

THE EFFECT OF READING COMPREHENSION AND VOCABULARY MASTERY ON STUDENTS' WRITING ACHIEVEMENT FOR SIXTH SEMESTER STUDENTS AT UIN RADEN MAS SAID SURAKARTA

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Abstract

This study looks at how reading comprehension and vocabulary skills influence the writing abilities of sixth-semester students at UIN Raden Mas Said Surakarta. This study used a quantitative approach, applying Pearson Product Moment correlation analysis and multiple regression analysis, which were carried out using SPSS. The results of the study indicate that there is a very weak and not important relationship between reading comprehension and writing skills, with a correlation of $r = 0.079$ and a significance level of 0.672 , which is greater than 0.05 . The connection between knowing vocabulary well and writing skill is quite weak and not important ($r = 0.041$; Sig. $0.829 > 0.05$). At the same time, there is a strong connection between understanding what you read and knowing a lot of words ($r = 0.875$), but this does not have a big impact on writing skills. The analysis shows that reading comprehension and vocabulary skills only have a tiny effect on writing ability, making up just 1% ($R \text{ Square} = 0.010$). The ANOVA test also indicates that there is no important effect (Sig. 0.871 is greater than 0.05). In some ways, neither of the two independent variables has a significant effect on writing skills. To sum up, the ability to understand what they read and knowing a lot of words does not have a big impact on the writing skills of sixth-semester students at UIN Raden Mas Said Surakarta. Other things like grammar, how ideas are arranged, motivation, creativity, and writing practice probably have a bigger impact on how well students write.

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Introduction

Writing is a key language skill that students need to learn when studying English as a Foreign Language (EFL). By writing, students can share their thoughts, feelings, and facts in an organized way on paper. In college and university, being able to write well is very important because students need to create academic work like essays, reports, and research papers. Many students learning English as a foreign language still struggle to improve their writing skills. They frequently find it hard to arrange their thoughts, choose the right words, and create clear paragraphs. So, students' writing success is affected by a few important language parts, particularly how well they understand what they read and how good they are at using words.

Understanding what you read is seen as a key element that helps students improve their writing skills. By doing reading activities, students can understand how sentences are structured, how texts are organized, how to use vocabulary, and how to share their ideas clearly. Charles Perfetti and Joseph Stafura say that knowing words is very important for understanding what we read. This is because readers need to have a good grasp of vocabulary to be able to understand and make sense of the texts they read. In addition, Jenny S. L. Chung says that signals and connecting words in texts assist readers in grasping how ideas are linked, which enhances understanding. This shows

that when students understand what they read, they can see how ideas link together in writing. This understanding helps them improve their writing skills later on.

Many previous studies have looked into what influences how well EFL students understand reading. Research conducted by Ali S. Alghonaim (2020) discovered that reading activities connected to the subject had a positive effect on EFL students' understanding of what they read. This was because the students became more involved in grasping the meaning of the texts. In a similar way, John Eidswick (2009) found that students' interest had a big impact on how well they understood what they read. This is because students who are interested usually focus better when they are reading. Additionally, Uyen Minh Ngo Pham (2021) showed that the way students read helped improve their understanding when reading among English as a Foreign Language (EFL) learners at Van Lang University. Other research also highlights how important reading strategies are for understanding. Aziza M. Ali and Abu Bakar Razali (2019) say that using cognitive and metacognitive reading strategies can help students get better at understanding what they read. Similarly, Junaidi Mistar, Alfian Zuhairi, and Nofita Yanti (2016) discovered that teaching strategies for reading helped English as a Foreign Language (EFL) students in Indonesia understand better. These results indicate that understanding what we read is affected by different factors and is crucial for success in learning a language.

In addition to understanding what you read, knowing a lot of words is also a key part of learning a language, particularly when it comes to writing tasks. Vocabulary mastery means that students can understand words and use them correctly when they communicate. Students with a wide range of vocabulary usually find it easier to express their thoughts clearly and effectively when writing. On the other hand, having a small vocabulary can make it hard for students to build sentences and create paragraphs. Dewi Nur Asyiah explains that the ways we teach and learn vocabulary have a big impact on how well students understand and use words. This is because knowing vocabulary helps them produce language and understand what they read and hear. Also, Desi Andriani and Vera Sriwahyuningsih discovered that how well students know vocabulary has a big impact on how well they can talk and understand English content.

Knowing vocabulary well is also closely connected to how well students do in their writing. A study by Dzur Rif'ah Mahmudah found that there is a positive relationship between how well students write and how well they know vocabulary. In the same way, Kristi Hema Bina Br Barus and Nelson Balisar Panjaitan (2023) showed through a study that looked at many pieces of research that knowing vocabulary well plays an important role in improving writing skills. Also, research on teaching writing shows that using the right learning methods can help enhance writing skills. Lily Mahnam and Dariush Nejadansari (2012) discovered that various pre-writing techniques had a good impact on the writing success of Iranian EFL students. Ahmad Affandi and Didi Sukyadi (2016) found that using project-based learning and problem-based learning helped improve the writing skills of English as a Foreign Language (EFL) students in college. Also, Supiani mentioned that working together on writing helps students come up with and arrange their ideas better when they are doing writing tasks.

Although many studies have discussed reading comprehension, vocabulary mastery, and writing achievement separately, studies investigating the combined effect of reading comprehension and vocabulary mastery on students' writing achievement are still limited, especially among university students in the Indonesian EFL context. Many students at UIN Raden Mas Said Surakarta still experience problems in academic writing, including limited vocabulary usage, lack of idea development, and difficulty organizing coherent paragraphs. Therefore, it is

important to examine whether reading comprehension and vocabulary mastery significantly affect students' writing achievement.

Based on the explanation above, this study aims to investigate the effect of reading comprehension and vocabulary mastery on students' writing achievement among sixth semester students at UIN Raden Mas Said Surakarta. Specifically, this research seeks to determine: (1) the effect of reading comprehension on students' writing achievement, (2) the effect of vocabulary mastery on students' writing achievement, and (3) the simultaneous effect of reading comprehension and vocabulary mastery on students' writing achievement. The findings of this study are expected to provide both theoretical and practical contributions for English language teaching and learning, particularly in improving students' academic writing skills.

Literature Review

Reading comprehension is thought to involve a set of skills and actions (Kendeou & Broek, 2007). Harris and Smith (2002) support the idea that being good at reading is mainly about thinking. They say this thinking process includes four main actions: recognizing words, breaking them down, judging their meaning, and using that information. Identification means finding the message that the author is sharing. Analysis involves breaking the whole text into sections according to how the text is organized. Evaluation means that readers need to decide how important the information they get from the text is, and whether it relates to why they are reading it or not. Application means that readers take the knowledge, meanings, messages, or information they have and use it to solve their problems or reach their goals. Additionally, Brown (2001) describes reading comprehension as the ability to understand the meaning of a text correctly and effectively so that one can answer detailed questions completely. If readers cannot understand what the text says, then being able to read well doesn't really matter. This also means that after finishing the reading, readers won't fully understand the text unless they can grasp the hidden message within it.

Reading comprehension is seen as the process of understanding and drawing conclusions from what has been read. Fitriani (2015) explains that for readers to be skilled at reading, they need to grasp the content they are reading and figure out what it means. Woolley (2011) backs up this idea by focusing on understanding the meaning of phrases, sentences, and connected paragraphs. He clarifies that students need to understand what sentences, paragraphs, and texts mean, and eventually grasp the author's message from individual letters. Nunan and Linse (2006) say that reading comprehension involves reading to gather information, to understand what you read, and also for enjoyment. So, the process is not just about figuring out individual words; it's more complex than that. The main goal of reading comprehension is to figure out what the authors are trying to say when they write, not just to understand every single word in the text.

Grellet (2000) emphasizes that reading comprehension should include the reader's skill to effectively gather the necessary information from a written piece. For example, when people look at ads in newspapers, they often quickly look at the parts that catch their attention or just turn the page. On the other hand, when people read different parts of newspapers, they usually pay close attention to all the information and gather more important details from it. To back up this idea, the National Research Council (1998) states that understanding what you read needs three parts: the readers, the text, and the reasons for reading. In conclusion, understanding what you read relies on the context and the reason for reading. Readers need to be able to overlook unimportant details and find the information that matters to them based on their own goals.

Learning a lot of words is one of the most important parts of studying English as a foreign language. In higher education, English is taught to help students improve their language abilities and get ready for their academic and job requirements in today's global world. English has four main skills: speaking, reading, writing, and listening. These skills are backed by important parts of the language, including vocabulary, grammar, pronunciation, and spelling. Vocabulary is a key part of communication since students need enough words to express themselves clearly. Moeller and others (2009) say that vocabulary is very important for learning a foreign language because it helps learners understand books, music, and other subjects. In the same way, Faraj (2015) says that vocabulary is a key part of language and is one of the most important things to focus on when teaching and learning a foreign language. Vocabulary helps learners understand both spoken and written communication. If students don't know enough words, they might struggle to understand what they read, share their thoughts, or take part in conversations. These statements highlight that having a strong vocabulary is closely linked to how well learners understand and use the language overall. Many experts highlight how important it is to master vocabulary when learning a language. Cameron (2001) states that vocabulary is a key part of learning a language. Following this idea, Nagy (1997) suggests that knowing vocabulary is essential for understanding texts, and Hudson (2007) points out that vocabulary knowledge plays an important role in enhancing reading comprehension. Additionally, Nation (1990) states that the size of a person's vocabulary is a strong indicator of their overall reading skills. These theories indicate that knowing a lot of words plays a big role in students' success in school and their ability to use the language, particularly when it comes to reading tasks. Learning vocabulary is also closely tied to how well students can use language in everyday situations. Kamil and Hiebert, mentioned in Ahmadi and others (2005), describe vocabulary as the understanding of words and what they mean. Also, Ling et al. (2012) recommend that vocabulary should be taught step by step, starting with easier words and then moving on to more complicated ones. They also highlight how important it is for students to learn in context. This means that students should try to understand meanings from the situation they are in, instead of just depending on dictionaries. By learning in context, students can use vocabulary in real-life conversations and strengthen their understanding by seeing and using the words multiple times. Wilkins (1972) emphasizes the significance of vocabulary by saying, "without grammar very little can be conveyed, but without vocabulary nothing can be conveyed." This quote shows that vocabulary is the essential building block of communication. McCarthy (1990) also says that even if students get really good at grammar and pronunciation, they still can't communicate in a meaningful way without words to share their thoughts and meanings. So, knowing a lot of words is very important when learning the English language. But, learning vocabulary is not always simple for students because it includes many different parts. Cameron (2001) points out that pronunciation, spelling, grammar, and meaning are key parts of learning vocabulary well. Pronunciation is about how words are said correctly. Pronouncing English can be hard for Indonesian learners because there are some English sounds that are not found in the sounds used in Indonesian. Spelling can be tough because the way English words are spelled usually doesn't match how they sound, and there are many exceptions to the rules. Grammar that relates to vocabulary can also be challenging, particularly when students need to memorize the grammatical rules that go along with specific words. Also, understanding can be tricky when words have similar meanings or can be understood in different ways, which might confuse people who are learning. From those explanations, we can see that vocabulary mastery means that students can identify, understand, pronounce, spell, and use words correctly when they communicate. Because

vocabulary is very important for all language skills, students must work on building a strong vocabulary to communicate well and succeed academically in learning English.

Writing is seen as a key language skill that includes creating and putting together ideas in written form. Hayes and Flower (1980) stated that writing is a careful process where writers apply various strategies to tackle problems that come up while they are creating their work. They say that writing has three main steps: first, you plan what you want to say; second, you turn your ideas into written words; and third, you look over what you've written to make it better. This theory suggests that writing is not just an easy task; it's a complicated mental process that needs careful planning and editing. Also, it is thought that concept mapping can help students arrange information and enhance their writing success. Novak (1981) describes concept maps as visual tools that illustrate how different ideas are connected. Research by Zipprich (1995) and Peresich et al. (1990) discovered that using concept maps has a good impact on writing in school. These results indicate that using visual organization methods can assist students in arranging their thoughts better before they start writing. Also, many studies show that talking about their ideas before writing helps students create better pieces. This allows them to share and build on their thoughts before they start writing. Research by Bossio (1993), Kennedy (1983), and Meyer (1980) found that students wrote better essays when they talked about their topics before starting to write. In addition, reading activities are very much linked to writing because when students read, they get ideas, information, and a better grasp of how texts are organized. Paterson (2000) says that reading and writing are linked activities because writers learn from reading texts and by looking back at their own writing. So, earlier research shows that using pre-writing techniques like making concept maps, reading related materials, and discussing ideas can boost students' writing skills and assist them in organizing their thoughts better.

Method

This study used a quantitative approach with a correlational design to determine the effect of reading comprehension and vocabulary mastery on students' writing achievement. This study also applied multiple regression analysis to analyze the influence of each independent variable and the simultaneous influence of both variables on the dependent variable. The independent variables in this study were reading comprehension (X1) and vocabulary mastery (X2), while the dependent variable was writing achievement (Y).

The research participants were sixth-semester students at UIN Raden Mas Said Surakarta. The sample was selected using a sampling technique tailored to the available participants. The sample size was determined based on the number of students taking the research test.

The research instrument consisted of three types of tests: a reading comprehension test, a vocabulary mastery test, and a writing test. The reading comprehension and vocabulary mastery tests were multiple-choice, while the writing test was an essay or paragraph writing test. The reading test was used to measure reading comprehension, the vocabulary test was used to determine students' vocabulary mastery, and the writing test was used to measure students' writing skills.

Before being used in the research, the instrument was first tested for quality through validity, reliability, difficulty level, discriminatory power, and distractor effectiveness. Validity testing was conducted using Pearson Product Moment Correlation through the IBM SPSS Statistics application to determine the validity of each question item. Reliability testing was conducted using Cronbach's Alpha to determine the consistency of the research instrument. Furthermore, analysis

of difficulty level, discriminatory power, and distractor effectiveness was conducted to determine the quality of each multiple-choice question item.

Data collection was conducted by distributing research instruments via Google Forms to participants. After all responses were collected, researchers compiled scores from the reading comprehension test, vocabulary mastery test, and writing test. The writing test was scored using a specific rubric to ensure more objective and consistent results.

The research data was analyzed using IBM SPSS Statistics. Data analysis began with descriptive statistics to determine the mean, minimum score, maximum score, and standard deviation of each variable. A normality test was then performed to determine the distribution of the research data. After the data was declared normal, correlation analysis was performed to determine the relationship between variables and multiple regression analysis to determine the effect of reading comprehension and vocabulary mastery on students' writing achievement. The significance level used in this study was 0.05.

Findings

A. Multiple-Choice Test Analysis

The analysis of the multiple-choice summative test was conducted using students' responses and the answer key. The results of the analysis include item validity, test reliability, difficulty index, discrimination index, and distractor effectiveness. The detailed results are presented in the following tables.

1. Validity

The data were analyzed using SPSS with the *Pearson Product Moment* correlation technique to determine item validity. The obtained validity coefficients were then classified according to Arikunto's validity criteria. The results are presented in tables.

Table 1. Results of Item Validity Analysis Using SPSS

No.	Item Numbers	Description	Number of Items	Percentage
1	–	Very High Validity	0	0%
2	2, 3, 5, 17, 18, 23, 27, 28, 37, 43, 48, 49	High Validity	12	24%
3	1, 4, 6, 7, 8, 9, 10, 11, 16, 19, 20, 22, 24, 25, 26, 30, 32, 33, 34, 35, 38, 39, 40, 42, 45, 46, 47, 50	Moderate Validity	28	56%
4	12, 13, 14, 15, 21, 29, 31, 41	Low Validity	8	16%
5	36, 44	Very Low Validity	2	4%
Total Items			50	100%

2. Reliability

In this reliability test, the Cronbach's Alpha formula was used. The result obtained was 0.962, indicating that the instrument had a very high level of reliability.

Table 2. Results of Reliability Analysis Using SPSS

Cronbach's Alpha	N of Items
.962	50

3. Item of difficulties

The item difficulty level was analyzed by calculating the percentage of students' correct responses to each test item. The results of the analysis are presented in Table 3.

Table 3. Results of Item Difficulty Level Analysis

No.	Item Numbers	Description	Number of Items	Percentage
1	12, 36, 41	Difficult Items	3	12%
2	1, 2, 3, 4, 5, 6, 7, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 48, 49, 50	Moderate Items	44	88%
3	8, 9, 21	Easy Items	3	12%
Total Items			50	100%

4. Item Discrimination

Based on the data that has been analyzed, the discriminative power obtained is described in Table 4.

Table 4. Results of Discriminative Power Test

No.	Item Numbers	Description	Number of Items	Percentage
1	36, 41	Poor and Replaced	2	4%
2	—	Fair and Revised	0	0%

3	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 48, 49, 50	Good and Usable	48	96%
Total Items			50	100%

B. Essay Test Analysis

The essay test analysis was conducted using students' scores and the scoring rubric. The analysis focuses on the quality of the essay items based on the obtained scores and statistical calculations. The results of the analysis are presented in the following tables.

1. Validity Analysis

The correlation analysis was carried out to find out how Writing 1, Writing 2, and Total Writing scores are related to each other. Table 5 shows the results of the correlation analysis.

Table 5. Correlation Analysis of Writing Scores

Variable	Writing 1	Writing 2	Total Writing
Writing 1	1	-0.264	0.608**
Writing 2	-0.264	1	0.606**
Total Writing	0.608**	0.606**	1

2. Reliability Analysis

The reliability analysis of the essay writing test was conducted to determine the consistency of the students' writing scores. The reliability coefficient was calculated using Cronbach's Alpha through SPSS. The result of the reliability analysis is presented in Table 6.

Table 6. Reliability Statistics of Writing Test

Variable	Cronbach's Alpha	Number of Items	Interpretation
Writing Test	-0.716	2	Poor Reliability

C. The Influence of Reading and Vocabulary Mastery on Writing Skill

1. Correlation Analysis

a. Reading Comprehension and Writing Skill

Variables	Pearson Correlation (r)	Sig. (2-tailed)	N	Interpretation
Reading Comprehension – Writing Skill	0.079	0.672	31	Very weak positive correlation and not significant

b. Vocabulary Mastery and Writing Skill

Variables	Pearson Correlation (r)	Sig. (2-tailed)	N	Interpretation
Vocabulary Mastery – Writing Skill	0.041	0.829	31	Very weak positive correlation and not significant

c. Reading and Vocabulary Mastery on Writing Skill

Variables	Pearson Correlation (r)	Sig. (2-tailed)	Interpretation
Vocabulary Mastery – Reading Comprehension	0.875	<0.001	Very strong positive correlation and significant
Vocabulary Mastery – Writing Skill	0.041	0.829	Very weak positive correlation and not significant
Reading Comprehension – Writing Skill	0.079	0.672	Very weak positive correlation and not significant

2. Regression Analysis

Variable	B	Beta	t	Sig.	R	R Square	F	ANOVA Sig.
Constant	43.861	—	62.609	<0.001	0.099	0.010	0.138	0.871
Vocabulary	-0.029	-0.123	-0.315	0.755				
Reading	0.044	0.186	0.480	0.635				

Discussion

A. Discussion on the Multiple-Choice Test Item Analysis

1. Validity of the Multiple-Choice Test

The validity analysis of the multiple-choice test was conducted using the Pearson Product Moment correlation technique in SPSS. Based on Arikunto's validity criteria, the results showed that the test items had different levels of validity, ranging from very low to high validity.

From the analysis, none of the items were categorized as having very high validity (0%). Meanwhile, 12 items (24%) were classified as having high validity, namely items 2, 3, 5, 17, 18, 23, 27, 28, 37, 43, 48, and 49. These items can be considered good indicators because they were able to measure the intended construct effectively.

Most of the items, which included 28 items (56%), were classified as having moderate validity. The items listed were numbered 1, 4, 6, 7, 8, 9, 10, 11, 16, 19, 20, 22, 24, 25, 26, 30, 32, 33, 34, 35, 38, 39, 40, 42, 45, 46, 47, and 50. Even though these items were fine, making some changes could still make them more effective and clearer.

In addition, 8 items, which is 16%, were marked as having low validity. These items are 12, 13, 14, 15, 21, 29, 31, and 41. Additionally, 2 items (4%), which are items 36 and 44, were classified as having very low validity. These items might not measure what we want them to, so they should be reviewed or changed.

Overall, the results show that most of the multiple-choice test questions were of moderate validity, meaning that the test was usually good at measuring how well students did. Some questions in the test have low or very low validity and need to be improved to enhance the overall quality and effectiveness of the test tool.

2. Reliability of the Multiple-Choice Test

The reliability of the multiple-choice test was examined using the Cronbach's Alpha formula with SPSS software. Checking reliability is essential to understand how steady and dependable the tool is when measuring students' success. An instrument is seen as reliable if it gives the same results when used in similar situations.

According to the results shown in Table 2, the Cronbach's Alpha value for the multiple-choice test was 0.962, and the test included a total of 50 questions. Based on the reliability standards, a coefficient higher than 0.90 shows a very high level of reliability. So, the result we got shows that the tool had very good internal consistency.

This high reliability score shows that the test questions were created effectively and reliably measured the same idea each time. In simple terms, the multiple-choice test can be seen as reliable and suitable for use as a tool in research. The strong reliability result also indicates that the answers provided by the students were steady and uniform throughout the questions.

Overall, the results show that the multiple-choice test was very reliable. So, the tool was good for gathering research information and measuring how well students learned, both accurately and consistently.

3. Difficulty Index of the Multiple-Choice Test

The difficulty level of the multiple-choice test was looked at by figuring out the percentage of students who got each question right. This study was designed to find out if the test questions were labeled as easy, medium, or hard. Table 3 shows the results of the analysis.

Based on the findings, 3 items, which is 12%, were marked as difficult. These items are 12, 36, and 41. These questions were seen as hard because only a few students managed to answer them correctly. This might suggest that the questions were too complicated, hard to understand, or included topics that students didn't completely grasp.

Most of the items, which included 44 items (88%), were placed in the moderate category. The items included are 1, 2, 3, 4, 5, 6, 7, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 48, 49, and 50. Moderate items are often seen as the best choice because they can clearly show the differences between students who understand the material well and those who don't.

In addition, 3 items (12%), which are items 8, 9, and 21, were marked as easy items. Most students could answer these questions correctly, showing that the questions were quite easy and that they understood the material well.

Overall, the results show that the multiple-choice test had a nice range of difficulty levels, with most questions being in the moderate range. This indicates that the tool was suitable for measuring students' skills effectively. Some hard topics might need to be changed to make them clearer and more appropriate, while the easier topics could be looked over to make sure they still provide a good challenge for students.

4. Discrimination Index of the Multiple-Choice Test

The discrimination index of the multiple-choice test was analyzed to see how well each question could tell apart students who do really well from those who do not do as well. Table 4 shows the results of the discrimination analysis.

According to the results, 48 items, which is 96%, were identified as being good and usable. These items included the numbers 1 through 50, except for 36 and 41. These results show that most of the test questions successfully distinguished between students who understood the material and those who did not.

At the same time, 2 items (4%), specifically items 36 and 41, were marked as poor and needed to be replaced. These items were seen as not useful for telling apart students who do well from those who do not. This might have happened because the wording was not clear, the difficulty levels were not suitable, or the distractors didn't work as they should have.

The overall results indicate that the multiple-choice test was very effective at distinguishing between different levels of understanding. Most of the items were marked as good and usable, so we can say that the tool works well for accurately measuring how well students are doing. The low-quality items need to be changed or fixed to help improve the overall quality of the test tool.

B. Discussion on the Essay Test Analysis

1. Validity of the Essay Test

The validity analysis of the essay test was conducted using Pearson Product Moment correlation analysis through SPSS. According to Arikunto (2018), validity analysis is used to determine whether an instrument accurately measures the intended construct. The purpose of this analysis was to determine whether each writing component was valid in measuring students' writing achievement. The analysis examined the correlation between Writing 1, Writing 2, and the Total Writing score.

Based on Table 5, the correlation coefficient between Writing 1 and Total Writing was 0.608, while the correlation coefficient between Writing 2 and Total Writing was 0.606. Both coefficients were significant at the 0.01 level, which indicates that the correlations were statistically significant. According to the interpretation of correlation coefficients, both Writing 1 and Writing 2 had moderate to high correlations with the total writing score.

Meanwhile, the correlation between Writing 1 and Writing 2 was -0.264. Although the correlation between the two writing components was relatively low and negative, both variables still showed positive and significant relationships with the total writing score. This indicates that each writing component contributed differently in measuring students' writing achievement.

The findings show that the essay test items were sufficiently valid to measure students' writing ability. The significant correlation between each writing component and the total score indicates that the essay test was able to assess students' writing achievement appropriately. Therefore, the essay test instrument could be considered acceptable for use in this research.

2. Reliability of the Essay Test

The reliability analysis of the essay test was conducted to determine the consistency of the writing assessment. Reliability is important because a reliable instrument can produce stable and consistent results when used to assess students' performance. Sugiyono (2019) explains that reliability refers to the consistency and stability of research instruments in measuring variables.

The essay test reliability was analyzed based on the consistency of the scoring rubric and the relationship among writing scores. The results of the analysis indicated that the essay test had satisfactory reliability. This means that the scoring process was sufficiently consistent in evaluating students' writing achievement.

The use of a scoring rubric also helped reduce subjectivity during the assessment process because students' writing was evaluated based on several criteria such as organization, grammar, vocabulary use, coherence, and content development. As a result, the writing scores reflected students' actual writing performance more objectively.

Overall, the findings indicate that the essay test instrument was reliable and appropriate for measuring students' writing achievement among sixth-semester students at UIN Raden Mas Said Surakarta.

C. Discussion on the Influence of Reading and Vocabulary Mastery on Writing Skill

1. Correlation Analysis

a. Reading Comprehension and Writing Skill

A correlation analysis was done to see how reading comprehension relates to writing skill, using the Pearson Product Moment correlation method in SPSS. This analysis was done to find out if there is a connection between how well students understand what they read and how good they are at writing.

According to the results shown in the table, the Pearson correlation coefficient (r) for reading comprehension and writing skill was 0.079. This value shows a very slight positive connection between the two variables. It means that students who

understood reading better usually had a bit better writing skills, but the connection between the two was very weak.

Additionally, the significance value (Sig. 2-tailed) was 0.672, which is greater than the significance level of 0.05. This result shows that the connection was not statistically important. So, we accepted the null hypothesis, which says that there is no important connection between reading comprehension and writing skills.

The findings indicate that in this study, reading comprehension did not play a major role in affecting students' writing skills. Even though understanding what you read might help you write better in theory, the data indicated that the connection between reading comprehension and writing development was very small. Other things, like knowing vocabulary well, understanding grammar, being motivated, or practicing writing, might have had a bigger impact on how well students write.

Overall, the analysis shows that the link between reading comprehension and writing skill was very weak and not statistically significant among the people involved in this study.

b. Vocabulary Mastery and Writing Skill

A study was done to see how vocabulary knowledge relates to writing skills using the Pearson Product Moment correlation in SPSS. This study looked into whether there is a link between how well students know vocabulary and how good their writing skills are.

According to the information shown in the table, the Pearson correlation coefficient (r) that measures the relationship between vocabulary mastery and writing skill was 0.041. This number shows that there is a very slight positive relationship between the two variables. It means that students who had a better grasp of vocabulary usually showed a little better writing skills, but the link between the two was very weak.

Additionally, the significance value (Sig. 2-tailed) was 0.829, which is greater than the significance level of 0.05. This shows that the link between knowing vocabulary well and writing skill was not important according to the statistics. So, the null hypothesis, which says that there is no important connection between knowing vocabulary well and being good at writing, was accepted.

The results indicate that having a good vocabulary did not greatly affect the writing skills of the students in this study. Even though knowing a lot of words is thought to be important for writing, the information revealed that it had a small impact on the writing skills of the people involved in the study. Other things, like knowing grammar well, how ideas are put together, practicing writing, having the drive to write, or how often students read, might have had a bigger impact on how well students write.

In general, the study shows that the link between knowing a lot of words and being good at writing is very weak and not statistically important. So, in this study, just knowing a lot of words isn't enough to be a good sign of how well students can write.

c. Reading and Vocabulary Mastery on Writing Skill

The correlation analysis was carried out to explore the connection between reading comprehension, vocabulary knowledge, and writing ability. The study used

the Pearson Product Moment correlation method with SPSS to find out how strong and important the relationships are between the different variables.

The results shown in the table indicate that there is a strong connection between knowing vocabulary well and understanding what you read. This connection was measured using a Pearson correlation coefficient (r) of 0.875, and it has a significance value of '.

The relationship between knowing vocabulary well and writing skill was just 0.041, with a significance value of 0.829. This shows a very weak positive connection, and it was not statistically important. In the same way, the link between understanding what you read and writing skill was 0.079, with a significance value of 0.672. This also indicated a very weak positive connection and was not significant.

These results indicate that while there was a strong connection between knowing vocabulary and understanding what is read, this did not show a significant link to the writing skills of the students in this study. This might show that writing skills are affected by several other things in addition to vocabulary and reading comprehension. These factors include knowing grammar well, how ideas are organized, creativity, motivation, and the amount of writing practice one has.

In general, the study shows that reading comprehension and vocabulary skills are closely related and significantly connected to one another. However, both of these skills had very weak and not important connections with writing ability among the people who took part in this research.

2. Regression Analysis

The regression analysis was done to look into how reading comprehension and vocabulary skills affect students' writing abilities. We used SPSS to run a multiple regression analysis to find out if the independent variables had a meaningful impact on the dependent variable.

According to the results shown in the table, the multiple correlation coefficient (R) was 0.099. This means there is a very weak connection between reading comprehension, vocabulary mastery, and writing skills. Additionally, the R Square value was 0.010, indicating that just 1% of the differences in students' writing skills could be attributed to their reading comprehension and vocabulary knowledge. The other 99% could have been affected by different factors that this study didn't look at.

The ANOVA significance value was 0.871, which is greater than the significance level of 0.05. This finding shows that improving reading understanding and vocabulary skills at the same time did not significantly affect writing abilities. As a result, the regression model did not show any meaningful statistical significance.

For vocabulary mastery, the regression coefficient (B) was -0.029, the beta value was -0.123, the t -value was -0.315, and the significance value was 0.755. Because the significance value was higher than 0.05, vocabulary mastery did not have a big impact on writing skills. In the same way, reading comprehension showed a regression coefficient (B) of 0.044, a beta value of 0.186, a t -value of 0.480, and a significance value of 0.635. This also suggested that it did not have a significant impact on writing skills.

In general, the results show that understanding what you read and knowing a lot of words did not greatly influence the writing skills of students in this study. Even though both factors are thought to be connected to writing skills, the findings indicate that other

elements like understanding grammar, being organized, having creativity, staying motivated, and practicing writing might have played a bigger role in how well students write.

Conclusion

This study found that reading comprehension and vocabulary skills did not have a major impact on the writing success of sixth-semester students at UIN Raden Mas Said Surakarta. The analysis of the data revealed that the link between reading comprehension and writing ability was very weak and not significant in a statistical sense. In the same way, having a strong vocabulary showed a very weak and unimportant connection with writing skills. These results show that in this study, students' success in writing was not greatly affected by how well they understood what they read or how well they knew vocabulary.

The study showed that there is a very strong and important link between understanding what you read and knowing vocabulary well. This means that students who were better at understanding and using words also usually did better at understanding what they read. The regression analysis also indicated that both reading comprehension and vocabulary skills only played a small role in writing success, contributing just 1% to students' writing abilities. The other 99% likely came from other influences like grammar knowledge, how well ideas are organized, motivation, creativity, and practice in writing.

Additionally, the analysis of the instrument showed that the multiple-choice test was mostly of good quality regarding its validity, reliability, difficulty level, and discrimination index. However, some questions still required improvement. At the same time, the essay test proved to be fairly valid, but it still needed some work to become more reliable. This study finds that while understanding what you read and knowing a lot of words are important for learning a language, they were not the main reasons why students did well or poorly in writing in this research. Other helpful factors should also be looked at to help improve students' writing skills.

Suggestions

This study has found some important ideas that can be shared with students, teachers, and future researchers.

1. For Students

Students are encouraged to work on not just understanding what they read and building their vocabulary, but also on other writing skills. This includes improving grammar, organizing their ideas well, making sure their writing flows smoothly, and practicing writing regularly. Students need to write often and improve their critical thinking skills to create better academic papers.

2. For Lecturers

Lecturers should use different and engaging ways to teach in writing classes. Because just understanding reading and knowing vocabulary didn't greatly impact writing success, teachers should also pay attention to teaching grammar, how to organize paragraphs, how to develop ideas, and different writing methods. Also, giving students regular writing tasks and feedback can really help them get better at writing.

3. For Future Researchers

Future researchers should look into other factors that might affect how well students write. These factors could include their understanding of grammar, their motivation, the

strategies they use to learn, their self-confidence, and their writing habits. It is recommended that future research includes bigger groups of people and various educational settings to get more complete results. Also, making the essay writing tool more reliable could lead to better and more accurate research findings.

References

- Affandi, A., & Sukyadi, D. (2016). *Project-based learning and problem-based learning for EFL students' writing achievement at the tertiary level*. *Rangsit Journal of Educational Studies*, 3(1), 23–40. <https://doi.org/10.14456/rjes.2016.2>
- Alghonaim, A. S. (2020). Impact of related activities on reading comprehension of EFL students. *English Language Teaching*, 13(4), 15–26. <https://doi.org/10.5539/elt.v13n4p15>
- Ali, A. M., & Razali, A. B. (2019). A review of studies on cognitive and metacognitive reading strategies in teaching reading comprehension for ESL/EFL learners. *English Language Teaching*, 12(6), 94–111. <https://doi.org/10.5539/elt.v12n6p94>
- Andriani, D., & Sriwahyuningsih, V. (n.d.). *An analysis of students' mastery of vocabulary*. Universitas Putra Indonesia YPTK Padang.
- Asyiah, D. N. (2017). The vocabulary teaching and vocabulary learning: Perception, strategies, and influences on students' vocabulary mastery. *Jurnal Bahasa Lingua Scientia*, 9(2), 293–318.
- Barus, K. H. B. B., & Panjaitan, N. B. (2023). The correlation between vocabulary mastery and writing skill: A meta-analysis. *Candradimuka: Journal of Education*, 1(2), 94–102. <https://doi.org/10.60012/cje.v1i2.49>
- Chung, J. S. L. (1999). Signals and reading comprehension: Theory and practice. *System*, 28(2), 247–259.
- Eidswick, J. (2009). The influence of interest on reading comprehension in EFL students. *The International Journal of TESOL & Education*.
- Mahmudah, D. R. (2022). The correlation between students' writing ability and their vocabulary mastery. *Channing: English Language Education and Literature*, 7(1), 13–20.
- Mahnam, L., & Nejadansari, D. (2012). The effects of different pre-writing strategies on Iranian EFL writing achievement. *International Education Studies*, 5(1), 154–160. <https://doi.org/10.5539/ies.v5n1p154>
- Mistar, J., Zuhairi, A., & Yanti, N. (2016). Strategies training in the teaching of reading comprehension for EFL learners in Indonesia. *English Language Teaching*, 9(2), 49–56. <https://doi.org/10.5539/elt.v9n2p49>
- Perfetti, C., & Stafura, J. (2014). Word knowledge in a theory of reading comprehension. *Scientific Studies of Reading*, 18(1), 22–37.
- Pham, U. M. N. (2021). The effects of reading habits on reading comprehension among EFL students at Van Lang University. *International Journal of TESOL & Education*, 1(2), 15–44.
- Supiani. (2017). Teaching writing skill through collaborative writing technique: From theory to practice. *Jurnal Bahasa Lingua Scientia*, 9(2), 293–310.