### **CHAPTER I**

#### INTRODUCTION

#### A. Background

English is considered to be a foreign language more to the second language in Indonesia and thought through lesson subject in the majority of Indonesian schools. As an international subject, it needs 6 years time to be learned. Start at high school, further at university level. Students are considered to be proficient at Engish when they are able to communicate effectively in this foreign language.<sup>1</sup> It becomes international language to unite the world. In the era of globalization, learning English is very important because English is able for linking and make easily people in the most of countries are communicated each other based on the development in the field of economic, business, education and also politic. It applies to interact to each other, peculiarly with the foreigners. In building a good communication we should understand the rules of the way to interact.<sup>2</sup>

Learning a language means learning to use that language to communicate both in oral from (listening and speaking) and written from (reading and writing). Learning a language particularly learning English, involves four basic skills: listening skill, speaking skill, reading skill, and writing skill. They are called language skills.

Beside the language skills, English has some elements which can be taught to the students. Those elements are pronunciation, vocabulary, and grammar. In

<sup>&</sup>lt;sup>1</sup>Rudiati, Comparative Study Of Students' Speaking Abilitythrough Clamshell Technique And Small Groupdiscussion At The Second Year Students Of Smpn 2labuhan Ratu, East Lampung (Universitas Lampung, 2018) p.2

<sup>&</sup>lt;sup>2</sup>Parmawati, A. Using Analytic Teams Technique To Improve Students'speaking kill. Edulitics (Education, Literature, And Linguistics) Journal, (2018), 3(2), 21-25.

order to learn English well, both the language skills and elements of language are inter related each other.

They cannot be separated. The element of language can complete the language skills. To learn English, student should be able to use appropriate basic structural patterns, master pronunciation, grammar and vocabulary. Good mastery of vocabulary is important for anyone who learns the language used in writing, reading, speaking and listening. The learners of foreign language will speak fluently and accurately, write easily and understand what the people hear.

Pronunciation is an important element too to be used in a good communication. People do not only understand the language but also need to know how to be good in pronunciation. Ability of pronunciation refers to use language with good pronunciation, understandable and acceptable. By doing pronunciation correctly toward on language sound, syllable, words, phrases, and sentences commonly, the context expressed by someone will understand the listener without misunderstanding.<sup>3</sup> It helps people to form words, sentence and good sound. People will not get misunderstanding in communication with the others if they are good in pronunciation. Grammar also is an important element to form words and builds English sentences. The form of words can change and can be varied into sentences in that language based on the grammar used. It can show our meaning in communication so that other people can understand our message. Therefore, the student should master it.<sup>4</sup>

In this research, the researcher only focuses on grammar element. It is a rule to create a sentence, it can influence the way of communication can be delivered and received. It is a rule of language which has conventional

<sup>&</sup>lt;sup>3</sup>Djiwandono, S. *Tes Bahasa Pegangan Bagi Pengajar Bahasa*. Jakarta: PT INDEKS. (2011) p. 123

<sup>&</sup>lt;sup>4</sup>Harmer, Jeremy.. *The Practice of English Language Teaching* (Third Edition Completely Revised and Updated). Longman. 2001 p.21

arrangement to make sentences and convey larger meaning. Some of them are tenses, passive voice, sentences, parts of speech, conditional sentences, and many more.<sup>5</sup>

It also is one of the English language elements which is very important to be mastered in all skill of language such as speaking, reading, and writing. It covers many themes that may confuse students' on memorizing and understanding them.<sup>6</sup> The students are usually confused of the rules and the use of tenses. The students sometimes get bored with the teaching-learning process that is employed by the teacher in teaching grammar. The problems often encountered by students while studying English. It is boredom in studying the basics of English tenses because they use books as the media, and most of them felt difficult to memorize all of the materials that have been studied in the school. Besides that, the students fear of the grammar, so they neglect grammar. It made a lot students have low scores on English and less confident to speak English in front of the public because they failed to mastery English grammar.

Grammar is essentially about system and pattern we use to select and combine words. In order to communicate we must share a common system which is why people who speak different language cannot understand one another. People have to know about grammar in order to use the language appropriately in social contexts. Some see the grammar, whether referring to language or to other systems of human communication, is about how parts of the system combine in order for people to communicate. Fundamentals components of the language system include: a) the words, which is called the lexis, b) the way we change

<sup>&</sup>lt;sup>5</sup>Argawati, *Think-Pair-Share: Its Implementation To Improve Students' Capability On Understanding Grammar On The Second Semester Students Of Stkip Siliwangi.* (Journal Of English Pedagogy, Linguistics, Literature, And Teaching), (2017), 5(1).

<sup>&</sup>lt;sup>6</sup>Rahma, Nasmilah & Farisatma. *Applying Group Work to Improve Student's Grammar Achievements*. (2017), 3(5), 1971–1975.

words, which is called morphology, c) the way we order words, which is called syntax. It can be described as the rules of language structure or how a language's sentences are formed.

Aside of grammar, tenses is also important to make and divide words based on the context and the time. Tenses simply means time, the form of verb shows the time of current event, the time changes and follows the time event, time in tenses is divided into present, past, future, and past future, while event is divided into simple, continuous, perfect, and perfect continuous. There are 6 forms of simple tenses that consist of simple, present, past, continuous, perfect, and future, by the development of knowledge and time now, they have evolved into 16 forms of tenses, 12 real tenses and 4 conditional tenses. In this subject, the researcher will focus on 6 forms of tenses, namely simple present, present continuous, present perfect, simple past, past continuous, and simple future, the researcher chooses these tenses because they are commonly met by students in English subject on high schools.

The people consider tenses as relatively easy subject and do not really put lot of attention on it. Unfortunately less they know that tenses have more than just showing the time, it is important in the implementation in 4 main skills of English. In fact, tenses actually pretty difficult subject to be mastered by students, because of their forms and changes, students find hard time to understand the correlation of tenses and the implementation in daily practice.

Based on the pre-observation done by the researcher on July 27th in SMA Islam Athirah. The researcher interviewed the teacher Ms. Yuli about the student ability to understand six tenses, the researcher found some problems in learning English, especially the student understanding about the tenses. They lack of tenses undestanding and their level of self confident. These issues can be solved by giving reinforcement to the students in order to motivate and increase their self esteem, also pushing them to understand this subject better. By using this method, the students are hoped to be able to understand 6 forms of tenses to apply them with less error.

Reinforcement is one of the best ways of external motivation to help students in learning and understanding of these tenses. "Reinforcement refers to a process in which consequence, a reinforcement is given following a desired behavior to increase the like hood that the behavior will occur again under similar conditions".

Skinner, reinforcement theory is one of the motivation theories; it states that reinforced behavior will be repeated, and behavior that is not reinforced is less likely to repeated<sup>7</sup>. Reinforcement is divided into two called verbal and non-verbal reinforcement. Verbal reinforcement is given through words or sentences as like complementing students or congratulating them for what they have done. While, non-verbal reinforcement is given through gesture, proximity, activity, token, symbol, contact and partial.

The external motivation is reinforcement while the internal motivation comes after it, it has tons of varieties, and however in this case verbal reinforcement is considered to be one of the most suitable options. It is because verbal reinforcement such as praise is able to raise students self confidence and motivate students to study more. One of teachers' obligations is to motivate students, therefore students actively need positive reinforcement input from their teachers actively. By applying this method the teacher hoped that this is best act to motivate students in the most suitable and convenient way.

<sup>&</sup>lt;sup>7</sup>Agus Wibowo. Reinforcement Application By Subject Teacher and implications of Guidance and Counseling. Retrieved Februay 24th

<sup>2021.</sup>https://media.neliti.com/media/publications/165280-ID-none.pdf

The students who have learnt English intensively should find no problem in interacting orally to one another by using English with correct tenses. However, it is not completely true on the field, contrary with the popular believes the students in SMA Islam Athirah Bone still find some difficulties in mastering 6 forms of English tenses, based on the previous observation the number of students find it difficult to use tenses proficiently.

The 10th grade students of SMA Islam Athirah Bone are the target of this study, in SMA Islam Athirah Bone the students have little amount of interest in learning English, tenses is also on the top list. They stated that learning tenses is very difficult, in fact they do not really understand much about the form changes and the structural application, this urgent situation must be solved by giving reinforcement to the students. Therefore a study needs to conduct to know the effectiveness of giving reinforcement to students.

Therefore, based on the explanations above the researcher will conduct a research at the 10th grade students of SMA Islam Athirah Bone entitled: **"TEACHER REINFORCEMENT TO THE STUDENTS TO UNDERSTAND THE SIX ENGLISH TENSES AT THE TENTH GRADE OF SMA ISLAM ATHIRAH BONE."** 

### **B.** Problem Statement

Based on the background of the research above, the researcher formulates research question as follow: does the use of reinforcement effective to the student understand the six tenses at the tenth grade students of SMA Islam Athirah Bone?

# C. Operational Definition

The tittle of this research is Teacher Reinforcement to the Students to understand the Six English Tenses at the Tenth Grade of SMA Islam Athirah Bone. Comprehending the tittle above, the definition of each word is explained as follows:

### Reinforcement

The act of making something stronger.<sup>8</sup> Reinforcement refers to a process in which consequence, a reinforce, is given following a desired behaviour to increase the likehood that the behaviour will occur again under similar conditions.<sup>9</sup>

# Understand

Know or realize the meaning of words, a language, what somebody says, etc.<sup>10</sup>

## Tenses

Verb form that shows the time of the action or state.<sup>11</sup> It is a form that indicates the time or state of action or event.<sup>12</sup> In this research, the researcher only focus on six tenses.

<sup>&</sup>lt;sup>8</sup>Oxord University Press, *Oxford Learner Pocket Dictionary Fourth Edition*, 2008 (great clarendom street, oxford ox2 6DP)p.357

<sup>&</sup>lt;sup>9</sup>Kefas Angandrowa Dwi Putra Zebua, *The Use Of Verbal Reinforcement To Motivate The* 11<sup>th</sup> grade Students Of Sma Budya Wacana Yogyakarta To Speak English, (Universitas Sanata Dharma Yogyakarta, 2017)p.8

<sup>&</sup>lt;sup>10</sup>Oxord University Press, *Oxford Learner Pocket Dictionary Fourth Edition*, 2008 (great clarendom street, oxford ox2 6DP)p.483

<sup>&</sup>lt;sup>11</sup>Oxord University Press, *Oxford Learner Pocket Dictionary Fourth Edition*, 2008 (great clarendom street, oxford ox2 6DP)p.458

<sup>&</sup>lt;sup>12</sup>Andi Faizal, S.Pd, *Master of English study*, (Nas Media Pustaka, Jl. Batua Raya NO.550 Makassar 9023)p.58

#### D. Objective and Significance of Research

Based on the problem statement that has been formulated before, the objectives of this research is to know the effectiveness of teacher reinforcement to understand six tenses at 10th grade students of SMA Islam Athirah Bone".

The significance of this research can be concluded as follows:

- 1. This research is expected to bring a valuable information and contribution for teaching and learning process especially in tenses learning.
- 2. The result of this research is expected to give alternative contribution and information about Reinforcement to the students in tenses learning.

#### E. Previous Related Finding

Review of literature provides the theoretical background, which can support the main chapter or analysis. This part presents various terms and theories and related research studies that are relative and helpful to this analysis.

Some researchers have done studies on writing method and its contribution on English teaching. Their findings are as the following;

Wulandari. Under tittle "The Student Teachers' Verbal and Non-Verbal Reinforcement during Teaching Practice in Microteaching Class". the aims of this research are to know types of verbal and non-verbal reinforcement given by student teachers in microteaching class and to describe the way student teachers give it to their peers who take role as students. A qualitative design with naturalistic approach was employed in this research to gain the data needed. There were 8 student teachers from 8 different microteaching classes who had participated in this research. The data were collected through observation, interview and student teachers' teaching practice videos. This research revealed that student teachers gave verbal reinforcement in form of word such as good, great, right, andin form of sentence as like "I think your suggestion is amazing..." and so forth. On the other hand, types of non-verbal reinforcement performed by student teachers were gesture, proximity, activity, and token/symbol. In gestural reinforcement, student teachers performed facial expression like smiling and body gesture like finger pointing, clapping hand, and nodding. The student teachers also walked to and stood beside students' seat as proximity reinforcement. In addition, various activities such as debate activity, presentation, game, and displaying students' work in front of the class were provided by student teachers to reinforce students. For the token or symbol reinforcement student teachers gave emoticon, love and star to students' work as evaluation and appreciation. The finding also showed that student teachers gave reinforcement through four ways such as to individual, to group, as soon as students performed desirable behavior and use reinforcement in various types and patterns.<sup>13</sup>

Kefas Angandrowa Dwi Putra, "The Use of Verbal Reinforcement to Motivate The 11<sup>th</sup> grade Students of Sma Budya Wacana Yogyakarta to Speak English". The results of the study showed that there were two types of verbal reinforcement, which were words and sentences. Mostly, the teacher used wordtype verbal reinforcement. It was implied from the students' replythrough the questionnaire. Futhermore, the findings showed that the students are more familiar with the word-type verbal reinforcement. Moreover, the researcher found that the students felt motivated when being praised. In line with the teacher's point of view, giving verbal reinforcement as inducements and rewards is a factor to

<sup>&</sup>lt;sup>13</sup>Di Adha Wulandari, *The Student Teachers' Verbal And Non-Verbal Reinforcement During Teaching Practice In Microteaching Class*, (Sunan Ampel State Islamic University Surabaya, 2019)p. V

motivate the 11th grade students of SMA Budya Wacana Yogyakarta to speak English.<sup>14</sup>

Yuli Eka, An Analysis of Teachers" Reinforcement toward Student"s Interaction in Teaching Speaking At SMPN 7 Padang by Yuli Eka Putri. The aims of this research is to describe type of reinforcement that is frequently used in teaching speaking at SMPN 7 Padang. The result of this study show that the teacher used both verbal and non-verbal reinforcement in teaching speaking and non-verbal reinforcement is type of reinforcement that is most frequently used during teaching learning.<sup>15</sup>

Vivek Kumar Stephen and Dr. Prem Prabha Singh (2017). Study of the Relationship between Student and Teachers in Terms of Reinforcement in Primary Schools of the Allahabad. The purpose of the study was to determine relationship between teacher and students in terms of Reinforcement Their Effectiveness academic performance of the Primaryschools student of Allahabad district. The study employed a Mixed Methods design in which both quantitative and qualitative data were collected. The study has targeted the students from public and private schools students of rural and urban area of the Allahabad district. Data was collected by using check-lists and interview schedules.<sup>16</sup>

Siti Yunanik. The Provision of Verbal and Non-verbal Reinforcement to Improve Student Learning Achievement in Heroism and Patriotism Subject Matter. The purpose of this study is to improve student learning achievement on the heroic and patriotism figures subject matter through the provision of verbal

<sup>&</sup>lt;sup>14</sup>Kefas Angandrowa Dwi Putra Zebua, *The Use Of Verbal Reinforcement To Motivate The 11<sup>th</sup> grade Students Of Sma Budya Wacana Yogyakarta To Speak English*, (Universitas Sanata Dharma Yogyakarta, 2017)p. viii

<sup>&</sup>lt;sup>15</sup>Yuli Eka Putri, "An Analysis Of Teachers' Reinforcement Toward Student's Interaction In Teaching Speaking At SMPN 7 Padang", (STKIP PGRI Sumbar, 2017) p. 2

<sup>&</sup>lt;sup>16</sup>Vivek Kumar Stephen & Prem Prabhak Singh, "Study of the relationship between student and teachers in terms of reinforcement in Primary schools of the Allahabad", IOSR Journal Of Humanities And Social Science (IOSR-JHSS). Vol. 22 No. 12, December 2017. 26-33

and non-verbal reinforcement. This research is a class action research (CAR) with the subject of the research were class IV students in semester 1 of SDN 2 Sandik, amounting to 28 students. Student learning achievement data were collected using test instruments and analyzed descriptively-qualitatively. The results showed that the student learning achievement in the first cycle was in the medium category (mean = 5.50) increased in the second cycle (mean = 8.25) with the good category.<sup>17</sup>

Referring to previous findings above indicate that there are a lot ways to use reinforcement, in this research the researcher will conduct reinforcement to make the students understand six tenses. It is different with the other writers subject that the researcher will apply reinorcement in his research.

<sup>&</sup>lt;sup>17</sup>Siti Yunanik, "The Provision of Verbal and Non-verbal Reinforcement to Improve Student Learning Achievement in Heroism and Patriotism Subject Matter", Jurnal Penelitian dan Pengkajian Ilmu Pendidikan: e-Saintika. Vol. 2 No. 2 June 2019. 98-104

# F. Conceptual Framework

The conceptual framework is concluded by the researcher as follows:

Figure 1.1

**Conceptual Framework** 



On the theoretical framework above, it is understandable that the researcher gives the students a treatment through Reinforcement. This way is expected to be able to develop the students' ability in understanding 6 tenses and the success of this way will be seen by comparing the students' achievement in 6 tenses test in the end of the study.

# G. Hyphotesis

In this research, some hyphotesis can be concluded as follow:

- 1.  $H_0$  (Null Hypothesis): Reinforcement does not effective to the students understand the six tenses for the second level.
- 2.  $H_1$  (Alternative Hypothesis): Reinforcement effective to the students understand the six tenses for the second level.

### H. Methodology of Research

This term describes method of the research, research design, research variables, location population and sample of the research, data and source of data, instrument of the research, procedure of collecting data and technique of data analysis.

a. Research design



This research applied pre-experimental design with one group pretest and post-test design. The diagram is presented as follows:

Figure 1.2

## Pre-experimental Design

Where:

<sup>&</sup>lt;sup>18</sup>Muhammad Basri, Fundation of Research Method, Makassar, 2010, P. 19

The design above means that before giving treatment of Reinorcement, the researcher would give pre-test to compare the result of post-test after doing treatment. The post-test was given to know the effectiveness of teacher reinforcement to understand six tenses after doing treatment.

b. Research Variable

There are two variables in this research namely: Independent and dependent variables. Teacher Reinforcement as independent variable and to understand six tenses as dependent variable.

- c. Location, Population and Sample
  - 1. Location

The research site is conducting research to obtain data derived from the respondents. The selected research site was SMA Islam Athirah Bone located on Sungai Musi street, Panyula, Bone regency, South Sulawesi.

2. Population

In each research, it is really important to put population because the more population researcher has has, the more data researcher will get. The population of this research was the second year students Sekolah Islam Athirah Bone in academic year 2021-2022. It has 79 students of three classes or IPA1, IPA2 and IPS class. 3. Sample

Sample is part of population that the real aspect of research and to get conclusion. It was taken by using cluster sampling, and the sample of this research was IPS class of the first year of Athirah Islamic Boarding school Bone. The number of the sample in this research was 27 students.

d. Instrument of the Research

In collecting data, the researcher used multiple choices test by giving students papers that consist of 30 numbers then the researcher asked the students to choose the correct answer that has been tought to the students. Beside, this way also helped the students to explore and stimulate their tenses understanding.

e. Procedure of Collecting Data

The procedure of collecting data of the research followed the procedure as follows:

1. Pre-Test

Before giving treatment, the researcher applied a pre-test to the students. The pre-test was intended to know the students' understanding in 6 tenses before giving reinforcement as treatment.

2. Treatment

After giving pre-test, the researcher tought 6 tenses by applying Reinforcement Method. The treatment was conducted six meetings and spent forty five minutes each meeting.

- a. First meeting
  - 1) The researcher introduced himself.
  - 2) The students listened to the researcher explanation.
  - 3) The researcher gave a brief explanation about 6 tenses.
  - 4) The researcher explained about simple present tense.
  - 5) The researcher distributed the papers to the students.
  - The researcher asked students to change the tenses in the sentences using Simple Present Tense.
  - Having done it, the researcher asked the students to read what they have written.
  - 8) The researcher corrected the mistakes
  - The researcher praised the students for their efforts for doing the assignments.
  - 10) The researcher asked the students if they have any questions and motivate them.
  - 11) The researcher thanked to the students and close the meeting.
- b. Second meeting
  - 1) The researcher began the class and greets the students.
  - 2) The researcher asked the previous lesson and reviews it.
  - 3) The researcher explained about present continuous tense.
  - 4) The researcher distributed the papers to the students.
  - 5) The researcher asked students to change the tenses in the sentences using present continuous tense.
  - 6) Having done it, the researcher asked the students to read that they have written.

- 7) The researcher corrected the mistakes
- 8) The researcher asked the students if they have any questions.
- The researcher encouraged students to not be afraid to make mistakes and praises them.
- 10) The researcher thanked to the students and close the meeting.

# c. Third meeting

- 1) The researcher began the class and greets the students.
- 2) The researcher asked the previous lesson and reviews it.
- 3) The researcher explained about simple past tense.
- 4) The researcher distributed the papers to the students.
- 5) The researcher asked students to change the tenses in the sentences using simple past tense simple past tense.
- 6) Having done it, the researcher asked the students to read that they have written.
- The researcher corrected the mistakes and encourages the students to not be afraid of making mistakes.
- 8) The researcher asked the students if they have any questions.
- The researcher motivated the students and concludes the meeting.

#### d. Fourth meeting

- 1) The researcher began the class and greets the students.
- 2) The researcher explained about Past Continuous tense.
- 3) The researcher distributed the papers to the students.

- 4) The researcher asked students to change the tenses in the sentences using past continuous tense.
- 5) Having done it, the researcher asked the students to read that they have written.
- The researcher corrected the mistakes and giving students compiments.
- 7) The researcher asked the students if they have any questions.
- 8) The researcher motivated the students and concludes the meeting.
- e. Fifth meeting
  - 1) The researcher began the class and greets the students.
  - 2) The researcher asked the previous lesson and reviews it.
  - 3) The researcher explained about present perfect tense.
  - 4) The researcher distributed the papers to the students
  - 5) The researcher asked students to change the tenses in the sentences using present perfect tense.
  - 6) Having done it, the researcher asked the students to read that they have written.
  - The researcher corrected the mistakes and gives students complements for their works
  - 8) The researcher asked the students if they have any questions.
  - The researcher motivated the students and concludes the meeting.
- f. Sixth meeting
  - 1) The researcher began the class and greets the students.
  - 2) The researcher asked the previous lesson and reviews it.

- 3) The researcher explained about simple future tense.
- 4) The researcher distributed the papers to the students.
- 5) The researcher asked students to change the tenses in the sentences using simple future tense..
- 6) Having done it, the researcher asked the students to read that they have written.
- 7) The researcher corrected the mistakes.
- 8) The researcher asked the students if they have any questions.
- The researcher thanked the students for their participation in his research.
- 10) The researcher motivated the students and concludes the meeting.
- 3. Post-test

After applying the treatment, the researcher gave the post test to students to obtain data, whether there is some progress of students' understanding of 6 tenses after having treatment or not.

#### f. Technique of Data Analysis

To measure the students' understanding of six tenses the researcher used the criteria where as follows:

1. Scoring the components of tenses

The researcher used test to measure the students' reinforcement understanding of six tenses that was included present formation, present - sentence recognition, present - book recognition. The researcher gave score for every component accompanying the following rule: To measure the quality of the students' scores on the five components observed, the data were classified into four classifications by adapting to the scoring system of English language as follows:

Table	1.	1
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The scoring system	
Number of question	Quality of question
1-25	4
Maximum score	100

Note:

Correct answer = 100

Incorrect answer = 0

Score =  $\underline{Score}$  <sup>19</sup>

Maximum score

	1	
1 4010	±•	

Classification	of the	e students	score
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No.	Score	Classification
1	80-100	Exellent
2	66-79	Good
3	56-65	Fairly Good

<sup>&</sup>lt;sup>19</sup>Anonym.Retrieved february 25th 2021 from

https://www.duniasosial.id/2020/09/contoh-rubrik-penilaian-soal-pilihan\_30.html, accessed on february 25th 2021

4	46-55	Fair
5	0-45	Poor

2. To calculate the mean score of the students' test, the researcher used formula as follows:

$$M_x = \frac{\Sigma X}{N}$$

Where:

$M_{\rm x}$	= mean score
$\Sigma X$	= the sum of all scores
N	= Total number of $subject^{20}$

3. To find out the standard deviation of the students' pretest and post test, this formula will be used:

$$SD = \sqrt{\frac{\sum X^2 - \frac{(\sum X^2)}{N}}{N-1}}$$
Where :  

$$SD = Standard \text{ deviation}$$

$$\sum X = The \text{ sum of all scores}$$

$$N = The \text{ total number of students.}$$

$$\sum X = The square \text{ of all scores.}^{21}$$

4. To calculate the value of t-test of the hypothesis concerning the difference between pre-test and post-test using the following formula:

<sup>&</sup>lt;sup>20</sup>Anas Sudijono, *PengantarStatistikPendidikan*, (Jakarta: RajawaliPers, 2012), p.81

<sup>&</sup>lt;sup>21</sup>L.R.Gay, *Educational Research : Competence for Analysis an Application*, (Colombus : Charles E. Merril Publishing Company, Eighth Edition 1981), p. 321

$$t = \frac{\overline{D}}{\sqrt{\frac{\Sigma D^{2} - \frac{(\Sigma D)^{2}}{N}}{N(N-1)}}}$$

where: T = Test of significance

- $\overline{D}$  = The difference of mean score
- $\Sigma D^2$  = The sum of the difference score
- = Total numbers of sample.<sup>22</sup> Ν
- 5. Calculating Cohen's es (effect size), the researcher uses this formula:

$$Es = t \sqrt{\frac{1}{N}}$$

Where :

Es = Effect sizet = the result of t-test N = the number of students

Table 1.3

The Criteria of Cohen's Effect Size

Effect size	Qualifications
ES ≤ 0,2	Low effect
0,2 < ES < 0,80	Moderate effect
ES > 0,80	High effect <sup>23</sup>

 <sup>&</sup>lt;sup>22</sup>Bahrani, Improving Students Reading Comprehension Using Word to Paragraph Analysis, Unpublished thesis (UNM Makassar, 2006) p. 490-491
 <sup>23</sup>Anonym.Retrieved on february 25th 2021 from https://drive.google.com/file/d/0B-

k3cSUkM3IySGkxd0ZDVUcxaUk/view. Accessed on february 25th 2021