

Articles

An investigation of vocabulary knowledge on students' writing performance

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Article Information	Abstract
<p>Keywords: Vocabulary Writing Vocabulary knowledge Writing performance</p> <p>Received 3 June 2022 Received in revised form 4 November 2022 Accepted 5 December 2022 doi: 10.33750/ijhi.v5i4.162</p>	<p>The research aims to determine the student's vocabulary knowledge, the students writing performance level, and the correlation between vocabulary knowledge and students' writing performance. The data source in this research was the students studying English at Muallimin Muhammadiyah Senior High School in Makassar, South Sulawesi, Indonesia. To obtain the data in the field, the researchers distributed writing and vocabulary test. This research found that the student's vocabulary knowledge level is categorized as "good" classification. Most Muallimin Muhammadiyah Senior High School Makassar students scored 70 – 79, with a mean score of 66.84. This research also found that the student's writing performance level is categorized as a "fair" classification. Most Muallimin Muhammadiyah Senior High School Makassar students scored 60 – 69, with a mean score of 69.28. Finally, this research revealed that there was a significant and positive correlation between students' vocabulary knowledge and writing competence. As this study has contributed to the notion that vocabulary knowledge is one of the determinants of writing performance, it is recommended that students receive additional vocabulary instruction based on word families.</p>

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1. Introduction

Vocabulary is one of the essential parts of mastering English because without having good ability in vocabulary. Students can struggle with written and spoken language (Pulido & Hambrick, 2008). A basic aspect of literacy abilities is vocabulary knowledge. To generate the language, a new learner must comprehend his or her vocabulary skills and strive to improve them. So, learning a word entail understanding a wide range of vocabulary comprehension aspects and is a multidimensional and complex structure. Teachers can use the most effective strategies for improving learner vocabulary retrieval for production abilities, such as speaking and writing to achieve this goal. As a result, the researchers proposed certain effective strategies to assist

learners in converting their passive vocabulary to active vocabulary and practicing it in further production skills.

Vocabulary knowledge is regarded as a necessary tool for acquiring any language skill and comprehending written and spoken materials. As a result, the more frequently learners are exposed to vocabulary, the more confident they are in their ability to understand and interpret the meaning of certain unfamiliar words from context. Learning vocabulary entails not just learning new words but also understanding their functions and applicability in various settings and circumstances. In other words, the simultaneous and complicated process of extracting and creating utterances using relevant lexical combinations, at the proper time and place, is required for language comprehension and production. Learners must not only learn the language as an

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abstract system of vocal signs or as a kind of grammar text with an accompanying dictionary, but also as a tool that allows them to know what utterances are useful to communicate effectively and what utterances are or are not proper to use in each context.

Vocabulary knowledge becomes essential to learning other language skills such as speaking, listening, writing, and reading. It is one of the essential parts of learning English that students must master. If a learner of a foreign language understands what he or she reads or hears, he or she will talk smoothly and coherently and write readily if they have a large vocabulary. As a result, we have much to learn and add to our vocabulary to obtain insight. This study tries to explore how the impact or influence of vocabulary knowledge on writing performances.

Vocabulary is critical to language competency since it serves as a foundation for learners' speaking, listening, reading, and writing abilities (Richards & Renandya, 2002). The students who have difficulty writing in a second language lack sufficient vocabulary knowledge, and their receptive vocabulary knowledge is greater than their productive vocabulary knowledge (Karakoç & Köse, 2017). It was also discovered that vocabulary knowledge substantially impacted foreign language reading, writing, and competence. Furthermore, according to the Lexical Frequency Profile data, the lexical level of the student essays and the students' productive vocabulary knowledge were strongly connected.

The explanation above indicates that the better the students' vocabulary knowledge, the better students' writing performance. In writing activity, the students will find it difficult to organize their ideas if they do not have a good vocabulary knowledge or size. The size of the vocabulary is important in mastering languages. Not only does it contribute to the comprehension and production of the language, but it also works as a good indicator of the performance and acquisition of any language skill. This is supported by some other scientists who conducted related research and found out that the vocabulary size of a foreign language is essential. It encourages the students a broader skill to produce well-structured written texts and contributes to the comprehension of utterances as well (Viera, 2017). We may reasonably anticipate learners' vocabulary size, as evaluated by a vocabulary test, to be reflected in their productive use of the language. Where this does not occur, we must be concerned about the learner's ability to apply language information and alter the language program accordingly (Laufer, 2017). In addition, writing and vocabulary knowledge are inextricably linked. That is to say, while writing is a wonderful way to improve and consolidate vocabulary, many studies have proven that vocabulary is one of the most important aspects of writing. According to studies, the most challenging aspect of writing in a foreign language is a lack of vocabulary (Leki & Carson, 2012).

However writing is important for MA Muallimin Muhammadiyah students, but they still have a problem in their writing. For example, the lack of teachers' monitoring of the students' writing activity causes a lot of problems in the students writing skills (Suyanto, 2010). Another factor that renders writing more difficult than other skills is that

writing is more an individual effort than speaking, and it is more rule-bound and, therefore, error-prone (Sahin & Genc, 2015). In conclusion, writing is difficult for students because most of them lack vocabulary and lack teachers' monitor their writing activity in class. It makes students' confused and afraid when they begin to write

To write English well, students need many vocabulary words in order to be able to express their ideas through writing. McWhorter (2016) also pointed out that in writing, our vocabulary determines how clearly and accurately we can express our ideas to others. Pertaining to the statement above, vocabulary mastery will determine writing skills, and mastering many words will contribute to writing skills. However, the researchers found that foreign language learners encounter difficulty when writing if they lack vocabulary knowledge. Acknowledging that many students in Muallimin Muhammadiyah Senior High School in Makassar have problems with writing tasks, the inefficiency seems to be due to the lack of vocabulary knowledge, especially the productive one. The researchers found that the students find difficulty in writing or making a composition. Ideally, students with good vocabulary knowledge can be good writers.

The researchers found it in some Muallimin Muhammadiyah Senior High School Makassar, where many students struggle to write or make a composition. Ideally, the students who have practiced more in writing can understand the English test. The less motivation of the teacher causes the failure of writing or composition in this school in developing the teaching of vocabulary and the less proficiency in vocabulary by the students. The teacher takes the material vocabulary from the textbook only. Consequently, their vocabulary is very limited. By referring to the above predicaments, this research reveals difficulties experienced by the students in writing English compositions.

In this analysis, the researchers justified focusing on the correlation between vocabulary knowledge and students' writing performance. In senior high school, vocabulary knowledge is strongly correlated to enhancing the student's ability to have good handwriting. In writing, the students can use language to develop their thoughts; a writer should select clear and precise words to communicate his or her views. We cannot improve our writing if we do not know many words. According to the English teacher of Muallimin Muhammadiyah Senior High School Makassar, the students lack writing performance because they do not have a lot of vocabulary to construct and organize their ideas.

By referring to the problem identification, the researchers formulate the research questions as follows:

- What is the level of the student's vocabulary knowledge?
- What is the level of the students writing performance?
- What Is the correlation of vocabulary knowledge on students' writing performance?

Based on the research questions above, the objectives of the research are as follows:

- To Investigate vocabulary the level of the students' vocabulary knowledge

- To Investigate the level of the student’s writing performance.
- To Investigate the Correlation of vocabulary knowledge on students' writing performance.

2. Method

The method consists of design, procedure, data analysis, and other related issues. This section describes the research method, time and location, research site, instrument of the research, procedure of collecting data, and technique of data analysis.

2.1. Research Method

The research applies correlational research that involves collecting data to determine whether and to what degree a relationship exists between two or more quantifiable variables (Gay, Mills & Airasian, 2012, p.202). In correlational research designs, investigators use the statistical correlation test to describe and measure the degree of association (or relationship) between two or more variables or sets of scores (Creswell, 2012, p.338). This study collects data about vocabulary knowledge that correlates with the ability to write an English descriptive text.

2.2. Research Setting

This research was conducted on the last semester students in the academic year of 2021/2022 for 14 days, which was on 26th January up to 10th February 2022. It was conducted in Muallimin Muhammadiyah Senior High School, which is located on Jl. Muhammadiyah, Makassar, South Sulawesi, Indonesia. The data source in this research were the students who study English at Muallimin Muhammadiyah Senior High School Makassar. The researchers chose the eleven grade students of Muallimin Muhammadiyah Senior High School Makassar as the data source.

2.3. Research Instruments

Data were gathered using two instruments, is vocabulary test and a writing test. A vocabulary test was used to get the data related to the students’ vocabulary knowledge or size level. The form of the test was multiple choices, matching the words to make correct collocations, completing the table with the sports people's names, and completing the sentences with the missing verbs. The other instrument in this research is the writing test. The descriptive text written test in this research aims to discover students' descriptive text writing performance. There are three subjects available. The participants are picked at random. They are chosen by picking one of the pupils to work on a short descriptive text composition.

2.4. Data Collection

The procedure of collecting data in this study consists of three steps:

- The researchers visited the school, which became the research location.
- The researchers collected the participants and distributed the vocabulary test to the participants. However, before that, the researchers explained how to complete the test.

- The next day, the researchers went to the research location and distributed a writing test to the participants.

2.5. Data Analysis

2.5.1. Analyzing the level of the students’ vocabulary knowledge

The first step in analyzing the level of the students’ vocabulary knowledge was by scoring the students’ answer from the given vocabulary test with the following formula:

$$\text{Score} = \frac{\text{Student correct answer}}{\text{Total numbers of item}} \times 100 \quad (1)$$

The next step was finding out the level of the students’ score, the researchers used the following classification:

Table 1. Classification of the students’ vocabulary score

No	Classification	Score
1	Very good	80 – 100
2	Good	70 – 79
3	Fair	60 – 69
4	Poor	50 – 59
5	Bad	0 – 49

(Ministry of Education and Culture, 2013)

After that, the researchers analyzed the data into percentage with the formula by Gay, Mills, and Airasian (2012) below.

$$P = \frac{F}{N} \quad (2)$$

Where:

P = Rate percentage

F = Frequency of respondents

N = Total sample

Then the researchers calculated the mean score of the students’ score using the Gay, Mills, and Airasian (2012) formula:

$$X = \frac{\sum X}{N} \quad (3)$$

Where:

X= Mean score

Σx= Total row score

N= Total number of samples

2.5.2. Analyzing the level of the students writing performance

The component of writing performance by Cheng and Fox (2017) measures focus, support, organization, style, and mechanics. The five components of writing above were measured with the following classification.

Table 2. Writing performance classification

Classification	Score
Excellent	5
Well developed	4
Acceptable	3
Partially developed	2
Undeveloped unclear	1

After that, a student's score was calculated with the following formula.

$$\text{A student score} = \frac{\text{gained score}}{\text{maximum score}} \times 100 \quad (3)$$

To understand the student’s score level, the classification used was the same as in Table 1. Finally, the researchers calculated the mean score, standard deviation, maximum and minimum score using the statistical package for social science (SPSS) version 26 software.

3. Results and Discussion

3.1. Results

The research was conducted to know vocabulary the level of the students’ vocabulary knowledge, the level of the student’s writing performance, and the vocabulary knowledge on students’ writing performance. The data source in this research were the students who study English at Muallimin Muhammadiyah Senior High School Makassar, and the data were gathered using two instruments. Those are vocabulary and written tests. The statistic provides summaries about the sample that have been done. Furthermore, the result described as follows:

3.1.1. The level of the student's vocabulary knowledge

To get the data related to the students’ vocabulary knowledge level, the researchers distributed the vocabulary test to 25 students. The test consisting of 53 items involves three kinds of assessment, and each item was awarded one point for each correct answer. These are multiple-choice, completing the table, matching the words to make correct collocations, and completing the sentences with the missing verbs in this part, the researchers present the result of the descriptive statistic computation of the student's vocabulary test:

In order to reveal the students’ vocabulary knowledge based on the vocabulary test used, descriptive statistics were calculated. The descriptive statistics of each vocabulary knowledge level in the test was reported in the table below. Table 3 summarizes the results that show the total number of students, mean, minimum, maximum score and standard deviation of students’ vocabulary knowledge tertiary.

Table 3. The minimum, maximum, mean score and standard deviation of the students’ score in vocabulary.

Descriptive Statistics					
Item	N	Minimum	Maximum	Mean	S. D
Vocabulary	25	32.00	83.00	66.84	13.04
Valid N (listwise)	25				

As it is shown in Table 3, the number of students (25) is illustrated. The mean score of the students’ vocabulary test is 66.84 (good). The total number of the test is 53 items, and each item was awarded one point for each correct answer. The minimum score is 32, and the maximum score is 83. The total number of students who got the minimum score is 1, and also there is 1 student who got the maximum score. This data proves that students can identify various types of questions on the vocabulary test given previously. The students can identify nouns and adjectives and put the correct verb in a sentence.

Table 4. The classification of students’ vocabulary score at Muallimin Muhammadiyah Senior High School Makassar

No	Classification	Score	Score in vocabulary	
			F	P (%)
1	Very good	80–100	1	4
2	Good	70–79	13	52
3	Fair	60–69	6	24
4	Poor	50–59	3	12
5	Bad	0–49	2	8
	Total		25	100

The data of the findings revealed that the students’ level of the students’ vocabulary knowledge is categorized as “good” classification. Most Muallimin Muhammadiyah Senior High School Makassar students scored 70 – 79. In addition, the table above also presents another classification of the students’ score. There is 1 student out of 25 students (4%) who are categorized as “very good” with scores between 80 - 100. Furthermore, 6 out of 25 students (24%) get scores between 60 – 69. It means they are categorized as “fair”. Moreover, 3 out of 25 students (12%) are categorized in “poor” level with scores between 50 – 59. Lastly, 2 out of 25 students (8%) get scores between 60 – 69. The data describe that the students have good vocabulary knowledge, which means that most of the students can answer correctly the vocabulary test given by the researchers. To see the percentage score of the students’ vocabulary knowledge, the following figure is presented:

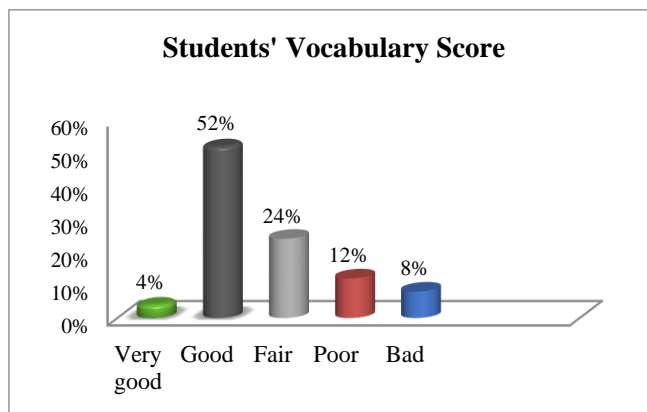


Figure 1. Students’ vocabulary score

The highest percentage of the student's vocabulary score is “good classification,” followed by " fair, poor, and bad students. The lowest percentage of student scores is in very good classification. The result shows the good achievement of the students at the good frequency vocabulary level. By referring to this fact, the researchers can conclude that the students mastered at Muallimin Muhammadiyah Senior High School Makassar mastered a lot of English vocabulary. It is supported by some information from the teachers where the students are diligent in memorizing, taking a note, or using pictures in learning vocabulary and also The English teachers said that the students often study with their friends or teachers to know the meaning of the new words.

3.1.2. The level of the students' writing performance

In analyzing the students' writing performance, the researchers focus on five writing components. They are the focus, support, organization, style, and mechanics (Cheng & Fox, 2017). In this section, the research will describe each of these components.

3.1.2.1. Focus

The main idea of the text is referred to as the focus. One method for determining this main idea is to consider the purpose of your essay. An essay should do more than just provide you with a grade; it should be able to persuade an audience, argue a point, or inform a reader. The assignment sheet is a great place to look for the essay's purpose.

Table 5. Students' score in focus

No	Classification	Score	Frequency	(%)
1	Excellent	5	2	8
2	Well developed	4	8	32
3	Acceptable	3	13	52
4	Partially developed	2	2	8
5	Undeveloped unclear	1	0	0
Total			25	100

The data in Table 5 shows that the result of student's ability of focus on writing components in writing the descriptive text was classified as "Acceptable". which means that the student's writing contains 3 criteria, namely (1) Remains on topic, (2) States main idea only indirectly, (3) Relates three supporting ideas only adequately. However, there are still some students' writings that fall into the "partially developed" category and no students who fall into the "undeveloped unclear" category. In addition, it was discovered the students' who get into "excellent well" category and "well developed". In summarizing, overall average value of the student's writing component, especially on "focus", is rated 3 (acceptable), which means the students ability to compile ideas in writing is quite good.

3.1.2.2. Support

The specific details and information that writers use to develop their topics are referred to as support. Getting specific is the key to developing support and elaboration. Good writers create mental images for their readers by using concrete, specific details, and relevant information. Readers struggle to picture what the writer is talking about if this attention to detail is not present, and they often give up entirely.

Table 6. Students' score in support

No	Classification	Score	F	(%)
1	Excellent	5	3	12
2	Well developed	4	10	40
3	Acceptable	3	11	44
4	Partially developed	2	1	4
5	Undeveloped unclear	1	0	0
Total			25	100

By referring to Table 6, it can be illustrated the result of student's ability in Support of writing components in writing

descriptive text was classified as "Acceptable". This means that the student's writing only adequately relates three supporting ideas. This indicates that, in the writing activity, the students can provide the main idea by showing examples, reasons, and explanations that are partially relevant, appropriate, primarily accurate, and developed unsatisfactorily. Furthermore, researchers also found another fact, which is that students get scores categorized into the "excellent, well developed, and partially "developed" category. and none of the students are included in the "undeveloped unclear" category.

3.1.2.3. Organization

The text is easier to understand when it is organized. As an example, consider putting together a bike. Having all the necessary tools, parts, and instructions on hand will make the job easier to complete than if the parts are scattered throughout the room, and the tools are scattered throughout the house. The same logic holds true when writing an essay. When all the parts of an essay are in some order, it is easier for both the writer and the reader to understand the main ideas presented in the essay.

Table 7. Students' score in organization

No	Classification	Score	F	(%)
1	Excellent	5	0	0
2	Well developed	4	10	40
3	Acceptable	3	13	52
4	Partially developed	2	2	8
5	Undeveloped unclear	1	0	0
Total			25	100

The data in Table 7, illustrates the result of student's ability in "organization" of writing components. The organization views how the students are able to compose an essay more organized in writing descriptive text. The students writing performances was classified as "Acceptable". In this case, students have a quite good ability to organize their thoughts in written form because it was found that students wrote by explaining the introduction, then giving the main ideas (body) and followed by conclusions and supporting sentences. Moreover, it was found to be similar to the previous 2 cases, which were in (focus and support). there are still students classified into "well developed and partially developed" category. and there were no students who were classified as "excellent well or undeveloped unclear" category.

3.1.2.4. Style

Monitoring sentence structure is an important way to check on your essay writing style. Many students will be surprised if they are penalized for repetitive sentence structure because they have made no technical or grammatical errors. On the other hand, keeping sentences varied and syntactically diverse is critical to maintaining an academic and formal tone as writing an essay.

The data in the Table 8 illustrates the result of student's ability in "Style" of writing components. Style views how the students write descriptive text using words, sentences, and formal language to convey meaning effectively.

Table 8. Students' score in style

No	Classification	Score	F	(%)
1	Excellent	5	0	0
2	Well developed	4	13	52
3	Acceptable	3	12	48
4	Partially developed	2	0	0
5	Undeveloped unclear	1	0	0
Total			25	100

Sentence arrangement, sentence structure, and word choice are all elements of writing style. The students writing performances was classified as “Well Developed”. This fact shows that students' work in writing contains (1) good sentence variety (2) good vocabulary: varied and (3) mostly accurate Formal level of language. Another information was found out where some students got the scores “acceptable” and there was no student got the “excellent, partially developed and undeveloped clear”.

3.1.2.5. Mechanics

The rules of the written language, such as capitalization, punctuation, and spelling, are referred to as mechanics. To clearly communicate your ideas in a paper, you must understand both grammar and mechanics.

Table 9. Students' score in mechanics

No	Classification	Score	F	(%)
1	Excellent	5	0	0
2	Well developed	4	3	12
3	Acceptable	3	20	80
4	Partially developed	2	2	8
5	Undeveloped unclear	1	0	0
Total			25	100

According to the data of Table 9, it is provided the data related to students' ability in “Mechanics” of writing components. Mechanics describe how the students write descriptive text by considering capitalization, punctuation, and spelling. The students writing performances were classified as “Acceptable”. This revealed that students' work in writing contains (1) no more than three major errors and (2) excessive minor errors. On the other hand, another fact was discovered several students got the scores “well developed” and “partially developed”, lastly there was no student got the “excellent, and undeveloped clear”

Table 10. The minimum, maximum, mean score and standard deviation of the students' score in each writing component

Item	Descriptive Statistics				
	N	Minimum	Maximum	Mean	SD
Focus	25	2.00	5.00	3.40	.76
Support	25	2.00	5.00	3.60	.76
Organization	25	2.00	4.00	3.32	.63
Style	25	3.00	4.00	3.52	.51
Mechanics	25	2.00	4.00	3.04	.45
Valid N (listwise)	25				

The data show that the means score of students' writing performance in focus is 3.4, support is 3.6, organization is 3.3, style is 3.3, and mechanics is 3.0. Most the means score classified into “acceptable” category. The average score for each component shows that the student's score is 3. This score

shows that the students' writing ability, especially descriptive text, is quite good because it is found that students' writing contains these five components. At the beginning of writing, students can determine the topic to be described and followed by supporting sentences. Students also pay attention to sentence patterns or structures and are able to vary the type of vocabulary.

After giving the explanation related to students' writing score in each writing component, the researchers would like to analyze the calculation of the students' writing score and to reveal the students' writing performance based on written test used, descriptive statistics were calculated. The descriptive statistics of each writing performance level in the test was reported in the table below. in the Table 11, the results that show the mean, minimum, maximum score and standard deviation of writing performance tertiary, are summarized.

Tabel 11. The minimum, maximum, mean score and standard deviation of the students' score in writing

Item	Descriptive Statistics				
	N	Minimum	Maximum	Mean	SD
Writing	25	56.00	84.00	69.28	8.06
Valid N (listwise)	25				

In this study, it was found that the students who were appointed as samples had fair writing skills. this is known after data analysis is carried out where students' handwriting on descriptive text is quite good. This happens because indeed the previous test aimed to find out the vocabulary mastery is quite good and this is one of the factors that can improve students' ability to write, especially descriptive text. As it is shown in Table 10, the number of students (25) is illustrated. The mean score of the students' writing performance 69.28 which classifies into “fair” category. The minimum score is 56 and maximum score is 84. The total number of the students who got the minimum score is 1 and also there is 1 student who got the maximum score.

Table 12. The classification of students' writing score at Muallimin Muhammadiyah Senior High School Makassar

No	Classification	Score	Score in writing	
			F	P (%)
1	Very good	80–100	4	16
2	Good	70–79	7	28
3	Fair	60–69	12	48
4	Poor	50–59	2	8
5	Bad	0–49	0	0
Total			25	100

The data of the findings revealed that the students' level of the Students' Writing Performance is categorized as “fair” classification. Most students of Muallimin Muhammadiyah Senior High School Makassar got score 70 – 79. There are 4 students out of 25 students (16%) are categorized as “very good” with the scores between 80 - 100. Furthermore, 7 students out of 25 students (28%) students get the scores between 70 – 79. It means they are categorized as “good”. Moreover, 2 students out of 25 students (8%) are categorized in “poor” level with the scores 50 – 59. It was not discovered

the students who got the score 0 – 49 which classifies as “bad”.

To see clearly the percentage score of the students' vocabulary knowledge following figured is presented:

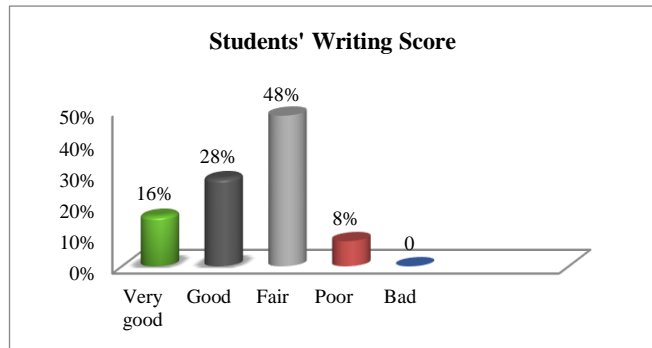


Figure 2. Students' writing score

The highest percentage of the students' writing score is fair classification, followed by good, very good and poor students. In this case, there were no students classified as bad. This result is used as a reference by researchers in concluding that students at Muallimin Muhammadiyah Senior High School Makassar are quite good in writing activities with evidence that after analyzing the data seen in students' writing, the five writing components that are used as references by researchers, such as focus, support, organization, style, and mechanics. In the data analysis process, researchers found various unique facts related to student writing, where students chose three main topics to write about, namely food, family, and favorite person. At the beginning of writing, students can write down the main ideas that guide them in developing their writing into supporting sentences while paying attention to proper English grammar even though there are still many errors, such as errors in using the present simple tense.

3.1.3. The correlation of students' vocabulary knowledge on students' writing performance

To describe the correlation of vocabulary knowledge on students' writing performance, the researchers calculated the data using Pearson product moment correlation in the statistical package for social science (SPSS) version 26 program. It can be seen the result of Table 13 below:

Table 13. The correlation of students' vocabulary on students' writing performance

Correlations			
	Items	Vocabulary	Writing
Vocabulary	Pearson Correlation	1	.878**
	Sig. (2-tailed)		<.001
	N	25	25
Writing	Pearson Correlation	.878**	1
	Sig. (2-tailed)	<.001	
	N	25	25

** . Correlation is significant at the 0.01 level (2-tailed).

The result of the research showed that there was a significant and positive correlation between students' vocabulary knowledge and writing competence. The level of significant is at the 0.01 level (2-tailed). The research had proved that between students' writing descriptive text

performance and vocabulary knowledge has correlation. From the data, the researchers can make a simple conclusion that almost the students who gain the better score in vocabulary test, the students can also get the better score in writing test. It means that the vocabulary mastery is important for developing writing performance and it also shows that vocabulary score can support the writing score and at last there are no students who get good score in reading unless their vocabulary is good as well. For this reason, the researchers sees that there is a correlation between vocabulary and writing. In other words, this means that impossible if students have a good writing performance without a large mastering of vocabulary. It indicates that the vocabulary knowledge and writing cannot have separated each other in learning English.

3.2. Discussion

The discussion is presented in respect of the explanations which are possible for what has been discovered, and it deals with the interpretation of the findings derived from the result of findings related to the level of the students' vocabulary knowledge, the level of the students writing performance and the correlation of vocabulary knowledge on students' writing performance.

3.2.1. The level of the students' vocabulary knowledge

Vocabulary is important in English; in Senior High School, vocabulary is a compulsory subject for students. The students cannot write, speak and listen well without mastering vocabulary. Schmitt (2014) describes that vocabulary knowledge or size deals with the total number of words a person knows. In other words, all the words that a person recognizes and understands make up the person's overall vocabulary size. On the other hand, vocabulary depth involves knowing how well a person knows a particular word. It is not just about recognizing and understanding a word but also the relationship between that word and other words, e.g., the synonyms, antonyms, etc.

The data from the vocabulary knowledge test was examined by counting the number of correct responses and the number of things the students answered correctly. The data of the findings revealed that the students' level of the Students' Vocabulary Knowledge is categorized as “good” classification. Most Muallimin Muhammadiyah Senior High School Makassar students scored 70 – 79 with the mean score of 66.84. The data show that the students can correctly answer the instrument distributed by the researchers.

In data frequency and data percentage, it was discovered that there are 4 students out of 25 students (16%) are categorized as “very good” with the scores between 80 - 100. Furthermore, 7 out of 25 students (28%) get scores between 70 – 79. It means they are categorized as “good”. Moreover, 2 students out of 25 students (8%) are categorized in “poor” level with the scores 50 – 59. It was not discovered the students who got the score 0 – 49 which classifies as “bad”. Thus, it can be concluded that the students used as data sources in this study have good vocabulary skills. this is evidenced by the ability of students to answer various types of questions about vocabulary related to nouns, adjectives and verbs, and others. Besides, the students also looked

enthusiastic and relaxed in working on the vocabulary worksheet used as an instrument by the researchers. It was also found that some students were still confused in understanding the questions in the vocabulary work sheet, but the researchers could overcome this by explaining to the students before answering the question.

3.2.2. The level of the students' writing performance

Writing is one of main components of English language. In other words, writing is one of the four macro skills needed to be mastered as we learn a language and is one of the productive skills. Being a productive skill means that during practice, we act to produce the language. Lannon et al. (2014) revealed that writing as the act of transforming the ideas we get from research inspiration, accident, trial or error, etc. into a message with a definite meaning. Writing is an act of conveying messages obtained from any resources. The messages must be meaningful so that the reader can understand them.

The data of the findings revealed that the students' level of the students' writing performance is categorized as "fair" classification. Most Muallimin Muhammadiyah Senior High School Makassar's students scored 60 – 69 with a mean score of 69.28. These data were obtained at the time the analysis was carried out. so that this is also the basis for researchers in providing an assessment of students' writing performance.

In data frequency and data percentage, it was discovered that there are 4 students out of 25 students (16%) are categorized as "very good" with the scores between 80 - 100. Furthermore, 7 out of 25 students (28%) get scores between 70 – 79. It means they are categorized as "good". Moreover, 2 students out of 25 students (8%) are categorized in "poor" level with the scores 50 – 59. It was not discovered the students who got the score 0 – 49 which classified as "bad".

The researchers used the writing score rubric Cheng and Fox (2017) developed to evaluate the students' descriptive text works. It's because the composition covers all five components of writing (focus, support, style, organization, and mechanics) and includes a clear score criteria for evaluating each one. During the written test, the researchers discovered that many students struggle to match the correct term based on antonyms and synonyms and that some students struggle to translate English words into Indonesian. It is a reality that students do not know or memorize many English terms. The fact that many of the students do not have excellent vocabulary mastering capacity and that the pupils were unenthusiastic in studying English, particularly in learning vocabulary, is corroborated by some information from English teachers.

Another information is also found that the students' neat writing prevents the writing from meeting the criteria of the mechanics component. Some of them are difficult to read. The students appear to understand the significance of punctuation. Many still do not use a full-stop (.) to indicate the end of a sentence. Some of them had problems with capitalization as well. As a result, their writing received a low mechanics score. In addition, in the initial writing activity, students experienced confusion because they did not understand the limits of the topic to be written, and after receiving an explanation related to the written worksheet

provided by the researchers, the students slowly understood it and began to write down their ideas. Initially, students were a bit stuck in forming the main idea, which became a winner in parsing their ideas, but this can be overcome by allowing students to ask the researchers when they have difficulties in writing descriptive text.

3.2.3. The correlation of students' vocabulary knowledge on students' writing performance

After comparing the result of the vocabulary knowledge and the writing test, the researchers is going to discuss the correlation between the two variables. According to the findings of the study, mastering vocabulary is critical while learning a foreign language. Vocabulary knowledge aids students in comprehending the material, and students should learn vocabulary in order to answer problems with writing activities. The researchers believes that, in most circumstances, mastering vocabulary can assist students in learning other language abilities, such as listening, speaking, reading, and writing.

In analyzing the data, the researchers found that there was a significant and positive correlation between students' vocabulary knowledge and writing competence. The level of significance is at the 0.01 level (2-tailed). The research proved that between students' writing descriptive text performance and vocabulary knowledge correlate. The result of the research showed that there was a significant and positive correlation between students' vocabulary knowledge and writing competence. The level of significance is at the 0.01 level (2-tailed). The research proved that students' writing descriptive text performance and vocabulary knowledge correlate.

It will be easier for students who did well in vocabulary to improve their writing skills. The result of a vocabulary and writing test led to this conclusion. Students with high vocabulary scores can write using a variety of vocabulary, organize their thoughts fluently, and explain their writing well. Otherwise, pupils with low vocabulary scores could not provide clear explanations, use common words, or write coherently. It has been established that vocabulary significantly impacts writing, and students with a vast vocabulary can easily organize and expand their ideas in writing.

The current study's findings demonstrated the impact of vocabulary knowledge on writing performance, demonstrating that the greater the students' vocabulary knowledge, the better they fared on the provided writing exam. According to Samah (2009), word acquisition is important through identifying letters and words, followed by the capacity to read the words, a learning process for receptive vocabulary knowledge. Efforts to generate comprehensible sentences using words that learners can read and recognize contribute to the effective growth of vocabulary knowledge. This means that high competence in writing denotes more vocabulary used in a written composition, and it reflects how well the words are used based on the context and content.

The research result is supported by previous researchers who investigated vocabulary knowledge and writing performance. The first previous research was conducted by

Karakoç and Köse (2017), who found that the contribution of vocabulary knowledge to the foreign language performances of reading, writing, and proficiency was significant. Solati-Dehkordi and Salehi, (2016) also did similar research and concluded that word comprehension and learners do not guarantee productive use of words are not only able to increase the active vocabulary under their control but also use the words they just learned. In a writing task that was at once fulfilled through explicit vocabulary instruction, vocabulary recognition is converted into a productive one, improving retention and leading to productive use of newly learned vocabulary at the same time.

The cases the students faced showed that good vocabulary knowledge is important for anyone who wants to improve their writing performance. Vocabulary and writing have a reciprocal relationship. In other words, vocabulary knowledge and size influence writing, whereas writing aids in improving vocabulary knowledge. Although receptive vocabulary information develops from a number of sources, Laufer (2012) contends that productive vocabulary does not always develop concurrently. The final level of vocabulary learning is converting receptive vocabulary into a productive language (Brown & Payne, 2010). Furthermore, Muncie (2016) claims that writing allows more experimenting with constructive usage of new words than speaking since students have access to more resources such as dictionaries and time. Moreover, the student's ability to deliver messages will be limited if they lack vocabulary, regardless of how well they learn the syntax and sentence structure.

The study discovered that several characteristics of vocabulary knowledge have a combined effect on predicting students' writing abilities, implying that correct understanding of high-frequency word families is linked to writing ability. Writing is tough for pupils because most of them lack vocabulary, and professors do not check their writing activities in class. When the students first begin to write, it causes them to be perplexed and fearful.

Moreover, for those who got good scores on Vocabulary Size Test, it guaranteed that they got good results in writing. According to studies, the most challenging aspect of writing in a foreign language is a lack of vocabulary (Sahin & Genc, 2015). Similarly, Pichette et al. (2012) suggest that if enough time is allocated for each task, writing a text may lead to significantly higher recall than reading, and thus language teachers may resort to writing tasks that incorporate newly taught words in order to improve student's retention. Moreover, students with a large vocabulary will be better equipped to engage in English, and comprehending words is also an important part of learning English.

The key factor that influences writing quality is vocabulary. On the other hand, a strong vocabulary capacity can aid students in improving their writing fluency. Content such as well-organized writing will not bother them, and their ability to create good sentences will aid them in writing grammatically accurate sentences. It signifies that a student's vocabulary knowledge impacts the quality of his or her writing. Because vocabulary is only one of many factors that go into producing high-quality writing, this is similar to what was found by Hacking and Tschirner (2017), who found a

correlation between vocabulary and other skills. The research concluded that statistically significant lexical minimums are associated with different reading proficiency levels. These findings suggest the utility of similarly designed studies for other languages and are discussed in terms of implications for the role of developing vocabulary knowledge in an undergraduate curriculum.

The results above show that writing and vocabulary cannot be separated from each other. Writing and vocabulary knowledge are inextricably linked. While writing is a wonderful way to improve and consolidate vocabulary, many studies have proven that vocabulary is one of the most important aspects of writing. According to studies, the most challenging aspect of writing in a foreign language is a lack of vocabulary (Leki & Carson, 2012). Furthermore, based on these data, it can be stated that the more vocabulary knowledge a student possessed, the more effective they were in the provided writing exam, and that vocabulary knowledge had a major impact on the student's writing performance. However, one key element should not be overlooked while examining the relationship between vocabulary knowledge and writing performance. Even if the learners lacked a vast vocabulary, they could produce well-developed essays utilizing the terms they knew well, most likely low-frequency words.

Lastly, to improve the students' writing performance, students are needed to improve their vocabulary mastery, both productive vocabulary and receptive aspects of vocabulary size, and this research is a positive development. Vocabulary knowledge was discovered to account for a portion of the variance in learners' writing performance, and this is regarded as the most significant contribution of this study to the domain of vocabulary acquisition. On the other hand, teachers should help their students to become empowered in the classroom to make them feel confident to participate in vocabulary learning activities.

In summarizing, it can be stated that (1) the students' vocabulary knowledge level is categorized as "good" classification. Most Muallimin Muhammadiyah Senior High School Makassar students scored 70 – 79 with a mean score of 66.84, (2) The data of the findings revealed that the students' level of the students' writing performance is categorized as "fair" classification. Most Muallimin Muhammadiyah Senior High School Makassar students scored 60 – 69 with a mean score of 69.28, and (3) there was a significant and positive correlation between students' vocabulary knowledge and writing competence. The level of significance is at the 0.01 level (2-tailed). The data indicates that vocabulary influences students' writing scores because students with a large vocabulary find it easier to organize and share their ideas in writing. Based on the findings, it is possible to conclude that the research findings support the theories that vocabulary is related to writing performance.

4. Conclusion

Based on the findings and discussion in the previous chapter, the researchers can conclude that (1) The students' vocabulary knowledge level is categorized as "good" classification. Most Muallimin Muhammadiyah Senior High

School Makassar students scored 70 – 79 with a mean score of 66.84, (2) The students' writing performance level is categorized as "fair" classification. Most Muallimin Muhammadiyah Senior High School Makassar students scored 60 – 69 with a mean score of 69.28, and (3) there was a significant and positive correlation between students' vocabulary knowledge and writing competence. The level of significance is at the 0.01 level (2-tailed).

Teachers should not entirely concentrate on one aspect of language, such as vocabulary, in order to achieve the learning objective. The teacher should guide how to meet all the trying-to-write components. Furthermore, the teacher should set a limit on the topic on which they will write. This will assist students in not writing what they are unable to write. The vocabulary levels assessment and writing subject area should be personalized to the students' abilities, and the complexity should not be greater than the student's ability. As a result, the students will have no difficulty being involved in the assessment.

The result of the research also views that another important topic in the literature is vocabulary teaching, particularly teachers' approach to unfamiliar words. To make a specific suggestion, whether the best time for direct teaching to occur in the learning of a word is before or after gaining meaning-focused experience can be studied in the future. Due to the multidimensional nature of vocabulary knowledge, testing vocabulary should include other dimensions such as partial and precise word knowledge or depth of vocabulary knowledge in addition to vocabulary size. Thus, more research is needed to develop or measure the practicality of diverse types of vocabulary tests.

In addition, it is suggested that the students should be supported with word-family based, supplemental vocabulary instruction, as this research has contributed to the assumption that vocabulary knowledge is one of the predictors of performance in writing and speaking. In other words, because vocabulary instruction contributes to the proficiency in productive skills, language instructors must emphasize the development of learners' vocabulary knowledge. Furthermore, in a writing task that was immediately fulfilled through explicit vocabulary instruction, vocabulary recognition is converted into a productive one, improving retention and leading to the productive use of newly learned vocabulary simultaneously (Solati-Dehkordi & Salehi, 2016).

5. Implication

Writing and vocabulary development are interdependent. In other words, vocabulary knowledge and size influence writing, while writing contributes to expanding vocabulary knowledge. Although receptive vocabulary information develops from various sources, Laufer (2012) asserts that productive vocabulary does not always develop concurrently. Consequently, a comprehensive examination of the influence of vocabulary knowledge on listening and speaking is necessary. For instance, a corpus analysis that identifies language significantly more prevalent in certain spoken registers than in written forms could be implemented in the future.

As a pedagogical implication of these findings, it is recommended that learners receive additional vocabulary instruction based on word families, as this study has contributed to the notion that vocabulary knowledge is one of the determinants of writing performance. In other words, because vocabulary instruction facilitates the acquisition of productive skills, language instructors should emphasize the development of their students' vocabularies. For students to be able to overcome their writing difficulties once they have successfully mastered vocabulary. In contrast, the implications of these results suggest that students need to engage in additional strategies to improve their vocabulary knowledge and writing performance.

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