

The Correlation between Vocabulary Mastery, Grammar Mastery, and Reading Comprehension Skills of Vocational High School Students of SMK N 1 Kendal

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Abstract

This current research is aimed at determining the correlation between vocabulary mastery, grammar mastery, and reading comprehension skills of vocational high school students. The correlation research technique was used as research design in this research. The population consisted of 492 students of SMK N 1 Kendal. Moreover, the researchers chose 36 students as sample. The vocabulary, grammar, and reading comprehension tests were used as research instruments in this research. Therefore, the data was examined utilizing multiple regression correlation. The research findings presented that (1) students' vocabulary mastery achieved 44.028%; (2) students' grammar mastery gained 57.222%; (3) students' reading comprehension skill showed 71.250%; (4) there is a significant positive correlation among both student's reading comprehension skill and vocabulary mastery with the coefficient correlation (r_{x_1y}) 0.449, and the coefficient significance (t_o) $2.722 > t\text{-count } 2.030$; (5) there is a positive correlation between students reading comprehension skills and grammar mastery with the coefficient correlation (r_{x_2y}) 0.441, and the coefficient significance (t_o) $4.661 > t\text{-count } 2.030$; and (6) there is a significant correlation between vocabulary mastery, grammar mastery, and reading comprehension skills which was defined by F-count ($10.599 > F\text{-table } (3.295)$). From those results, it is possible to conclude that vocabulary mastery and grammar mastery could increase reading comprehension skills.

Keywords: correlation, vocabulary, grammar, reading comprehension)

Introduction

English becomes important in our lives especially for Indonesian people though it is foreign language for us. This language is used worldwide in science and technology as well as in education, business, transactions, and other global in the world. In Indonesia, English is a learning material in education from elementary school to the high school level. English is also the basis of one's ability in the world of work for several companies. People in Indonesia also think that people who are able to speak English will find it easy to get a job.

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Widyaningsih (2006) stated that if you already have an interest in words (vocabularies), by using them, it can improve reading, writing, speaking, and thinking. Grammar is part of the study of form or structure and the system of rules for ordering formation by general agreement, and how they relate to words including the level of analysis at the sentence level (Brown, 2001; Thornbury, 2002). Al-Yousef (2005:144) explained that it can be viewed as an interactive process between readers that leads texts to spontaneity or fluency in reading.

The reason why researchers are looking for the relationship between vocabulary, grammar, and reading comprehension skills is that in the opinion of the researchers these three things can improve English language skills if they are able to master them. The difficulty that is often faced by students in Indonesia is the lack of language skills. It is because the students do not know the vocabulary and grammar which is used. It is indirectly makes students unable to understand English material through reading.

The next reason is that language teaching is increasingly concentrated on teaching language knowledge. There is less emphasis on the component of language skills. Linguists believe that this is the most important aspect of language skills to focus on because it is the ultimate objective of language teaching.

The following reason is that language education is becoming progressively concentrated on teaching language competence. There is less importance placed on language skills. Linguists believe that focusing on this aspect of language skills is the most essential because it is the main goal of language teaching.

According to the background that has been outlined previously, the researchers formulated the purpose of the research. They are investigating the correlation between vocabulary mastery, grammar mastery, and reading comprehension skills among vocational high school students at SMK N 1 Kendal.

Literature Review

A. Vocabulary

According to Richards (2003), vocabulary is a fundamental component of language proficiency which served a lot of the foundation because of the students listen and speak fluently, reading, and writing. According to Hiebert and Kamil (2010), vocabulary is the collection of the meaning of words. Moreover, Hatch and Brown (1995:1) claimed that vocabulary is possible to identify as collection of words for specific language that may be used by those that use that language. Therefore, as stated by those definitions of vocabulary which were stated by the experts, it can be interpreted that vocabulary is a list of a collection of words in a certain language about knowledge of the meaning of words, and it becomes one of the critical things in influencing students' English skills. It is difficult for learners to comprehend the meaning of words that can improve their reading skills if they have not learned the vocabulary.

Thornbury (2007) stated that there are several ways to learn vocabulary when teaching vocabulary. Two of them are network tagging and building. Labeling is an association between words and concepts. For example, a cow's name is "cow". I learned from the concept of cows, quadrupeds, and brown fur. Snow (2003:2) also states that vocabulary mastery is one of the various types of knowledge needed to understand a text. This is a way to learn basic vocabulary. From here, you can express pictures of words and teach vocabulary.

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Therefore, statements above confirm that vocabulary mastery plays a critical role in reading skill. The more students learn vocabulary, the better they have good understanding of the sentence meaning in the text. It is also they have better understanding in the overall content of the text. Vocabulary has an impact on students' achievement, particularly in reading. In fact, the more they read the more vocabulary they learned.

B. Grammar

Huddleston and Pullum (2005), on the other hand, found that grammar is related to how the sentence produce in smaller size as in phrases, clauses, as well as words. Mastering grammar is not simply about composing sentences, but it is also about avoiding misunderstandings among people about what they are saying and reading. Abu Jeld (2004) stated that grammar in terms both sounds and pattern of sound which are main units of implying such as words. It is also the rules for combining them into new sentences. Grammar mastery is essential not only for sentence construction but also for preventing misunderstandings among individuals as to what they speak or interpret. These are how the grammar applied a language learning.

Based on Kumara (2013), grammar mastery is the ability of students to get well understanding about the rules of correct English sentences. As the Oxford Dictionary (2008) stated, grammar is the framework and semantics of a language. Knowledge of grammar is necessary to make the text valuable and easy to understand for the reader. It shows that it is important to master grammar when learning a language, especially reading.

Grammar, according to Subasini and Kokilavani (2013), is a language's structure of sound, arrangement, and meaning. Furthermore, Kolln and Funk (2012) stated that in learning languages, there are two types of grammar. They are divided into structural grammar and transformational grammar. Structural grammar defines a language's grammar by analyzing the description of the sentence's "structure", and investigating the structure of the sentence. Meanwhile, transformational grammar examines a sentence's surface and deep structure.

As Negara (2016), Choirunnisa (2017), and Prajnaparamita (2013) pointed out that a low student's grammar score results in a low student's reading comprehension, as a result, there is a correlation between grammar and reading comprehension. Students' reading scores were also high, and researchers made better use of their research tools, tests, and documentation scores.

According to Yule (2010), grammar excludes all non-grammar sequences and languages as a way to explain the structure of sentences and phrases by taking into account all grammar sequences. According to Yule (2010), grammar excludes all non-grammar sequences and languages as a way to explain the structure of sentences and phrases by taking into account all grammar sequences.

Therefore, it can be concluded that grammar is a sound, sound pattern, structure, and word meaning system consisting of basic meaning units and the rules for combining them into sentences which can also affect students' English skills.

C. Reading

Shanahan (2013) claimed that there are two features that can affect the understanding of reading comprehension students. They are the background of the vocabulary and the complexity of the grammar. Futhermore, Grabe and Stoller (2002) stated Reading comprehension is the exceptional feat of managing and organizing numerous skills as part of

a series of highly complicated and rapid routines, which makes comprehension appear effortless and pleasant activity for fluent readers. Westwood (2008) explained that reading comprehension is a thinking procedure which is being active in which the readers deliberately builds meaning in order to develop well understanding of the information and concept which are presented in the text.

Jeffries and Mikulecky (2007) expressed that understanding of what a person reads is more than just admitting and understanding the words. RAND (2002) also claimed that reading comprehension is the process of obtaining meaning from the written text using interactions and collaboration.

Moreover, Van den Broek & Espin (2012) expressed that reading comprehension is an interaction that is complex between cognitive process that are automatic and strategic the readers to produce a mental rendering of the text. Snow (2003:2) adds that students need to have different abilities and abilities to understand texts. Klingner (2007) stated that reading comprehension as a multi-component, extremely complicated procedure that includes a lot of interactions between readers and also what they bring to the text, in addition to characteristics related to the text content.

According to the expert interpretations, reading comprehension is the result of a complicated interaction among automatic and strategic thinking skills that enable the reader to develop a mental understanding of the text. Reading comprehension is an active method of thought in which a reader intentionally develops meaning in order to get a better knowledge of the concepts and information offered in a text. Readers frequently employ previous knowledge, vocabulary, grammatical expertise, familiarity with a book, and other techniques to help them understand written texts. Reading comprehension is a very cognitively demanding task.

Method

This research design used multiple regression correlation. The population used in this study was grade 2 senior high school, amounting to 492 students. From this population, the researchers chose the financial accounting and institutions (AKL 1) classes, which amounted to 36 students as the sample. The instruments used in this research were tests consisting of a vocabulary test, a grammar test, and a reading test. Moreover, the researchers applied multiple regression analysis to examine the data obtained from this research. It also utilized calculations from SPSS and manual calculations. Researchers used the following formula:

$$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\} \{N \sum Y^2 - (\sum Y)^2\}}}$$

Finding and Discussion

4.1 The result of students' vocabulary mastery, grammar mastery, and reading comprehension skills

According to the result of the data obtained by the researchers, the student's vocabulary mastery ability is at the fail level with the highest ranking is 80, and the lowest ranking is 20. The percentage value showed 44,028%. Meanwhile, the result of students' mastery of grammar is at a poor level with the best ranking is 95, as well as the lowest rating is 25. The

percentage value is 57,222 %. Furthermore, the result of the students' reading comprehension ability is 71,250% which is in a good level with a highest point of 95 and a bottom number of 40.

4.2 The results of students' correlation between vocabulary mastery and reading comprehension skills

The students' correlation between vocabulary mastery and reading comprehension skills of students in SMK N 1 Kendal's eleventh grade was calculated by rxy formula. It showed that the result of rxly was 0.449. It can be concluded from the research hypothesis that rxly > 0. It means Ha is approved and Ho is rejected which indicates there is a correlation between vocabulary mastery and reading comprehension skills students in the eleventh grade at SMK N 1 Kendal.

The students' correlation between vocabulary mastery and reading comprehension skills of students in the eleventh grade at SMK N 1 Kendal was calculated by using SPSS program and manual calculation. It is described as follows:

Table 4.1 Correlation between vocabulary mastery and reading comprehension skills

Co
efficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95,0% Confidence Interval for B		Correlation		
	B	Std. Error	Beta			Lower Bound	Upper Bound	Z	Partial	Part
(Constant)	51,479	7,516		6,849	,000	36,204	66,754			
Vocab	,449	,165	,423	2,722	,010	,114	,784	,423	,423	,423

a. Dependent Variable: Reading

The calculation result by manual calculation.

$$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\} \{N \sum Y^2 - (\sum Y)^2\}}}$$

$$r_{xy} = \frac{36 \sum 1585.2565 - (\sum 1586)(\sum 2565)}{\sqrt{\{36 \sum 1585^2 - (\sum 1585)^2\} \{36 \sum 2565^2 - (2565)^2\}}}$$

$$r_{xy} = 0.449$$

Based on the manual calculation and by using SPSS program, researchers found that the result of students' correlation between vocabulary mastery and reading comprehension skills students in the eleventh grade at SMK N 1 Kendal is 0.449. It can be concluded from the research hypothesis that rxly > 0.

4.3 The results of students' correlation between grammar mastery and reading comprehension skills

The result of students' correlation between grammar mastery and reading comprehension skills of students in SMK N 1 Kendal's eleventh grade was 0.441. According to the research hypothesis, it can be concluded that $r_{xy} > 0.441$. It is possible to reach that grammar mastery and reading comprehension skills of 11th learners at SMK N 1 Kendal are related.

The students' correlation between grammar mastery and reading comprehension skills of eleventh-grade students of SMK N 1 Kendal was calculated by using SPSS program and manual calculation. It is described as follows:

Table 4.2 Correlation between grammar mastery and reading comprehension skills

Coefficients											
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlation			
	B	Std. Error	Beta			Lower Bound	Upper Bound	Z	Partial	Partial	
(Constant)	46,025	5,663		8,128	,000	34,517	57,533				
Grammar	,441	,095	,624	4,661	,000	,249	,633	,624	,624	,624	,624

a. Dependent Variable: Reading

The calculation result by manual calculation.

$$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\} \{N \sum Y^2 - (\sum Y)^2\}}}$$

$$r_{xy} = \frac{36 \sum 5283900 - (2060)(2656)}{\sqrt{\{36 \sum 2060^2 - (\sum 2060)^2\} \{36 \sum Y2565^2 - (\sum 2565)^2\}}}$$

$$r_{xy} = 0.441$$

Based on the manual calculation and by using SPSS program, the researchers discovered that the outcome of students' correlation between grammar mastery and reading comprehension skills of students in the eleventh-grade of SMK N 1 Kendal is 0.441. It can be concluded from the research hypothesis that $r_{xy} > 0$.

4.4 The results of students' correlation between vocabulary mastery, grammar mastery, and reading comprehension skills

The student correlation between vocabulary mastery, grammar mastery, and reading comprehension skills of students in SMK N 1 Kendal's eleventh grade was obtained from the comparison between f-count and f-table. The result of the f-count is 10.599, and the result of

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the f-table is 3.295. According to the basic decision making the f-count is higher than the f-table ($10.599 > 3.295$). it is possible to conclud that there is a correlation between vocabulary mastery, grammar mastery, and reading comprehension skills students in the eleventh grade at SMK N 1 Kendal.

The student's correlation between vocabulary mastery, grammar mastery and reading comprehension skills of SMK N 1 Kendal students in the eleventh grade was obtained from the comparison between f-count and f-table. It is described as follows:

Table 4.3 Correlation between vocabulary mastery, grammar mastery, and reading comprehension skills

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,625	,391	,354	10,1364	,391	10,599	2	3	,000	2,263
a. Predictors: (Constant), Grammar, Vocab										
b. Dependent Variable: Reading										

The results obtained by the researchers regarding the relationship between vocabulary mastery, grammar mastery, and reading comprehension skills defined a good relationship. The result of the f-count is 10.599, and the result of f-table is 3.295. It might be stated that there is a link among vocabulary mastery, grammatical mastery, and reading comprehension skills of SMK N 1 Kendal 11th learners.

Supported by the result of the calculation, the vocabulary value of students in Indonesia has a low value belonging to the failed level. This is due to the differences in vocabulary in Indonesian and English vocabulary. That is the reason why there are difficulties in mastering vocabulary.

According to the results that have been presented previously, the reason why students' low grammar scores belong to poor level is because the Indonesian grammar structure is completely different from the grammar of the English. That is why there are difficulties in mastering grammar.

Based on the findings of the students' reading comprehension skills have high scores belongs to a good level. It is due to the mass of students to read without regarding the vocabulary and grammar the main thing is to get the idea. It means that the learners are attempting to comprehend the content of the text.

Furthermore, based on those findings, it could be assumed that the higher the students' vocabulary and grammar mastery, the higher the students' reading comprehension abilities. Meanwhile, the lesser the students' vocabulary and grammar mastery, the poorer their reading comprehension skills. Furthermore, the findings of a study on the relationship between vocabulary mastery, grammatical mastery, and reading comprehension skills revealed that there is a link.

Conclusion

The goal of this article was to investigate the relationship between vocabulary mastery, grammar mastery, and reading comprehension skills among students in the 11th grade at SMK N 1 Kendal. Based on the previously reported statistics, it is possible to deduce that the students' vocabulary mastery score percentage was 44.028. The kids' grammatical mastery score percentage was 57.222. The proportion of reading comprehension skills scored by the learners was 71.250. Furthermore, the correlation between vocabulary mastery and reading comprehension skills is 0.449, implying that $r_{xy} > 0.449$. As a result, there is a correlation between vocabulary mastery and reading comprehension skills. Additionally, the correlation between grammar skill and reading comprehension skills is 0.441, suggesting that $r_{xy} > 0.441$.

References (TNR 14pt., bold)

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