

THE CORRELATION BETWEEN LEARNING STYLE AND STUDENTS' VOCABULARY SIZE OF THE TENTH GRADE OF SMA KEMALA BHAYANGKARI KOTABUMI ACADEMIC YEAR 2020/2021

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Abstract: The lack of vocabulary size can affect their responsiveness to the material presented by the teacher in the learning process. In this case the right learning style is very important to increase the size of students' vocabulary in the learning process. If students have appropriate learning styles in learning, they will be interested in understanding each vocabulary in the learning process. The objective of this research to determine whether there is significant correlation between learning style and students' vocabulary size of the tenth grade of SMA Kemala Bhayangkari Kotabumi academic year 2020/2021. This research is a descriptive correlational research. This research uses a proportional random sampling technique to determine the sample in this research. The total sample of this research was 30 students. The population in this research consist of 86 students. The instruments used to collect the data were a multiple choice test and questionnaire of learning style. After collected data, it it was analyzed by Product Moment formula, and the results of statistical data analysis of this research was $r_{\text{observed}} \geq r_{\text{table}}$ which is $0,913 \geq 0,361$ (30) (0,05). The researcher used T-test to know the significant of the correlation. The result of this research showed t_{observed} is grather than t_{table} which is $11,819 \geq 1,697$, it means that there is significant significant correlation between learning style and students' vocabulary size of the tenth grade of SMA Kemala Bhayangkari Kotabumi academic year 2020/2021.

Key Words: Learning style, vocabulary size, vocabulary, correlation, tenth grade.

Abstrak: Kurangnya ukuran kosakata dapat mempengaruhi daya tanggap mereka terhadap materi yang disampaikan oleh guru dalam proses pembelajaran. Dalam hal ini gaya belajar yang tepat sangat penting untuk meningkatkan ukuran kosakata siswa dalam proses pembelajaran. Jika siswa memiliki gaya belajar yang sesuai dalam belajar, mereka akan tertarik untuk memahami setiap kosakata dalam proses pembelajaran. Tujuan dari penelitian ini adalah untuk mengetahui ada tidaknya hubungan yang signifikan antara gaya belajar dan ukuran kosakata siswa kelas sepuluh SMA Kemala Bhayangkari Kotabumi tahun ajaran 2020/2021. Penelitian ini merupakan penelitian deskriptif korelasi. Penelitian ini menggunakan teknik proportional random sampling untuk menentukan sampel dalam penelitian ini. Jumlah sampel penelitian ini adalah 30 siswa. Populasi dalam penelitian ini berjumlah 86 siswa. Instrumen yang digunakan untuk mengumpulkan data adalah tes pilihan ganda dan angket gaya belajar. Setelah data terkumpul kemudian dianalisis dengan rumus Product Moment, dan hasil analisis data statistik penelitian ini adalah was $r_{\text{observed}} \geq r_{\text{table}}$ dengan nilai $0,913 \geq 0,361$ (30) (0,05). Peneliti menggunakan T-

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test untuk mengetahui signifikansi korelasi. Hasil penelitian ini menunjukkan $t_{observed}$ lebih besar dari pada t_{table} dengan nilai $11,819 \geq 1,697$, itu berarti dapat di simpulkan bahwa ada hubungan yang signifikan antara gaya belajar dan ukuran kosakata siswa kelas sepuluh SMA Kemala Bhayangkari Kotabumi tahun ajaran 2020/2021.

Kata kunci: *Gaya belajar, ukuran kosakata, kosakata, korelasi, kelas sepuluh.*

I. INTRODUCTION

Vocabulary is the smallest component in language. Vocabulary is very important because it will affect language knowledge if the vocabulary is limited. Vocabulary is needed for the formation of a sentence and then used to communicate. Therefore vocabulary is the basis of a language that must be learned.

Vocabulary can develop students' language skills. Skills such as speaking, listening, reading and writing can develop if students master vocabulary well. How students can write, read, hear, even speak well if they lack of vocabulary or do not have vocabulary knowledge. Learning vocabulary is very important because vocabulary is the most basic thing in helping students mastering these four skills.

Vocabulary is the most important part in language. In language, every human being communicates with words that have meaning to convey or express the message to be conveyed. Hiebert and Kamil (2005, p.3) stated that “Generically, vocabulary is knowledge of the meanings of the words”. Therefore, when students learn English they must understand each word they will use in English.

Willis (2008, p.89) stated that usually students build their vocabulary before they are ready to use it. It is important to increase students' vocabulary before expanding their English skills. Because if they know a lot of vocabulary they will be easier to learn English. Anderson and Freebody in Sen and Kuleli (2015, p.1) said that it is the general vocabulary knowledge is best predicts how well that reader understands the text. The knowledge of vocabulary can help the

student understand the meaning of the text when they read it. Vocabulary size is an approach that aims to find out the amount of vocabulary or the level of student knowledge about vocabulary. It is in line with Harrington (2018, p.4) who stated that 'an approach based on the simple assumption that the number of words known to the user can provide more vocabulary knowledge is called vocabulary size'. Vocabulary size knowledge is very important in providing an understanding of words and can help students' learning processes because students who master a large amount of vocabulary will easily understand the words used in the learning process.

In general, high school students have difficulty learning English because they lack vocabulary. This can cause students are not be able to understand the material being taught. When the exam occurs students will have difficulty in answering questions and will cause students to get a low score.

Based on pre observations was conducted on Friday 28th February 2020, at SMA Kemala Bhayangkari Kotabumi. From interview conducted with teachers and students at school, the researcher found that the reason why students lack vocabulary is because students assume that English is a foreign language. They are not accustomed to using English in their school environment or social environment. This causes students to be less likely to speak and difficulties to improve their vocabulary in the learning process of English.

There are many interesting ways to help teachers to teach language skills, especially in expanding students' knowledge about vocabulary. Learning styles can affect students' interest in learning foreign languages. Keefe in Brown (2000, p.114) also said that learning style are the affective, cognitive, and physiological traits of how students understand and interact with the learning environment. It means learning styles are related to personalities and feelings that are

unique in learning process. Learning style can affect the construction or mastery students skill in learning English.

Learning styles are the particular way in which a learner tries to learn something. Winkel in Yuliatin (2016, p.63) learning styles are a typical way of learning for students. The ability of students to understand lessons is different. Therefore, they must understand what learning styles make it easier to understand the lesson.

Teaching based on learning styles will be able to help find out the character of students. There are other dimensions of learning styles, visual learning styles, auditory learning styles, and kinesthetic learning styles. Brown (2000, p.122) stated that visual learning style tends to learning that uses pictures, information graphic, and reading. Brown (2000, p.122) also stated that auditory learning style marked by a preference for listening to audiotapes and lectures. And also Brown (2006, p.129) stated that kinesthetic learning style more refers to physical activity and

demonstrations that involve body movements.

In learning process learning style have an active role in developing students' learning activities. According to Brown (2000, p.114) stated that learning style are affective and physiological factors mingle with cognition related to the educational context. Keefe in Brown (2000, p.114) also said that learning style are the affective, cognitive, and physiological traits of how students understand and interact with the learning environment. It means learning styles are related to personalities and feelings that are unique in learning process. Learning style can affect the construction or mastery students skill in learning English.

Based on the previous explanation above, researcher interested in conducting research to overcome the difficulties students have in learning English vocabulary about the correlation between learning style and students' vocabulary size of the tenth grade of SMA Kemala

Bhayangkari Kotabumi academic year 2020/2021.

II. METHODS

Results

This research is a quantitative research. It is a research conducted by collecting data from samples to determine the results of the research. The research method was conducted by descriptive research. In descriptive research, researcher do not do anything to the object under research, because descriptive research is the simplest research. Arikunto (2010, p.3) stated that descriptive research is research that is intended to investigate circumstances or conditions whose results are presented in research reports. In this research, researcher used a correlation research type. According to Arikunto (2010, p.4) correlation research is research conducted by researcher to determine the level of the relationship between two variables, without making

changes, additions or manipulations to existing data.

This research has two variables, independent variable (X) and dependent variable (Y). The independent variable is learning style (X) and the dependent variable is vocabulary size (Y). The two variables are investigated and measured to find the extend of relationship between them.

Population is the whole object or subject that has the qualities and characteristics that will be used in research. Sugiyono (2017, p.80) stated that population is all areas that contain objects or subjects that have the qualities and characteristics that researcher use to research and draw conclusions. Population is the subject of research (Arikunto 2010, p.173). It mean all students who are at the same grade level as the research subject are the population. The population of this research is all tenth grade students of SMA Kemala Bhayangkari Kotabumi academic year 2020/2021 which consist of three

classes: they are class X Science 1, X Science 2, and X Social. The total number is 86 students.

Sample is part of the population that is observed to determine the results of the research conducted. Sugiyono (2017, p.81) also said that the sample is part of the population. In other words, the sample can represent the entire population. Researcher used probability sampling. According to Sugiyono (2017, p.84) probability sampling is a sampling technique that provides equal opportunities for each population to be selected as a sample. This means that all populations have the same opportunity to be selected as a sample, only a part of the population is taken to be sampled.

The sampling technique is a way of taking samples. Sampling can be seen from the number and criteria owned by the population. The sampling technique used in this research is proportional random sampling technique. According to Sugiyono (2017, p.82) proportional random sampling is used if the population is not

homogeneous and stratified by proportionality. Regarding how many samples to be taken, researcher needed to consider several things: time, energy, and funds (Arikunto 2010, p.177). Because the population is still relatively large, the researcher took sample proportionally 35% from each class.

In this research, researcher used tests as a research instrument. According to Arikunto (2010, p.193) tests are exercises in the form of questions to measure the knowledge possessed by individuals or groups. Researcher used multiple choice type test for the vocabulary size instrument. Researcher also used a questionnaire as a research instrument. According to Arikunto (2010, p.194) the questionnaire is question used to obtain information from respondents. Researcher used questionnaire for the learning style instrument.

In conducting this research, the researcher first conducted a tryout before continuing the research. The tryout was

held on Friday, June 4th 2021, at SMA PGRI 01 Kotabumi which was attended by 29 students. For the validation of the instrument, the researcher can use expert judgments. In this case, the researcher asked for an assessment from the vocabulary lecturer Mrs. Rulik Setiani, S.S., M. Pd. and the second supervisor, Mrs. Dewi Sri Kuning, S.Pd., M.Pd.

After the validity score was found, the reliability of the instrument of vocabulary size was calculated by using Spearman Brown formula. It was gotten that r_{observed} was 0,587 while $r_{\text{table}}(0,05)$ was 0,367 with $N = 29$. It means that r_{observed} was $0,587 > r_{\text{table}}(0,05)(29) 0,367$, and this indicates that the items of the instrument have significant reliability.

TABLE 1
THE SUMMARY OF RELIABILITY
OF VOCABULARY SIZE

Total of Odd Score (X)	134
Total of Even Score (Y)	128
Total of X ²	710
Total of Y ²	660
Total of XY	630
r_{xy}	0,415

r_{11}	0,587
r_{table}	0,367

Meanwhile, the reliability of learning style questionnaire was calculated by using Alpha formula. The criterion for reliable instrument is if r_{observed} is bigger than r_{table} in significant level 5% and $n = 29$.

TABLE 2
THE SUMMARY OF RELIABILITY
OF LEARNING STYLE

Observation	Result
r_{count}	0,779
r_{table}	0,367
Description	The instrument is reliable

After the validity and reliability on the two instruments, the researcher continued the research on Friday, August 20th 2021, at SMA Kemala Bhayangkari Kotabumi. The sample in this research amounted to 30 students taken from 86 students, because the researcher used a sample of 35% of the total population randomly.

In this research, the researcher analyzed the data to find whether the data

came from normal distribution or not. Therefore, the researcher used normality test, by using Liliefors formula. The result is presented in the table below:

TABLE 3
THE SUMMARY OF NORMALITY TEST

N	Variables	$L_{o \max}$	L_{table}	Description
1	Vocabulary Size	0,1475	0,1618	Normally Distributed
2	Learning Style	0,1230	0,1618	Normally Distributed

Based on the table before, it can be seen that the data for vocabulary size was found $L_{observed \max}$ 0,1475 and the result the data for learning style was found that $L_{observed \max}$ 0,1230. The value of L_{table} from the sample $N = 30$ with significant $\alpha = 0,05$ gotten from the distribution L_{table} or gotten from the formula $\frac{0,886}{\sqrt{30}}$, so the value of L_{table} 0,1618. From the explanation above, it can be concluded that $L_{observed \max}$ from two variables are smaller than L_{table} . It means that the data came from the

sample which is considered in normal distribution.

Homogeneity test is done by taking the data from the samples, which is same or not variant of samples which is taken from the same population. The researcher calculated the homogeneity test which done using F-test formula. It aims to know whether the sample of research was homogeneous or not. The result of homogeneity test can be shown in the calculation of F-test:

$$F_{observed} = \frac{\text{The Highest Variance}}{\text{The Lowest Variance}}$$

$$F_{observed} = \frac{51,98}{40,77}$$

$$F_{observed} = 1,27$$

Based on the result of homogeneity test, it was obtained $F_{observed} = 1,27$ with $F_{table} (0,05,29,29) = 1,86$. From the calculation, $F_{observed} < F_{table}$. It is found that the data from two variables are homogenous.

The hypothesis test was done after the data was normally distributed and that the variance of each group is homogenous. The

hypothesis test was tested by using Person's Product Moment formula.

TABLE 4
THE SUMMARY OF HYPOTHESIS TEST

Observed	Result
r_{observed}	0,913
r_{table}	0,361
Conclusion	H_0 was rejected, H_a was accepted

Based on the table before and the calculation by by using Product Moment formula, it found that the correlation between two variables (X) and (Y) or $r_{\text{observed}} = 0,913$ and $r_{\text{table}} = 0,361$ with $n = 30$ at significant level 0,05. Therefore, because of r_{observed} is bigger than r_{table} or $0,913 > 0,361$, it means H_0 was rejected, and H_a was accepted. It means that there is correlation between learning style and students' vocabulary size.

After the correlation was calculated by using Pearson Product Moment formula, the researcher used T-test to know the significant of the correlation. The following is the summary summary of significant test.

TABLE 5
THE SUMMARY OF SIGNIFICANT TEST

Observed	Result
t_{observed}	11,819
t_{table}	1,697
Conclusion	H_0 was rejected, H_a was accepted

From the result above it is found the t_{observed} was 11,819 and t_{table} was 1,697, with $n = 30$ by using significant level 0,05. As the result, so H_0 was rejected, and H_a was accepted, which means that the correlation was significant. This showed that there is significant correlation between between learning style and students' vocabulary size of the tenth grade in SMA Kemala Bhayangkari Kotabumi academic year 2020/2021.

Discussion

The research was conducted in SMA Kemala Bhayangkari Kotabumi on August, 22nd 2021. From the result of hypothesis testing using Pearson Product Moment correlation and T-test, it was found that

there was a significant correlation between learning style and students' vocabulary size of the tenth grade in SMA Kemala Bhayangkari Kotabumi academic year 2020/2021, and it is categorized into high correlation.

In addition, this research result is also in line with the research conducted previously by Maulana (2020) entitled “The Correlation Between Learning Style and Students' Vocabulary Mastery at First Grade Students at State Junior High School 3 Tambang” which found that positive correlation between learning style and students' vocabulary mastery with $t_{\text{observed}} = 8,032 > t_{\text{table}} = 1,734$. Thus, it can be concluded that learning style has correlation with students' vocabulary mastery.

The results of other research which are in line with the research on learning styles and vocabulary were also conducted by Oksatridywi (2017) entitled “The Correlation Between Learning Style and Students' Vocabulary Achievement”. This

research article found that positive correlation between learning style and students' vocabulary achievement with total with $t_{\text{observed}} = 10,99 > t_{\text{table}} = 2,10$. . Thus, it also can be concluded that learning style has correlation with students' vocabulary mastery.

Other similar study that had the same variable showing the same positive correlation was also conducted by Arianti (2016) entitled “The Influence of Learning Styles towards Students' Reading Comprehension at the Eleventh Grade of SMK Negeri 1 Kotabumi North Lampung Academic Year 2015/2016”. In this research t_{observed} of learning style is divided into three to, t_{observed} of visual learning style was 2,90 and t_{table} was 2.11 ($t_{\text{observed}} > t_{\text{table}}$) so H_0 is rejected, t_{observed} of auditory learning style was 4.64, and t_{table} was 2.05 ($t_{\text{observed}} > t_{\text{table}}$) also H_0 is rejected. While t_{observed} of kinesthetic learning style was 1.25 and t_{table} was 2.05 ($t_{\text{observed}} < t_{\text{table}}$) so H_0 is accepted.

In conclusion based on this research finding, it has been proved that learning style gives positive and significant correlation to students' vocabulary size. The result of this research is agrees with the theory, According to Keefe in Brown (2000, p.114) learning style are the affective, cognitive, and physiological traits of how students understand and interact with the learning environment. By having a learning style that is favored in learning, students will be enthusiastic in the learning process, so they will study English easier. However, when students learn with a learning style they don't like in learning English, they do not enjoy studying and do less effort in the learning process. As the result, they are difficult to achieve the maximum result. Based on the previous research, learning style in learning English influenced toward other students vocabulary. Not only influence to vocabulary size, but also other such as between learning style and vocabulary mastery .

IV. CONCLUSION

Based on the result hypothesis and the significant test, it can be concluded that there is significant correlation between Learning Style and Students' Vocabulary Size of the Tenth Grade in SMA Kemala Bhayangkari Kotabumi academic year 2020/2021. The result of this research showed that H_a is accepted with the result of hypothesis test t_{observed} is grather than t_{table} which is $11,819 \geq 1,697$.

Based on the discussion and conclusion previously discribed, the research gives some useful suggestion to support the teaching of English especially in develop vocabulary size. For English teacher, they are expected promote their students learning style in learning English because students who having a learning style that is favored in learning can increase their vocabulary size, then the teacher provide activities, employ certain technique or method that is in accordance with the learning style that students are intrested in. For the students, the students are suggested

to have a learning style that suits their interests, in order to maximize their responsiveness in learning English, especially in increasing their vocabulary.

For further researcher, to find out factors that about learning style in learning English especially in vocabulary size.

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