LEARNING STYLES AND VOCABULARY MASTERY OF STUDENTS: A CORRELATIONAL ANALYSIS

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Abstract

This study was aimed at determining whether or not there was a significant correlation between learning style and vocabulary mastery of the Eighth Grade Students of SMP Negeri 11 Palembang. This research employed correlational design and 34 students used as the sample of this study. To collect the data, the researchers used tests and questionnaires. To analyze the data, Pearson product moment correlation was applied. The results based on correlation coefficient showed that there was no correlation because the correlation coefficient (r-obtained) of -0.224 was lower than (r-table) 0.334. Yet, the results based on the interpretations of the correlation value showed that there was low correlation because r-obtained was -0.224 within the correlation value of 0.200-0.400. In conclusion, there is correlation between learning styles and vocabulary mastery of the Eighth Grade Students of SMP Negeri 11 Palembang

Keywords: correlation, learning style, vocabulary mastery

Introduction

Vocabulary is one of the most important aspects of language. Hilaliyah (2018) states that vocabulary is the aspect of words contained in a language, the wealth of words of a speaker, and the words used in the field of science. Hasanah et al., (2016) state that vocabulary is a component of language that needs to be understood and mastered to facilitate written communication fluency in a variety of languages. Vocabulary and words are inextricably linked.

According to Willis (2008), vocabulary is an extremely vital component of language since words are used to represent ideas that can only be comprehended clearly by other people. Students that increase their vocabulary are better able to communicate concepts of sound, knowledge, and communication. (p. 80). This research concerns with vocabulary mastery. As students have mastered vocabularies, they can speak well. Noermanzah (2015) states that vocabulary will have an impact on whether the sentence is a unit built by several words and students' grasp it to reach achievement and success at learning English. To have tough vocabulary mastery, students need to have great learning styles. Wang (2007) states that learning style refers to a strategy that allows pupils to absorb specific knowledge in the manner or style of their choice.

Cimermanová (2018), further defines that in order to effectively use a variety of learning styles, students must be independent, self-directed learners. Personal learning is also necessary to foster cooperation and teamwork. Abante et al., (2014) state that learning style is the total of the learner's characteristics that generates learning environment. It is led to the way that people like to compile knowledge and strategies for thinking, recalling, or resolving certain issues.

From the explanation, the researchers keen on conducting a study to find out how learning style correlates with vocabulary mastery for every student has a different learning style when learning English. To get empirical data on this study, the researchers provided a questionnaire and vocabulary test to see learning style and vocabulary mastery affect students' vocabulary Achievements.

Learning Style

In learning English, students have different learning styles. Suciani et al., (2022) state that each student is different from the other in terms of their hobbies or unique learning activities, a learning method tailored to their learning style will enable students to process educational materials more quickly. Every student has a distinctive learning style. Rasheed & Wahid (2021) define that the way that students comprehend the material that is taught to them by their teachers or through independent study is also reflected to learning styles. Each student has a unique learning style which is essential to the effectiveness of the learning activities that teachers need to focus on. According to (Porter & Mike, 2007), Learning style is a combination of the ways in which students take in, arrange, and interpret information" (p.110).

Students' learning style is the fastest and best style individual has in receiving, absorbing, organizing, and processing information. There are three different levels of comprehension and assimilation of lessons: fast, medium, and slow. As a result, they frequently need to approach the same material or lesson in multiple ways to learn it. Wilza (2022) state that students' learning style is how the manner in which learning students react and use stimuli received in the process. In learning style student choice based interventions, along with the

associated idea of learning preferences, may provide a more economical and empirically supported method of improving instruction and results for students experiencing learning behavior difficulties.

Baumgartner, et al., (2019) states that learning style knowledge includes a pedagogical approach and provides important insight for students and teachers. When educators understand learning styles, the students can tailor their teaching methods and activities to the strengths and weaknesses of individual students. Learning style can be used to customize instruction methods and materials to meet a student's requires and preferences.

Firmansyah et al., (2023) state that learning style is closely connected to an individual's personality which is determined by their education and advancement history. Learning style is a person's way of learning and how they reason in the proof process. Each learning style is different depending on how to understand and absorb the lessons given by the teacher. If teachers can adapt to the different learning styles of their students, then students will have an interest in their learning. Learning style cannot be forced on each student because they have different interests and perceptions of information,

According to Reid (1987), there are three kinds of learners based on their learning style, as follows:

1. Visual Type Learner
   This kind of instruction uses directly visible content, such reading or looking at pictures. Even when studying in class, the visual type prefers to sit in the front. Students take notes on the information the teacher presents.
2. Auditory Type Learner
   They acquire knowledge by using their aural senses. This kind of learner prefers to write down what

they have learnt or discussed when the teacher offers spoken instructions.

3. Kinesthetic Type Learner

It has something to do with via hands-on experience in which students actively and physically participate.

Vocabulary

One of the language aspects that must be comprehended by students when learning target language is vocabulary, since it can be used as a tool to improve all aspects of English proficiency. Without vocabulary, students cannot become more proficient readers, writers, or communicators with target language. Kusmaita, (2019) states that vocabulary is a collection of letter units that have meaning without word there may be no language because the word is the embodiment of language, every word contains the concept of meaning and has a role in the implementation of the language.

According to Setiyaningsih (2009), vocabulary is the knowledge of word meaning, feeling, idea, or information clearly and accurately for people (p.72). Meanwhile Ulfah et al., (2019) said that many students realize that their vocabulary is limited and find it difficult to convey ideas. Harimurti Kridalaksana (2008) states that there are four steps to mastering vocabulary (p.26) such as recognizing, listening, and reciting.

Like other experts, Xiqin & Qianyi (2008) defined that vocabulary as the entire vocabulary branch of knowledge known to a person how he or she uses and stores words and phrases. Albert (2010) adds that vocabulary can be classified into 8 categories, in terms of noun verb, adjective, adverb, pronoun, preposition, conjunction and interjection.

Research Methodology

The objective of this study was aimed Therefore, it utilized qualitative research design. Taylor, et.al (2016) stated that qualitative methodology refers in the broadest sense to research that produces descriptive data; people's own written or spoken words and observable behavior. This research was considered as a correlational research design. According to (Creswell, 2012) correlation is a statistical test to determine the tendency or pattern for two (or more) variables or two sets of data to vary consistently (p.338). There were two variables in this research, namely: the independent variable was learning style and the dependent variable was vocabulary mastery. According to Creswell (2012) Sugiyono (2013, p.39), the variable is a quality or trait of a person or organization that (a) the researcher can quantify or see, and (b) fluctuates depending on the person or organization under study (p.112).

Additionally, there were 384 of the eighth grade students at SMP Negeri 11 Palembang used as the population of the study, and the researchers used 34 students as the sample of the study which was obtained through cluster random sample by lottering.

According to (Creswell, 2012) , the sample is a subgroup of the target population that the researcher plans to study for generalizing about the target population (p.142). Fraenkel & Wallen (2006) & Thompson (2012).) state that a sample is a group in a research study on which information is obtained, as displayed in Table 1.

Table 1. Sample of the Study

No	Class	Male	Female	Total
1	VIII 8	17	17	34

To collect the data of students' learning style and their vocabulary mastery, the researchers gave questionnaires and vocabulary tests. (Kumar Singh, 2006) says that a questionnaire is a form that is prepared and distributed to secure responses (p.191). The questionnaire in this research which was answered by the students consisted of 20 statements with a Likert Scale. (Bethel & Thomas, 2006) a likert scale is a type of test item in which respondent indicate their attitude toward a particular statement by choosing one of a small number of ordered alternatives. (p.94).

Additionally, the students were asked to check-list the statements that they feel appropriate with them. The learning style questionnaire indicated learners' preference for the way their work with information. Besides, the researchers directly involved in the classroom activity and gave a vocabulary test as research instrument. According to Wilkinson & Birmingham (2003), research instruments are simply devices for obtaining information relevant to your research.

To analyze the data, the researchers used Pearson product-moment correlation using SPSS 25.00 Version to know coefficient correlation. Alam Sur et al., (2023) said that the coefficient correlation ranges from -1 to +1. The researchers also used the interpretation of coefficient correlation as illustrated in Table 2.

Table 2. Interpretation of Coefficient Correlation

Value r	Interpretation
0,80 – 1,000	High
0,60 – 0,800	Enough
0,40 – 0,600	Medium
0,20 – 0,400	Low
0,00 – 0,200	Very Low (not correlated)

(Arikunto, 2010)

Findings and Discussion

Result of Students' Vocabulary Test

The results of vocabulary mastery test which were given to 34 students described in Table 3.

Table 3. The Results of the Vocabulary Test

No	Name	Questions		Score
		True	False	
1	JRP	17	3	85
2	AM	19	1	95
3	GAYS	13	7	65
4	QJ	18	2	90
5	SR	18	2	90
6	FY	6	14	20
7	SAA	20	0	100
8	KK	20	0	100
9	NF	20	0	100
10	AVK	20	0	100
11	YF	20	0	100
12	DPN	20	0	100
13	MGN	19	1	95
14	RGW	20	0	100
15	RAS	20	0	100
16	MF	20	0	100
17	AAS	19	1	95
18	YDK	20	0	100
19	MIA	20	0	100
20	MFF	19	1	95
21	RIF	20	0	100
22	SU	20	0	100
23	NR	18	2	90
24	CI	19	1	95
25	HP	15	5	75
26	AAH	19	1	95
27	ARY	19	1	95
28	VFR	13	7	65
29	CLA	12	8	60
30	AZA	14	6	70
31	IFY	11	9	55
32	ZAA	12	8	60
33	ILA	15	5	75
34	AY	13	7	65

Table 3 shows that there are 13 students got the highest score (100), one student got the lowest score (20) and one student got the moderate score (55).

The Results of Students' Learning Style Questionnaire

The results of learning style questionnaire which were given to 34 students described in Table 4.

Table 4. The Results of Learning Style Questionnaire

No	Name	Score
1	JRP	75
2	AM	67
3	GAYS	69
4	QJ	70
5	SR	72
6	FY	66
7	SAA	54
8	KK	55
9	NF	67
10	AVK	64
11	YFA	59
12	DPN	67
13	MGN	70
14	RGW	78
15	RAS	77
16	MF	76
17	AAS	70
18	YDK	62
19	MIA	82
20	MFF	80
21	RIF	80
22	SU	75
23	NR	84
24	CI	76
25	HP	74
26	AAH	74
27	ARY	76
28	VFR	76
29	CIA	74
30	AZA	81
31	IFY	80
32	ZAA	80
33	ILA	82
34	AY	83

Table 4 showed that there were 5 (15 %) students in very high category. There were 15 (44%) students in the high category. Then, there were 11 (32%) students in moderate category. There were 3 (9%) students in low category. Last, there were 0 (0%) students in very low category.

Correlation between Students' Learning Style and Vocabulary Mastery.

Table 5. Pearson Product Moment Correlation

		Learning Style	Vocabulary Mastery
Learning Style	Pearson Correlation	1	-.224
	Sig. (2-tailed)		.202
	N	34	34
Vocabulary Mastery	Pearson Correlation	-.224	1
	Sig. (2-tailed)	.202	
	N	34	34

Table 5 showed that the coefficient correlation between learning style (independent variable) and vocabulary mastery (dependent variable) is (r-obtained) – 0.224 with a significance of 0.202. It could be concluded that the correlation between the two variables was not significant because the accompanying significance was bigger than $0.05(0.000>0.05)$. The coefficient correlation value of 0.224 indicated that there was a negative correlation between learning style and vocabulary mastery. Yet, based on the interpretation of coefficient correlation, there was a low correlation between learning style and vocabulary mastery since r-obtained was -0.224 within the correlation value of 0.200-0.400.

Interpretations

Formerly, the researchers collected the data by distributing tests and questionnaires. First, the researcher distributed a vocabulary test in term of multiple choices consisting of 20 question items and questionnaires on the same day. The researchers found various scores from the students which showed that the highest score of vocabulary test was 100 and the lowest Score was 20.

The researchers found that the result of the questionnaire given which showed that the highest score was 84 and the lowest score was 54. So, based on the

findings the researcher found significant no correlation between learning style and vocabulary mastery. The correlation coefficient between learning style (independent variable) and vocabulary mastery (dependent variable) is r-obtained = -0,224 with a significance of 0,202. Based on the stated decision criteria, it can be concluded that the correlation of the two variables was not significant because the accompanying significance was bigger than 0.05 (0.000>0.05). The correlation between that occurs in the negative and the low category. Based on the theory of correlation score by (Arikunto, 2010 p.319) the position of the value of - 0,224 was in the low correlation.

Conclusion

The correlation that occurs was negative, meaning that if the independent variable increases, it would be accompanied by a weakness in the dependent variable and the correlation was in the low category. In conclusion, the researcher's think that there was a correlation between learning styles and vocabulary mastery even though it was not too significant for each student has different learning style that affect his or her vocabulary mastery.

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