The Effects of Vocabulary and Grammar Mastery on Students’ Reading Skill

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Abstract - Students’ lack of vocabulary and grammar knowledge can influence their reading skill. This research is aimed at finding the effects of vocabulary and grammar mastery on students’ reading skill. The eleventh grade students of state senior high schools in Tangerang are the research participants. The sample was selected through simple random sampling. There are three variables – vocabulary and grammar mastery and English reading skill. Objective tests were administered to the students for the data. Correlation technique and multiple regressions were used for data analysis. The research findings reveal first significant effects of vocabulary and grammar mastery both partially and collectively on the students’ English reading skill, proved by Sig.0.000 < 0.05 and $F_{184.710}$, with correlation coefficient 0.90 and determination coefficient is 0.809 or 80.9%. The regression equation is: $Y = 2.071 + 0.529X_1 + 0.414X_2$. It means that the students’ English reading skill is strongly influenced by their vocabulary and grammar mastery. Secondly, there is a significant effect of vocabulary mastery on the reading skill of grade XI students at State Senior High Schools in Tangerang, proved with the score of $t_{observed} = 5.263 > t_{table} = 1.987$ and Sig. 0.000 < 0.05. Thirdly, there is a significant effect of grammar mastery on the reading skill of grade XI students at State Senior High Schools in Tangerang, proved with the score of $t_{observed} = 4.514 > t_{table} = 1.987$ and Sig. 0.000 < 0.05. The conclusion is that there are significant effects of the students’ vocabulary and grammar mastery both partially and collectively on their reading skill.

Keywords: Vocabulary, Grammar, Reading Comprehension

I. INTRODUCTION

In the era of globalization, English has become an important international language. As an international language, English is used in many fields such as trade, education and communication. Most people in the world use English to communicate with other people from other countries, in particular those from English speaking countries and also to compete in the global arena. Hence, it is necessary for people to be competent in English for their effective international communication and competition purposes. Thus, due to its importance as an international language, people need to master English. As such, English is taught in many countries, including in Indonesia.

In Indonesia, English has been taught as a foreign language subject at formal educational institutions, from junior high school level up to university level. Further, English has also been included in the national curriculum. However, students in Indonesia still find it difficult to understand English. They have problems learning English whether in listening, speaking, reading or writing skill. Finally, they are not interested in learning English even though they know about the importance of the language. In learning English, not only do students have to have the mastery of the knowledge of the language, but they also have to have the mastery of its skills – listening, speaking, reading and writing. As one of the four language skills, reading is an important skill to students in learning English. Richard Anderson and the Commission on Reading define reading as the process in which meaning is constructed from written texts. It means that reading is a process in which interaction between a reader and a text is involved. Therefore, readers should understand the text. Further, the text should also provide them with the necessary information so that the readers can understand it.

Many people like reading because they believe that they have a lot of benefits of doing so. Reading can give readers information, knowledge, skill, etc. Further, when someone is fond of reading, he or she will obtain benefits, among others, be free from having Alzheimer’s disease and slash stress since fondness of reading can protect his or her brain from such health problems and encourage positive thinking, and fortify friendships. However, without comprehension, reading will not give the above benefits to readers. It means that to understand a reading text, readers should have reading comprehension skills. Learning to read is a serial process. It means that each new skill is developed after the mastery of the previously learned skills. In the beginning, for example, children learn to divide words into their most basic sounds in a process called decoding. After that, they start to understand the meaning of words, sentences and, ultimately, entire passages of text. To understand a text, learners need reading comprehension skill. Good readers can understand the individual sentences and the organizational structure of a piece of writing. They can understand ideas, follow arguments, and detect implications. They already know most of the words in the text, but they can also determine
the meaning of a lot of the unknown words from the context. If they fail to do so, they can look up the unfamiliar words in their dictionary. As such, good readers can extract from the writing what is important for the particular task they are employed in.

As a skill, reading can be learned. However, it is not easy for learners to understand a text since they should have their reading skill to comprehend the text. There are many factors which affect learners’ reading mastery. Having lack of vocabulary and grammar knowledge can be factors which influence student’s reading mastery. Having lack of vocabulary knowledge can make the students have difficulty understanding a text, for instance an English reading text and also answering the questions of the text, or they can possibly answer them, but their answers are not relevant to the questions. They neither understand the questions nor find the answers from the passage because there are a lot of unfamiliar words. Reading failure happens because it is not that they cannot understand the meaning of the words in the passage, but they have less vocabulary knowledge to comprehend a text, especially the one with difficult words. Without comprehending the meaning of difficult words, students often fail to acquire new and difficult words, and thus fail to improve their vocabularies. It will also give rise to the failure in reading comprehension.

Another factor which influences students’ mastery of reading skill is having lack of grammar mastery. Grammar of a language is the foundation for communication – the better the grammar, the clearer the message, the more likelihood of understanding the message’s intent and meaning. That is what communication is all about. In comprehending a reading text in English, for instance, having good sentence-structure knowledge helps a reader to see relations between ideas, including relationships between main ideas and details and also relations among each part of the components of a sentence in order to have a better analysis of the text and sentences, and hence a better understanding of them.

Based on the above explanations about the importance of the mastery of vocabulary and grammar, this study will examine whether the students’ mastery of English vocabulary and grammar has correlation to their reading skill. In addition, the hypothesis ‘the higher the learners’ mastery of English vocabulary and grammar, the better their skill in reading’ will be investigated in this research. In doing so, indeed, the problems of the research are needed to be formulated. The problem formulation is as follows.

1. Are there any effects of vocabulary and grammar mastery on students’ reading skill at state senior high schools in Tangerang?
2. Is there any effect of vocabulary mastery on students’ reading skill at state senior high schools in Tangerang?
3. Is there any effect of grammar mastery on students’ reading skill at state senior high schools in Tangerang?

This study is aimed at obtaining empirical data of the effect of vocabulary and grammar mastery upon the student’s reading skill. Operationally, the objectives of this research are to show:

1. The effects of vocabulary and grammar mastery on students’ reading skill at state senior high schools in Tangerang.
2. The effect of vocabulary mastery on students’ reading skill at state senior high schools in Tangerang.
3. The effect of grammar mastery on students’ reading skill at state senior high schools in Tangerang.

In English learning and teaching process, particularly in improving the student’s reading skills. The significance of the study is as follows:

1. This study is hopefully considered very important by the decision makers to make any policy related to the process of learning and teaching English subject.
2. It is hoped that the English teachers, would reap the benefit of this study in selecting appropriate teaching techniques to be implemented in the class.
3. It is expected that the English teachers could broaden their perspective about teaching approach, method, and techniques to be applied in the class, especially when teaching reading subject.

Hypothesis is a statement that might be true, which can then be tested. It can also be said that hypothesis is a temporal answer to the research problems. Hence, the hypotheses of this research are stated as follows:

1. There are significant effects of vocabulary and grammar mastery altogether on students’ reading skill at State Senior High Schools in Tangerang.
2. There is a significant effect of vocabulary mastery on students’ reading skill at State Senior High Schools in Tangerang.
3. There is a significant effect of grammar mastery on students’ reading skill at State Senior High Schools in Tangerang.

In conducting the above research, relevant theoretical views from experts which are related to the topic of the discussion of this study are used. It is initiated with the theories of vocabulary mastery, grammar mastery and reading skill. Further, internet browsing was also conducted to examine as to whether any previous research on the same topic has been conducted. The writer found that Dongbo Zhang from Michigan State University, USA, conducted research on vocabulary and grammatical
knowledge in L2 Reading comprehension: A structural equation modeling study, and his research paper was published in December 2012. In his study, Zhang used structural equation modeling analysis to examine the contribution of vocabulary and grammatical knowledge to second language reading comprehension among 190 advanced Chinese English as foreign language learners. Dongbo found that vocabulary knowledge related significantly to reading comprehension; grammatical knowledge showed a weak contribution to reading comprehension after controlling for the effect of vocabulary knowledge. In addition, learners' implicit knowledge of grammar had a stronger relationship to reading comprehension than explicit knowledge, over and above the effect of vocabulary size. Christanto Dwi Nugroho in May 2015 conducted research on the effects of vocabulary and structure pattern mastery towards reading comprehension at SMP Kesuma Bangsa, a private junior high school in Beji, Depok. His research findings prove that students’ vocabulary and structure pattern mastery influence their reading comprehension. It is proved with the correlation coefficient of 0.918 and the determination coefficient of 0.842 (84.2%). This research conducted to focus on the effects of vocabulary and grammar mastery on the reading skill of 11th grade students of three state senior high schools in Tangerang, Banten, and regression method of analysis is employed in this research.

Vocabulary Mastery

Vocabulary plays a very important role in language learning. Learners cannot express their opinions or ideas well to other people if they do not have any vocabulary knowledge. According to Baker, Simmons, and Kame'enui (1997), learning, as a language based activity, is fundamentally and profoundly dependent on vocabulary knowledge. Learners must have access to the meanings of words that teachers, or their surrogates (e.g., other adults, books, films, etc.), use to guide them into contemplating known concepts in novel ways (i.e. to learn something new). Nation (1993) believes that principally, vocabulary knowledge is one of the components in language skills such as reading, speaking, writing, and listening. Nation (2009) and Melka (1997:84-102) offer a productive vocabulary which is contradicted to a receptive vocabulary to be used in vocabulary learning. In receptive vocabulary learning, a teacher gives his or her students words and their meanings. It offers words and their meanings without any context. However, in productive vocabulary learning, the teacher allows learners to think the meaning of the new word from the context given.

In learning vocabulary, notonly do learners have to understand the meaning of words (lexical meaning), but they also have to understand the meaning of the words in a sentence (grammatical meaning). It means that the learners should be able to use the words that they have learned. In this regard, Cruse (2000: 15) broadly distinguishes the areas of interest in studying vocabulary in language use. It is seen that studying vocabulary is not only studying words, but also the word meaning and how those words are used in language, whether in written form or oral form. Those areas enable vocabulary knowledge to be more understandable.

The above theories on learners’ vocabulary mastery reveal that it is not only about the meaning of the word or its synonym, but it is also related to the concept of the word itself. Thus, when learners can recognize the words well and can use them in the correct form and structure of the sentences, they can be regarded that they have vocabulary knowledge.

Grammer

There are some definitions of grammar. Nunan (1997:97) gives several definitions of grammar:

a. An analysis of the structure of a language either as encountered in a corpus of speech or writing (a performance grammar) or as a predictive of a speaker’s knowledge (a competence grammar).

b. An analysis of the structural properties which define human language (a universal grammar).

c. A level of structural organization which can be studied independently i.e. Phonology and Semantics.

Cowan (2008:3) defines grammar as the set of rules that describes how words and groups of words can be arranged to form sentences in a particular language. The grammar of English consists of all the rules that govern the formation of English sentences, and that is precisely what learners of English want to know. Thornbury (1999: 1) defines grammar by saying that grammar is partly the study of what forms (or structures) are possible in a language. Thus, grammar is a description of the rules that govern how a language’s sentences are formed. Harmer (1987: 1) defines grammar by saying the grammar of a language is what happens to words when they become plural or negative, or what word order is used when we make questions or join two clauses to make one sentence. Further, Bowen, Madsen and Hilferty (1985:161) argued that grammar is the rules by which we put together meaningful word and parts of words of language to communicate messages that are comprehensible. And, grammar can be understood in different ways by different people with different purposes. From the explanations above, grammar mastery is

Reading Skill

Gleason and Ratner (1998:3) states that comprehension is a process how to find and interpret the punctuations (speech perception), determine to the word
meaning (lexical access), analyze to the sentences grammatically to get meaning extensively (sentence processing), evaluate and formulate the long text appropriately (discourse). To interpret the language is a very complicated process. However, we can comprehend the language easily since language definitely has hierarchal structure. Otong (2008:5) states that reading is an activity to comprehend and dig deep into the information as well as explore the mind of the information conveyer stated in a text. To implement the thinking ability into reading is by knowing the reading comprehension of the reader. Harris and Smith (1976: 239) state that there are four ways of thinking to comprehend the reading. The four ways of thinking are as follows.

1) Identification
   The basic level where the reader must memorize or find the information that wrote by the writer. The reader must comprehend the writer’s idea.

2) Analysis
   The higher level where the reader checks some parts of the reading based on schema and structure.

3) Evaluation
   The advance level is where the reader can evaluate the information to determine the score through the proper standard.

4) Application
   The reader tries to do something on the information that they got. Means the reader uses the information to answer the question about the proper reading.

From the explanations above, it goes without saying that reading is a process which needs phases or stages in order to comprehend a passage; it also needs a strategy to do so. Further, in order to comprehend a reading text well, learners should be trained a reading strategy, for instance SQ3R, which stands for Survey, Question, Read, Recite, and Review (Robinson, 1970). SQ3R is a reading strategy that is formed by its sentences or letters. The SQ3R method was introduced by Robinson in 1941, to provide students with a systematic approach to study a textbook and assignment. The method capitalizes on the predictable format on most traditional content of textbook (e.g., title, introduction, headings, subheadings, conclusion, etc.). The steps are as follows: (1) Survey, (2) Question, (3) Read, (4) Recite, and (5) Review. SQ3R will help students build a framework to understand their reading assignment. SQ3R is a method for active elaboration of material that you read by doing five steps as mentioned.

II. RESEARCH METHODOLOGY

This research was conducted at State Senior High School (SMAN) 4, SMAN 6, and SMAN 15 in Tangerang, Banten Province during the period of March – July 2015. It involves 90 students or participants during March to July, 2015. The participant of population in the research is the Grade XI Students of State Senior High School (SMAN) 4, SMAN 6 and SMAN 15 in Tangerang. The number of the population is more than 400 students. However, the researcher does not take all of the population. According to Sudjana (1992: 6), sample is a part of population. The process of drawing a sample from the population is called sampling. In this research, simple random sampling is used. The number of the sample taking part in this research is 90 students. The total number of the sample consists of 30 students from SMAN 4, 30 students from SMAN 6, and 30 students from SMAN 15.

This research was utilized by survey method. Fraenkel and Wallen (1993: 342) state that survey research is one of the most common forms of research engaged in by educational researchers. It involves researchers asking a large group of people questions about a particular topic or issue. It is done to get the data and fact based on the examination of observation of variables. This research is conducted using descriptive correlation method, a method designed to determine if two or more variables are associated with each other. Descriptive method is used to describe the present behavior or characteristics of a particular population. The application of this method is performed through tested instruments to the students by using multiple choice tests for the vocabulary mastery, grammar mastery and reading skill. Application of this method is performed through tested instruments to the students by using multiple choice tests for the vocabulary mastery, grammar mastery and the reading skill. A constellation among variable in this research can be figured as follows:

Figure 3.1
Research Design

Note:
X₁ = Independent variable of vocabulary mastery
X₂ = Independent variable of grammar mastery
Y = Dependent variable of reading skill

The instrument used to collect data in this research is test. A test of vocabulary mastery, grammar mastery and reading comprehension or skill was administered to the Grade 11 Students of SMAN 4, SMAN 6 and SMAN 15. The format of the tests is multiple-choice by using a binary system in which every correct answer is given score 1 and every incorrect answer is given score null. The collected
quantitative data were processed and computed by using SPSS version 20.0. The data were analyzed by applying linear regression method, to examine as to whether both of the independent variables – the vocabulary ($X_1$) and grammar mastery ($X_2$), altogether affect the students’ reading skill ($Y$). The data analysis is also to examine as to whether each of the independent variables partially affects the student’s reading skill. Before doing so, the pre-requisite tests should also be conducted (Suparman, 2013: 119-125). They are validity and reliability test, normality test, homogeneity test, multicolliniarity test and linearity test. Based on the output of the pre-requisite tests, it is found that the instruments are valid and reliable; the data are normally distributed and homogeneous. In addition, there is no multicolliniarity among the independent variables found in the regression model. Linearity test is an assumption in the regression analysis. It means that the regression line between $X$ and $Y$ forming whether or not in the linear line. Further, if the line is not linear, it cannot be automatically continued to the next step. Hence, based on the data output, it is found that the regression line between variable $X$ and variable $Y$ is linear. After the entire requirement test of data analysis has been fulfilled and known that the data are processed further properly, so the next step is to test each of the proposing hypothesis test is using correlation analysis and regressive analysis (regression line equality calculation and Regressive Significant Test).

### III. RESULTS AND DISCUSSION

After the valid and reliable tests of vocabulary, grammar and reading comprehension administered to the 90 students of the above three state senior high schools in Tangerang, Banten, the data collected from the tests are analyzed. The purpose of the analysis is to find out the research findings to answer the formulated problems on the effects of vocabulary mastery and grammar mastery (the independent variables) on the students’ reading skill (Dependent variable), for which the necessary hypotheses test is conducted. The research focuses on the effect of the two independent variables on the dependent variable both partially and collectively. In this regard, all the data are processed and computed with the assistance of Statistical Program for Social Science (SPSS) version 20.0 for Window.

The testing of the hypotheses is conducted based on the statistical and verbal hypotheses. The recapitulations of the entire test can be seen in the set of the tables below:

<table>
<thead>
<tr>
<th>Table 1</th>
<th>The Recapitulation Result of Multiple Correlation Coefficients of the Effects of Vocabulary Mastery and Grammar Mastery on the Students’ Reading Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Summary</td>
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<td>Model</td>
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<td>.900 *</td>
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</tbody>
</table>

a. Predictors: (Constant), Grammar Mastery, Vocabulary Mastery
b. Dependent Variable: Reading Skill

<table>
<thead>
<tr>
<th>Table 2</th>
<th>The Recapitulation Result for Regression Coefficient Significant Test of the Effects of Vocabulary Mastery and Grammar Mastery on the Students’ Reading Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANOVA</td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td>Sum of Squares</td>
</tr>
<tr>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td>Regression</td>
<td>406.896</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
<td>502.722</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Reading Skill
b. Predictors: (Constant), Grammar Mastery, Vocabulary Mastery
Based on the description of the three tables above, the testing of hypothesis of the effects of vocabulary mastery and grammar mastery on the students’ reading skill is formulated both statistically and verbally as follows:

1. The Effects of Vocabulary Mastery (X_1) and Grammar Mastery (X_2) on the Students’ Reading Skill (Y)

   \[ H_0 : \beta_1 = \beta_2 = 0 \]
   \[ H_1 : \beta_1 \neq 0 \ \beta_2 \neq 0 \]

Explanation:

   \( H_0 \) : There are no effects of vocabulary mastery and grammar mastery altogether on the students’ reading skill.

   \( H_1 \) : There are effects of vocabulary mastery and grammar mastery altogether on the students’ reading skill.

Table 1 above shows that the coefficient correlation of the effects of the independent variables: vocabulary mastery (X_1) and grammar mastery (X_2) altogether on the dependent variable: the students’ reading skill (Y) is 0.90. It indicates that among the variables, there are very strong effects that if \( R_{\text{observed}} \) is closely to 1, the correlation tightness will be getting stronger. Furthermore, according to the recapitulation above, it reveals that the coefficient correlation value is significant. In other words, there is a significant bound effect among the independent variables: vocabulary mastery (X_1) and grammar mastery (X_2) altogether on the dependent variable: the students’ reading skill (Y).

Meanwhile, the coefficient of determination of the vocabulary mastery and grammar mastery variables contribute to the reading skill variable is 0.809. It indicates that the contribution of the independent variables: vocabulary mastery and grammar mastery altogether to the dependent variable: students’ reading skill is about 80.9% and the rest (for 19.1%) is determined by other factors.

According to the regression analysis which is used to test the hypothesis, we may get the set of data stated in Table 2 and Table 3 above. Referring to this, we may set the regression line equality that represents the effects of vocabulary mastery and grammar mastery (the independent variables) on the students’ reading skill (the dependent variable) in the following equation:

\[
Y = 2.071 + 0.529X_1 + 0.414X_2
\]

where:

- \( Y \) = dependent variable
- \( X_1 \) and \( X_2 \) = independent variables

The above regression equation shows that the value of constant (konstanta) is 2.071, and the values of the regression coefficient are 0.529 and 0.414 respectively. To test the significance of the regression line, we have to look at the recapitulation of Table 3. In accordance with the general criteria, the significance of regression is obtained if Significance (\( \text{Sig} \)) is less than 0.05, which affects the rejection of \( H_0 \) or if \( F_{\text{observed}} \) (F_o) is more than \( F_{\text{table}} \), which affects the rejection of \( H_0 \) and the coefficient of regression is stated significant, or there is a significant effect of the independent variables: vocabulary mastery (X_1) and grammar mastery (X_2) altogether on the dependent variable: the students’ reading skill (Y).
Based on Table 2 above, *Sig value* is stated by 0.000, and *F* is stated with 184.710, while *F* table is stated with 3.950. Since the *Sig value* is less than 0.05 and *F* is higher than *F* table, as the consequence *H*₀ is rejected, and automatically *H*₁ is accepted. It means that the coefficient of regression is significant. In general, it could be said that there are significant effects of the independent variables: vocabulary mastery (X₁) and grammar mastery (X₂) altogether on the dependent variable: students’ reading skill (Y).

From the recapitulation of the test results (the research findings) either correlation or regression, it could be interpreted that there are significant effects of vocabulary mastery (X₁) and grammar mastery (X₂) altogether on the students’ reading skill (Y). Further, Reference the same calculation, it can be seen that vocabulary mastery is as influential as grammar mastery towards the student’s reading skill since the *Sig value* of both of the independent variables is the same (0.000). Indeed, vocabulary mastery and grammar mastery have an important role to help students understand the meaning of the words throughout their reading skill. Hence, both the students’ vocabulary and grammar knowledge must be improved by enriching activities so that they could comprehend the reading materials as well.

Further, from the regression analysis, we may obtain the linear regression equation as follows: \( Y = 2.071 + 0.529X_1 + 0.414X_2 \). The regression equation could be interpreted that there is a significant effect of vocabulary mastery on the students’ reading skill (Y). Further, Reference the same calculation, it can be seen that vocabulary mastery is as influential as grammar mastery towards the student’s reading skill since the *Sig value* of both of the independent variables is the same (0.000). Indeed, vocabulary mastery and grammar mastery have an important role to help students understand the meaning of the words throughout their reading skill. While the scores of the regression coefficient stated consecutively with 0.529 and 0.414, they reveal that the positive correlation of the independent variables X₁ (vocabulary mastery) and X₂ (grammar mastery) altogether with the dependent variable Y (student's reading skill). In addition, they also reveal that each score increment for vocabulary mastery level will affect the level of reading skill as much as 0.529, and each score increment for grammar mastery level will affect the level of reading skill as much as 0.414.

The testing of hypothesis of the effect of vocabulary mastery on the students’ reading skill is formulated both statistically and verbally as follows:

2. The Effect of Vocabulary Mastery (X₁) on the Students’ Reading Skill (Y)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>H</em>₀ : ( \beta_1 = 0 )</td>
<td>There is no significant effect of vocabulary mastery on the students’ reading skill.</td>
</tr>
<tr>
<td><em>H</em>₁ : ( \beta_1 \neq 0 )</td>
<td>Explanation:</td>
</tr>
</tbody>
</table>

To test the hypothesis above, we can simply see from the numbers which are stated in t column or *Sig value* column in the row of vocabulary mastery in Table 3 above. In accordance with the general assumption, the significance of regression is if \( t_{\text{observed}} \) is higher than \( t_{\text{table}} \), or *Sig value* is less than 0.05, it brings the consequence that *H*₀ is rejected, and automatically *H*₁ is accepted. It means that there is a significant effect of the independent variable X₁ on the dependent variable Y. *Sig value* is the number which is stated in *Sig column* for the row of vocabulary mastery (Variable X₁) in Table 3. Meanwhile, \( t_{\text{table}} \) is the number which is stated in t column for vocabulary mastery (Variable X₁) on Table 3 as well. For the value of \( t_{\text{table}} \) for 5% real degree and degree of freedom (df = n – 2) is 1.988, where n is the total number of respondents.

Further, Table 3 above also shows that the *Sig value* is stated with 0.000 and \( t_{\text{observed}} \) is stated with 5.263, while \( t_{\text{table}} \) is stated with 1.988. Since *Sig value* is less than 0.05 and \( t_{\text{observed}} \) is higher than \( t_{\text{table}} \), it brings the consequence that *H*₀ is rejected, and automatically *H*₁ is accepted. It means that there is a significant effect of the independent variable X₁ (vocabulary mastery) on the dependent variable Y (the students’ reading skill). From the tabulation of correlation test, regression test and linear model above, it can be seen that there is a significant effect of the independent variable X₁ (vocabulary mastery) on the dependent variable Y (the students’ reading skill). As such, it could be interpreted that the higher the level of vocabulary mastery possessed by the students especially correlated to reading domain, the higher the possibility to achieve the reading skill. It may happen because vocabulary is also important in language learning which has to be mastered by the students to develop the language skills, particularly reading. In other words, the students should have adequate vocabulary if they would like to convey the meaning of reading materials as well.

The testing of hypothesis of the effect of grammar mastery on the students’ reading skill is formulated both statistically and verbally as follows:

3. The Effect of Grammar Mastery (X₂) on the Students’ Reading Skill (Y)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>H</em>₀ : ( \beta_2 = 0 )</td>
<td>There is no significant effect of grammar mastery on the students’ reading skill.</td>
</tr>
<tr>
<td><em>H</em>₁ : ( \beta_2 \neq 0 )</td>
<td>Explanation:</td>
</tr>
</tbody>
</table>

| *H*₀ : There is no significant effect of grammar mastery on the students’ reading skill. |
| *H*₁ : There is a significant effect of grammar mastery on the students’ reading skill. |
To test the hypothesis above, we can simply see from the numbers which are stated in t column or Sig column in the row of vocabulary mastery in Table 3 above. Based on the general assumption, the significance of regression is if $t_{\text{observed}}$ is higher than $t_{\text{table}}$ or Sig value is less than 0.05, it brings the consequence that $H_0$ is rejected, and $H_1$ is automatically accepted. It means that there is a significant effect of the independent variable $X_2$ on the dependent variable $Y$. Sig value is the number which is stated in Sig column for the row of grammar mastery (Variable $X_2$) in Table 3. Meanwhile $t_{\text{observed}}$ value is the number which is stated in t column for the grammar mastery (Variable $X_2$) on Table 3 as well. For the value of $t_{\text{table}}$ for 5% real degree and degree of freedom (df = n – 2) is 88, where n is the total number of respondents.

Table 3 above also reveals that the Sig. value is stated with 0.000 and $t_{\text{observed}}$ is stated with 4.514, while $t_{\text{table}}$ is stated with 1.988. Since Sig value is less than 0.05 and $t_{\text{observed}}$ is higher than $t_{\text{table}}$, it brings the consequence that $H_0$ is rejected, and automatically $H_1$ is accepted. It means that there is a significant effect of the independent variable $X_2$ (grammar mastery) on the dependent variable $Y$ (the students’ reading skill). From the tabulation of correlation test, regression test and linear model above, it can be seen that there is a significant effect of the independent variable $X_1$ (grammar mastery) on the dependent variable $Y$ (the students’ reading skill). As such, it could be interpreted that the higher the level of grammar mastery of the student especially correlated to reading aspect, the higher the possibility for him or her to achieve the ability in reading domain.

IV. CONCLUSION

Based on the research findings, the conclusion of this research can be presented as follows:

1. There are significant effects of vocabulary and grammar mastery altogether towards the reading skill of grade XI students at State Senior High Schools in Tangerang. It is proved by the score of $F_{\text{observed}} = 184.710 > F_{\text{table}} = 3.950$ and Sig. 0.000 < 0.05. It means that the higher the students’ vocabulary and grammar mastery, the higher the student’s reading skill, or vice versa. This reveals that the vocabulary mastery and grammar mastery are two critical variables to be considered in explaining about the improvement of the student’s reading skill.

2. There is a significant effect of vocabulary mastery towards the reading skill of grade XI students at State Senior High Schools in Tangerang. It is proved by the score of $t_{\text{observed}} = 5.263 > t_{\text{table}} = 1.988$ and Sig. 0.000 < 0.05. This means that the higher the student’s vocabulary mastery, the higher the student’s reading skill. Conversely, the lower the student’s vocabulary mastery, the lower the student’s reading skill. Therefore, the student’s vocabulary mastery is an important variable to consider in predicting the student’s reading skill.

3. There is a significant effect of grammar mastery on the reading skill of grade XI students at State Senior High Schools in Tangerang. It is proved by the score of $t_{\text{observed}} = 4.514 > t_{\text{table}} = 1.988$ and Sig. 0.000 < 0.05. This means that the higher the student’s grammar mastery, the higher the student’s reading skill. Conversely, the lower the student’s grammar mastery, the lower the student’s reading skill. Therefore, the student’s grammar mastery is an important variable to consider in predicting their reading skill.

REFERENCES


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