THE CORRELATION BETWEEN STUDENTS' VOCABULARY AND GRAMMAR MASTERY AND THEIR READING COMPREHENSION ABILITY AT THE SECOND YEAR OF MAN 2 BANDAR LAMPUNG
(A Script)

By:
Nadya Ayu Paradita


ENGLISH EDUCATION STUDY PROGRAM DEPARTMENT OF LANGUAGE AND ARTS EDUCATION FACULTY OF TEACHER TRAINING AND EDUCATION UNIVERSITY OF LAMPUNG


#### Abstract

THE CORRELATION BETWEEN STUDENTS' VOCABULARY AND GRAMMAR MASTERY AND THEIR READING COMPREHENSION


# ABILITY AT THE SECOND YEAR OF MAN 2 BANDAR LAMPUNG 

## BY

NADYA AYU PARADITA

The objectives of this research are to find out whether i) there is a significant correlation between students' vocabulary mastery and their reading comprehension ability, ii) there is a significant correlation between students' grammar mastery and their reading comprehension ability, iii) there is a significant correlation between students' vocabulary and grammar mastery on their reading comprehension ability at the second year of MAN 2 Bandar Lampung.

This research is quantitative research using ex post facto co-relational design to determine the relationship abilities among vocabulary, grammar, and reading comprehension. The population of this research is the second year students of MAN 2 Bandar Lampung and the sample is class XI MIA 1 which consisted of 35 students. The sample of this research is chosen by using simple random sampling technique. Vocabulary test, grammar test, and reading comprehension test are used as the instruments of this research. The collected data were analyzed by using Pearson Product Moment Correlation and Multiple Linear Regression Test.

The result shows that there is a significant correlation between vocabulary mastery and reading comprehension with the coefficient correlation is .865 . Moreover, there is a significant correlation between grammar mastery and reading comprehension with the coefficient correlation is .796 . Furthermore, there is a significant correlation between students' vocabulary and grammar mastery, and their reading comprehension ability with the coefficient correlation (R) is 0.867 . This suggests that to have a good reading comprehension ability, vocabulary mastery and grammar mastery must be improved.

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By:
Nadya Ayu Paradita

## A Script

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Teacher Training and Education Faculty


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The Chairperson of
The Department of Language and Arts Education


Dr. NurlaksanaIGk Rusminto, M.Pd.
NIP 196401061988031001

## ADMITTED BY

1. Examination Committee

Chairperson : Drs. Sudirman, M.Pd.

Examiner : Prof. Dr. Cucu Sutarsyah, M.A.


Secretary : Drs. Ramlan Ginting Suka, M.Pd.


Graduated on : August 09 ${ }^{\text {th }}, 2019$

## LEMBAR PERNYATAAN

Yang bertanda tangan dibawah ini, saya:

| Nama | $:$ Nadya Ayu Paradita |
| :--- | :--- |
| NPM | $: 1513042028$ |
| Program Studi | $:$ Pendidikan Bahasa Inggris |
| Jurusan | $:$ Pendidikan Bahasa dan Seni |
| Fakultas | $:$ Keguruan dan Ilmu Pendidikan |
| Judul Skripsi | $:$The Correlation between Students' Vocabulary and <br> Grammar Mastery and Their Reading Comprehension <br> Ability at the Second Year of MAN 2 Bandar Lampung |

Menyatakan bahwa skripsi ini adalah hasil karya sendiri. Sepanjang pengetahuan saya, karya ini tidak berisi materi yang ditulis oleh orang lain, kecuali bagianbagian tertentu yang saya ambil sebagai acuan. Apabila ternyata terbukti bahwa pernyataan ini tidak benar, sepenuhnya menjadi tanggung jawab saya.

Bandar Lampung, 13 Agustus 2019 Penulis,


Nadya Ayu Paradita

## CURRICULUM VITAE

Nadya Ayu Paradita was born on December 2 ${ }^{\text {th }}, 1997$ in Bandar Lampung. She is the first child of a lovely couple, Gunawan Arief and Yuniarni. She has two brothers named Gilang Fahlefi and Bima Wirya Tama.

She started her study at TK Gajah Mada, Kota Baru, Bandar Lampung in 2003. Then, she continued her study at SDN 1 Rawa Laut until she graduated in 2009. After graduating from elementary school, she continued to SMPN 5 Bandar Lampung and graduated in 2012. In 2015, she graduated from SMAN 1 Bandar Lampung. In the same year, she passed SNMPTN program at English Education Study Program of Language and Arts Education, Faculty of Teacher Training and Education, University of Lampung.

From July to August 2018, she did KKN program in Kacamarga, Cukuh Balak, Tanggamus and she conducted PPL at SMKN 1 Cukuh Balak. To accomplish her study, she did a research about correlation between students' vocabulary and grammar mastery and their reading comprehension ability at MAN 2 Bandar Lampung.

## DEDICATION

I dedicate this script to:
My beloved parents, Gunawan Arief and Yuniarni My beloved brothers, Gilang Fahlefi and Bima Wirya Tama

All my beloved big family
My beloved comrades, English Education Study Program 2015 of University of
Lampung
My Almamater, University of Lampung

## MOTTO

"Do not compare your life to others. There is no comparison between the sun and the moon. They shine when it is their time"
-Cassey Ho-

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It is important to know that this script would never have come into existence without any support, encouragement, guidance and assistance from several dedicated people. I would like to take this opportunity to address my sincere gratitude and deep respect to:

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Finally, I realize that this paper still has some weaknesses. Therefore, constructive comments and suggestions are invited for the improvement of this paper. Somehow, I hope this research can give positive contribution to the educational development, the readers, and those who want to carry out further research.

Bandar Lampung, Juli 2019
The Writer

Nadya Ayu Paradita

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## I. INTRODUCTION

This chapter presents several points such as background, research questions, objectives, uses, scope, and definition of terms. The contents of the chapter are presented as follows.

### 1.1 Background

Based on the syllabus from English Curriculum 2013 for second year of Senior High School, there is a basic competence that says the students should be able to capture contextually meaning related to social function, text structure, and linguistic elements of recount text. This basic competence refers to one of basic language skills that is reading. Reading includes as an important skills that should be mastered by the students. They have to master reading skill because reading cannot be separated from teaching and learning process. In teaching and learning process, there will always be reading activity because it is usually found English texts in written form.

Reading refers to the ability to understand written texts. A reading skill can be described as "a cognitive ability which a person is able to use when interacting with texts" (Urquhart \& Weir, 1998). It means that in understanding texts we need an intelligent process and the product of human mind. According to Cline et.al. (2006), reading is decoding and understanding written texts. Decoding requires translating the symbols of writing system (including Braille) into the spoken words which they represent. Understanding is determined by the purposes for reading, the context, the nature of the text, and the readers' strategies and knowledge.

In reading activities, we do not only translate written texts into spoken words, but we also have to understand the meaning of the text. It is called as a reading comprehension. Reading comprehension is explained as an ability to understand what has been read from a text. Comprehension refers to a process in which information from the text and the knowledge possessed by the reader combine together to construct meaning. There are some factors that can affect reading comprehension. According to Harris and Smith (1986:227-231) in Sutarsyah (2015) mention seven major factors that can affect a reader to comprehend a text. The factors are divided into two categories. Those are factor internal (background experience, language abilities, thinking abilities, affection, and reading purposes) and factor external (the nature of the text and physical factor). Meanwhile Wilkins (1972) states that without grammar very little can be conveyed; without vocabulary nothing can be conveyed. It means besides the seven major factors, vocabulary and grammar can also affect reading comprehension.

According to Harmer (2007) reading is useful for language acquisition. Reading is means of language acquisition, communication and of sharing information and ideas. Nowadays, most of information is presented in written language such as books, newspapers, and magazines. We always find those kinds of written language in our daily life; therefore, we often do reading activities. Reading help the reader get what they want to know. We can find specific information that we need from a text by reading. By reading we can also develop our creativity, critical thinking, and even writing skill. Therefore, it is important for students to have a good ability in reading comprehension.

Apparently, reading is not an ability that is easy to be mastered. Previous research conducted by Ameiratrini (2017) in SMA N 1 Abung Selatan revealed that the students still had a low ability in reading comprehension. She found that students had difficulty in comprehending the reading text. They cannot find the information
easily from the text, because they were dealing with a number of problems in reading comprehension. One of problems in their reading comprehension were the lack of vocabulary and grammar. In vocabulary, they still had little size of words. In grammar, they could not differentiate the tenses, so they could not understand the text appropriately.

That statement was also proved by the researcher's experience when conducting teaching practice (PPL) in SMKN 1 Cukuh Balak. The students' score of reading comprehension is low. It is caused of their lack of vocabulary. It is evidenced by those who always opened dictionaries to find meaning of words they did not know. Those problems also happened in school where this research will be done. Students have low ability in understanding the text. They have difficulty in getting idea from the text.

Since a text is collection of words and sentences, vocabulary and grammar mastery can affect students' reading comprehension. The lack of their vocabulary and grammar mastery may affect their reading comprehension ability. The students also have to master vocabulary and know the grammar as well as possible to determine the type of the text.

Tarigan (1986) states that the quality of one's language depends upon the quantity of his or her knowledge of vocabulary, the richer one's vocabulary is the more one master a language. From the statement, it means that people who have little vocabulary will face problem in communication including reading. Without vocabulary, it is difficult for students to obtain any kind of news and information that stated in any printed material. By having a large number of words, this kind of difficulty can be solved.

Meanwhile, Baldwin (1985) states that reading a text is an interactive process of the grammar competence owned by the reader. It is also to say that grammar gives
high contribution to students' reading comprehension as well. Grammar is the rules that show how words are combined, arranged, or changed to show certain kinds of meaning. Knowledge of grammar is important in comprehension because complexity of grammar can cause difficulty. The lack of knowledge of grammar will cause in the grammatically incorrect sentences which can lead to misunderstanding of what is said or written.

Based on the explanations of those background of problem, it can be concluded that there might be a positive correlation between vocabulary and grammar mastery with students' reading comprehension ability. This research aims to find out the significant correlation between students' vocabulary and grammar mastery and their reading comprehension ability exist.

### 1.2 Research Questions

In line with the background above, this research primarily formulates three main research questions to be addressed. They are listed as follows:
a. Is there any significant correlation between students' vocabulary mastery and their reading comprehension ability at second year of senior high school?
b. Is there any significant correlation between students' grammar mastery and their reading comprehension ability at second year of senior high school?
c. Is there any significant effect of students' vocabulary and grammar mastery towards their reading comprehension ability at second year of senior high school?

### 1.3 Objectives

In reference to the research questions, the objectives of the research are:
a. To find out whether there is a significant correlation between students' vocabulary mastery and their reading comprehension ability at second year of school.
b. To find out whether there is a significant correlation between students' grammar mastery and their reading comprehension ability at second year of school.
c. To find out whether there is a significant effect of students' vocabulary and grammar mastery towards their reading comprehension ability at second year of school.

### 1.4 Uses

The uses of research are as follows:
a. Theoretically

1) The result of this research may strengthen the previous theories related to vocabulary, grammar, and reading comprehension ability.
2) This research may be used as a reference for the next researcher who will concentrate in correlation between students' vocabulary and grammar mastery and their reading comprehension ability.
b. Practically
3) The result of this research can be a new information for English teachers that students' vocabulary and grammar mastery influence their reading comprehension ability.
4) The finding of this research can be used as a consideration in teaching reading. The teachers should be aware of the importance of students' vocabulary and grammar mastery in their reading comprehension ability.

### 1.5 Scope

This research was focused on finding the correlation between students' vocabulary and grammar mastery and their reading comprehension ability at second year of MAN 2 Bandar Lampung. This research was a quantitative research. There was no teaching process in this research. It only collected the data from the sample, because it is believed that the correlation between the variables has occurred. To gain the data from the students, there were three tests that had been done. Those were vocabulary test, grammar test, and reading comprehension test. The purpose of the tests were to know the students' ability in those three variables. Vocabulary test items focused on content words (verb, noun, adjective, and adverb). The grammar items focused on identifying noun types, verb forms, pronoun, adjectives, adverbs, prepositions, articles, and conjunctions. The reading comprehension items focused on determining main idea, identifying specific information, inference, reference, and vocabulary.

### 1.6 Definition of Terms

Some words that are used in this study become key words. In order to have a better understanding and to avoid misinterpretation about the terms used in this study, the researcher presents some definitions of terms, they are:
a. A reading skill can be described as a cognitive ability which a person is able to use when interacting with texts.
b. Reading comprehension is the construction of meaning involves the reader connecting information from the written message with previous knowledge to arrive at meaning and understanding.
c. Vocabulary is a core component of language proficiency and provide much of the basis for how well learners speak, listen, read, and write.
d. Grammar is the rules that show how words are combined, arranged, or changed to show certain kinds of meaning.
e. Ability is possession of the means or skill to do something.
f. Mastery is knowledge and skill that allow individual to do, use, or understand something very well.
g. Correlation is a mutual relationship or connection between two or more variables.

Those are several points that has been explained in this chapter. They are background, research questions, objectives, uses, scope, and definition of terms.

## II. LITERATURE REVIEW

This chapter elaborates theories which support the script. They are classifying like the following: previous research, notion of reading, notion of reading comprehension, notion of vocabulary, notion of vocabulary mastery, concept of vocabulary test, notion of grammar, notion of grammar mastery, concept of grammar test, correlation between students' vocabulary and grammar mastery and their reading comprehension, theoretical assumption, and hypothesis.

### 2.1. Previous Researches

In relation to this research, there are some previous research which had been conducted by some researchers. The study had been conducted by Furqon (2013). He investigated the correlation between students' vocabulary mastery and their reading comprehension. The result of his research stated that the correlation coefficient is 0.725 . It means that there was a strong correlation between students' vocabulary mastery and their reading comprehension. Students who have high score in reading test also have high score in vocabulary test.

Another study was conducted by Nyoman (2015) at SMAN 1 Sidomulyo. He investigated a correlation between students' vocabulary mastery and their reading comprehension. The result of his research showed students with larger number of words find reading easier. The correlation coefficient of his research was 0.989. It was proven that there was a correlation between students' vocabulary mastery and their reading comprehension.

Another study conducted by Manda (2017) showed that grammar mastery has a correlation with reading comprehension. The population of this research was
students of the first semester. The correlation coefficient was 0.970 and it means that there was a positive correlation between those two variables. It means that grammar mastery is an important things for student to comprehend the text of reading.

Based on those three previous researches, the researcher is interested to find the correlation between students' vocabulary and grammar mastery and their reading comprehension abilities with different subjects and school.

### 2.2. Notion of Reading

Reading is included as one of important skill because it cannot be separated in the process of teaching and learning of English. By reading, the students are able to get a lot of information based on what they required in reading. Reading skill refers to the ability to understand written texts. Reading is means of language acquisition, communication and of sharing information and ideas. A reading skill can be described as "a cognitive ability which a person is able to use when interacting with texts" (Urquhart \& Weir, 1998).

In the process of reading, people receive information through the eyes, discriminate letter shapes, associate the letter with language and associate the text with meaning. According to Cline et.al. (2006), reading is decoding and understanding written texts. Decoding requires translating the symbols of writing system (including Braille) into the spoken words which they represent. Understanding is determined by the purposes for reading, the context, the nature of the text, and the readers' strategies and knowledge.

By reading we can develop our creativity, critical thinking, and even writing skill. There are also many advantages from reading according to Beatrice and Jeffries (1996):

1) Reading helps you learn to think in English.
2) Reading can enlarge your English vocabulary.
3) Reading can help you improve your writing.
4) Reading may be a good way to practice your English if you live in a non English speaking country.
5) Reading can help you prepare for studying in English - speaking country.
6) Reading is a good way to find out about new ideas, facts and experiences.

Brunan (1989) for instance defines reading as a two way interaction in which information is exchange between the reader and the author. Smith (1973) also shares the same attitude. This is proved by his line: "Reading is an act of communication in which information is transferred from a transmitter to a receiver". According to Tarigan (1990:7), reading is a process that is carried and used by readers who want to get the message delivered by the author through the medium of words or written language. It can be concluded that reading is an interactive process between the reader and the writer in order to get information that is presented by the writer.

Regarding the definitions, it can be claimed that reading is an interpretation of graphic symbols. Reading is thus perceived as two-fold process: (1) identification of the symbols and (2) association of appropriate meanings with them. In short, reading needs identification and comprehension.

### 2.3. Notion of Reading Comprehension

Reading is the process of combining textual information with the information of reader bring to a text (Widdowson, 1979). In this view, reading is viewed as kind of dialogue between the reader and the text. It means that reading is the process of exchanging information between the writer who bring new information and the readers who combine the new information with the previous information she or he
has got before. To get the information from the writer, the readers should have a comprehension of the text they read. Comprehension means a process in which information from the text and the knowledge possessed by the reader combine together to construct meaning. Readers' previous knowledge or schemata is one of factors that can affect reading comprehension. According to Sutarsyah (2015) when reading takes place, readers' schemata have to be activated because they are used by a reader to make sense of text.

Additionally, Kruidenier (2002) elaborated that comprehension is an active process and the reader must interact and be engaged with the text for it to work well. It is also a strategic process which can be taught. As comprehension takes place, words are decoded and associated with their meaning in the reader's memory and phrases and sentences are processed rapidly or fluently enough to that the meanings derived from one world, phrase, or sentence are not lost before the next is processed. Yet, reading comprehension can be described as understanding a text that is read, or the process of constructing meaning from a text. Reading comprehension is explained as the ability to understand what has been read.

Dallman (1982) states that reading is not just knowing each letter of alphabet. Reading involves more than word organization; the comprehension is essential of reading; that without comprehension no reading take place. Eskey (1986) says that comprehension means relating what we do not know, or new information, to what we already know. Moreover, she says that reading comprehension in this sense that comprehension of any kind depends on the knowledge.

According to Olson and Diller (1982), what is meant by reading comprehension is a term used to identify those skills needed to understand and apply information contained in a written material. This statement is supported by Harris and Sipay (1980), who say that reading comprehension ability is taught to be a set of generalized knowledge acquisition skills that permits people to acquire and exhibit
information gained as a consequence of reading printed language. Based on the statements above reading comprehension is a way to understanding or comprehend of the text that includes not only word reading, world knowledge or fluency, but by reading comprehension we can get information and wide insight from the text.

Nuttall (1982) states that there are five reading skills that should be mastered by the reader to comprehend the text deeply; they are described as follow:

1) Determining main idea

Finding the main idea of a paragraph is one of the most important specific comprehension ability. The main idea is the essence of the paragraph, or rather what the writer is trying to get across to the reader. In other words, that is what the writer wants a reader to know about. Therefore, the main idea is the important idea that the writer develops throughout the paragraph. The example of finding main idea can be illustrated into a question as follows: What words state the main idea of the text?
2) Finding the specific information or part of text

Specific information develops the topic sentence by giving definition, examples, facts, comparison, analogy, cause and effect statistic and quotation. The question of finding the specific information is as follows: Who is the character of the text?

## 3) Finding reference

References are words or phrases used either before or after the reference in the reading material. When such words are used, they are signals to the reader to find the meaning in the text. There are two types of references; cataphoric and anaphoric reference. A cataphoric reference unit refers to another unit that is introduced later on in the text/speech. To understand the unit refers to by a cataphoric reference a reader would need to look ahead in the text. Meanwhile, an anaphoric reference
unit, on the other hand, refers to another unit that was introduced earlier in the text. To understand the unit referred to by an anaphoric reference a reader would need to look back in the text. The following question is the example of finding reference: "... He is the best badminton player in our family" (last line). The bold word refers to ...

## 4) Finding inference

Inference is good guess or conclusion drawn based on the logic of passage. Finding inference means the reader implies the sentences or passages understand and conclude it logically. The question containing inference meaning can be as follows: What is the purpose of this text?

## 5) Understanding vocabulary

Vocabulary is stock of word used by people or even person. Concerning with those statements indeed vocabulary is fundamental for everyone who wants to speak or to produce utterances for reading. The question consisting vocabulary aspect can be drawn as follows: "Peter is interested in sports very much." The bold word is synonym of ...

Based on the statement above, the writer assumes that to master reading comprehension the students have to know the reading skills such as determining main idea, finding the specific information, finding the reference, finding inference and understanding the vocabulary.

### 2.4. Notion of Vocabulary

Vocabulary is a set of familiar words within a person's language. This word is used to express human feelings or ideas in oral and written form. Every word in a language always has specific meaning, both literal and semantic meaning. Also, people will use suitable vocabulary to express their feelings or ideas in order to be
understood by other people. By using vocabulary people can communicate each other in order to ask or deliver the information. This is why vocabulary has an important role in language use. Napa (1991) says vocabulary is one of components of the language and there is no language without words. It can be assumed that vocabulary is the component of the language in form of word in which it make language meaningful because without vocabulary speaker cannot convey meaning and communicate with each other.

According to Nation Institute for Literacy (2002) vocabulary are the words that people must understand in order to communicate effectively. It makes a person will achieve the communication purpose and become meaningful when a person have the same knowledge of words as his interlocutor. Burton (1982) says that a large number of words help the learners to express idea vividly, precisely and without repetition of words and with large number of words they can better perform in all aspect of English language work.

Nation (1994: 02) states that both learners and teachers see vocabulary as a being a very important element in language learning. It means that vocabulary is the most important part in language and the learner should master a large number of words in order to perform language well. By having lot of vocabulary knowledge, it can help students to understand the text. If the students know a lot of words, they may able to comprehend the text easily. It is impossible for students to understand the passage without mastering vocabulary. It is clear that the students' vocabulary is needed to face the difficulties in learning English, especially to understand reading materials.

In English, vocabulary means every part of speech which is used to construct the sentences when people communicated each other. Fries (1970) classified English word into four groups, they are discussed in the following points:

## 1) Content word

Content words represent the name of objects or things that are the concrete nouns (dog, motorcycle, and box); action done by with those things, that is: verb (drive, hit, push); the qualities of these things that is adjective (charming, beautiful, heavy, tall); and the indication such meanings as frequency, degree, manner and place, that is adverbs (carefully, here, now).
2) Function word

Function words are those words which are used as a means of expressing relation of grammatical structure. Function words include determiners (which, this, each and some), conjunction (and, but, or, and after), prepositions (in, at, on, and until), $\operatorname{article}(a$, an, and the), and auxiliaries (are, be, have and do).

## 3) Substitute word

Substitute words are those, which represent the individual things or specific action as substitute for whole from classes of words. In other words, substituted words are indefinite pronouns such as anything, anyone, everybody, and nothing.

## 4) Distribute word

Distribute words are those are distributed in use according to grammatical matter as presence of a negative such as either, too, or, yet.

Those are some classifications of English words. Based on the explanation above, it can be concluded that vocabulary is a list of words that included in part of speech which have meaning when it is used to construct a sentence to express human ideas in order to be understood by other people.

### 2.5. Notion of Vocabulary Mastery

Vocabulary mastery can be defined as thorough knowledge of the words of a language. The students' mastery of words of a language is indicated by their ability in producing the language. Byrne (1976) says that in order to communicate effectively, the learners needs adequate numbers of words. Furthermore, Rivers (1972) states that it would be impossible to learn a language without words. It means that without vocabulary, the learners cannot reach his purpose in learning a language for communication either in oral or written form.

In addition, Wainwright (2006) states that vocabulary is the important factor in reading. Without vocabulary, it is difficult for students to obtain any kind of news and information that stated in any printed material. He also says that the larger number of words one master, the easier it is to make the sense of the text. This statement is also supported by Wassman and Rinsky (2002) that say the more words students know the better and faster students can understand what students read. Wilkins (1972) stated, "Without grammar very little can be conveyed, without vocabulary nothing can be conveyed." You can say very little with grammar, but you can say almost anything with words. Most learners acknowledge the importance of vocabulary mastery.

Vocabulary mastery means the students having ability in understanding and using words. Vocabulary mastery itself deals with words and meaning. Students' vocabulary mastery can be enveloped naturally following their growth of experience and progress in education. The teacher can only stimulate the learner's progress by giving the suitable material.

### 2.6. Concept of Vocabulary Test

A test of vocabulary measures students' knowledge of the meaning of certain words as well as the pattern of collocations in which they occur. By knowing the students' vocabulary mastery, students can also know their language skills which are; listening, speaking, reading, and writing. A vocabulary test is usually divided into two types, breadth and depth of vocabulary knowledge. Freebody (1981) in Read (1993) defines breadth of vocabulary knowledge as the size of learners' vocabulary, whereas depth of knowledge involves a consideration of the quality of learners' vocabulary knowledge. In short, breadth is used to know how many words students know, while depth is used to know how well particular words are known by students. In breadth, it only deals with superficial meaning of words, but in depth, it deals with synonyms, derivations, and collocations of words.

In this study, the test was focused on the depth of vocabulary knowledge because it would not be appropriate to only measure the size of vocabulary since in reading students have to know well the words not only the meaning of the words.

### 2.7. Notion of Grammar

Grammar is one of language components. It refers to pattern of form and arrangement by which the words put together and it must be learnt if the language will be used. Someone who uses language has to know the grammatical of the language. People agree that grammar is too important to be ignored, and that without good knowledge of grammar, learners' language development will be severely constrained (Richards \& Renandya, 2002:145).

Harmer (2001) defines grammar as the description of the ways in which words can change their forms and can be combined into sentences in the language. Gerot and Wignell (1994) state that grammar is a theory of a language, of how language is put together and how it works. Grammar is the study of the classes of words, their
inflections and their functions and relations in the sentence of a language. People learn how to construct a good message based on the rules they have known and try to convey message to the others.

Grammar has always been a central aspect of language. Du Toit and Orr (1987) argues that correct grammar is important because grammatical mistakes can lead to misunderstanding what one is saying or writing and give people a very bad impression of the speaker, for example:
if one says "My mother punished me for breaking the glass" and the listener will know that his mother does the punishment in the past time, as grammar can be used to denote time sequence.

In addition, Jeffery (1990:120) states that grammar is needed in order to gain control of written language for thought has to be organized in order to make meaning clear to readers.

Grammar is a set of structured rules that govern composition of clauses, phrases, and words in languages. Grammar is also known as a way of thinking about a language. It is the study of rules governing the use of language. The set of rules governing a particular language thus each language can be said to have its own distinct grammar. It is grammar that makes it possible for a language to be learned either by the native speakers or non-native speakers of the language. When considering sentence grammar we need to know various things (Harmer, 1999), including parts of speech:
a) Noun types

A noun is a word (or group of words) that is the name of a person, a place, a thing or activity or a quality or idea; nouns can be used as the subject or object of a verb. Nouns can be divided into sub classes. There are proper nouns and common nouns. There are also countable nouns (pens, pillows, fruits), mass or uncountable nouns
(sugar, water, money), abstract nouns (idea, religion, faith), concrete nouns (chair, table, cap), and collective nouns (class, government, group).
b) Verb forms

Verbs are words that denote or describe an action, experience or state. Vendler in Hatch and Brown (1995) places verbs into four classes: activities (sleep, drink, eat), accomplishment (catch, kill, build), achievement (lose, find, recognize), and states (love, have, know). Verb form is kind of verb related to the time when we do the activity. In grammar, people called it tenses. There are 16 tenses in English.
c) Pronoun

A pronoun is defined as a word or phrase that is used as a substitution for a noun or noun phrase, which is known as the pronoun's antecedent. Pronouns are short words and can act as a subject, direct object, indirect object, object of the preposition, and more and takes the place of any person, place, animal or thing. For example: subjects (I, he, she, you), object (me, her, us, them), and reflexive (myself, yourself, himself).
d) Adjectives

An adjective is a part of speech which describes, identifies, or quantifies a noun or a pronoun. Basically, the main function of an adjective is to modify a noun or a pronoun so that it will become more specific and interesting. Adjective can be used before and after nouns. They can have many forms, those are comparative and superlative (better and best, more interesting and most interesting), adjective and preposition (interested in, keen on), and adjective as nouns (the blind).
e) Adverbs

An adverb is a word that is used to change, modify or qualify several types of words including an adjective, a verb, a clause, another adverb, or any other type of word or phrase, with the exception of determiners and adjectives, that directly modify nouns. Specifically, adverbs provide a description of how, where, when, in what manner and to what extent something is done or happens. The examples: carefully, immediately, and wisely.

## f) Prepositions

A preposition is a word used to link nouns, pronouns, or phrases to other words within a sentence. They act to connect the people, objects, time and locations of a sentence. Prepositions are usually short words, and they are normally placed directly in front of nouns. The examples: after, in, to, on, and with.
g) Articles

An article is a word that comes before a noun. There are two kinds of articles: definite articles and indefinite articles. In English there is just one definite article: "the". There are two indefinite articles: "a" and "an". The word "an" is used before a word starting with a vowel sound: we say "a horse", "a child", "a European" (Euro has a "Y" sound), "a university", but "an orange", "an elephant".
h) Conjunctions

A conjunction is a part of speech that acts as a connector. Conjunctions serve to join together sentences, phrase, or clause. The examples: for, but, when, before, and since.

Based on the explanation, grammar is the set of structural rules that govern the composition of clauses, phrases, and words in any given natural language. English grammar is also to make the meaning clear for the reader.

### 2.8. Notion of Grammar Mastery

Grammar mastery is the understanding of sentence structure, sentence elements, and the knowledge of the relationship of the elements. Center (1952) states that working knowledge of syntax must to competence in speaking, reading and writing a language. Therefore, lack of knowledge of sentence structure plays its part in a failure to read competently. According to Wilkins (1972) without grammar very little can be conveyed; without vocabulary nothing can be conveyed. That statement points clearly that grammar is an important aspect in language skills after vocabulary. Lack of grammar knowledge can cause misunderstanding when communicate. Fries (1963) presents a statement in support the theory, he says that sentence meaning and grammatical structure are related. Grammar mastery is the mastery of formal rules concerning word forms and application of words in a sentence to create correct and meaningful sentences. Structural linguists agree that grammatical structure provides cues that help the reader by making clear how words function and how they are related in utterances.

To confirm, grammar is the factor that students need if they want to make a sentence in a good structure therefore the students should have a good grammar mastery. By mastering grammar the students can understand easily how to make sentence and composition in a good order. Finally, we conclude that grammar mastery is the knowledge to master the grammar in linguistic competence like native speaker. Student must master the grammar in order to master the target language.

### 2.9. Concepts of Grammar Test

According to Rea (1991) presents the various definitions of grammar that have provided the basis of the constructs of grammar underlying different approaches to the testing of it. She begins with a quotation from Close (1982) defining grammar as knowledge of sentence level form. "English grammar is chiefly a system of syntax that decides the order and patterns in which words are arranged in sentences." Such a definition excludes context beyond what a single sentence provides, considers meaning a separate matter, and is not concerned with the ability to use such a sentence. This sort of understanding of grammar, this construct, led to multiple-choice items of the type we are all familiar with. There might be some quibble over which of the following is the best of the type (that is, has the best construct validity) but all are reasonably good examples.

In general, grammar test try to assess students' use of language in its totality as well as various parts and rules of language. Grammar tests might focus on skills such as sentence structure, using and identifying adjective clauses, adverb connectors, and part of speech.

### 2.10. Correlation between Students' Vocabulary and Grammar Mastery and their Reading Comprehension Ability

Reading has been an important skill in teaching and learning process and vocabulary and grammar are two aspects that cannot be separated from reading comprehension.

According to Richards and Renandya (2002), vocabulary is a core component of language proficiency and provide much of the basis for how well learners speak, listen, read, and write. Tarigan (1986) also states that the quality of one's language depends upon the quantity of his or her knowledge of vocabulary, the richer one's vocabulary is the more one master a language. From the statement, it means that
people who have little size of words will face problem in communication including reading. Wainwright (2006) states that vocabulary is the important factor in reading. He also says that the larger number of words one master, the easier it is to make the sense of the text. Without vocabulary, it is difficult for students to obtain any kind of news and information that stated in any printed material. By having the number of words, this kind of difficulty can be solved.

Meanwhile, based on Baldwin (1985), he states that reading a text is an interactive process of the grammar competence owned by the reader. It is also to say that grammar gives high contribution to students' reading comprehension as well. Knowledge of grammar is important in comprehension because complexity of grammar can cause difficulty. The lack of knowledge of grammar will cause in the grammatically incorrect sentences which can lead to misunderstanding of what is saying or writing.

Based on the explanations of those theories, it can be concluded that there might be a significant correlation between vocabulary and grammar mastery with students' reading comprehension ability. Those aspects which are vocabulary and grammar mastery cannot be separated each other.

### 2.11. Theoritical Assumption

Based on the frame theories, the researcher assumes that students' vocabulary and grammar mastery seems to have a significant correlation toward their reading comprehension ability. Those two things have become parts of reading text that cannot be separated. Understanding the vocabulary and grammar are important in reading. It can help the students to comprehend the text. It can be assumed that the better students' vocabulary and grammar mastery, the better their reading comprehension ability. If the student failed to understand vocabulary and grammar,
they cannot find the idea from a text and they also cannot answer the question about the text. By doing this research, the researcher wants to prove the assumption.

### 2.12. Hypothesis

Hypothesis is defined as the provisional answer toward the research problems or research questions. Concerning with the theories and the assumption above, the hypothesis can be formulated as follow:

1. There is a significant correlation between students' vocabulary mastery and their reading comprehension ability.
2. There is a significant correlation between students' grammar mastery and their reading comprehension ability.
3. There is a significant effect of students' vocabulary and grammar mastery towards their reading comprehension ability.

Those are the hypothesis about the correlation between students' vocabulary and grammar mastery and their reading comprehension.

## III. METHODS

This chapter discusses about design of research, population and sample, variables, instruments, administering try out, criteria of good tests, procedure of data collection, data analysis, and hypothesis testing.

### 3.1. Design of Research

This study was intended to find out whether there is a significant correlation between students' vocabulary and grammar mastery and their reading comprehension ability. The design of this research was ex post facto design. Ex post facto design involves only one group as the sample of the research and does not use any control class. This study applied co-relational study. Co-relational study focuses on the relationship among variables that exist naturally. In this research, there was no treatment for the students because it is believed that the correlation between the variables has occurred. The researcher only collected the data in the form of tests.

According to Hatch and Farhady (1982), the formula of the co-relational study is illustrated as follows:

1) The formula for the first research question is :

## X 1 Y

This formula is used to find the correlation between students' vocabulary mastery and their reading comprehension where X 1 refers to vocabulary mastery and Y refers to reading comprehension ability.
2) The formula for the second research question is :

## X 2 - $\quad \mathbf{~}$

This formula is used to find the correlation between students' grammar mastery and their reading comprehension where X 2 refers to grammar mastery and Y refers to reading comprehension ability.
3) The formula for the third research question is :


This formula is used to find the correlation between students' vocabulary and grammar mastery and their reading comprehension where X1 refers to vocabulary mastery, X2 refers to grammar mastery and Y refers to reading comprehension ability.

### 3.2. Population and Sample

The population of this research was the second year students of MAN 2 Bandar Lampung in even semester of 2018/2019 academic year. There were four classes of group namely XI MIA, but there was only one class as a sample. The sample was chosen randomly using probability sampling that is simple random sampling technique, using lottery. By using the technique, every class had the same chance to be chosen. After doing the random sampling, class XI MIA 1 was chosen as the class sample of the research and class XI MIA 2 is used to administer try out tests.

### 3.3. Variables

In this research, there were two variables: independent variable $(\mathrm{X})$ and dependent variable (Y). The independent variables are students' vocabulary mastery (X1) and grammar mastery (X2), while dependent variable is reading competency (Y). The dependent variable is affected by the independent variables. If the students have good mastery of vocabulary and grammar, they will also have good reading comprehension ability.

### 3.4. Instruments

There were three kinds of tests as the instruments in this research. Those were vocabulary test, grammar test and reading comprehension test. The tests were in the form of multiple choice items with four alternative answers. The students did the test on different days. Each test consisted of 40 items. Time allocation for each test was sixty minutes.

### 3.5. Administering Try Out

Try out test was administered to determine the quality of the tests that would be used to collect the data. In order to determine the quality of the test whether the instruments were valid, the researcher tried out the instruments to measure the validity, reliability, discriminating power and level of difficulty. The try out was administered in class XI MIA 2. The researcher gave 50 items for each tryout test. Time allocation for each try out test was 75 minutes. After giving the try out tests, the researcher found if the question was significant or not. Furthermore the significant questions were tested again to find the correlation between students' vocabulary and grammar mastery and their reading comprehension ability.

### 3.6. Criteria of Good Test

In this research, there were try out to prove whether the tests have good qualities. The test can be said has good quality if it had a good validity, reliability, level of difficulty, discrimination power, and scoring system.

### 3.6.1 Validity

A test can be said valid if it measures the object to be measured and suitable with the criteria (Hatch \& Farhady, 1982). To measure whether the test has a good validity, the researcher analyses it from content and constructs validity.

## 1) Content Validity

Content validity is the extent to which the test measures a representative sample of the subject matter content. The focus of the content validity is adequacy of the sample and not simply on the appearance to the test (Hatch \& Farhady: 1982). Content validity is intended to know whether the test items are good reflection of what will be covered. To get the content validity, the items test was determined according to the material that had been taught to the students. The item test of vocabulary, grammar and reading comprehension were related to recount text. The text was chosen based on material in Curriculum 2013 for second year of Senior High School.

Table 3.1 Table of Vocabulary Test Specifications

| No. | Questions of Vocabulary test | Items number | Percentage of Item |
| :---: | :---: | :---: | :---: |
| 1 | Verb | $1,2,5,6,7,8,11,14,34,35$ | 25\% |
| 2 | Noun | $\begin{aligned} & 4,18,19,23,25,26,27,28, \\ & 32,40 \end{aligned}$ | 25\% |
| 3 | Adjective | $\begin{aligned} & 3,10,12,15,17,24,31,33, \\ & 37,38 \end{aligned}$ | 25\% |
| 4 | Adverb | $\begin{aligned} & 9,13,16,20,21,22,29,30, \\ & 36,39 \end{aligned}$ | 25\% |
|  | Total | 40 items | 100\% |

That is the table specifications for vocabulary test. There are 40 items which divided into the same percentage for each aspect of vocabulary. Each aspect has the same total number which is 10 items.

Table 3.2 Table of Grammar Test Specifications

| No. | Questions of Grammar <br> Test | Items number | Percentage of <br> item |
| :--- | :--- | :--- | :--- |
| 1 | Noun types | $14,18,25,33,38$ | $12,5 \%$ |
| 2 | Verb Forms | $7,12,26,34,35$ | $12,5 \%$ |
| 3 | Pronoun | $2,8,15,24,31$ | $12,5 \%$ |
| 4 | Adjective | $16,19,27,28,37$ | $12,5 \%$ |
| 5 | Adverb | $1,3,10,21,22$ | $12,5 \%$ |
| 6 | Preposition | $4,13,17,20,30$ | $12,5 \%$ |
| 7 | Articles | $5,9,32,36,39$ | $12,5 \%$ |
| 8 | Conjunction | $6,11,23,29,40$ | $12,5 \%$ |
|  | Total | 40 items | $100 \%$ |

That is the table specifications for grammar test. There are 40 items which divided into the same percentage for each aspect of grammar. Each aspect has the same total number which is 5 items.

Table 3.3 Table of Reading Comprehension Test Specifications

| No. | Questions of Reading <br> Comprehension Test | Items number | Percentage of <br> item |
| :--- | :--- | :--- | :--- |
| 1 | Main idea | $1,7,14,18,22,29,35,37$ | $20 \%$ |
| 2 | Specific information | $2,9,16,19,24,31,32,38$ | $20 \%$ |
| 3 | Reference | $4,5,11,25,28,33,39,40$ | $20 \%$ |
| 4 | Inference | $8,10,15,20,21,23,30,36$ | $20 \%$ |
| 5 | Vocabulary | $3,6,12,13,17,26,27,34$ | $20 \%$ |
| Total |  |  |  |

That is the table specifications for reading comprehension test. There are 40 items which divided into the same percentage for each aspect of reading. Each aspect has the same total number which is 8 items.

## 2) Construct Validity

Construct validity is concerned with whether the test is actually in line with the theory of what it means to know the language (Shohamy, 1985). It means that construct validity can be found by relating the instrument with the theory of what it means to know certain knowledge skills. In this case, the researcher measured students` vocabulary mastery, grammar mastery and reading comprehension. The instruments were constructed based on theories that were in line with students' abilities to be measured. There were also expert judgement for the instruments to prove the validity of the tests. The table of expert judgement could be seen on Appendix 28.

### 3.6.2 Reliability

Reliability referred whether the test was consistent in its score and gave us an indication of how the test score is accurate (Shohamy, 1985). Reliability defined as the extent to which a test produced consistent results when it administered under similar condition (Hatch \& Farhady, 1982). That was why reliability in this research was important to be measured.

The reliability of vocabulary test, grammar test and reading comprehension test found out by using split-half method. It was done by dividing the number of test items into two groups (odd and even) and correlated by using Pearson Product Moment Correlation, the formula is as follows:

$$
r_{x y}=\frac{N \sum x y-\left(\sum x\right)\left(\sum y\right)}{\sqrt{n\left(\sum x^{2}\right)-\left(\sum x\right)^{2} n\left(\sum y^{2}\right)-\left(\sum y\right)^{2}}}
$$

Where :
$\mathrm{r}_{\mathrm{xy}} \quad$ : coefficient of reliability between the first half and the second half items
$\mathrm{N} \quad$ : number of the students
$\mathrm{X} \quad$ : square of X
Y : square of Y
$\sum x$ : the total numbers of odd number
$\sum y \quad$ : the total numbers even number
(Hatch and Farhady, 1982)
The criterion of reliability is as follows:

1) $0.80-1.00:$ very high
2) $0.60-0.79:$ high
3) 0.40-0.59 : average
4) $0.20-0.39$ : low
5) $0.0-0.19$ : very low

After getting the reliability of half test, the researcher then used Spearman Brown`s Prophecy to determine the reliability of the whole test as follows:

$$
r_{k}=\frac{2 r_{x y}}{1+r_{x y}}
$$

Where:
$\mathrm{r}_{\mathrm{k}} \quad$ : the reliability of the whole tests
$\mathrm{r}_{\mathrm{xy}} \quad$ : the reliability of half test

The criterion of the reliability are as follows:

1) $0.00-0.19$ : Very low
2) $0.20-0.39$ : Low
3) $0.40-0.59$ : Average
4) $0.60-0.79:$ High
5) $0.80-1.00$ : Very high
(Hatch and Farhady, 1982)

The researcher found that the reliability of vocabulary, grammar, and reading comprehension test were 0.83 (on vocabulary test), 0.75 (on grammar test), and 0,85 (on reading comprehension test). Based on the criteria of the reliability test, the reliability of grammar test was high, and the reliability of vocabulary and reading comprehension test were very high. It means the tests were reliable and good to be used for the data collecting (See on appendix 19, 20, and 21).

### 3.6.3 Level of Difficulty

Difficulty level relates to how easy or difficult the item is from the point of view of the students who take the test. It is important since the items, which are too easy (that students get right) can tell us nothing about differences within the test population. To see the level difficulty, the researcher used the formula as follow:

$$
L D=\frac{U+L}{N}
$$

Where:
LD : level of difficulty
$\mathrm{U} \quad$ : the total of correct answer of the higher group
L : the total of correct answer of the lower group
$\mathrm{N} \quad$ : the total of students following the test

The criterion are as follows:

1) Less than $0.30=$ difficult
2) $0.30-0.70 \quad=$ average $($ good item $)$
3) More than 0.70-1.00 = easy
(Shohamy, 1985;75)

The researcher found that there were 8 difficult items ( $16 \%$ ), and 42 average items ( $84 \%$ ) in vocabulary test. There were also 4 difficult items (8\%) and 46 average items ( $92 \%$ ) in grammar test. In reading comprehension test, there were 5 difficult items ( $10 \%$ ) and 45 average items ( $90 \%$ ). Based on the result of the level difficulty, the researcher omitted the difficulty items to get good items test (See on appendix 16,17 , and 18).

### 3.6.4 Discrimination Power

Discrimination power refers to the extent to which the item differentiates between high and low level students on the test. A good item according to this criterion is "one in which good students do better than the poor." (Shohamy, 1985:81). To calculate the discrimination power (DP) of the test items, the researcher used the following formula:

$$
D P=\frac{U-L}{\frac{1}{2} N}
$$

Where:
DP : discrimination power index
$\mathrm{U} \quad$ : the proportion of upper group students
L : the proportion of lower group students
$\mathrm{N} \quad$ : total number of students
(Shohamy, 1985:82)
Classifications:

1) $0.00-0.20:$ Poor
2) $0.21-0.40:$ Satisfactory
3) $0.41-0.70$ : Good
4) $0.71-1.00:$ Excellent
5)     - (negative) : Bad items (should be omitted)

After analysing the try out test, there were 2 bad items ( $4 \%$ ), 8 poor items ( $16 \%$ ), 34 satisfactory items ( $68 \%$ ), and 6 good items ( $12 \%$ ) in vocabulary test. In grammar test, there were 1 bad item ( $2 \%$ ), 9 poor items ( $18 \%$ ), 39 satisfactory items ( $78 \%$ ), and 1 good item ( $2 \%$ ). In reading comprehension test, there were 2 bad items ( $4 \%$ ), 7 poor items (14\%), 37 satisfactory items ( $74 \%$ ), and 4 good items ( $8 \%$ ). The items that had bad and poor discrimination power were dropped (See on appendix 16, 17, and 18).

### 3.6.5 Result of Try Out Test

After counting level of difficulty and discrimination power of each items, the researcher found that 10 items of try out vocabulary test that did not have a good criteria of test should be dropped, and they were $7,11,14,21,22,26,30,37,38$, 41. The item number 7 was dropped because it had difficult level and poor
discrimination power. The reason for other items could be seen in the table of level of difficulty and discrimination power of vocabulary test on Appendix 16.

There were also 10 items of try out grammar test that should be dropped which were $4,11,18,19,23,28,36,39,45,50$. The item number 4 was dropped because it had poor discrimination power. The reason for other items could be seen in the table of level of difficulty and discrimination power of grammar test on Appendix 17.

In try out reading test, there were 10 items those were $12,19,23,27,29,30,33,35$, 37,46 should be dropped. The item number 12 was dropped because it had difficult level and poor discrimination power. The reason for other items could be seen in the table of level of difficulty and discrimination power of reading comprehension test on Appendix 18.

### 3.6.6 Scoring System

In this research, the tests were in the form of multiple choice items, so each of the correct item scored 1 and for the wrong item scored 0 . In scoring students' result of the test, the researcher used Percentage Correct. The total number of the items was 40 for each test. The ideal highest score was 100 . The scores of vocabulary, grammar and reading comprehension test calculated by using as follow:

$$
S=\frac{r}{n} \times 100
$$

Where:
S : the score of the test
$r$ : the total of the right answer
n : the total of test items

After scoring the data using the formula, it was found the highest until the lowest of students' score. The highest score of vocabulary test was 87,5 and the lowest was 47,5 . The highest score of grammar test was 82,5 and the lowest was 42,5 . For reading comprehension test, the highest was 92,5 and the lowest was 35 . The whole result score of students' test could be seen on Appendix 22, 23, 24 and the result of students' try out test on Appendix 10, 11, and 12.

### 3.7. Procedure of Data Collection

The procedure of the research were as follows:

## 1. Determining the population and sample

This research was conducted in MAN 2 Bandar Lampung as the population and sample of this research. This research chose the second year students and took one class as the sample for this research, and it was class XI MIA 1.

## 2. Preparing the try out tests

The researcher prepared the try out tests for the sample. The try out tests were vocabulary test consisting of 50 items, grammar test consisting 50 items and reading comprehension consisting of 50 items.

## 3. Conducting the try out to the students

The try out was conducted before the test. The students did the three kinds of try out test. The try out was used to find out the quality of the test before it was used for data collecting, whether the items were good or not in validity, reliability, level of difficulty, and the discrimination power.

## 4. Conducting the tests to the students

The tests were conducted after the try out tests. The students did the three kinds of tests on different days. They were vocabulary test, grammar test, and reading comprehension test. The tests were consisting of 40 items.

## 5. Analyzing the test result

After scoring the tests, the data was analyzed by using SPSS software program.

Those were some steps of research procedure in this research. It started from determining the population and sample, preparing the tests, conducting the try out, conducting the tests, and analyzing the test result.

### 3.8. Data analysis

In order to get result of this research, the data analyzed by the researcher. It was used to identify whether there is a significant correlation between students' vocabulary and grammar mastery and their reading ability.

The researcher used the following steps:

1) Scoring the vocabulary, grammar, and reading comprehension tests.
2) Tabulating the result of the tests and calculating the scores of the tests.
3) Analyzing, interpreting, and discussing the tabulated result.
4) Drawing conclusion from tabulated result of the test.

### 3.9. Hypothesis Testing

The hypothesis testing is used to prove whether the hypothesis proposed in this research is accepted or not. The hypotheses were analysed by using Pearson Product Moment Correlation and Multiple Linear Regression in Statistical Program for Social Science (SPSS). The hypotheses of this research were as follows:

1. $\mathrm{H}_{0} \quad:$ There is no correlation between students' vocabulary mastery and their reading comprehension ability.
$\mathrm{H}_{1} \quad$ : There is a significant correlation between students' vocabulary mastery and their reading comprehension ability.
2. $\mathrm{H}_{0} \quad$ : There is no correlation between students' grammar mastery and their reading comprehension ability.
$\mathrm{H}_{1} \quad$ : There is a significant correlation between students' grammar mastery and their reading comprehension ability.
3. $\mathrm{H}_{0} \quad$ : There is no significant effect of students' vocabulary and grammar mastery towards their reading comprehension ability.
$\mathrm{H}_{1} \quad$ : There is a significant effect of students' vocabulary and grammar mastery towards their reading comprehension ability.

In order to prove the hypotheses of this research, the researcher used the following formulate:
a) Use the product moment correlation in order to investigate the first hypothesis. The formula is as follow:

$$
r_{x y}=\frac{N \sum x y-\left(\sum x\right)\left(\sum y\right)}{\sqrt{n\left(\sum x^{2}\right)-\left(\sum x\right)^{2} n\left(\sum y^{2}\right)-\left(\sum y\right)^{2}}}
$$

Notes :
rxy : coefficient correlation between students' vocabulary mastery and their reading comprehension.
n : number of students in sample
$\sum \mathrm{x} \quad$ : the total score of students' vocabulary
$\sum \mathrm{y} \quad$ : the total score of reading comprehension
$\sum \mathrm{xy}$ : the total score of students' vocabulary mastery and reading comprehension (Hatch and Farhady, 1982)
b) Use the product moment correlation in order to investigate the second hypothesis. The formula is as follow:

$$
r_{x y}=\frac{N \sum x y-\left(\sum x\right)\left(\sum y\right)}{\sqrt{n\left(\sum x^{2}\right)-\left(\sum x\right)^{2} n\left(\sum y^{2}\right)-\left(\sum y\right)^{2}}}
$$

Notes:
Rxy : coefficient correlation between students' grammar mastery and their reading comprehension.
n : number of students in sample
$\sum \mathrm{x}$ : the total score of students' grammar
$\sum \mathrm{y} \quad$ : the total score of reading comprehension
$\sum \mathrm{xy}$ : the total score of students' grammar mastery and reading comprehension
(Hatch and Farhady, 1982)
c) In order to investigate the third hypothesis, multiple linear regression formula was used. The formula can be seen as follows:

$$
Y=a+b 1 X 1+b 2 X 2
$$

Notes :
Y : reading comprehension
a : constant
b1 : coefficient regression of vocabulary mastery
b2 : coefficient predictor of grammar mastery
X1 : vocabulary mastery
X2 : grammar mastery
(Sudjana, 2009)

The criterions for accepting and rejecting the hypotheses were as follow:
a) Determine the result of correlation in order to investigate the first and second hypotheses. It was achieved by comparing the result of $\mathrm{r}_{\mathrm{xy}}$ with the critical value of $r$ in the $r_{\text {table }}$.

1. If $r_{x y} \geq r_{\text {table }}$ it means that $H_{l}$ is accepted and the null hypothesis $\left(H_{0}\right)$ is rejected.
2. If $r_{x y} \leq r_{\text {table }}$ it means that $H_{l}$ is rejected and the null hypothesis $\left(H_{0}\right)$ is accepted.
b) Determine the result of the third hypotheses, the researcher had to analyze some result tests. First, the researcher analyzed the R Square in the multiple correlations. Then, the researcher compared the value of $\mathrm{F}_{\text {count }}$ with $\mathrm{F}_{\text {table }}$.
3. If $F_{\text {count }} \geq F_{\text {table }}$ it means that, the null hypothesis (H0) is rejected and hypothesis (H1) is accepted.
4. If $F_{\text {count }} \leq F_{\text {table }}$ it means that, the null hypothesis ( H 0 ) is accepted and H 1 is rejected.

Those are the explanations about some points of this chapter. They are design of research, population and sample, variables, instruments, administering try out, criteria of good tests, procedure of data collection, data analysis, and hypothesis testing.

## V. CONCLUSIONS AND SUGGESTIONS

This chapter presents the conclusions of the research and suggestions based on the data presentation and analysis from the previous chapter. This chapter is divided into two parts, the first is conclusions and the second is suggestions.

### 5.1 Conclusions

Based on the result of the data analysis and discussion in previous chapter, the researcher draws the following conclusions:

1) There is a significant correlation between students' vocabulary mastery and their reading comprehension ability. Students who had good vocabulary mastery also had good reading comprehension ability. It prove that vocabulary mastery takes an important role in reading comprehension ability.
2) There is significant correlation between students' grammar mastery and their reading comprehension ability. The students who had good mastery in grammar could understand reading well. A correct grammar is important because grammatical mistakes can lead to misunderstanding what one is writing.
3) There is a significant effect of students' vocabulary and grammar mastery towards their reading comprehension ability. Vocabulary and grammar mastery give high contributions in reading comprehension. It can be assumed that the better students' vocabulary and grammar mastery, the better their reading comprehension ability.

### 5.2 Suggestions

Based on the conclusions of the research, the researcher would like to propose some suggestions, they are:

1) In improving students' reading comprehension ability, the English teacher should be aware of the importance of students' vocabulary and grammar mastery in their reading comprehension ability. They should teach reading by focusing on vocabulary and grammar mastery.
2) In order to improve students' vocabulary and grammar mastery, the teacher might use some interesting techniques in teaching and learning process. For example, the teacher can use flash card which consist of words or sentence that correlate to the reading text to make students understand the text easily.
3) For further researchers, they can do a research to find out good methods for teaching vocabulary and grammar in order to improve students' reading comprehension ability.
4) For further researchers, they should consider about the time allocation when collecting the data, so that it will make the students more focus and think maximally in doing each test.
5) For further researchers, when the students are working on the test, they can remain the students about the remaining test time, so the students can adjust the remaining time to complete the test.
6) For further researchers, they can do a research about the correlation between vocabulary and grammar mastery with other language skills. They can focus on other language skills which are listening, speaking, and writing.

## REFERENCES

Ameiratrini, T. (2017). The use of jigsaw strategy in improving students' achievement in reading comprehension at the first grade of SMAN 1 Abung Selatan. Unpusblished Script. Bandar Lampung: University of Lampung.

Baldwin, R. (1985). Content area reading. Iowa: Kendal/Hunt.
Beatrice, S. M., \& Jeffries, L. (1996). More reading power. Longman: AddisonWesley Publishing.

Burton. (1982). Mastering English language. London: The Macmillan Press.
Byrne, D. (1976). Teaching oral English. Harlow: Longman.
Cline, F., Johnstone, C., \& King, T. (2006). Focus group reaction to three definition of reading (as originally developed in support NARAP Goal 1). Minneapolis, M.N.: National Accessible Reading Assesment Project.

Dallman. R. C. D. (1982). The teaching of reading (6th ed.). Canada: CBS College Publishing.

Departement Pendidikan \& Kebudayaan. (2013). Standar kompetensi mata pelajaran bahasa Inggris. Jakarta: Depdikbud.

Du Toit, A. P. , \& Orr. (1987). Achiever's handbook. Johannesburg: Southern Book.
Eskey, D. (1986). Theoretical foundation in teaching second language reading for academic purpose. California: Wesley Publishing Company.

Fries, C. C. (1963). Linguistics and reading. New York: Holt, Rinehart and Winston.

Fries, C. C. (1970). Teaching and learning English as foreign language. Ann Arbor: The University of Michigan Press.

Furqon, F. (2013). Correlation between students' vocabulary mastery and their reading comprehension. Unpublished Script. Bandung: Indonesia University of Education.

Gerot \& Wignell. (1994). Making sense of functional grammar. Cammeray NSW: Antipodean Educational Enterprises.

Harmer, J. (1999). How to teach grammar. White Plains, NY: Pearson/Longman.
Harmer, J. (2001). The practice of English language teaching (3rd ed.). Pearson Education Limited.

Harmer, J. (2007). How to teach English. England: Longman Pearson.
Harris, A. J., \& Sipay, E. R. (1980). How to increase reading ability. New York: Longman.

Hatch, E., \& Farhady, H. (1982). Research design and statistics for applied linguistics. Roweley: Newbury House.

Hatch, E., \& Brown, C. (1995). Vocabulary, semantics, and language education. New York: Cambridge University Press.

Henning, G. (1987). A guide to language testing: Development-evaluationresearch. Rowley, Massachusetts: Newbury house.

Jeffery, C. D. (1990). The case for grammar: Opening it wider. South African Journal of Higher Education, Special Edition.

Kruidenier, J. (2002). Research-based principles for adult basic education reading instruction. USA: The National Institute for Literacy.

Manda, I. N. (2017). Correlation between grammar mastery and reading comprehension of the students in STIE Indonesia Pontianak. Unpublished Script. Pontianak: STIE Indonesia Pontianak.

Napa, A. P. (1991). Vocabulary development skill. Kanisius: Yogyakarta.
Nation, P. (1994). New ways of teaching vocabulary. New York: Teacher of English to speaker of another language/ TESOL.

National Institute for Literacy. (2002). The partnership for reading: Adolescent literacy (Research informing practice: A series of workshops). Washington, DC: Author.

Nuttall. (1982). Teaching reading skills in a foreign language. London: Heinemann Educational Books.

Nyoman, I S. I. P. (2016). The correlation between vocabulary mastery and students' reading comprehension. Unpusblished Script. Bandar Lampung: University of Lampung.

Olson, J. P., \& Diller, M. H. (1982). Learning to teach reading in elementary school. London: MacMillan Publishing Company.

Oxford, R. L. (1989). Use of language learning strategies: A synthesis of studies with implications for strategy training. System, 17/2, 235-247.

Rea, D. P. M. (1991). What makes a grammar test communicative? In language testing in the 1990s edited by Alderson, Ch., \& North, B.

Read, J. (1993). The development of a new measure of L2 vocabulary knowledge, language testing. 10 (3), 355-371.

Richards, J. C., \& Renandya, W. A. (2002). Methodology in language teaching: An anthology of current practice. New York, USA: Cambridge University Press.

Rivers, W. M. (1972). Teaching foreign language skill. Chicago: The University of Chicago Press.

Setiyadi, Ag. B. (2016). Metode penelitian untuk pengajaran bahasa asing: pendekatan kuantitatif dan kualitatif. Yogyakarta: Graha Ilmu.

Shohamy, E. (1985). A practical handbook in language testing for the second language teacher. Tel Aviv: Tel Aviv University.

Smith, F. (1973). Psycholinguistics and reading. New York: Holt, Rinehart \& Winston.

Sudjana, N. (2009). Metode statistika. Bandung: Tarsito.
Sutarsyah, C. (2015). Reading theory and practice. Yogyakarta: Graha Ilmu.
Tarigan, H. G. (1986). Pengajaran kosakata. Bandung: Angkasa.
Urquhart, A \& Weir, C. (1998). Reading in a second language: Process, product and practice. London: Longman.

Wainwright, G. (2006). Speed reading better recalling (Indonesian Edition). Jakarta: Gramedia Pustaka.

Wassman, R., \& Rinsky, L. A. (2002). Effective reading in a changing world. NJ: Prentice Hal.

Widdowson, H. G. (1979). Explorations in applied linguistics. Oxford: Oxford University Press.

Wilkins, D. A. (1972). Linguistics in language teaching. London: Edward Arnold.

