain information in the reading text	5,8,1 7,22, 24	6
		Be able to determine the time and place that happened in the story. Be able to determine the participant such as who and what is involved in the story. Be able to determine the problem in the story.	2,13,16, 20,23	5
		Be able to determine the problem in the story.	3,6,9, 11,18	5
		Be able to determine	15,25,12	3

		the problem resolved in the ending of the story.		
		Be able to identify the appropriate title of the story. Be able to identify the characters and place in the story. Be able to describe the characters and setting in the story. Be able to determine the moral value of the story.	4,7,10, 14,19,21	6
2	Total			25

c. Construct Validity

Brown (2004: 45) mentioned that a construct is any theory, hypothesis, or model that attempts to explain observed phenomena in our universe of perception. Based on the theory above, the researcher asked the students to answer the question about recount text based on

the text to measure students' achievement in reading comprehension in the form of multiple choices to fulfill the construct of reading test and valid in term of construct validity. Therefore, the test has fulfilled the theory of reading in part of recount text. The test contains seven texts all of which were about recount text especially in the personal recount that contain the orientation, events and re-orientation and the test was appropriate for testing reading comprehension.

2. Reliability

Reliability is equipment for verifying data which the data must be reliable and consistent. This statement supported by Carmines and Zeller (1979) stated that Reliability concerns the extent to which a measurement of a phenomenon provides stable and consist result. The Harrison in Johnson (2001) says that the reliability of a test is its consistency. Thus, reliability is a measure of accuracy, consistency, dependability or fairness of scores resulting from the administration of the particular examination. Ary et al (2006:236) also defined reliability as the degree of consistency with which an instrument measures whatever it was measuring. In this study, the researcher conducted try out before pre-test and post-test. After that, the researcher uses SPSS statistics 18.0 to calculate the score during trying out session. The researchers conducted try out to 32 students of VIII B at SMP Terpadu Al Anwar on 7 April 2019. Cronbach's alpha reliability (Cronbach, 1951) was one of the most widely used measures of reliability in the social

and organizational sciences. The criteria of validity of the instrument can be divided into five classes as follows (Ridwan, 2004: 118);

1. If the *alpha Cronbach* score 0.00-0.20: less valid
2. If the *alpha Cronbach* score 0.21-0.40: rather valid
3. If the *alpha Cronbach* score 0.41-0.60: enough valid
4. If the *alpha Cronbach* score 0.61-0.80: valid
5. If the *alpha Cronbach* score 0.81-1.00: very valid

Based on the tryout of the test that has been done on 7 April 2019, the researcher can find the result of the reliability of the test. The researcher used SPSS program to calculate it and the result of the test could be seen as follows:

Table 3.4 The Result of Reliability Testing by Using Cronbach's Alpha

Case Processing Summary

		N	%
Cases	Valid	32	100.0
	Excluded ^a	0	.0
	Total	32	100.0

Case Processing Summary

		N	%
Cases	Valid	32	100.0
	Excluded ^a	0	.0
	Total	32	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.728	26

From the table above, it showed that the Alpha value was 0.728, thus the value is included in *alpha Cronbach* score 0.61-0.80, it could be concluded that the test has valid reliability.

E. Data Collecting Method

In collecting data for this research, the researcher used a reading test as the instrument, the kinds of test given to the students were as follows:

1. Pre-test

A pretest is an instrument that given before giving treatment to the students to measure on some attribute or characteristic that the researcher assesses for the

participant in an experimental before they receive treatment. At this research, this research conducted before taught by Direct Reading Thinking Activity Strategy. Creswell (2008:301). At the first meeting, the researcher gave a pre-test to the students. It was conducted to know how far the students score in reading. This test is given in order to know how far the students ability in reading comprehension of recount text. The pre-test comprised 25 items, in the form of multiple choices items of recount text.

2. Treatment

After conducting the pre-test, the researcher gave the treatment to the students for 60 minutes in a meeting. The researcher applied the technique or treatment using *DRTA strategy*. Here the steps of the treatment were as follows:

Table 3.5. Steps in *DRTA Strategy*

No.	Steps	Activities
1.	Pre-Activity	<p>a. Preface</p> <ul style="list-style-type: none"> • The researcher greets the students by saying salam and asking “Good morning? How were you today? (friendly) • The researcher checks students’ attendance by asking, “Who is absent today?” <p>b. Apperception</p> <ul style="list-style-type: none"> • The researcher asks several questions to students randomly: “Have you ever been on vacation? Please tell us your memorable

		<p>experience about your vacation” (humble)</p> <ul style="list-style-type: none"> • The researcher writes the students’ answers on the whiteboard • The researcher mention the material
2.	Main-Activity	<p>1. Pre-test</p> <ul style="list-style-type: none"> • The researcher explains a little about recount text • Students do the exercise about recount text based on the pre-test question

		<p>2. Treatment</p> <ul style="list-style-type: none">• The researcher explains the Basic explanation of recount text. Consist of<ol style="list-style-type: none">a. Definition of Recount Textb. General structurec. Language featuresd. Short Example of Recount Text• The researcher introduces and explains DRTA Strategy start from the purpose and steps in applying to the students.• Students were trying to identify the structure and meaning.• The researcher told to the students to make a group consisted of 4-5 students.• The researcher wrote the title of the recount text on the whiteboard as the first clue in DRTA Strategy.• The researcher played the first video on the projector.• The researcher asked the students identified condition that conducts on the video• The students identified the video and making at least 3 statement from the first video.
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		<ul style="list-style-type: none">• Then after the students complete the task the first video, it continued by do the task in the second video by the same way with the first step of the first video.• After there were 4 videos played by the researcher, the researcher divided the recount text into each group,• All of the students read the recount text in silent condition. This parts spent around 15 minutes.• The students compared the first prediction statement before silent reading and after reading.• They found the right statement and the false statement.• The students made a conclusion about his statement. They measured how much the true prediction and the false prediction.• The students submitted the result to the researcher.
		3. Post-test

		<ul style="list-style-type: none"> • The researcher discusses the result of using DRTA Strategy with the students • Students do the exercise about recount text based on the post-test question
3.	Post-Activity	<ul style="list-style-type: none"> • The researcher asks the students whether they enjoy the lesson or not (honesty) • The researcher reviews the materials by asking students what they have learned today (responsive) • The researcher closes the lesson by saying “goodbye” (caring)

3. Post-test

Post-test was given after the researcher conducted the treatment. It was given to investigate students reading comprehension score after doing the DRTA strategy as the treatment. The post-test is a measure on some attribute or characteristic that was assessed for participants after a treatment. Creswell (2008:301). The researcher conducted post-test after conducting the teaching through DRTA strategy. The post-test comprised also 25 items, in the form of multiple-choice items.

F. Data Analysis

Data analysis was used by the researcher in collecting the data. The data was taken from the result of pretest and post-test given to the students. The researcher used statistical data analysis technique to know the difference score between the students' achievement in reading ability before and after being taught by using DRTA strategy. Data analysis in research includes scoring technique, data analysis on the pre-test and post-test:

Analyzing data is a process of analyzing the acquired from the result of the research. The data which is needed in this research is students' comprehending about the text of the eighth-grade students of MTs Imam AL Ghozali Panjerrejo Rejotangan in the academic year 2018/2019 before and after taught by using DRTA Strategy. To analyze the data, the author used statistically calculation of the test to determine the final calculation, which was done to measure the last score of the research test.

The collected data could be analyzed by using Paired-Samples T Test in IBM SPSS Statistic 18.0 version. In this case, discussing the relationship between significant value and significant level. Significant values are the output of calculating hypothesis by Paired-Samples T-Test. Meanwhile, significant level referred to the standard level of hypothesis, it is 0.05. The criteria for accepting or rejecting the null hypothesis could be seen;

a. H_0 is rejected if significant value < 0.05 . It means there is a significant difference score on the students' reading comprehension before and after being taught by using DRTA strategy.

b. H_0 is not rejected if significant value > 0.05 and the alternative (H_a) is rejected. It means there is no significant difference score on the students' reading comprehension before and after being taught by DRTA strategy.