

The Effect Of Vark (Visual Auditory Read/Write Kinesthetic) Strategy Toward Students' Reading Comprehension (A Quasi Experimental at Second Grade Students' of SMAN 3 Kota Bengkulu)

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ABSTRACT

This study aims to investigate the effect of the VARK (Visual, Auditory, Read/Write, Kinesthetic) learning strategy on students' reading comprehension in the second grade at SMAN 3 Kota Bengkulu. Reading is a vital skill for senior high school students, as it enhances their ability to acquire new knowledge, support ideas, and complete academic assignments. This study employs a quasi-experimental design with 68 students as participants. Class XI J was selected as the experimental group, receiving the VARK strategy, while class XI G was the control group, using convensional teaching methods. The results show a significant effect of the VARK strategy on students' reading comprehension, with a p-value of 0.000. These findings suggest that the VARK strategy can enhance reading comprehension by catering to different learning preferences, creating a more inclusive and effective learning environment. **Keywords :** Reading Comprehension, VARK (Visual Auditory Read/Write Kinesthetic) Strategy

1. Introduction

Reading is the one of the important skill for senior high school. Through reading students can get new ideas, can obtain needed information, can support for their ideas, can help to complete their assignments and their motivation to know all of the world, not only as an important skill for the student in their life but also as an important aspect in the national final exam. The student know that an important of reading but for many students, reading is a tedious job, especially in English reading because they are consider that english is complicated , they are can not understand the meaning of the text, and in Indonesia English as a foreign language (Damayanti, 2018:76).

Reading is one of English skills which help people finding an information from what they read in order to be able to reach the comprehension. Nunan (2003:68) states that reading is a fluent process of readers combining information from a text and their own background knowledge to build meaning. Some of people argue that reading some articles or textbook is easy but reading with comprehension is more difficult. Actually, reading skill is very important for students such as; the students can get information from they read, the students can add their knowledge and can enlarge the way of their thinking by reading any text. So the students should have skill in reading to add their information and enrich their knowledge.

Reading comprehension is a developmental skill in describing idea beginning at the word level and proceeding to attaching meaning to an entire reading selection. In addition, (Nisa & Helmanda, 2019:137) mention that reading comprehension is decoding and understanding written text. It means that decoding requires translating the symbols of writing system. This definition relates that reading is not only about reading a text, but also sign or symbol such body language and road sign. Readers are asked to interpret meaning from the symbol by relating to the situation.

Based on the previous observation result at second grade students of SMAN 3 Kota Bengkulu, the researcher found some obstacles existing. The first obstacle is students still can not understand the text properly and lack vocabulary when reading text, so it is difficult to determine the meaning with only once reading. Then, students are often out of focus or concentration when they are reading a text, so it is still difficult to determine the meaning of the text and the main idea of a text, the student is still confused conclude conclusion and make a prediction of a teks. The last, student still confused when they are need to develop a mind of their own and develop ideas when reading a text.

To resolve these problems, the teacher must find reading strategy suitable and that the learning process becomes more effective, but among the many reading strategy that can be used are not all effective and appropriate to the needs of students. it is exactly what encourages teachers to seek an accurate strategy and develop it to the fullest in order to improve students' reading comprehension, one of effective strategy that can be used to selove this problem is Visual Auditory Read Kinesthetic. VAK is primarily an acronym of three words visual, auditory and kinesthetic (Virleen, M. C. 2020).

Visual Auditory Kinesthetic strategy or VARK is three modalities of learning that is first developed by Fleming (1987:23) to show individual preference in the learning process. The VARK learning style model includes a questionnaire that identifies a person's sensory modality preference in learning. This model classifies students into four different learning modes; visual (V), aural (A), read/write (R), and kinesthetic (K).. According to the VARK theorists, we need to present information using all three styles. This allows all learners the opportunity to become involved, no matter what their preferred style may be. Othman, N., & Amiruddin, M. H. (2010) states that VARK learning model is multisensory learning style that engages three learning style namely seeing, listening, reading, and moving. Teacher should encourage students not only use one modality but also combine three modalities to increase their achievement and cover up their weakness in the study. Moreover, Ramadian (2019:143) VARK learning model consist of a combination of motivation, engagement, and cognitive processing habits, which then influence the use of metacognitive skills such as situation analysis, selfpacing, and selfevaluation to produce a learning outcome based on the difference of students" learning style. VARK is the acronyms of individuals' visual, auditory, read/write and kinesthetic learning styles. Neil D. Fleming, an educator for more than forty years, developed the VARK scale which is a simple sixteen-question test with four alternatives, each and the participants could choose more than one choice if they discovered it appropriate (Faisal, R. A. 2019).

Based on the description above, the researcher tries to find out whether the effect of Visual Auditory Read/Write Kinesthetic (VARK) strategy in reading comprehension. The researcher choose this study entitled "The Effect of VARK (Visual Auditory Read/Write Kinesthetic) Strategy Toward Students' Reading Comprehension (A Quasi Experimental at Second Gradeb Students' Of SMAN 3 Kota Bengkulu)".

There are some previous studies related to this research. First, a study by Naibaho & Manik (2023) entitled "The Comparative Study of Visual and Auditory Learning Style on Jigsaw Strategy on Students' Reading Comprehension at Junior High School". The results of this study were (1) there was different post-test score between auditory and visual class where the visual class had higher score (71,25) than the auditory class (67,00) after being taught using jigsaw strategy. The result of the paired sample t-test showed that the values of sig (2-taieled) was 0,000 < 0,050 which means that there was significant different between the Pre-test and Post-test and it can be concluded that there was mean difference between the pre-test and the post-test of reading comprehension score of visual and auditory learning style after taught using jigsaw strategy.(2) Based on the ANCOVA test it was found that the value of level of significance of learning style was 0.120 and the value of level of Jigsaw strategy significance level was 0,162. It can be said that there was no significance effect of jigsaw strategy on students' reading comprehension of auditory and visual and auditory Learning Style at SMP Negeri 3 Lintonghihuta.

Second, Rasmawati (2019) entitled "The Use Of Visual Auditory Read Kinesthetic (VARK) Learning Model To Increase Students' Vocabulary (A Pre Experimental Research at the Seventh Grade of MTs Aisyiyah Sungguminasa)". The research findings indicated that the use of Visual Auditory Read Kinesthetic (VARK) learning model could improve students" vocabulary. It could be saw of the students" mean score in pre-test was 45.51, but after evaluation in post-test the mean score was 81.55 so, the improvement was 79.19%. Than the t-test value was higher than t-table value, or 10.50 > 2,048. It proved the hypothesis that there was an improvement from the score of students" pre-test and post-test, where their achievement after using Visual Auditory Read Kinesthetic (VARK) learning model was higher than before using the model.

The last, a study by Riyadi et al., (2018) entitled "The Influence of Vark Learning Style Towards Reading Comprehension of Third Year Students at SMAN 3 Kotabumi". They were categorized according to their learning style by using VARK questionnaires and then their mean score of the reading comprehension test were compared. The aspects of reading comprehension were also analyzed to find out the best aspect of reading comprehension of each learning style group. The result showed that the mean score of read/write group was the highest among the others. This indicates that read/write style is the best in reading comprehension.

This previous study and present research are similar since it analyzed the implementation of VARK Learning model on students' English skill. However, the subject and the skill to be improved on this previous study is different from the present research. The previos study improved the students' vocabulary mastery while the present research will use VARK strategy to improve second grade of SMAN 3 Kota Bengkulu students' reading skill.

The research question is fomulated as follows: " Is there any effect of VARK (Visual Auditory Read Kinesthetic) strategy on students' reading comprehension at second grade of SMAN Kota Bengkulu?"

2. Research Method

A. Research Design

This research used quantitative research. Sugiyono (2019:13) called quantitative as a traditional method, because this method is long enough to use so it's been a tradition as a method for research. This method is referred to as the positivistic method because based on the philosophy of positivism. This method is a scientific method because it has met the scientific principles that concrete, objective, measurable, rationally and systematically.

In quasi-experiments, the cause is manipulable and occurs before the effect ismeasured. However, quasi-experimental design features usually create less com-pelling support for counterfactual inferences. In quasi-experiments, the researcher has to enumerate alternative explanationsone by one, decide which are plausible, and then use logic, design, and measure-ment to assess whether each one is operating in a way that might explain any observed effect (Sugiyono, 2019:15).

Group	Pre-test	Independent Variable	Post-test
E	Yı	X1	Y ²
С	Yı	XO	Υ²

 Table 3. 1 Randomized Group, Pre-Test and Post-Test

Notes :

E = Experiment group

C = Control group

Y1 = Pre- Test

X1 = Treatment on the experiment group using VARK strategy

X0 = Treatment on the control group using VARK strategy

Y2

	Table 3.2 The Procedures of Research						
No.	Phase	Activities	Times	Groups			
1.	Pretest	Initial measurement by answering multiple choice questions	60 menutes	Experiment and control			
2.	Treatment Class	Learning uses the VARK strategy Learning uses the Traditional strategy	4 meetings with 60 minutes/meeting 4 meetings with 60 minutes/meeting	Eksperiment Control			
3.	Postest	Initial measurement by answering multiple choice questions	60 minutes	Ekperiment and control			

= Post-Test Table 3.2 The Procedures of Research

B. Research Setting

Location

This research was conducted in SMAN 3 Kota Bengkulu which is located in Pagar Dewa, Kec. Selebar, Kota Bengkulu, Bengkulu 38216.

Population

In this research, the population on the research included all second grade students at SMAN 3 Kota Bengkulu in academic year 2023/2024. There were 360 students for the class.

NO	Class	The Number of the Students
1	Class A	36
2	Class B	36
3	Class C	36
4	Class D	36
5	Class E	36
6	Class F	36
7	Class G	36

Table 3.3 The Population of the Research

8	Class H	36
9	Class I	36
10	Class J	36
The Number of Population		360 Students

C. Sample

The sample is a smaller group to be analyzed which is drawn from the population. Sugiyono (2019:119) stated that the sample is some part of the total and characteristic that is has of the population. The researcher gave pre-test. The sample of this taken from all an of student of the second semester. One class is an experiment class, it used VARK Strategy and another without using VARK Strategy. The researcher used purposive sampling technique in deciding the sample of this research. The researcher chooses two classes which got the highest score in pre-test.

Class Number of Students			
XI G	34		
XI J	34		
Total	68		

Table 3.4 Sample of the Research

Class VIII A was taken as experiment class which is implemented VARK strategy while VIII C was as control class with traditional teaching strategy. The number of students in the experimental and control classes each amounted to 36 students. Of the 36 students in the sample, only 34 students were in each experimental and control class. This happened because there were students who were absent and the students were permitted to carry out training activities to prepare for the competition.

D. Technique for Collecting Data

In collecting the data, the researcher did some steps as follows;

1. Administering Pre-test

The step before applying VARK strategy in doing research, the researcher gave pretest to the experimental and control group to know the students' ability in reading. It was given in the beginning of lesson. In this research, the test was administrated in multiple choice form based on the topic in lesson plan that the English teacher uses. The reading test or reading assessment was collected from some sources (English textbook and worksheet that used by English teacher in SMAN 3 Kota Bengkulu). Pre-test is important for getting data about students' ability before receiving the treatment. The pretest in this research was reading test.

2. Description of the treatment

This stage was handled by the researcher as a teacher in doing the treatment. Since in this research the researcher divided the classes into two classes is experimental class and control class, the treatment for the two classes is different one each other. The treatment used in the experimental class is that by using VARK Strategy. Meanwhile, the treatment used in the control class is that by using traditional method is role play. The researcher did treatment in six meetings for each experiment and control class.

This research could be carried out effectively, the researcher held 6 meetings, which according to Sugiyono (2018) stated that there were 6 meetings held in the quasi experimental treatment, namely introducing the program and initial measurements,

providing treatment or instructions to the experimental group, carrying out practice and training, holding discussions. and reflection, providing further material, and carrying out final measurements and evaluation.

3 Administering Post-test

The step after applying VARK strategy in doing research, the researcher gave post-test to the experimental and control group to know the students' ability in reading after give treatments. It was given in the ending of research. In this research, the test was administrated in multiple choice form based on the topic in lesson plan that the English teacher uses. Conducting post-test is important for getting data or score the students' after received the treatment.

E. Research Instrument

Instrument has important function in this research. Instrument is one of the significant steps in conducting this research. Arikunto (2019) stated that instrument is a tool or facilities that is used by researcher. Therefore, the researcher must choose some instruments in the process of collecting data. Instrument is a tool to collect a data which is needed in a research. The instrument on this research is reading test which aims to measure students' reading comprehension. The reading test or reading assessment will be collected from some sources (English textbook and worksheet that used by English teacher in SMAN 3 Kota Bengkulu).

Reading comprehension test is the test that used for measuring the students' reading comprehension to the material given. This test also aims to know the students' improvement in their reading comprehension before and after the treatment. It was given at the pre and post treatment. The researcher used multiple choice forms (A B C D E options) since the final test in Senior High School level always in the form of multiple choice questions, and there were thirty items of question for pre-test (experiment and control) and thirty items of question for post-test (experiment and control) that was adapted from English Textbook for grade XI. The assessment rubric is as follow.

F. Technique of Data Analysis

The data in this research was analyzed by using SPSS v.26. It is to calculate the pre-test and post-test result. The procedure for data analysis technique is as follows: 1. Normality test

Normality test was used to know whether the data is distributed normally. To know whether the data have normal distribution or not, the value of α = 0.05 is used as the standard. The hypotheses for testing the normality are as follows:

- H₀ : The data is normally distributed
- H₁ : The data is not normally distributed

The data is considered normally distributed when p-value > α = 0.05

2. Homogeneity test

Homogeneity test was used to know the homogenity of variance of the data. In order to know whether the data is homogenous or not, the following steps should be considered: Formulate the hypothesis

From the topic of the research, the hypothesis is formulated as follows:

- H₀: The variances before having treatment are equal
- H_1 : The variances before having treatment are not equal

 H_0 is accepted or rejected, $\alpha = 0.05$ is used.

The variances are considered homogenous when the p-value> α = 0.05

3. Hypothesis Testing

It consists of four steps:

- a. The research hypothesis are reviewed
- b. T-Count is calculated,
- c. T-table is consulted (2 tailed test α =0,05) For formula A= df= n₁+n₂-2 ; for formula B, n₁ o n₂ is whichever is smaller

d. T-count is compared with t-table.

There are two possibilities:

If $t_{count} \ge t_{table}$; (sig. p \le 0,05) H₁ was accepted and H₀ was rejected

If $t_{count} < t_{table}$; (sig. p > 0,05) H₀ was accepted and

H1 was rejected

G. Validity and Reliability

1. Validity

Validity refers to the extent to which an instrument measured what it claimed to measure (Kimberlin et al, 2008). It means that the test was valid when it measures what is supposed to measure. Validity test criteria using SPSS is if significance <0,05, then the question item in the question text is valid. The reseracher only took the valid questions which can be used for instrument of this research. The invalid question was removed from the instrument.

2. Reliability Test

Reliability refers to our measure repeatedly delivering the same (or near same) results. To know the reliability of instruments used in this research, the researcher tried them out before conducting them into the pretest and posttest. After getting the data, the researcher analyzed them by using SPSS 26. The categorial in reliability test is in the table below.

· · · · · · · · · · · · · · · · · · ·				
The Reliability Value	The Criteria			
0,80 - 1,00	Very High Reliability			
0,60 - 0,80	High Reliability			
0,40 - 0,60	Moderate Reliability			
0,20 - 0,40	Good Reliability			
0,00 – 0,20	Low Reliability			

Table 3.4 The Criteria of Reliability

(Sugiyono, 2019:176)

3. Result and Discussion

A. Result

This chapter discusses the result of the research conducted at second grade of SMAN 3 Kota Bengkulu. This chapter provides some findings and discussion about VARK (Visual Auditory Read/Write Kinesthetic) strategy on students' reading comprehension. This chapter consists of the description of the data, normality and homogeneity analysis, and the data analysis by using Independent sample t-test. The data was taken from pre-test and post-test that were given in experimental class and control class.

1. Validity and Reliability of the Instrument

After trying out the instrument, the researcher analyzed the valid items of questions. From 35 item test, 30 items were found to be valid. After did the validity test, the researcher did the reliability test to know whether the all items of reading instrument were reliable or not. The data of validity and reliability was in the table below.

Questions	r-count	r table (df 35)	Ket				
1	0.558	0.334	Valid				
2	0.598	0.334	Valid				
3	0.566	0.334	Valid				
4	0.748	0.334	Valid				
5	0.598	0.334	Valid				
6	0.413	0.334	Valid				
7	0.129	0.334	Tidak Valid				

	-		
8	0.407	0.334	Valid
9	0.104	0.334	Tidak Valid
10	0.411	0.334	Valid
11	0.065	0.334	Tidak Valid
12	0.558	0.334	Valid
13	0.598	0.334	Valid
14	0.566	0.334	Valid
15	0.715	0.334	Valid
16	0.437	0.334	Valid
17	0.669	0.334	Valid
18	0.454	0.334	Valid
19	0.669	0.334	Valid
20	0.748	0.334	Valid
21	0.598	0.334	Valid
22	0.413	0.334	Valid
23	0.251	0.334	Tidak Valid
24	0.611	0.334	Valid
25	0.455	0.334	Valid
26	0.611	0.334	Valid
27	0.455	0.334	Valid
28	0.220	0.334	Tidak Valid
29	0.566	0.334	Valid
30	0.458	0.334	Valid
31	0.591	0.334	Valid
32	0.531	0.334	Valid
33	0.414	0.334	Valid
34	0.395	0.334	Valid
35	0.407	0.334	Valid

Reliability Statistics

Cronbach's Alpha	N of Items
.891	30

The result of reliability test revealed that the instrument was reliable with α = 0,891for total item was 30. It means that the instrument was valid and reliable. The data description of students' reading pre-and post-test score will be explained in detail.

2. Description of The Data

a. Experiment Class

The experiment class was the one that was taught using VARK strategy. There were 34 students enrolled in the experimental class. The data description of pre-test and post-test result can be seen in the table below.

Table 4.2Data Description of Experiment Class

N	Minimum	Maximum	Mean	Std. Deviation
		in a start and	mean	Stal Berlation

Pretest Experiment	34	50.00	84.00	68.7941	6.82588
Posttest Experiment	34	74.00	100.00	92.4118	6.78732
Valid N (listwise)	34				

Table 4.2 showed that there were total sample of experiment class 34 students. The minimum pre-test score of control class was 50, the maximum was 84 with mean= 68,79 and standard deviation= 6,82. For post-test of experiment class, the minimum pre-test score was 74, the maximum was 100 with mean= 92,41 and standard deviation= 6,78. the meanscore of pretest of experiment class was 68,79 and the posttest score of experiment group was 92,41.

b. Control Class

The control class was one that received instruction using the conventional approach. The class that served as the subject control had 34 students. The data description of pre-test and post-test result can be seen in the table below.

Ν Minimum Maximum Mean Std. Deviation Pretest Control 34 80.00 8.29433 54.00 68.8529 57.00 87.00 8.00050 Posttest Control 34 73.1471 Valid N (listwise) 34

Table 4.4 **Data Description of Control Class**

Table 4.4 showed that there were total sample of control class 34 students. The minimum pre-test score of control class was54, the maximum was 80 with mean= 68,85 and standard deviation= 8,29. For post-test of control class, the minimum pre-test score was 57, the maximum was 87 with mean= 73,14 and standard deviation= 8,00.

the meanscore of pretest of control class was 68,85 and the posttest score of control class was 73,14. Therefore, to see wether the data was normal and homogen or not, it was showed in the following description.

3. Normality and Homogeneity Test

a. Normality Test

Before analyzing the hypothesis, the researcher did normality and homogeneity test. The normality test in this research used Kolmogorov-Smirnov of SPSS v.26 for windows with criteria $\rho > 0.05$. The normality test result of pre-and post-test was displayed in the table below.riyadi

Table 4.6 The Normality Test of Control Class							
Pretest Po							
N		34	34				
Normal Parameters ^a	Mean	68.8529	73.1471				
	Std. Deviation	8.29433	8.00050				
Most Extreme	Absolute	.177	.185				
Differences	Positive	.177	.161				
	Negative	146	185				
Kolmogorov-Smirnov Z		1.030	1.078				
Asymp. Sig. (2-tailed)		.239	.195				

Table 4.6 The Normality	Test of Control Class



Figure 1. The Histogram of Normality Test in Control Class

The Kolmogorov Smirnov test of the pre-test in control class showed that significance was 0,239 and 0,195 for posttest. Since the significance value was higher than 0.05, it could be concluded that the data obtained were considered normal. If the data is normal, it means the data was suitable to be analyzed by using Independent sample t-test Analysis. But before the data was analyzed by using Independent sample t-test Analysis, the data needed to be homogenous first. The result of the homogeneity test of the data will be described on the next pages.

	-	Pretest	Posttest
N	_	34	34
Normal Parameters ^a	Mean	68.7941	92.4118
	Std. Deviation	6.82588	6.78732
Most Extreme	Absolute	.165	.162
Differences	Positive	.165	.132
	Negative	153	162
Kolmogorov-Smirnov Z		.963	.946
Asymp. Sig. (2-tailed)		.312	.332
a. Test distribution is Normal.			

Table 4.7 The Normality Test of Experiment Class



Figure 2. The Histogram of Normality Test of Experiment Class

The Kolmogorov Smirnov test of the pre-test in experiment group showed that significance was 3,32 and 3,12 for posttest. Since the significance value was higher than 0.05, it could be concluded that the data obtained were considered normal. If the data is normal, it means the data was suitable to be analyzed by using Independent sample t-test Analysis. But before the data was analyzed by using Independent sample t-test Analysis, the data needed to be homogenous first.

b. Homogeneity Test

The ouput of homogeneity test was on the table 4.8.

Table 4.8	
Output of Homogeneity Test	
Test of Homogeneity of Variances	
	_

	Levene Statistic	df1	df2	Sig.
Posttest	1.591	1	66	.212
Pretest	2.050	1	66	.148

The sig.of levene anaysis of pre and post test= 0,148 and 0,212 were more than 0,05. It means that the data was not different significantly but homogenous. Since the data was distributed normally and homogenous, the researcher did Independent sample t-test analysis test to examine the hypothesis.

4. Hypothesis Testing using Independent Sample t-test

To know the difference of students' score between experiment and control group on students' reading comprehension, the researcher analyzed the students' score before and after the treatment. The result can be seen on the following table

Table 4.9 Analysis of Independent Sample t-test

Group Statistics									
	Grup N Mean Std. Deviation Std. Error Me								
Posttest	Experiment	34	92.4118	6.78732	1.16402				
	Control	34	73.1471	8.00050	1.37207				

			t-tes	t for Equalit	ty of Means	;				
						Sig. (2-	Mean Differenc	Std. Error Differenc	95% Cor Interva Differ	
		F	Sig.	t	df	tailed)	е	e	Lower	Upper
Posttes t	Equal variances assumed	1.591	.212	10.707	66	.000	19.26471	1.79931	15.6722 6	22.8571 5
	Equal variances not assumed			10.707	64.292	.000	19.26471	1.79931	15.6704 8	22.8589 3

Independent Samples Test

From table 4.9, it can be proved that the mean difference was 19,26 with sig. (2 tailed) = 0,000 < 0,05 which means that H₀ was rejected. In other words, VARK strategy is effective in improving students' reading comprehension. The graphic below showed the significant different of meanscore between control and experiment class.



Graphic 1. The Difference of Pre-Test and Post-Test Score

Regarding to graphic 1, the students' reading ability meanscore on pre-test between control and experiment group was slightly similar with 68,85 for control class and 68,79 for experiment class. However, in the post test, the reading score of experiment class was higher than control class with 73,14 for control class and 92,41 for experiment class. Therefore, there was no significant different of students' meanscrore after the treatment in control class while there was a significant different of students' reading meanscore after the treatment in experiment class. It can be concluded that there was an effect of using VARK (Visual Auditory Read Kinesthetic) strategy toward students' reading comprehension.

Moreover, to know whether there is any significant effect of using VARK strategy toward students' reading comprehension, the researcher used Pair Sample T-Test analysis. The result was in the table below.

Paired Differences							
	Std. Deviatio	Std. Error			Sig. (2-		
Mean	n	Mean	Lower	Upper	t	df	tailed)

Table 4.10 Paired Samples T-Test

	-	Paired Differences							
			Std. Deviatio	Std. Error		nfidence I of the rence			Sig. (2-
		Mean	n	Mean	Lower	Upper	t	df	tailed)
Pair 1	Pre_Exp - Post_Exp	-2.36176E1	8.33036	1.42864	-26.52425	-20.71105	- 16.532	33	.000

The result showed that the sig of paired sample t-test for experiment class was 0,000 which means that there was a significant effect of using VARK (Visual Auditory Read/Write Kinesthetic) Strategy toward students' reading comprehension at second grade of SMAN 3 Kota Bengkulu.

B. Discussion

This research was aimed to find out whether there is an effect of VARK (Visual Auditory Read/Write Kinesthetic) strategy on students' reading comprehension at second grade of SMAN 3 Kota Bengkulu. The finding of this research showed that there was a significant effect with sig (2-tailed)= 0,000 of using VARK (Visual Auditory Read Kinesthetic) Strategy toward students' reading comprehension at second grade of SMAN 3 Kota Bengkulu.

This research revealed that the VARK strategy can help the students who learned by visual, auditory, read, and kinesthetic style to comprehend the reading text since VARK is an acronym for four different learning styles, namely visual (V), Auditory (A), Read/Write (R) and kinesthetic (K). this research finding was confirmed by experts. As Fleming (2001) stated that VARK focuses on how we can receive and impart knowledge with our senses. The simplest approach for someone in a meeting to receive varied new knowledge is to use his learning style. A student will have his own manner of studying so that he understands and always does provide the material gained. "An individual's qualities and preferred techniques of gathering, organizing, and thinking about information," according to Fleming (2001).

The VARK strategy, which stands for Visual, Aural, Reading/Writing, and Kinesthetic learning preferences, offers several advantages for enhancing students' reading comprehension: By addressing different learning styles, the VARK strategy allows students to engage with reading material in ways that resonate with their individual preferences, making comprehension more effective. Incorporating various modalities can make reading more interactive and engaging, helping students maintain interest and motivation, which are crucial for understanding complex texts (Fleming, 2005).

This reserach found that the VARK strategy encourages the use of diverse reading strategies, such as summarizing (reading/writing) or discussing content (aural), which can deepen understanding and provide different perspectives on the material. The strategy can be tailored to fit various subjects and reading materials, making it versatile and applicable across different contexts and curricula. By engaging with texts through various formats, students can develop critical thinking skills as they analyze and synthesize information from different sources. Moreover, The VARK strategy helps students recognize their own learning preferences, fostering self-directed learning and enabling them to choose strategies that best suit their needs. Overall, the VARK strategy can create a more inclusive and effective learning environment, improving reading comprehension across diverse student populations (Imani,2023).

Moreover, this research finding was similar to some previous studies. First, a study by Naibaho & Manik (2023) entitled "The Comparative Study of Visual and Auditory Learning Style on Jigsaw Strategy on Students' Reading Comprehension at Junior High School". The results of this study were (1) there was different post-test score between auditory and visual class where

the visual class had higher score (71,25) than the auditory class (67,00) after being taught using jigsaw strategy. The result of the paired sample t-test showed that the values of sig (2-taieled) was 0,000 < 0,050 which means that there was significant different between the Pre-test and Post-test and it can be concluded that there was mean difference between the pre-test and the post-test of reading comprehension score of visual and auditory learning style after taught using jigsaw strategy.(2) Based on the ANCOVA test it was found that the value of level of significance of learning style was 0.120 and the value of level of Jigsaw strategy significance level was 0,162. It can be said that there was no significance effect of jigsaw strategy on students' reading comprehension of auditory and visual and auditory Learning Style at SMP Negeri 3 Lintonghihuta.

Second, Rasmawati (2019) entitled "The Use Of Visual Auditory Read Kinesthetic (VARK) Learning Model To Increase Students' Vocabulary (A Pre Experimental Research at the Seventh Grade of MTs Aisyiyah Sungguminasa)". The research findings indicated that the use of Visual Auditory Read Kinesthetic (VARK) learning model could improve students" vocabulary. It could be saw of the students" mean score in pre-test was 45.51, but after evaluation in post-test the mean score was 81.55 so, the improvement was 79.19%. Than the t-test value was higher than t-table value, or 10.50 > 2,048. It proved the hypothesis that there was an improvement from the score of students" pre-test and post-test, where their achievement after using Visual Auditory Read Kinesthetic (VARK) learning model was higher than before using the model.

The last, a study by Riyadi et al., (2018) entitled "The Influence of Vark Learning Style Towards Reading Comprehension of Third Year Students at SMAN 3 Kotabumi". They were categorized according to their learning style by using VARK questionnaires and then their mean score of the reading comprehension test were compared. The aspects of reading comprehension were also analyzed to find out the best aspect of reading comprehension of each learning style group. The result showed that the mean score of read/write group was the highest among the others. This indicates that read/write style is the best in reading comprehension.

It can be concluded that VARK (Visual Auditory Read/Write Kinesthetic) Strategy was effective to improve students' reading comprehension at second grade of SMAN 3 Kota Bengkulu.

4. Conclusion

Based on the findings of this research, it can be concluded that the use of the VARK (Visual, Auditory, Read/Write, Kinesthetic) strategy has a significant effect on students' reading comprehension at the second grade of SMAN 3 Kota Bengkulu. The statistical analysis showed a significant result with a p-value of 0.000 (sig 2-tailed), indicating that the VARK strategy positively influences students' ability to comprehend reading materials. Furthermore, the significant effect of the VARK strategy underscores its potential to improve educational outcomes in reading comprehension across diverse student populations. Given these positive results, it is recommended that educators consider integrating the VARK strategy into their teaching practices to foster a more effective and adaptable learning experience. This approach could not only enhance reading comprehension but also support the development of other language skills. In conclusion, the VARK strategy proves to be a valuable tool in enhancing reading comprehension in secondary education. Future research could explore its impact on other academic skills, such as writing or listening, and investigate its effectiveness in larger and more diverse student groups to confirm its broader applicability.

References

Arikunto, S. (2019). Prosedur Penelitian. Jakarta: Rineka cipta.

- Damayanti, E. (2018). The Influence Of Using Visualization Auditory Kinesthetic (Vak) Learning Model Toward Students' Narrative Text Writing Ability At The Second Semester Of The Eighth Grade At Smpn 3 Bukitkemuning North Lampung In The Academic Year Of 2017/2018. State Islamic University of Lampung.
- Faisal, R. A. (2019). Influence of personality and learning styles in English language achievement. *Open Journal of Social Sciences*, 7(08), 304.
- Fleming, N.D. (2001). *Teaching and learning styles: VARK strateg*ies. Edisi Kedua. Christchurch, Selandia Baru.
- Imani, T. (2023). The Effects of Self-Explanation and the VARK Modal Preferences on Performance. *Learning and Instruction, 13(2), 195–210*
- Kimberlin, C. L., & Winterstein, A. G. (2008). Validity and reliability of measurement instruments used in research. *American journal of health-system pharmacy*, 65(23), 2276-2284.
- Naibaho, H., & Manik, S. (2023). The Comparative Study of Visual and Auditory Learning Style on Jigsaw Strategy in Students' Reading Comprehension at Junior High School. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature, 11*(1), 572–585. https://doi.org/10.24256/ideas.v11i1.3802
- Nisa, R., & Helmanda, C. M. (2019). The classification of reading comprehension test items. *Proceedings of the 2nd English Education International Conference (EEIC) in Conjunction with the 9th Annual International Conference (AIC)*, 1975, 137–141.
- Nunan. (2003).Practical English Language Teaching. (Singapore: The Mc. Graw –Hill Companies)
- Othman, N., & Amiruddin, M. H. (2010). Different perspectives of learning styles from VARK model. *Procedia-Social and Behavioral Sciences*, *7*, 652-660.
- Ramadian, O. D., Cahyono, B. Y., & Suryati, N. (2020). The Implementation of Visual, Auditory, Kinesthetic (VAK) Learning Model in Improving Students' Achievement in Writing Descriptive Texts. English Language Teaching Educational Journal, 2(3), 142. https://doi.org/10.12928/eltej.v2i3.946
- Rasmawati. (2019). THE USE OF VISUAL AUDITORY KINESTHETIC (VAK) LEARNING MODEL TO INCREASE STUDENTS' VOCABULARY (A Pre Experimental Research at the Seventh Grade of MTs Aisyiyah Sungguminasa). Muhammadiyah University of Makassar.
- Riyadi, B. S., Setiyadi, B., & Hasan, B. (2018). The Influence of Vark Learning Style Towards Reading Comprehension of Third Year Students at SMAN 3 Kotabumi. *U-Jet: Unila Journal of English Language Teaching*, 7(5), 1–7. https://doi.org/10.23960/ujet.v7i5.201809
- Roomy, M. (2022). Investigating the Effects of Critical Reading Skills on Students' Reading Comprehension. Arab World English Journal (AWEJ) Volume 13. Number1. March 2022 Pp. 366-381 DOI: https://dx.doi.org/10.24093/awej/vol13no1.24
- Supit, D., Melianti, M., Lasut, E. M. M., & Tumbel, N. J. (2023). Gaya belajar visual, auditori, kinestetik terhadap hasil belajar siswa. *Journal on Education*, 5(3), 6994–7003. https://doi.org/10.31004/joe.v5i3.1487.
- Sugiyono (2015). Metode Penelitian Kombinasi (Mix Methods). Bandung: Alfabeta
- Syafrizal et al. (2020). Teachers' belief on Early Second Language Acquisition in Indonesian Bilingual School. *Journal of English Language Studies Volume 5 Number 1 (2020) 47-59*
- Tomlinson, C. A. (2014). *The differentiated classroom: Responding to the needs of all learners.* Ascd

Virleen, M. C. (2020). Found on VARK: A guide to learning styles. http://www.vark-learn.com/ [accessed 12 April 2010]. Center for Learning and Teaching, Cornell University, USA.