# THE CORRELATION BETWEEN STUDENTS' VOCABULARY MASTERY AND READING COMPREHENSION

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### ABSTRACT

This study aimed to determine the relationship between vocabulary mastery and reading comprehension. The sample in this study was eighth-grade students in a junior high school in Bali, consisting of 42 students who were selected using a random sampling method with a lottery system. The researcher used two tests to obtain data on vocabulary mastery and reading comprehensions, such as a vocabulary assessment test for vocabulary mastery and a short answer test for reading comprehension. The data obtained were assessed using the Product Moment formula and analysed using SPSS 26 for windows. Based on data analysis, it shows that there is a high, significant and positive relationship between vocabulary mastery and reading comprehension of eighth students in junior high school. Therefore, answering the research question, there is a substantial relationship between vocabulary mastery and reading comprehension.

Keywords: vocabulary mastery, reading comprehension, descriptive text.

#### ABSTRAK

Tujuan dari penelitian ini adalah untuk mengetahui hubungan antara penguasaan kosakata dengan pemahaman bacaan. Sampel dalam penelitian ini adalah siswa kelas delapan pada Sekolah Menengah Pertama di Bali yang terdiri dari 42 siswa yang dipilih dengan menggunakan metode random sampling dengan sistem undian. Peneliti menggunakan dua tes untuk mendapatkan data penguasaan kosakata dan pemahaman bacaan, seperti tes penilaian kosakata untuk penguasaan kosakata dan tes jawaban singkat untuk pemahaman bacaan. Data yang diperoleh dinilai dengan menggunakan rumus Product Moment dan dianalisis dengan menggunakan SPSS 26 for windows. Berdasarkan analisis data menunjukkan bahwa terdapat hubungan yang tinggi, signifikan dan positif antara penguasaan kosakata dengan pemahaman bacaan dari siswa kelas delapan pada Sekolah Menengah Pertama. Oleh karena itu, menjawab pertanyaan penelitian bahwa ada hubungan yang signifikan antara penguasaan kosakata dan pemahaman bacaan.

Kata kunci: penguasaan kosakata, pemahaman bacaan, teks deskriptif.

### INTRODUCTION

Language skills include four aspects. namely listening skills. speaking skills, reading skills, and writing skills. These four aspects of language play an essential role in teaching a language in schools. One of the language skills that are very important to be mastered by students is reading. Teachers must realise how essential reading is, which is then referred to as a fundamental skill for students. In addition, teachers must also understand that reading has a

complex skill and involves other minor skills (Mantra et al., 2020).

In a broad sense, reading is one of the four skills that students learning the English Language must master. This skill takes attention because reading is a process in which the reader finds information given by the writer in writing. Reading is one of the ways we can update our knowledge because we can get much of information and helps to open up the mind to new ways of thinking and perceiving while a book can be the teacher, mentor, and inspirator. Reading activity stimulates society and will educate the eyes speed (Mantra & Kumara, 2018). Reading gives us many benefits, especially for getting information that helps the readers consolidate their knowledge by comprehending the reading material.

Reading is crucial because of two main reasons. First, it benefits the student's personal life (Sari & Prasetyo, 2021). Reading English texts may positively impact students' further studies and careers, or it may simply play the role of joyful reading (Mantra & Kumara, 2018). Second, it benefits their language acquisition for spelling and vocabulary knowledge. Through reading, students develop knowledge, information, concepts and attitudes.

Moreover, students get many vocabularies needed in other skills if they read a lot (Mantra et al., 2020). Students also need to comprehend the text during the reading process. They are expected to read with good pronunciation and construct and find meaning through interaction and involvement with written language (Zubaidah et al., 2018).

Reading comprehension is the ability to understand written texts.

When the relationship between paragraphs has been understood, the readers will understand the text's meaning. Reading comprehension is constructing meaning by coordinating several complex processes, including reading, word word and world knowledge, and fluency. It refers to the ability to interpret the words and understand the meaning and relationships between ideas conveyed in a text (Handayani et al., 2019). Reading also has a positive effect on students' vocabulary knowledge. Reading helps vocabulary acquisition creating by opportunities to infer word meaning from context (Dilek Belet Boyaci & Güner, 2018).

The objective of this research

study was to get empirical evidence on whether there was any relationship between students' vocabulary mastery and reading comprehension. Furthermore, the study applied the eighth-grade students. In addition, the study's result indicated a positive correlation between the two variables. Moreover, vocabulary mastery, strategy and background knowledge of the text could help the students comprehend the text.

Vocabulary plays a vital role in language learning. Vocabulary is also an essential skill for learning to read, speak, write and listen. The more people master vocabulary, the more they can speak, write, read and listen as they want (Handayani, 2020). Learning vocabulary is a critical aspect of foreign language acquisition and academic achievement and is vital to reading comprehension and proficiency, to which it is closely linked. Learning vocabulary based on the formation of specific habits. Since this involves associating symbols and their meaning, it is clear that an enrichment of the word's meaning is as essential as its frequent repetition (Mantra et al., 2021).

Vocabulary is crucial in acquiring and understanding the language (Suparsa & Mantra, 2020). Vocabulary mastery is the competence to know what words mean. A person must master the meaning of the words (Widiastuti, 2011). If you have a poor vocabulary, it will slow your reading speed and limit your comprehension.

Vocabulary knowledge is essential in reading comprehension. How to find out how vital vocabulary mastery influences reading comprehension. In conclusion, the researcher is interested in analysing the correlation between students' vocabulary mastery and reading comprehension in eighth-grade students of a junior high school.

## **RESEARCH METHOD**

This study investigated the

correlation between the two variables; vocabulary mastery and reading comprehension. In addition, ex post facto was a method of testing out possible antecedents of events that have happened and cannot, therefore, be engineered or manipulated by the investigator.

This study used ex post facto with a correlation research design. Vocabulary mastery was considered an independent Meanwhile, variable. reading comprehension was categorised as the dependent variable. Based on this explanation, the researcher wanted to determine whether there was a significant relationship between students' vocabulary mastery and reading comprehension in a junior high school in Bali. In this research design, the researcher cannot manipulate the research variables directly. Researchers only report the results of this study without any manipulation. It is because the report is made based on the research results so that the researcher only manipulates the results of their research according to the facts obtained.

Population and sample were used for the state under study. A population is all members of any well-defined class of people, events, or objects. In other words, the sample is a portion of a population. A sample of the population was taken from small groups that are affordable to be observed in small numbers. It was also defined as the subject of the population. The sample selection was an essential step in conducting a research study.

The sample is a part of the population which is to be analysed. The sample must be represented as one was to be able to generalise with confidence from the sample to the population. In the present study, the researcher chose the population of eighth-grade students in a junior high school in Bali. The class was divided into ten classes which consisted of 29-33 students in each class. Then the total of students in the eighth grade was 317 students. The researcher used three classes as a sample. They are class VIII

A, VIII C and VIII H. The total samples were 95 students.

In this research, the researcher used cluster sampling because it was the most time-efficient and cost-efficient probability design for large geographical areas, this method was easy to be used from practicality viewpoint, and there was a larger sample size that could be used due to the increased level of accessibility of perspective sample group members. In this study the class for cluster samples were heterogeneous. In conducting cluster sampling. the researcher selects from the entire population of the eighth-grade students. The samples were from class VIII A, VIII C and VIII H.

To answer the research problem and to obtain the objectives of this present study, the researcher needs to design the researcher instrument. To collect data from the sample on this research, the writer used the cloze task as the vocabulary mastery test, and for the reading comprehension, the writer used a short answer task.

Cloze test was usually at least two paragraphs long to explain discourse expectations. They can be constructed relatively easily as long as the specifications for selecting deletions and for grading are clearly defined. Brown said there are two types of closed tasks, named; Fixed Ratio Elimination and Rational Elimination. Fixed ratio deletion is a type of closed task where the designer deletes every seven words of text. Besides, rational deletion is the procedure for selecting deletions according to grammatical functions or word discourses. In this present study, the researcher will use cloze tasks type rational deletion as the student's test by their ability in identify vocabulary. While, short answer task is open-ended task that can test the reading comprehension. In the questions that require students to create an answer a reading passage present and the test taker

reads questions that must be answered in a sentence or two questions might cover the same specifications indicate above for the test reading, but be worded in question form. In this present study, the writer used short answer task that the students test by their ability to read the text first and then answered in a sentence briefly. The task was used to obtain the score of vocabulary mastery and reading comprehension.

Data analysis was a review of a of activities. series grouping, systematisation. interpretation and verification of data so that a phenomenon has social value, academic and scientific. The data obtained from research results of the student's test that were analysed quantitatively. Quantitatively analysis was done by using statistic, which is called statistical analysis or inferential statistic. Statistic technique for determining the relationship between pair score known as correlative procedures.

### RESULTS AND DISCUSSION Result

The present study dealt with the correlation between vocabulary mastery and reading comprehension of the eight grade students in a junior high school in Bali. There were 95 students as a sample in this research from 3 class in the present research in which the respondents were chosen by cluster sampling from 10 class with 317 populations of the eight grade students in a junior high school in Bali. After the samples works were scored, the researcher than started the statistical analyses. In the present study, there were two steps of statistical analyses. They pre-requisite were analyses and hypothesis testing

## **Pre-requisite analyses**

In this session, the researcher would like to explain the requirements for the data used that the statistical analyses can be further continued to the next analyses. Therefore, before the data further tested into a hypothesis testing, the data should pass the normality and homogeneity test. In this study, after the data were obtained from the tests result that have been done by students through the provision of the research instruments for the samples under study, the researcher conducted a normality test and a homogeneity test for the collected data.

Normality test was a test conducted with the aim to assess the distribution of data in a group of data or variables. whether the distribution of data is normally distributed or not. Normally test is useful for determining data that has been collected in normal distribution or taken from a normal population. If a variable fails a normality test, it is critical to look at the histogram and the normal probability plot to see if an outlier or a small subset of outliers has caused the non-normality. To analyse the data above, Firstly the researcher used IBM SPPS version 26 to test the normality of the instruments in this research. The result from two well-known tests of normality, namely the Kolmogorov-Smirnov test and Shapiro-Wilk test. Kolmogorov-Smirnov test is more appropriate for big simple sizes (>50 samples), that is why the researcher used Kolmogorov-Smirnov test because the sample of this research is 95 (>50 samples), if sig >0,05, it means the data distribution is normal and if sig <0.05, it means the data distribution is not normal. BM SPSS 26 output table above, it is known that the significance value (sig) of 0,052 on vocabulary mastery which is greater than 0.05. As for variable reading comprehension, it can be noted on the sig of 0.200 which was greater than 0.05. To purpose of this test was to find the normality of the data can be detected detecting known by by histogram.

Based on histogram result, it can be seen that bell-shaped curve histogram, it represents an ideal data set that has lots of numbers. It shows that the rationality assumption for the normality test and it can be concluded the histogram curve of vocabulary mastery and reading comprehension was normal.

Homogeneity test was test that assess whether there were differences in variance between the two groups or more. Homogeneity test was only used in different subjects or data sources. Therefore, Homogeneity test was needed as calculated homogeneity testing, the researcher used IBM SPSS 26 program using vocabulary mastery and reading comprehension.

Homogeneity testing produces two tables namely the test of homogeneity variance table and the ANOVA table. Here the focus was the test table of homogeneity variance. If sig > 0.05, the variance of the data is homogeneous on the other hand if sig < 0.05, the variance of the data is not homogeneous. Based on the result above it was found that the significance value of 0.529>0.05. It can be concluded that the result of the homogeneity test was homogeneously distributed.

Hypotheses testing was test that tests the research hypotheses studied. within this hypothesis, there is a possibility whether it is accepted or not. In this study, the researcher constructed a directional hypothesis which clearly stated that there was a significant correlation between vocabulary mastery and reading comprehension of the eight grade students in a junior high school in Bali. After calculating the pre-requisite analysis of normal distribution and homogeneity of variance in which the data were normally and homogeneously distributed, the researcher tan did the hypotheses testing that had been stated previously. In line with the hypotheses testing, there were two tests that were used in hypotheses testing, namely the Pearson Product Moments Correlation and T-test.

Pearson Product Moments

Correlation was employed to examine the relationship between the independent and dependent variable. Correlation coefficient is able to provide a numerical overview of the direction and strength of the linier correlation between vocabulary mastery and reading comprehension. Pearson's correlation coefficient was range from -1 to +1 for the indicated a perfect positive correlation. Meanwhile, the mind points of this range, zero indicates that there is no correlation at all.

The size of the absolute value formulates information on the strength of the relationship. Based on statistical computation assisted by IBM SPSS 26 using the test of Pearson Product Moment. From the 95 samples, the obtained r of correlation was 0.931 and the significant value (p) is 0.000. It means the r calculated was higher than r-table (0932>2.02). According to table 3.4 in chapter III, the correlation between variable X and Y variable are considered as very high correlation because 0.931 is in range 0.80- 1.00. Meaning that the value of Pearson Product Moment in this research is very high correlation. It means that there is a positive significant correlation between student's vocabulary and reading comprehension.

The T-test was a test of statistically significant different between the two groups. There are three kinds of T-test namely, one sample T-test, paired sample T-test, and independent sample Ttest. First, one sample T-test analysis technique for compering one independent variable, second pare sample T-test analysis is a procedure used to compare the average two variables in one group, Third, independent sample T-test is a test is used to determine whether two unrelated samples have different avengers. In this study, the researcher used the paired sample T-test to determine the data whether or not there is significant probably а correlation between the two variables. The data can be categorising significantly correlate if sig > 0.05, and if sig < 0.05, it means the data is not normal.

Based on the results above, it can be clearly seen that the level significant of all group of data which were analysed by paired samples T-test showed that the significant was value was a figure of 0.039 and it was higher than the level significance, 0.05. The result of the T-test is accepted because 0.039>0.05. In addition, the result of the T-test counted on the table 4.6 was 2.090. According to the result of T-table 0.05 from df = n-2=93 samples was 1.166140. It can be concluded that t-test counted > t-table (2.090>1.16640) there was significant correlated. It meant that there was a significant between vocabulary mastery and reading comprehension of the eightgrade student in a junior high school in Bali. The research findings of the present study can be briefly and concisely elaborated in the following parts.

## Discussion

This section shows the concepts and theories that are integrated with the result of the study. In this session, research present in full the result of the study. In addition, the research answers the problems raised, give meaning to the result of the study, and discusses the research finding with the theory or the findings of previous research. Researcher need to state clearly whether the result of the study support, reject or enrich existing theories. This discussion includes the findings of other people who are different, with the aim of providing a theoretical explanation that the finding has been made to be accurate. A number of researcher's idea or thoughts on researcher findings and an assessment of the methods that have been used can be placed in this session.

The purpose of data analysis in this study it was mean to measure the correlation between vocabulary mastery and reading comprehension of the eightgrade students in a junior high school in Bali. Based on the correlation above about the normality test, homogeneity test and hypothesis test of the present study. The researcher had conducted the data. The data was collected by using two instruments. The first instrument is the cloze task (rational deletion) use to know the students' vocabulary mastery. The second instrument is short answer task use to know the students' reading comprehension.

Based on statistical by using statistical computation using IBM SPSS 26 in order to know whether the population or data involved in this research is in normal distribution, that can be seen from the result of normality with Aiymp vocabulary mastery of is 0.052>0.05 and for the reading comprehension is 0.200>0.05. Based Kolmogorov-Smirnov test with the provision that if Aiymp. Sig>0.05, the data used in this research were normally distributed. Furthermore, to find a set of data that is homogeneous and match the composition of distribution data, the data has the compared with the value of sig is 0.529>0.05, it can be concluded that the group of subjects in the study is homogeneous.

In order to find out the correlation between vocabulary mastery and reading comprehension of eight-grade the students in a junior high school in Bali. IBM SPSS 26 was used with the result of Pearson product-moment is 0.931. It means the r calculated was higher than rtable (0.931>0.202). The result of product-moment Pearson score is included in the scale between 0.80-0.1000. The scale is indicating that there is a high relationship between variable X (student's vocabulary mastery), and (student's Y variable reading comprehension). To know whether the data from two populations there are no significant different paired sample T-test was used with the result value of sig =0.039.The result of T-test is significantly accepted because

0.039 < 0.05 it means Ha is accepted. Moreover, the data can be seen the correlation between vocabulary mastery and reading comprehension was accepted because based on the t-table with de =n-2 =93 was 1.66140 while the t-test counted was 2.090>1.66140. Thus, it can be considered that there is a significant between vocabulary mastery and reading comprehension of the eight-grade students in a junior high school in Bali.

The result of the data analysis shows that there was a significant correlation between student's vocabulary mastery and reading comprehension. Good vocabulary mastery may effectively affect the ability to read and understand reading, therefore, to have the adequate vocabulary knowledge is insisted for understand the reading. student to Vocabulary knowledge is crucial in reading comprehension how find out how strong the vocabulary mastery influences the reading comprehension. Furthermore, vocabulary mastery is one of the factors strengthen that the student's comprehension in reading text. Thus, it is able to be said that there is a necessary connection between student's vocabulary mastery and their reading comprehension.

Reading comprehension is "the of construct meaning process by coordinating a number of complex processes including word reading, word and world knowledge, and fluency". It refers to the ability in interpreting the words, understanding the meaning and the relationship between ideas convey in a text. Reading helps in vocabulary acquisition by creating opportunities to infer word meaning from context. The reading comprehension is able to develop through vocabulary mastery. The mastery of vocabulary is able to help the students to read.

## CONCLUSION AND SUGGESSTION Conclusion

The research design of the present

study used x-post facto research with correlation design. The correlation could be drawn that there is a significant correlation between vocabulary and reading comprehension of the eight-grade students in a junior high school in Bali. Based on the data that calculated by IBM SPSS 26, this is evidenced by the result that have been describe in Chapter IV, that data has been said normal because both of the variables have a significant value more than 0.05. in addition, the data has also been said to be homogenous because it has a significant value of more than 0.05. In the hypothesis test, the researcher gets the result of the t-test, the result of t-test is significantly accepted because 0.039>0.05.

Besides the result of data analysis, the result of this study was assisted by Several courses from experts who stated that if there is a correlation between vocabulary mastery and reading comprehension. Furthermore, this is reinforced by several previous studies that that have examined the same variable. In a previous study, it was also confirmed if there а significant correlation between vocabulary mastery and reading comprehension of the eightgrade students in a junior high school in Bali.

# Suggestion

The students have to increase their vocabularv and their understanding. Students should be more active in learning, practicing their reading skill, especially in comprehending the text they have read, not only during the teachinglearning process. They should get used to reading many books in English in order to train their comprehension and get many new vocabularies on the text they had read. It is essential to train students to be accustomed to reading many books as through reading they can get new knowledge and access various information.

For other research who are

interested in further study reading, this research can be useful reference. This might be also being able to modify or improve the instruments used in this research study for their future research in the same field, to measure mastery of the correlation between vocabulary mastery and reading comprehension in this study.

In addition, other researchers who would conduct similar studies are advised to find out the level of vocabulary mastery at school to measure students reading comprehension at various level of students because the ability of student in each school was different. In addition, another researcher must be more creative in building research instrument.

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