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THE CORRELATION BETWEEN VOCABULARY MASTERY AND READING COMPREHENSION OF EIGHT GRADE STUDENTS IN SMPN 1 SUNGGUMINASA

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ABSTRACT

Vocabulary mastery plays a crucial role in students' reading comprehension, particularly when understanding texts in narrative. Many students face difficulties in reading due to limited vocabulary knowledge. This research aims to investigate the correlation between vocabulary mastery and reading comprehension of the students, especially in narrative texts. This research used a quantitative correlational design involving 50 eighth-grade students at SMPN 1 Sungguminasa. The data were gathered through a test of mastery in vocabulary and a test of reading comprehension and analyzed using statistical analysis of correlation to determine the relation between the variables. The findings are expected to reveal a consequential correlation between vocabulary mastery and reading comprehension. This research results are anticipated to provide valuable insights for English teachers in developing effective strategies to enhance students' vocabulary and improve their reading comprehension skills

Keywords: vocabulary mastery, reading comprehension, narrative text, correlation

A. Background

Vocabulary mastery is one of the most essential components in English learning, especially in developing students' reading comprehension. Nation (2001) describes that vocabulary is the foundation when learning a language because without

knowing words, learners cannot understand written texts effectively. Grabe and Stoller (2011) also explain that reading comprehension depends greatly on the ability of students to perceive and recognize words. If students do not understand the meaning of the words in a text, they will fail to understand the overall message. This shows that vocabulary mastery becomes the main key to successful reading comprehension.

In narrative texts, vocabulary mastery becomes even more important because this type of text uses many action verbs, descriptive adjectives, and time expressions. Anderson and Anderson (2003) state that narrative texts are used to entertain readers and deliver moral values through stories. However, Thornbury (2002) explains that students with limited vocabulary will have serious difficulty understanding the content of the story even if they understand the grammar. They may fail to understand the plot, characters, and message of the story. Therefore, vocabulary mastery plays a very important role in understanding narrative texts.

Although vocabulary is very important, many students still have low vocabulary mastery, which affects their reading comprehension. Snow (2002) states that limited vocabulary is one of the main causes of students' low achievement in reading. Many students can read English texts but cannot understand the meaning well because they do not recognize many words. This problem often happens at the secondary school level where reading texts becomes more complex. This condition shows that students' low vocabulary mastery becomes a serious problem in reading comprehension.

Reading comprehension is also a crucial skill for students' academic success. Guthrie and Wigfield (2000) explain that students with good reading comprehension skills tend to perform better in all school subjects. However, Schmitt (2010) states that students with limited vocabulary knowledge often depend too much on dictionaries, which makes reading slow and ineffective. This condition reduces students' motivation to read English texts. This situation shows the urgent need to investigate the connection of vocabulary mastery and reading comprehension more deeply.

Many previous studies have shown that vocabulary mastery has a

significant relationship with reading comprehension. Laufer (1997) found that students with higher vocabulary knowledge are better at understanding reading texts. However, this study only discussed reading comprehension in general and did not focus on a specific type of text. This becomes a limitation because different text types require different kinds of vocabulary. This shows that research focusing on specific text types is still needed.

Qian (2002) also found that both vocabulary size and vocabulary depth have a strong correlation with students' reading comprehension ability. This research showed that students who have a larger and deeper vocabulary knowledge achieve better reading results. However, the participants in this study were university students, not secondary school students. In addition, the reading texts used were still general in nature. This indicates that further research at the secondary school level and on specific text types is still limited.

More recently, Lin and Wu (2022) explained that different genres of text require different vocabulary knowledge. They found that genre-based vocabulary mastery has an important role in students' reading comprehension. However, their study did not specifically focus on the relationship between proficiency in vocabulary and reading comprehension of students in narrative texts only. This shows that there is still a research gap related to narrative text understanding in the EFL context.

Based on the limitations of previous studies, the novelty of this research lies in its specific focus on the relationship between mastery of vocabulary and reading comprehension of students in narrative texts at the junior high school level. Unlike previous studies that focused on general reading comprehension or university students, this study emphasizes narrative texts and secondary school learners in an EFL context. This focus becomes the main contribution and uniqueness of the present study.

This research is feasible because both vocabulary mastery and reading comprehension can be measured clearly using appropriate tests. Brown (2004) states that vocabulary mastery can be measured through vocabulary tests, while reading comprehension can be

measured through reading tests. The relationship between both variables can be analyzed using quantitative correlational analysis. This shows that this research design is clear and measurable.

This study is also feasible in terms of time, participants, and data collection. Creswell (2012) explains that correlational research is suitable for identifying relationships between variables without giving any treatment. The participants can be taken from one class or one grade, so this research can be conducted effectively in a school setting. Therefore, this research is not only important and urgent but also realistic and practical to be conducted.

B. Research Design

This study employed quantitative correlational approach aimed at determining the connection among the learners' mastery of vocabulary and comprehension of reading in narrative form. A correlational study is appropriate because this researcher does not manipulate variables but measures them as they naturally occur. This design helps identify whether students who have higher vocabulary mastery also tend to achieve higher reading comprehension scores. According to Creswell (2018), correlational research investigates the degree to which two variables are related, providing statistical evidence of the relationship's strength and direction. Therefore, this study is pursued to determine that there is a notable correlation aligning the two variables. This study involves two main variables which are Independent Variable (X) and Dependent Variable (Y). The independent variable of this research is vocabulary mastery. It refers to students' ability to understand, recall, and use English vocabulary appropriately. Vocabulary mastery includes knowledge of word meaning, word form, and word use, which support reading comprehension, especially in narrative texts. While the dependent variable is comprehension in reading in particular narrative form. This variable refers to the ability of the learners to comprehend the content, structure, meaning, and message of narrative texts. This includes identifying main ideas, characters, setting, plot, inference, and moral values within narrative passages. The population of this research consists of all eighth-grade students in SMPN 1 Sungguminasa in the academic year

2025. While the sample consist of 30 students selected by using purposive sampling.

C. Findings and Discussion

1. Descriptive Statistics

Table 1 Descriptive Statistics Table

	Vocabulary	Reading
Valid	50	50
Mode	37.79	75.40
Median	57.50	73.00
Mean	56.80	66.55
Std. Deviation	25.47	19.48
Minimum	10.00	20.00
Maximum	100.0	100.0

Based on the data above, the descriptive statistical results from 50 participants, the vocabulary scores yielded a mean score of 56.80, a median score of 57.50, and 37.79 of mode. The fact that the mean value is slightly higher than the median suggests that the distribution of vocabulary scores is relatively balanced, although with a slight tendency toward the lower range of scores. The score range is considerably wide, spanning from 10 to 100, accompanied by a standard deviation of 25.47, which indicates substantial variability in learners' vocabulary proficiency. Meanwhile, the reading scores indicate a mean of 66.55, a median of 73.00, and a mode of 75.40. The median and mode scores being notably higher than the mean suggests that the majority of participants achieved higher reading scores, though several low scores lowered the overall average. The minimum score of 20 and maximum score of 100, with a standard deviation of 19.48, reflect a moderate yet significant variation in reading proficiency among participants.

2. **Pearson Product–Moment Correlation between vocabulary vs. reading**

Table 2

Pearson's Coefficient Correlation Table

		n	Pearson's r	p	Lower 95% CI	Upper 95% CI	Covariance
vocabulary	reading	50	0.437**	.002	0.180	0.638	216.7
* p < .05, ** p < .01, *** p < .001							

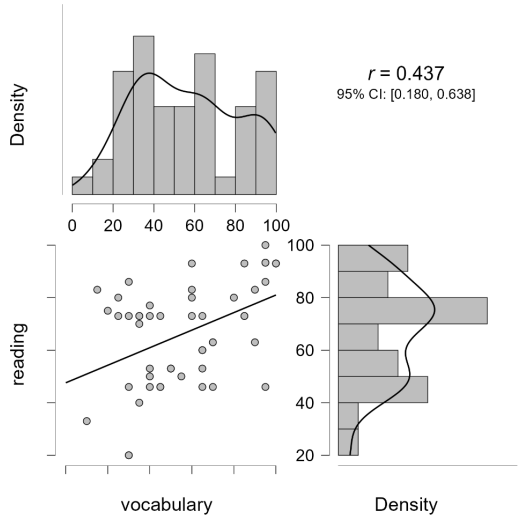

Figure 1. *Bivariate Scatterplot with Density Plots*

The inferential analysis confirms a significant connection linked these two variables. The correlation coefficient of Pearson was calculated as r = 0.437, indicating a moderate, positive linear association. This positive correlation demonstrates that as learners' mastery of vocabulary increases, their understanding in reading narrative texts tends to improve as well. The statistical significance of this finding is undeniable, with a p-value of 0.002, which is far below the 0.05 threshold. Additionally, the 95% confidence interval [0.180, 0.638] did not include zero, which further implies that the relationship is unlikely to have occurred by chance. Consequently, the null hypothesis H_0 is rejected, and the alternative hypothesis H_1 is accepted, confirming that a statistically significant relation exists between mastery of vocabulary and reading comprehension in texts of narrative. While this link validates the theoretical background that vocabulary is fundamental to reading, the moderate strength of the correlation suggests that vocabulary is a primary, but not singular, predictor of success, allowing room for other cognitive factors, like inference and plot structure recognition, to influence the final reading score.

Discussion

This research successfully established a positive and statistically notable relationship between mastery of vocabulary and reading understanding of the learners using narrative texts (r=0.437, p=0.002). This finding is a powerful interpretation of the results, firmly confirming the hypothesis that vocabulary mastery is a fundamental and statistically significant predictor of reading success in this context. However, the moderate strength of this correlation suggests a nuanced relationship, not a perfect dependence. Critically, the descriptive statistics revealed a lower mean score for vocabulary mastery

(56.80) compared to the mean score for reading comprehension (66.55). This difference strongly suggests that students are actively employing compensatory strategies, such as using contextual clues, making inferences, or relying on narrative schema knowledge, to bridge the lexical gaps and achieve a better comprehension score than their isolated vocabulary knowledge might predict. This necessity for compensation, coupled with the immense variability in vocabulary scores (SD=25.47), highlights a substantial instructional challenge where a large subset of students is struggling with the very foundation of the skill.

This evidence is directly connected to existing literature and theories in applied linguistics. The positive correlation aligns squarely with the Threshold Hypothesis, which posits that a certain level of vocabulary knowledge is essential before true comprehension can occur (Nation, 2013). Furthermore, the results support the 98% Coverage Principle advocated by Schmitt, Jiang, & Grabe (2011), suggesting that the moderate correlation is a consequence of students falling below this threshold and being forced to guess or infer too frequently. Because this research focused on narrative texts, a genre rich in descriptive language, specific verbs, and detailed plot mechanisms (Anderson & Anderson, 2003). The established relationship affirms that both the scope and intensity of lexical understanding are necessary if they want to decode the complex emotional and plot elements specific to storytelling. The significant finding reinforces the assertion that vocabulary is the "main key" to reading comprehension (Grabe & Stoller, 2011), but its moderate correlation also acknowledges the influence of other essential reading sub-skills.

Implication

The findings carry profound implications for educational practice. Given the statistically proven link and the low vocabulary mean score, this research mandates that educators prioritize explicit and systematic vocabulary instruction as a core component of the English curriculum, moving beyond incidental exposure. Instruction must be integrated into reading activities, explicitly teaching students how to infer word meanings from narrative contexts, which they

are already attempting to do. Moreover, the vast score range requires differentiated instruction to provide targeted intervention for students with the lowest vocabulary mastery, ensuring they reach the lexical threshold necessary to access the curriculum effectively. Failure to address this foundational deficit will likely limit the effectiveness of any higher-level comprehension strategy training.

Limitation

Despite the robustness of the correlation, this research is subject to limitations. Being a correlational design, this research cannot establish a cause-and-effect relationship; it can only confirm the strength of the association. The findings are also geographically and demographically specific, limited to the sampled eighth-grade students, which constrains the generalizability to other text types or age groups. Lastly, this research did not control potential confounding variables, such as student motivation, prior reading experience, or general cognitive ability, which undoubtedly contributed to the unexplained variance in the reading comprehension scores.

Future Directions

To advance the field, future research should be directed toward experimental designs. This includes conducting an intervention study where systematic vocabulary instruction is introduced to a treatment group to definitively test the causal hypothesis: whether increased vocabulary mastery directly leads to statistically significant improvements in reading comprehension. Furthermore, research should focus on the specific depth of vocabulary knowledge (e.g., knowledge of word forms and collocations) and its relationship to narrative comprehension, potentially utilizing qualitative methods to explore the specific compensatory strategies used by successful readers to overcome lexical barriers.

D. CONCLUSION

This research successfully examined the connection between mastery in vocabulary ability with comprehension of reading on narrative using quantitative correlation design. This research found a moderate, positive, and statistically significant correlation between vocabulary mastery and reading comprehension, with a Pearson coefficient correlation of r =

0.437 and a p-value of 0.002. Since the p-value is less than the significance level of 0.05, the null hypothesis is rejected, and the alternative hypothesis H1, which states that there is a significant correlation, is accepted.

In summary, these findings confirm that vocabulary mastery plays an important and statistically significant role in supporting the ability of the to understand the content, structure, and morals of narrative texts. Although students showed a higher average in reading comprehension (66.55) than in vocabulary mastery (56.80), suggesting the use of compensatory reading strategies, the identified correlation proves that higher vocabulary knowledge contributes directly to higher reading performance. Therefore, improving students' vocabulary mastery is confirmed as an essential instructional focus for enhancing reading comprehension in the narrative genre at the secondary school level

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