

# The Effects of Perception on School Environment and Vocabulary Mastery towards Students' Reading Comprehension

Muhamad Iqbal Fauzi<sup>1</sup>, Lilik Yuliawati<sup>2</sup>

<sup>1</sup>Insan Pembangunan University

<sup>2</sup>Bina Sarana Informatika University

<sup>1</sup>iiqqball@gmail.com, <sup>2</sup>lilik.lyw@bsi.ac.id

**Abstract:** Reading is a fundamental skill that must be mastered in learning English as foreign language. There are many factors which can influence students' reading comprehension. This study aims to examine the effects of perception on school environment and vocabulary mastery towards students' reading comprehension in the State of Senior High School in Tangerang Banten. Population in this research is 11<sup>th</sup> grade students of State Senior High School in Kota Tangerang Banten. The samples of the research were taken as much as 60 respondents from two schools of one sub-district with A accredited. The data were collected by giving two sets of objective test and one set of questionnaire as the instruments to the 60 students. The results showed that 1) there is positive effect of perception on school environment and vocabulary mastery simultaneously towards students' reading comprehension; 2) there is positive effect of perception on school environment towards students' reading comprehension; 3) there is positive effect of vocabulary mastery towards students' reading comprehension.

**Keyword:** *Perception on School Environment, Vocabulary Mastery, Reading Comprehension*

## INTRODUCTION

Today mastery of English is a must in any country. English is the most popular language adopted as national language in several countries and international organizations. Besides, almost each country in the world uses English as second language after national language. These are reasons why everyone has to learn English to follow current development in globalization era.

Reading is one of the English receptive skills that must be mastered by students. It activates students' cognitive aspect in comprehending information within written text (Hilmi & Addinna, 2021). (Orasanu, 1986) stated that reading comprehension is a passage presented to the readers which have to be read either silently or out loud. Then, the series of questions are presented that test the reader's comprehension of the passage. Hence, reading comprehension is defined as the level of understanding of writing.

The ability of reading comprehension can be categorized as reading the text through understanding which refers to the background experience of the readers, general knowledge, vocabulary, syntactic awareness, and word identification function (Hermann et al., 2015).

Students are required to read a wide range of texts such as course reading pack, materials slides, books, internet articles, mass media, etc. Besides being able to understand texts, students also need to critique them, evaluate them, compare and contrast them, and apply the information which is useful for them. Therefore, students have to pay more attention to improve their reading skill in order to have good reading comprehension (Yuliawati, 2018).

Unfortunately, there are many students getting difficulties in comprehending English text. They feel difficult in understanding English texts especially the long ones. Most of them stated that they don't know the meaning of the words. The lack of vocabulary knowledge becomes an obstacle for them in comprehending the text.

(Hornby, 1995) states that vocabulary is the number of the words which make up a language using some kinds of rules. This statement is then strengthened by (Burns & Broman, 1975) who says that vocabulary means the stock of words used by a person, class of profession, all having much in common, yet each distinctly different. In other words, Vocabulary is knowledge of words and word meaning in both oral and written language and in both receptive and productive form.

The acquisition of a vocabulary becomes the main thing in learning a language. Therefore, vocabulary acquisition is required for success in learning English. A large vocabulary cannot guarantee the learners' competence in learning English, but inadequacy of vocabulary will obstruct their chances to make success in English.

Having good vocabulary mastery is important for language learners either in listening, reading, speaking, or writing (Lehr, Osborn, & Hiebert, 2004). By mastering vocabularies, the students will be able to understand what they have read, and they have ability to share or retell what have been read. By enhancing vocabulary mastery of English the students can easily improve their information and knowledge through any book especially English book.

The larger the students master vocabulary, the better they understand the English text. By having limited vocabulary, the student will find difficulties in mastering reading and other skills. In their research, (Hayati, 2016) and (Abdullah & Mukadar, 2023) found that there was a positive correlation between students' vocabulary mastery and their reading comprehension. The students will get high score in reading comprehension if they have high score in vocabulary, and vice versa.

School environment gives influence on students' performance through curricula, teaching techniques, and relationship since students spend most of their time at school (Lawrence & Vimala, 2012). Thus, environment plays a vital role in the development of students' personality. An appropriate and good environment is really important for a success of students learning. Therefore, school should provide nice and necessary stimulus for students' learning experience (Harinarayanan & Pazhanivelu, 2018).

Moreover, schools environment is place where students enhance their intelligence. It is being important to build good school buildings, strategic location, good design building, fresh air, complete facilities, skillful teachers, etc. Good school environment will give so much impact to students for learning optimally. (Wayne, Fortner, Kitzes, Timm, & KalishmanSummers, 2013) stated that students' perception and learning environment have a relationship with academic performance, including reading achievement. (Wang & Holcombe, 2010) also agreed that students' perception of their school can contribute to their level of academic engagement.

(Wingard, Hermawan, & Dewi, 2020) found that there is a correlation between students' perception of their school environment against their reading achievement through reading comprehension test. The perception was narrowed into feeling of being safe at school. In addition, students might feel that a good mood helped them a lot in understanding the text they read (Ismawati & Syafradin, 2022). Therefore, creating a safe school environment is essential to gain a productive learning (Diamanduros & Downs, 2011).

Based on the theories and previous researches above, the writers conducted this research to know students' perception on their school environment, their vocabulary mastery, and their level of reading comprehension as well. The writer also studied whether or not students' perception on school environment and their vocabulary mastery could affect their reading comprehension.

## **METHODOLOGY**

### **Research Design**

The method used in this research is survey method. (Sasmoko, 2004) says, "Survey is data collecting from the limited cases in large numbers. Purpose of the survey is to collect information about the variables and not information about individuals". There are three

variables studied; they are: the independent variables consisting of two variables namely Perception on School Environment and Vocabulary Mastery, and one dependent variable that is Students' Reading Comprehension. The hypothesis testing was analyzed by using multiple linear regressions. The research design can be seen in the following scheme:

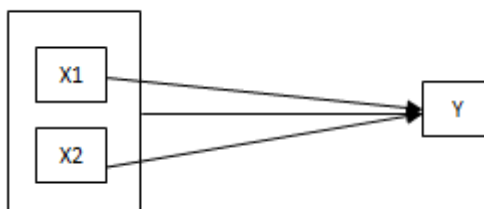


Figure 1. Research Design

Description:

X1 : Perception on School Environment

X2 : Vocabulary Mastery

Y : Reading Comprehension

### Population and Sample

Population in this research is all State Senior High School students of 11<sup>th</sup> grade in Kota Tangerang, Banten. There are more than 500 students in this population.

The sampling technique used for this survey research is a cluster-sample random sampling - it means taking a sample in cluster randomly and in a simple way because of the wide area and a great deal of population. According to (Sevilla, Ochave, Punsalan, Regala, & Uriarte, 2006), the cluster-simple random sampling is used in which related to a geographic location of respondents where they are in one school which is selected randomly as a cluster and regarded having an equal position for relevant characteristics towards examined variables.

Furthermore, Roscoe in (Sugiyono, 2013) stated that in multivariate research, the total of respondent is at least ten times of the total of variables. According to above statements, the samples of the research were taken as much as 60 respondents. In choosing the sample, there are two schools of one sub-district with A accredited namely: SMA Negeri 1 and SMA Negeri 2 then 30 students in each selected schools become samples. As a result, 60 students in grade eleventh in the odd semester of academic year 2016/2017 are to be the samples in this survey research.

### Data Collection Technique

The data were collected by giving two sets of objective test and one set of questionnaire as the instruments to the 60 students. Test 1 was given to assess students' vocabulary mastery, while Test 2 was given to assess students' reading comprehension. The questionnaire was given to students in order to gain information about their perception on their school environment.

### Data Analysis Technique

The hypothesis test used multiple linear regressions, and the overall analysis was carried out by a computer program of SPSS version 20.0 for windows.

## RESULTS AND DISCUSSION

The result of calculation and Test can be seen on table below:

Table 1  
Calculation Result of Multiple Correlation Coefficient Test Variable  $X_1$  and  $X_2$  upon Y

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.535 <sup>a</sup>	.286	.261	3.513

a. Predictors: (Constant), Perception on School Environment, Vocabulary Mastery

b. Dependent Variable: Students' Reading Comprehension

Table 2  
Calculation Result of Significant Regression Coefficient Test Variable  $X_1$  and  $X_2$  upon Y

**ANOVA<sup>a</sup>**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	282.043	2	141.021	11.425	.000 <sup>b</sup>
Residual	703.557	57	12.343		
Total	985.600	59			

a. Dependent Variable: Students' Reading Comprehension

b. Predictors: (Constant), Perception on School Environment, Vocabulary Mastery

Table 3  
Calculation Result of Multiple Regression Equation Variable  $X_1$  and  $X_2$  upon Y

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	73.258	3.322		22.054	.000
1 Vocabulary	.010	.031	.341	3.314	.001
Grammar	.819	.172	.532	4.755	.000

a. Dependent Variable: Students' Reading Comprehension

### 1. The effect of Perception on School Environment (X<sub>1</sub>) and Vocabulary Mastery (X<sub>2</sub>) Simultaneously towards The Students' Reading Comprehension (Y)

From table 1 it can be seen that the coefficient correlation of the effect of perception on school environment and vocabulary mastery simultaneously on students' reading comprehension is 0,535. It means that among variables have quite strong effects because R<sub>o</sub> is more than 0,500.

Meanwhile, the coefficient of determination of Perceptions on Schools Environment and Vocabulary Mastery variables on writing skill is 0.286. It means that the contribution of Perceptions on Schools Environment and Vocabulary Mastery simultaneously on students' writing skill is 28.6% and the rest (71.4%) is determined by other factors.

According to table 2, it is known that there is a significant effect of Perceptions on Schools Environment and Vocabulary Mastery simultaneously towards Students' Reading Comprehension. It is proved with the score  $Sig. = 0,000 < 0,05$  and  $F_0 = 11,425$ .

According to table 3, we may set the regression line equality that represents the effects of Perceptions on Schools Environment (X<sub>1</sub>) and Vocabulary Mastery (X<sub>2</sub>) on Students' Reading Comprehension (Y) in the following equation:

$$Y = 73,258 + 0,010 X_1 + 0,819 X_2$$

Description:

Y : dependent variable

X : independent variables

Explanation:

- a. The value of constant is 73.258. It means if the independent variables are considered constant, the Students' Reading Comprehension value is 73.258
- b. The value of regression coefficient of Perception on School Environment (X<sub>1</sub>) is 0.010. It shows that each addition of one unit of Perception on School Environment has an impact on the increased Students' Reading Comprehension in the amount of 0.010.
- c. The value of regression coefficient of Vocabulary Mastery (X<sub>2</sub>) is 0.819. It shows that each addition of one unit of vocabulary mastery has an impact on the increased Students' Reading Comprehension in the amount of 0.819.

### 2. The effect of Perception on School Environment towards The Students' Reading Comprehension

Referring to table 3 above, it can be seen that  $Sig. = 0.001 < 0.05$  and  $t_0 = 3.314$ . It means that there is a significant effect of Perception on School Environment (X<sub>1</sub>) towards Students' Reading Comprehension (Y).

(Gilakjani & Sabouri, 2016) mentioned that one of the factors influencing learners' reading comprehension is environment. Readers may have a lot of problems to understand a text in an unorganized environment than those who read in a calm and controlled place. If readers are in an unsafe place, they find it difficult to focus on their reading, and vice versa.

This evidence has the same result with the study that had been done by (Mokalu, Muntuuntu, & Tuna, 2021) at SMAN 1 Langowan that there was a positive correlation between students' perception about their school library on their reading comprehension achievement. Good school environment gives positive influence on students' reading comprehension and academic achievement engagement.

The learning environment is associated with the atmosphere that is created during the teaching and learning process, and functions as a supporting element for the development of

knowledge, skills, and attitudes (Vaatstra & Ries, 2007). Furthermore, (Tentama & Jayanti, 2019) mentioned that learning environment consists of the atmosphere of the learning environment, the cleanliness of the environment, the manner in which teacher educates and develops the most appropriate teaching method, efficient, good relations between teachers and students, intimate interaction between fellow students, and the availability of community activities that allow students to learn and develop their personality. These elements above will facilitate individuals to maximize the acquirement of knowledge, understanding, skills, and personality that is needed to identify existing career opportunities.

Environmental settings cooperate with vocabulary acquisition will affect reading comprehension. It means that the learning environment may influence vocabulary learning directly and reading comprehension indirectly. Students in appropriate and nice environment tend to gain more vocabulary which leads to higher reading comprehension scores, and vice versa (Dong, Hu, Wu, Zheng, & Peng, 2018).

### **3. The effect of Vocabulary Mastery towards Students' Reading Comprehension**

Referring to table 3 above, it can be seen that  $\text{Sig.} = 0.000 < 0.05$  and  $t_o = 4.755$ . It means that there is a significant effect of Vocabulary Mastery (X2) towards Students' Reading Comprehension (Y).

Vocabulary mastery is needed to make any communication, both oral and written to avoid misunderstanding between the speaker and listener or the writer and reader. Here, vocabulary becomes a significant component of reading comprehension in English language learning. (Tarigan, 1986) said that the quality of a person's language skill clearly depends on the quantity and quality of his vocabulary. In another researches which focused on the same variables, it was found that there was a significant effect of vocabulary mastery toward reading comprehension skill (Fasikh, 2018; Yuliawati, 2018).

The lack of vocabulary affects the level of reading comprehension. Having limited vocabulary has been identified as an impairment of reading comprehension among Indonesian students (Floris & Divina, 2009; García-castro, 2020). Moreover, ideally to read optimally, a reader is expected to know 90% coverage of words in texts. These words are mostly available in the first 1.000 words and some in the second 1.000 words. In other words, the first 2.000-word level is the basic vocabulary needed for every learner of English as a second/ foreign language to read English text and to have other skills as well (Sutarsyah, 2008).

A review by (Moghadam, Zainal, & Ghaderpour, 2012) showed that vocabulary knowledge plays a very significant role in reading exams, and reading investigation has constantly come up with a word knowledge element on which vocabulary tests load positively. Vocabulary knowledge is really important since lexical errors are the most frequent ones and, concurrently, they form obstructions in communicating.

Therefore, the metacognitive strategy may be advantageous to enhance the students' vocabulary acquisition and establish their prior knowledge (Nanda & Azmy, 2020)

## **CONCLUSION**

From the findings and discussion above, some conclusions of this research can be presented as follows:

1. There is a significant effect of perception on school environment and vocabulary mastery simultaneously towards students' reading comprehension.
2. There is a significant effect of perception on school environment towards students' reading comprehension.
3. There is a significant effect of vocabulary mastery towards students' reading comprehension.

**REFERENCES**

- Abdullah, S., & Mukadar, S. (2023). The Correlation between Students' Vocabulary Mastery and Reading Comprehension at the Second Grade of SMA Negeri 10 Kota Ternate. *EDUCATUM Scientific Journal of Education*, 1(1), 13–19.
- Burns, P. C., & Broman, B. L. (1975). *The Language Arts in Childhood Education* (third edit). Chicago: Rand McNally College Publishing Co.
- Diamanduros, T., & Downs, E. (2011). Creating a Safe School Environment: How to Prevent Cyberbullying at Your School. *Library Media Connection*, 30(2), 36–38.
- Dong, Y., Hu, J., Wu, X., Zheng, H., & Peng, X. (2018). The Evidence of Different Learning Environment Learning Effects on Vocabulary Size and Reading Comprehension. *Frontiers in Psychology*, 9(1914), 1–11. <https://doi.org/10.3389/fpsyg.2018.01914>
- Fasikh, M. (2018). The Effect of Vocabulary Mastery toward The Reading Comprehension Skill for the Students Grade VIII in the State of Junior High School in Bekasi District. *Journal of English Language and Literature (JELL)*, 3(1), 69–86.
- Floris, F. D., & Divina, M. (2009). A Study on the Reading Skills of EFL University Students. *TEFLIN Journal*, 20(1), 37–47.
- García-castro, V. (2020). The Effects of Vocabulary Knowledge in L2 Semantic Lexical Engagement: The Case of Adult Learners of English as a Second Language. *Indonesian Journal of Applied Linguistics*, 10(1), 261–270.
- Gilakjani, A. P., & Sabouri, N. B. (2016). A Study of Factors Affecting EFL Learners' Reading Comprehension Skill and the Strategies for Improvement. *International Journal of English Linguistics*, 6(5), 180–187. <https://doi.org/10.5539/ijel.v6n5p180>
- Harinarayanan, S., & Pazhanivelu, G. (2018). Impact of School Environment on Academic Achievement of Secondary School Students at Vellore Educational District. *International Journal of Education*, 7(1), 13–19.
- Hayati, A. (2016). The Correlation between Indonesian Students' Vocabulary Mastery and Their Reading Comprehension. *AL-TA'LIM JOURNAL*, 23(2), 95–99.
- Hermann, K. M., Kocisky, T., Grefenstette, E., Espoholt, L., Kay, W., Suleyman, M., & Blunsom, P. (2015). Teaching Machines to Read and Comprehend. In *Advances in Neural Information Processing System (NIPS)*.
- Hilmi, L., & Addinna, A. (2021). The Effectiveness of Reading to Tell the Story to Students' Reading Comprehension Reviewed from Autonomy Level. In *Advances in Social Science, Education and Humanities Research* (Vol. 579, pp. 161–165). Atlantis Press SARL.
- Hornby, A. S. (1995). *Oxford Advanced Learner's Dictionary of Current English*. (J. Crowther, Ed.). New York: Oxford University Press.
- Ismawati, K., & Syafryadin. (2022). Students' Perceptions of Using Readtheory.org in Reading Comprehension. *Journal of Applied Linguistics and Literacy*, 6(2), 171–180.
- Lawrence, A. S. A., & Vimala, A. (2012). School Environment and Academic Achievement of Standard IX Students. *Journal of Educational and Instructional Studies in the World*, 2(3), 210–215.
- Lehr, F., Osborn, J., & Hiebert, E. H. (2004). A Focus on Vocabulary. In *Research-Based Practices in Early Reading Series*. the Regional Educational Laboratory at Pacific Resources for Education and Learning.
- Moghadam, S. H., Zainal, Z., & Ghaderpour, M. (2012). A Review on the Important Role of Vocabulary Knowledge in Reading Comprehension Performance. In *The 8th International Language for Specific Purposes (LSP) Seminar - Aligning Theoretical Knowledge with Professional Practice* (Vol. 66, pp. 555–563). Johor: Procedia - Social and Behavioral Sciences. <https://doi.org/10.1016/j.sbspro.2012.11.300>
- Mokalu, R. E., Muntuuntu, M., & Tuna, J. R. (2021). Students' Perception about the Effect of School Library in Their Reading Comprehension Achievement. *Jurnal Ilmiah Bahasa & Seni*, 1(5), 505–514.
- Nanda, D. W., & Azmy, K. (2020). Poor Reading Comprehension Issue in EFL Classroom

- among Indonesian Secondary School Students: Scrutinizing the Causes , Impacts and Possible Solutions. *Englisia: Journal of Language, Education, and Humanities*, 8(1), 12–24. <https://doi.org/10.22373/ej.v8i1.6771>
- Orasanu, J. (1986). *Reading Comprehension: From Research to Practice*. New Jersey: Lawrence Erlbaum Associates Publisher.
- Sasmoko. (2004). *Metode Penelitian*. Jakarta: UKI Press.
- Sevilla, C. G., Ochave, J. A., Punsalan, T. G., Regala, B. P., & Uriarte, G. B. (2006). *Pengantar Metode Penelitian*. Jakarta: Universitas Indonesia Press.
- Sugiyono. (2013). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Sutarsyah, C. (2008). Vocabulary Constraint on Reading Materials. *Jurnal Ilmu Pendidikan*, 15(3), 193–200.
- Tarigan, H. G. (1986). *Pintar Berbahasa Inggris*. Malang: Pustaka Hidayah.
- Tentama, F., & Jayanti, H. D. (2019). Self-Concept , Perception of the Learning Environment and Employability: A Study of Vocational High School Students in Prambanan Yogyakarta, Indonesia. *Humanities & Social Sciences Reviews*, 7(1), 433–440.
- Vaatstra, R., & Ries, R. . (2007). The Effect of the Learning Environment on Competences and Training for Workplace According to Graduates. *Higher Education*, 53(3), 335–357.
- Wang, M.-T., & Holcombe, R. (2010). No Title. *American Educational Research Journal*, 47(3), 633–662.
- Wayne, S. J., Fortner, S. A., Kitzes, J. A., Timm, C., & KalishmanSummers. (2013). Cause or effect? The relationship between student perception of the medical school learning environment and academic performance on USMLE Step 1. *Medical Teacher*, 35(5), 376–380.
- Wingard, A. K., Hermawan, H. D., & Dewi, V. R. (2020). The Effects of Students' Perception of the School Environment and Students' Enjoyment in Reading towards Reading Achievement of 4th Grades Students in Hong Kong. *Indonesian Journal on Learning and Advanced Education*, 2(2), 68–74. <https://doi.org/10.23917/ijolae.v2i2.9350>
- Yuliawati, L. (2018). The Effects of Grammar and Vocabulary Mastery on Students ' Reading Comprehension. *Wanastra*.