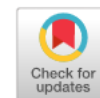


The Relationship Between Vocabulary and Reading Comprehension of Senior High School Students

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ABSTRACT

Although many studies have explored the relationship between vocabulary mastery and reading comprehension, research in vocational school contexts is limited, where students face unique challenges in learning English. This study aimed to examine the correlation between vocabulary mastery and reading comprehension among eleventh-grade students of SMK NW Pancor in the 2024/2025 academic year. A quantitative correlational design was used, involving 22 students selected through purposive sampling. Vocabulary mastery was measured using a 20-item multiple-choice test covering synonyms, antonyms, definitions, and sentence completions, while reading comprehension was assessed with a 20-item multiple-choice test focusing on main ideas, specific information, inference, and vocabulary in context. Data were analyzed using descriptive statistics, normality tests, and the Pearson Product Moment correlation. The results revealed a strong and significant positive correlation between vocabulary mastery and reading comprehension ($r = 0.753$, $p < 0.001$), indicating that students with higher vocabulary knowledge tended to achieve better reading comprehension. These findings highlight the essential role of vocabulary development in supporting reading skills and suggest that integrating systematic vocabulary instruction into English lessons can improve students' overall language proficiency in vocational school settings.

Keywords: *Vocabulary Mastery; Reading Comprehension; Correlation; Senior High School Students***Article History:**Received 21st August 2025Accepted 19th September 2025Published 22nd September 2025

INTRODUCTION

English, as an international language, plays a crucial role in education, communication, and global interaction. In Indonesia, it is taught as a foreign language and included in the national curriculum, particularly at the senior high school level, to prepare students for academic, professional, and social demands. Mastery of English enables students to participate effectively in global communication, access international information sources, and compete in academic and professional settings. Among the four language skills, reading comprehension is considered essential, as it allows learners to acquire information efficiently, expand their knowledge, and achieve academic success.

Reading comprehension is a complex cognitive process that involves decoding words, understanding sentence structures, identifying main ideas, making inferences, and integrating new information with prior knowledge. In the context of second and foreign language learning, students often face challenges in comprehending texts due to limited vocabulary, unfamiliar grammatical structures, and insufficient exposure to authentic materials. Vocabulary mastery, therefore, is considered a crucial determinant of reading ability. Nation (2001) argues that learners must know at least 95% of the words in a text to comprehend it effectively. Without sufficient vocabulary knowledge, students struggle not only to understand individual words but also to construct meaning from larger texts.

Wilkins (1972) famously emphasized that “without grammar very little can be conveyed, but without vocabulary nothing can be conveyed,” highlighting the indispensable role of vocabulary in language acquisition. Schmitt (2000) further asserts that vocabulary knowledge strongly influences learners’ ability to read, write, listen, and speak effectively. In line with these theoretical perspectives, vocabulary is recognized as the foundation for developing language proficiency, particularly in reading comprehension. Students who possess a broader vocabulary are more capable of understanding complex texts, making inferences, and integrating new information with prior knowledge.

Empirical studies have also reinforced the link between vocabulary mastery and reading comprehension. Anderson and Freebody (1981) found that vocabulary knowledge is a significant predictor of reading ability. Similarly, Laufer (1992) reported that students with larger vocabularies achieved better comprehension scores, suggesting that vocabulary instruction should be an integral part of reading development. More recently, Lamadi (2020) confirmed the positive relationship between vocabulary size and reading comprehension in various educational contexts, indicating that students who systematically acquire vocabulary tend to perform better in reading tasks. Despite these insights, most studies focus on general education settings, and research specifically addressing vocational school students remains limited.

Vocational school students often face unique challenges in learning English. Their curriculum emphasizes technical and practical skills, leaving relatively less time for language instruction. Consequently, students may have less exposure to reading materials and limited opportunities to expand their English vocabulary. These contextual factors may influence the strength of the relationship between vocabulary mastery and reading comprehension in vocational school settings. Therefore, examining this relationship in such a context is critical to understanding how vocabulary knowledge supports reading comprehension among students with different educational backgrounds and learning experiences.

The current study addresses this gap by investigating the correlation between vocabulary mastery and reading comprehension among eleventh-grade students of SMK NW Pancor. By focusing on this specific population, the research contributes to a better understanding of how vocabulary development affects reading performance in vocational school environments, where English learning faces distinct challenges compared to general secondary schools.

The objectives of this research are twofold. First, it aims to determine the level of vocabulary mastery and reading comprehension among the participants. Second, it seeks to examine the correlation between vocabulary mastery and reading comprehension, testing whether higher vocabulary knowledge is associated with improved reading ability. The findings are expected to offer practical guidance for English teachers in vocational schools to design more effective vocabulary and reading instruction tailored to their students’ needs.

This study also holds theoretical significance. It extends existing literature by providing empirical evidence from a vocational school context, which has been underrepresented in prior research. The results may validate or refine theoretical models that posit vocabulary as a core component of reading comprehension. Practically, the study offers insights for curriculum developers, educators, and policymakers, highlighting the importance of integrating systematic vocabulary instruction into English lessons to enhance students’ reading skills and overall language proficiency.

In conclusion, English reading comprehension is a critical skill for academic success and lifelong learning. Vocabulary mastery plays a central role in facilitating comprehension, enabling learners to decode, interpret, and integrate information effectively. While prior studies have established the importance of vocabulary in general educational contexts, research focusing on vocational school students remains limited. This study addresses this gap, aiming to examine the relationship between vocabulary mastery and reading comprehension among eleventh-grade

students of SMK NW Pancor. The findings are expected to provide both theoretical contributions and practical recommendations to improve English language instruction in vocational school settings.

METHOD

This study employed a quantitative correlational research design to examine the relationship between vocabulary mastery, as the independent variable, and reading comprehension, as the dependent variable. The research was conducted at SMK NW Pancor on August 4, 2025, during the 2024/2025 academic year. The participants consisted of twenty-two eleventh-grade students who were selected through purposive sampling.

Two instruments were used to collect the data. The first was a vocabulary mastery test comprising 20 multiple-choice items that assessed synonyms, antonyms, definitions, and sentence completions. The second was a reading comprehension test with 20 multiple-choice items focusing on main ideas, specific information, inference, and vocabulary in context.

Prior to administration, both instruments underwent a validation process. Content validity was established through expert judgment by two English Education lecturers, who reviewed the items for clarity, relevance, and alignment with the research objectives. Construct validity was ensured by designing the items to reflect the essential dimensions of vocabulary mastery and reading comprehension. In addition, the reliability of the instruments was examined using Cronbach's Alpha in SPSS. The results showed that the vocabulary mastery test obtained a reliability coefficient of 0.82, while the reading comprehension test reached 0.85. These coefficients indicate a high level of internal consistency, confirming that both instruments were valid and reliable for data collection.

FINDINGS AND DISCUSSION

Findings

The vocabulary mastery scores ranged from 17.5 to 50, with a mean of 42.61, indicating that most students possessed high levels of vocabulary knowledge. Reading comprehension scores ranged from 17.5 to 50, with a mean of 40.80, suggesting a generally good level of comprehension among participants.

Table 1. Descriptive Statistics of Vocabulary Mastery and Reading Comprehension

Variable	N	Min	Max	Mean	Std. Deviation
Vocabulary Mastery	22	17.5	50	42.67	5.12
Reading Comprehension	22	17.5	50	40.80	6.03

The results of the Pearson Product Moment correlation analysis are presented in Table 2.

Table 2. Correlation between Vocabulary Mastery and Reading Comprehension

Variable	r	Sig (2-tailed)	Interpretation
Vocabulary and Reading Comprehension	0.753	0.000	Strong Positive Correlation

The correlation coefficient ($r = 0.724$, $p < 0.05$) indicates a strong positive and statistically significant relationship between vocabulary mastery and reading comprehension. This suggests that students with higher vocabulary mastery tend to achieve better reading comprehension performance.

Discussion

The findings of this study reinforce the critical role of vocabulary mastery in supporting reading comprehension. The strong and significant correlation ($r = 0.753$) indicates that vocabulary knowledge is not merely an additional skill but a fundamental component of successful reading. Students with a wider vocabulary are better able to decode complex texts, identify main ideas, and make accurate inferences, which are essential aspects of comprehension.

These results are in line with Nation's (2001) assertion that readers must know at least 95% of the words in a text to comprehend it adequately. They also support Anderson and Freebody's (1981) instrumentalist hypothesis, which highlights vocabulary knowledge as a direct facilitator of comprehension through access to word meanings. Similarly, Snow (2002) emphasized that reading comprehension involves constructing meaning, a process that depends heavily on sufficient vocabulary mastery.

One possible explanation for this correlation is that vocabulary knowledge reduces the cognitive load during reading. When students are not required to stop frequently to interpret unfamiliar words, they can allocate more mental resources to higher-level comprehension processes such as inference-making, critical analysis, and summarization. Conversely, students with limited vocabulary may experience fragmented understanding, reduced fluency, and greater difficulty in grasping the overall meaning of texts.

In the context of SMK NW Pancor, vocabulary instruction is still dominated by memorization and translation practices. While these approaches support word recognition, they often fail to develop the ability to apply vocabulary in authentic contexts. To address this limitation, teachers should integrate vocabulary learning into meaningful reading activities by using authentic materials, encouraging extensive reading, and adopting interactive strategies such as peer teaching, contextualized tasks, and digital games. These approaches are consistent with Grabe (2009) and Guthrie and Wigfield (2000), who argue that interactive and engaging learning environments enhance both vocabulary development and comprehension skills.

CONCLUSION

This study demonstrated a strong and significant positive correlation between vocabulary mastery and reading comprehension among eleventh-grade students of SMK NW Pancor. The findings highlight the importance of integrating vocabulary instruction into reading activities to enhance students' comprehension skills. In practical terms, the results suggest several implications. For teachers, the findings underline the importance of designing reading lessons that emphasize vocabulary growth through contextual learning, guided practice, and interactive classroom strategies. For students, the results imply that independent vocabulary building – such as reading authentic texts, using digital applications, and practicing word usage in real contexts – can significantly improve their reading comprehension. For curriculum developers, the study indicates the need to integrate vocabulary development systematically within the reading syllabus, ensuring that learning materials provide gradual exposure to varied and level-appropriate vocabulary.

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