Journal of Innovative and Creativity
Journal Homepage: https://joecy.org/index.php/joecy
e-mail: journaljoecy@gmail.com

Faculty of Education
University of Pahlawan Tuanku Tambusai
ISSN 2775-771X (Online)
ISSN 2962-570X (Printed)
5 (2) 2025, Page: 17786-17792

The Correlation between Students' Vocabulary Mastery and Reading Comprehension

Alva Frisky Sanger, Alan Hubert Frederick Sanger
[1,2]Universitas Klabat

Corresponding Author: alansanger@unklab.ac.id

Published: Agust , 2025

ABSTRACT

This research aimed to investigate the levels of vocabulary, reading comprehension, and to examine whether there was a significant correlation between vocabulary mastery and reading comprehension among students. The research was quantitative in design, using descriptive and correlation methods. Purposive sampling technique was employed. The instruments used in the research were two adapted types of tests from Erniwati (2019) consisting of vocabulary mastery and reading comprehension. In the data analysis section, mean values and Pearson Correlation were used in the research. The population for the study were grade 8 of UNKLAB Junior High School which consisted of 136 students and total respondents were the 64 students. The result of the findings of vocabulary mastery level is 87 which categorized in understanding level, the level of reading comprehension is 74 which categorized in developing level, and the correlation between students' vocabulary mastery and reading comprehension is 0.636 which classified there was a significant correlation between the two variables. The It could be concluded that when students have a larger vocabulary, they will comprehend the reading texts better.

Keywords: Vocabulary Mastery, Reading Comprehension

© The Author(s). 2021 Open Access This article is licensed under a Creative Commons Atibution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0

INTRODUCTION

English is one of the most widely used languages in the world. It has become an important international language in various fields, including global communication, business, technology, science, entertainment, and education. English is used as an official language in many countries, serves as an international language for cross-cultural communication, and plays a role in the international technology and business industries. In English language learning, four skills must be understood and mastered by learners, which include listening, speaking, reading, and writing. And

one of the key elements in mastering these four elements is vocabulary. Destiyanti, Amin, and Putera (2021) stated vocabulary containing simple words is a simplified version of difficult ones, words that students frequently encounter in everyday English. When learning the meanings of simple words, it will enhance vocabulary mastery and enable the study of other important aspects. As stated by Ramadhani (2021), the greater one's vocabulary, the higher one's output in all facets of English. It can be said that by having a extensive vocabulary, a person tends to be better at speaking, writing, understanding, and using English effectively in various situations or fields.

Therefore, a rich vocabulary can have a positive impact on one's overall English language proficiency. Vocabulary is closely related to reading because there are words or sentences that originate from the source being read. Ali (2010) stated that having a good grasp of vocabulary plays an important role in reading. Therefore, it can be inferred that vocabulary proficiency is related to reading. Vocabulary is essential for engaging in reading activities. According to Nunan as cited in Manihuruk (2020) reading is an ability that revolves around understanding and deriving meaning from written text. It can be concluded that vocabulary can enhance the ability to develop reading. In the process of reading, readers will search for and discover meanings and various types of words containing vocabulary. Septiana and Hanafi (2022) vocabulary is necessary to be mastered since it will enhance comprehension in reading. Hence, when students are about to read a text, readers can understand the words written due to an adequate mastery of vocabulary. However, there is research that contradicts this. Like the study conducted by Aprilia (2019), which found that many students still lack vocabulary. One of the cases that occurs is one of the problems faced by students, especially the students in the process of mastering vocabulary and comprehension in reading.

There were two hypotheses formulated in this study:

H0: There is no significant correlation between students' vocabulary mastery and reading comprehension.

Ha: There is significant correlation between students' vocabulary mastery and reading comprehension mastery and their reading comprehension in descriptive text at the eight grade students of UNKLAB Junior High School.

METHODOLOGY

In this study, the researcher employed a quantitative research design, wherein a specific test was chosen to gather data from a particular sample. As per Aliaga and Gunderson, as cited in Muijs (2010), quantitative research involves explaining phenomena by collecting numerical data and analyzing them using mathematically based methods, particularly statistics. Additionally, the researcher used a descriptive technique to analyze the levels of Vocabulary Mastery among students and Reading Comprehension in students. Furthermore, the researcher used a descriptive technique

to assess the extent of students' vocabulary mastery and reading comprehension. According to Maghfirohtin (2017), this descriptive approach is used to understand and interpret human behavior as it appears in specific social situations. Additionally, the researcher utilized a correlation technique to examine the connection between students' vocabulary mastery and reading comprehension.

The researcher used purposive sampling in conducting this study. According to Tongco (2007) the purposive sampling technique, also called judgment sampling, is the deliberate choice of an informant due to the qualities of the informant possesses. The researcher intentionally chose Grade 8A as a sample to conducted the research due to observations conducted by the researcher, it was found that class 8A has issues regarding vocabulary mastery and reading comprehension.

Research Instrument

The instrument that the researcher used were adapted tests as a measuring tool for two variables, namely vocabulary mastery and reading comprehension. For the vocabulary test, the researcher used predetermined multiple-choice "Consisting of 20 items and answer choices consisting of 4 options." as a test to assess the students' vocabulary level. As for the reading test, the researcher used a story-based set of questions, and subsequently, the students answered questions derived from that story in multiple-choice format and the test consists of 15 items with answer choices consisting of 4 options. This test was used to assess the students' reading comprehension level.

Pilot Test

Before conducting the research, the researcher conducted a pilot study to determine the validity and reliability of the instrument used. The pilot study was conducted at UNKLAB Junior High School, Airmadidi. The test was distributed to the students of Grade 8C, with the total of 30 students, during the English class. After that, the test was collected and analyzed.

Result and Discussion

Three research questions were used to guide this study. First, how were the student's vocabulary mastery level in learning English. Second, how were the student's reading comprehension level in learning English? Third, was there any correlation between the student's vocabulary mastery and their reading comprehension ability in learning English?

Table 4.1

The Descriptive Statistic of the Level of Vocabulary Mastery

Variable	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3	Maximum
Grade Vocabulary	34	0	87.79	1.82	10.60	55.00	80.00	90.00	95.00	100.00

From the results of the vocabulary test, it was observed that the average score was 87. (Table 4.1) Based on the scoring scale, the average obtained from the students was at a understand level. The lowest score obtained was 55, and the highest score obtained in the test was 100. So, to answer research question number one, it can be concluded that the student's vocabulary mastery level in class 8A was at understand level.

Table 4.2

The Descriptive Statistic of the Level of the Reading Comprehension

Variable	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3	Maximum
Reading Test	34	0	74.31	3.81	22.21	20.00	65.00	80.00	93.33	100.00

The results of the reading comprehension test above, the mean score of the test was 74.31 (Table 4,2). According to the interpretation scale, this mean score fell into developing. The lowest score obtained was 20, and the highest score obtained in the test was 100. So, to answer research question number two, it can be concluded that the level of reading comprehension of students in class 8A at UNKLAB Junior High School was classified as developing

Table 4.3

The descriptive statistic of correlation of vocabulary mastery and reading comprehension

Pearson correlation	0,636
P-value	0,000

The result obtained was that the r-value = 0.636 and the p-value = 0.000 (Table 4.3). It could be concluded that the r-value was high, indicating a correlation between the two variables, as seen on page 25 regarding Pearson Correlation. Another result indicated that the p-value was 0.000, indicating that the p-value was low, and the standard significance level was (0.05). With a very low p-value, it could provide strong evidence against the null hypothesis and support the alternative hypothesis. It could be concluded that the alternative hypothesis (H1) was accepted, and the null hypothesis (H0) was rejected. To answer research question number three from the results presented, it could concluded that the two variables had a strong relationship and had significant correlation as well.

This result was similar to the research conducted by Daryanti (2015), the research aimed to establish a link between the vocabulary proficiency of 8th students at SMP Negeri 4 Wates in the

academic year 2013/2014, which comprised five classes, and their reading comprehension. A sample of 28 students was chosen using a cluster random sampling technique. The data collection instruments were carefully tested, and the data was analyzed using Linear Regression analysis in SPSS 16. The research findings revealed a positive and significant correlation between students' vocabulary mastery and their reading comprehension. The results of the hypothesis test indicated a correlation coefficient of 0.600, with vocabulary mastery contributing 36% effectively to reading comprehension. Additionally, the significance level (F) was 0.001, which was less than 0.05. This led to the rejection of the null hypothesis (HO), confirming a strong relationship between vocabulary and reading comprehension among the eighth-grade students at SMP Negeri 4 Wates in the academic year of 2013/2014. This suggests that vocabulary has a crucial role in enhancing reading comprehension, although it is not the exclusive factor determining reading comprehension abilities.

In a study conducted by Ramadani (2021), the research focused on exploring the correlation between the vocabulary proficiency of eleventh-grade students at MAN Selayar and their reading comprehension. The study included a sample of 24 students, selected using a random sampling technique. The study's findings indicated that the students' vocabulary mastery and reading comprehension were quite strong, as reflected in the average scores of 82.00 for vocabulary mastery and 84.64 for reading comprehension. Furthermore, a strong relationship was observed between vocabulary mastery and students' reading comprehension, with a correlation coefficient (r) of 0.914. This correlation value falls within the range of 0.80-1.000, signifying a very strong relationship between the two variables, namely vocabulary mastery and students' reading comprehension.

CONCLUSION

Based on the findings found in this study, it is concluded that the students' vocabulary level fell into the category of understand. It could be said that the students understood vocabulary. Furthermore, the students' reading comprehension level was classified as developing and it could be concluded that the students had comprehended reading comprehension. Regarding the correlation, the findings revealed a significant correlation between vocabulary mastery and reading comprehension. Some limitations of this study included was the limitations on time during the administration of the instrument, potential cheating during the test-taking time, and the lack of seriousness of some students in completing the test due to the relatively large number of test items. In terms of significance, there was a positive significance, which meant that the students' increased vocabulary allowed them to enhance their reading comprehension.

RECOMMENDATION

In this study, the researcher provided several recommendations regarding the findings of the research. Firstly, although the students' vocabulary level was very high, it was highly recommended that students continue to develop new vocabularies to expand their vocabulary in English learning. Learning should be conducted both inside and outside the school. Furthermore, regarding the level of reading comprehension among students. Although it was categorized as high, students should have been more diligent in practicing reading English books to be able to read other books more complex. For teachers, it was highly recommended to inform and continue teaching students about the importance of developing English vocabulary as it would have brought several beneficial advantages. The teachers can be the motivator where they motivate the students and assist them in developing reading comprehension in English so that the students wouldn't lose interest in reading.

REFERENCES

Ali, I. R. I. (2010). The correlation between students' vocabulary mastery and reading comprehension. Unpublished bachelor's thesis]. Universitas Islam Negeri Syarif Hidayatullah. https://www.academia.edu/download/34102541/IRWAN_ROIYAL_ALI-FITK.pdf

Aprilia, N. (2019). The Correlation between Students' Vocabulary Masteryandtheir Reading Comprehension in Descriptive Text at State Senior HighSchool2 Pekanbaru (Doctoral dissertation, Universitas Islam Negeri Sultan Syarif Kasim Riau). http://repository.uin-suska.ac.id/21675/

Daryanti, T. (2015). The Contribution of Vocabulary Mastery Toward Reading Comprehension. Universitas Negeri Yogyakarta. https://eprints.uny.ac.id/26312/1/THESIS.pdf

Destiyanti, C., Amin, M., & Putera, L. J. (2021). Gender-Based Analysis of Students' Ability in Answering Factual and Vocabulary-in-Context Questions of the TOEFL-Like Reading Comprehension Test. PALAPA, 9(1), 1-17. https://www.ejournal.stitpn.ac.id/index.php/palapa/article/view/926

Erniwati. (2019) THE Correlation Between the Students' Vocabulary Mastey and Their Reading Comprehension Ability in Learning English. (Universitas Muhammadiah Makassar). https://digilibadmin.unismuh.ac.id/upload/5964-Full_Text.pdf

Maghfirohtin, H. (2017). Students' Common Errors in Listening to Vowel Minimal Pairs at SMPN 3 Kertak Hanyar Banjar Regency. https://idr.uin-antasari.ac.id/id/eprint/8669

Manihuruk, D. H. (2020). The correlation between EFL students' vocabulary knowledge and reading comprehension. Journal of English Teaching 6(1), 86-95. http://ejournal.uki.ac.id/index.php/jet/article/view/1264

Muijs, D. (2010). Doing quantitative research in education with SPSS, 1-264. https://www.torrossa.com/gs/resourceProxy?an=4913517&publisher=FZ7200

Ramadhani, N. (2021). Improving reading comprehension at the eighth-grade students of SMPN 1 Watu through Directed Reading Thinking Activity. (DRTA) (Doctoral dissertation, INSTITUT AGAMA ISLAM NEGERI PALOPO). http://repository.iainpalopo.ac.id/id/eprint/3906/

Septiana, A. R., & Hanafi, M. (2022). Vocabulary mastery and reading comprehension of IT Education Department students, Journal Eduscience, 9(2), 532-542. https://jurnal.ulb.ac.id/index.php/eduscience/article/view/3070

Tongco, M. D. C. (2007). Purposive sampling as a tool for informant selection. https://scholarspace.manoa.hawaii.edu/handle/10125/227