

# AN ANALYSIS OF STUDENTS' READING COMPREHENSION WITH DIFFERENT LEARNING STYLES

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**Abstrak:** Penelitian ini bertujuan untuk menemukan: i) apakah ada perbedaan secara signifikan dari membaca komprehensif siswa dengan gaya belajar yang berbeda dan ii) untuk mengetahui aspek membaca komprehensif yang paling sulit dihadapi murid dalam pemahaman membaca teks bahasa Inggris. Penelitian ini menggunakan pendekatan kuantitatif. Penelitian ini menggunakan desain ex-post facto. Subjek penelitian ini adalah 30 siswa kelas VIII, SMPN 26 Bandar Lampung. Teknik pengumpulan data yang digunakan dalam penelitian ini adalah kuisioner gaya belajar dan tes membaca komprehensif. Hasil penelitian menunjukkan bahwa tidak ada perbedaan pemahaman membaca siswa yang signifikan dengan gaya belajar yang berbeda. Selain itu, aspek membaca yang paling sulit dihadapi oleh siswa untuk pelajar visual adalah membuat kesimpulan, sedangkan untuk pelajar dengan gaya belajar pendengaran dan kinestetik aspek membaca tersulit adalah memahami kosa kata. Sebagai kesimpulan, setiap siswa memiliki gaya belajar yang berbeda akan menghadapi kesulitan membaca komprehensif yang berbeda.

**Kata kunci:** *membaca komprehensif, aspek membaca paling sulit, gaya belajar*

**Abstract:** The objectives of this research are to find out: i) whether there is any significant difference of students' reading comprehension with different learning styles and ii) what the most difficult aspect of reading comprehension that are faced by students. This research is quantitative research. This research use ex-post facto design. The subjects of this research are 30 students of SMPN 26 Bandar Lampung. The data are collected through learning styles questionnaire and reading comprehension test. The result shows that there is no significant difference of students' reading comprehension with different learning styles. Furthermore, the most difficult reading aspects that are faced by students are making inference for visual learning style, understanding vocabulary for auditory and kinesthetic learning styles. In conclusion, the students who have different learning styles faced different difficulty in reading comprehension.

**Keywords:** *reading comprehension, most difficult aspect of reading, learning styles*

## INTRODUCTION

Reading is one of the important English language skills which must be mastered by the students in learning English. This skill cannot be separated from the other language skills because this skill will support students to mastery other skills. From reading, everyone will acquire the level in understanding of the text in order to build their comprehension ability. Reading is the process of looking at series of written symbols and getting meaning from them. Everyone who reading a text, they are in the process to get something from the text. Nowadays, we often find many students do not make an equal achievement in all languages skills. Some students mastering reading and the other did not. Reading comprehension is the interaction between the reader and the text in a meaningful way. It is the connection from passive reading to active reading.

Moreover, in reading comprehension it must also be familiar with reading sub skills. Nuttal (1982: 109) states there are five short reading skills that should be mastered by reader to comprehend a text deeply. Those skills are determining main idea, finding the specific information or part of the text, finding reference, finding inference, and guessing meaning of vocabulary or difficult word. Those sub skills or aspect of reading must be understood deeply by the reader in order to fully comprehend the text. Based on the researcher experience doing PPL in SMAN 1 Way Tenong, it was found several difficulties encountered by the students. It is also in line with the pre observation in SMPN 26 Bandar Lampung, the teacher said that the students get some problem in understanding word, identify the main idea, specific information, reference, inference of the paragraph. So, that is why the researcher wants to analyze the difficult aspect of reading comprehension.

According to Shehu (2015), reading comprehension difficulty occurs frequently, this difficulty in reading comprehension occurs for many reasons; the three most important ones are vocabulary, working memory, absence of extensive reading. For foreign learner vocabulary is the biggest problem, they are difficulty to guess the meaning of the words and memorize the words. Many of students confused with sentences and tenses. From those problems, it is important to encourage students' reading comprehension, especially foreign language students to read as much as possible because in this way they will find a great help in their process of language learning.

In comprehending a text, students have different styles, namely learning styles. This is one aspect that affects students' achievement. Students' learning styles can be meant by students' cognitive or affective characteristic in which what way students understand something, interacting to other people, and responding something. According to Krischner, P.A (2013: 121) says the second legend is the widespread belief that learners have specific learning styles and that education should be individualized to the extent that the pedagogy of teaching learning is matched to the preferred styles of the learner. That is why the teacher should know how the students prefer to learn the materials.

In fact, each person has different character. Therefore, the way in learning something will different too. Since the students have different preferences to the

certain learning styles. There are three main types of learning styles: visual, auditory, kinesthetic. As quoted by Setyawan (2016) in 2005 Dornyei categorizes learners' learning styles according to sensory preference into several types: visual, auditory, kinesthetic or tactile. He explains that learners with visual learning styles absorb information most effectively if it is provided through the visual channel. Thus, they tend to prefer reading tasks and often use colorful highlighting schemes to make certain information visually more salient. Learners with auditory learning styles absorb information most effectively through auditory input such as lectures or audiotapes. They like to talk the material through by engaging in discussions and group work. Kinesthetic learners will learn most effectively through complete body experience such as body movement, whereas tactile learners like a hand-on, touching learning approach.

Some researchers on the area of learning styles and reading comprehension have been done to investigate the correlation of both topics. One of the researchers is carried by Setyawan (2016). He conducts the research at second semester students of English Literature, STBA Teknokrat. The sample of the population was 18 persons which involved both male and female students. They were chosen by using a learning styles questionnaire and a reading test. Then his students were taught based on their learning styles and given a test every three meetings. Furthermore, when kinesthetic students were taught through activities adjusted for kinesthetic students, they got better mean score than visual and auditory students did. The next research was conducted by Hidayati (2018). She states there are students mostly got difficulties in understanding vocabulary, poor mastery of grammar, the difficulty in understanding long sentences, lack of media learning, less support from the family, lack of knowledge of strategies in reading comprehension. Those are the main difficulties that often happen during reading process.

In accordance to the definition and previous research above, those are three learning styles which have their own strengths and weaknesses which will affect in students' reading comprehension. Thus, the researcher tries to analyze the differences of students reading comprehension achievement with different learning styles and to know the most difficult of aspects of reading comprehension with different learning styles.

## **METHOD**

This research is a quantitative research. The population of this research is the second grade of SMPN 26 Bandar Lampung academic year 2016/2017. This research used ex-post facto design. There are eight classes of the second grade students that consist of 30 students for each class and the researcher choose one class as the sample. The data are collected through questionnaire and reading comprehension test. The questionnaire adopted from Reid (2000), originally the questionnaire consists of 30 items but the researcher only used 15 items. After distributed questionnaire, the researcher distributed reading comprehension test which consist of 40 items to students. The result of the questionnaire and reading comprehension test were analyzed by using One Way Anova in SPSS 16 program.

## RESULTS

After the data were analyzed, the results of this research are briefly presented as the followings. Firstly, the hypothesis which was tested in this research is:

$H_0$  indicates that there is no significant difference on students' reading comprehension with different learning styles.

$H_1$  indicates that there is significant difference on students' reading comprehension with different learning styles.

**Table 1. The result of ANOVA Computation**

Score	ANOVA				
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	116.138	2	58.069	.869	.433
Within Groups	1536.208	23	66.792		
Total	1652.346	25			

From the table above, it could be seen that the significance between all learning styles to students' reading comprehension is 0.433 with significant level of 0.05 ( $p < 0.05$ ). It meant that P-value is higher than  $\alpha$  ( $0.433 > 0.05$ ). In other word,  $H_1$  was rejected and  $H_0$  was accepted. It indicated that there was no significant difference on students' reading comprehension based on their learning style.

**Table 2. The Mean Score of Reading Comprehension Compared to the Three Types of Learning Styles**

					95% Confidence Interval for Mean			
					Lower Bound	Upper Bound		
	N	Mean	Std. Deviation	Std. Error			Minimum	Maximum
V	6	61.67	11.255	4.595	49.86	73.48	50	80
A	8	65.88	7.772	2.748	59.38	72.37	50	75
K	12	67.00	6.606	1.907	62.80	71.20	55	75
Total	26	65.42	8.130	1.594	62.14	68.71	50	80

According to the table, it can be concluded that kinesthetic tends to be the best learning style in reading comprehension among others. Kinesthetic reaches the highest mean score of reading comprehension that is 67.00, which is followed by auditory with the mean score 65.88 and visual is the lowest mean score with value 61.77.

Furthermore, in order to investigate which aspect of reading comprehension is the most difficult aspect of reading comprehension with different learning styles, the results of reading comprehension test in terms of the aspects of reading comprehension are showed below.

**Table 3. The Post Hoc test analysis the difference of students' reading comprehension with different learning styles****Multiple Comparisons**Score  
Scheffe

(I) LS	(J) LS	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
V	A	-4.208	4.414	.640	-15.76	7.34
	K	-5.333	4.086	.440	-16.02	5.36
A	V	4.208	4.414	.640	-7.34	15.76
	K	-1.125	3.730	.956	-10.88	8.63
K	V	5.333	4.086	.440	-5.36	16.02
	A	1.125	3.730	.956	-8.63	10.88

It has been stated before that there is no significant difference of students' reading comprehension with different learning styles significantly. It could be seen from the table. At the first column in the table above, visual learning style is worse than auditory and kinesthetic with the mean difference scores are -4.208 and -5.333. While auditory is better than visual is 4.208 but auditory is still worse than kinesthetic with the mean difference score is -1.125. Moreover, at the last column in the table above, it can be described that kinesthetic tends to be the best learning styles among others (visual, and auditory learning styles) with the mean difference scores are 5.333 and 1.125.

**Table 4. Score of Aspects of Reading Comprehension based on Their Learning Styles**

No.	Learning style	Aspects of Reading					Most Difficulty
		Main Idea	Specific Information	Reference	Inference	Vocabulary	
1.	Visual	4	3.62	4.25	3	3.63	Inference
2.	Auditory	3.75	4.12	4	4.25	3.25	Vocabulary
3.	Kinesthetic	4.5	3.87	4.88	3.88	3.13	Vocabulary

The table shows the three learning styles has different difficulty in reading even auditory and kinesthetic learning styles are same. For the students who have visual Learning Styles, the difficulty that the most frequently faced namely inference (3). Vocabulary (3.25) is the most difficult aspect of reading which is faced by the students who have auditory learning style, it is same that vocabulary (3.13) is faced by the students who are kinesthetic learner.

**DISCUSSION**

Based on the result, looking at the percentages of students' learning styles, the greatest proportion was kinesthetic learners. Kinesthetic learners will learn through movement as way to get information and transfer it into brain. They enjoy doing and solving real-life problems. Furthermore, 26.7% students are classified as auditory learners. These type learners tend to learn by listening and able to memorize faster by reading text loudly. Then, 20% students are visual learners.

Students with visual learning style tend to learn best by seeing images or pictures. While the other learners are mix learning styles that reach 13.3%. Students with this type tend to learn by listening, through movement and seeing image or picture. Therefore, it can be concluded that students of VIII B SMP Negeri 26 Bandar Lampung are dominated by kinesthetic learners. This is true because the results indicated that the total of kinesthetic learners amounted to 12 person that it is at the most. It is supported Vaishnav and Chirayu (2013) who found that kinesthetic learners were the majority or the most dominant learning style.

After doing ANOVA analysis, it was found that there is no significant difference on students' reading comprehension performance based on their learning style. The result showed that P-value is higher than P-alpha ( $0.488 > 0.05$ ). Therefore,  $H_0$  is accepted that there is no significant difference on students' reading comprehension among visual, auditory, and kinesthetic learners. It was proven by seeing their mean score. While visual got 61.66, auditory 65.87, and kinesthetic 67.00. There are no significant different mean score. This finding supports by some extent those of previous research studies by Mentari (2016). On her research, she found that there is no significant difference on students' reading comprehension performance based on their learning style. In comprehending reading text, there are some other possible factors which might be affected students' reading comprehension.

This finding supports by some extent those of previous research studies by Mentari (2016). On her research, she found that there is no significant difference on students' reading comprehension performance based on their learning style. In comprehending reading text, there are some other possible factors which might be affected students' reading comprehension. As quoted by Sutarsyah (2013) in 2005 Duff states the factors that affect comprehension are divided into two categories. The first is internal factors, which are background experience, language abilities, thinking abilities, affection (interest, motivation, attitudes, beliefs, feelings), and reading purposes. The other one includes two factors external to the reader and it includes the nature of the text to be read and physical factor.

Moreover, Zint (1966) states in her book that failure in reading can be affected from many factors, they are; learners' motivation, physical factors, lack of rest, substandard out of school environment and neurological impairments, emotional upsets, inadequate language readiness for reading process and resentment of siblings or parents. This finding is rejected by Jafari and Mahboudi (2012) research. On their research, it indicated that learning styles were found to be significantly correlated with the English proficiency between two groups (i.e., high and low proficiency). It means based on their finding, some factors that influence students' reading comprehension is not only from learners' motivation but also physical factors, lack of rest, environment, emotional and more. There is another possible factor which might be affected students' reading comprehension. Another possible factor is learning styles.

On the other side, some researcher finding that there is no effect of learning styles on students' reading comprehension. Rachma (2015) carried out the similar research with the title the effect of learning style on students' reading

comprehension achievement at the first grade of SMAN 10 Bandar Lampung. On her research, she find that there is no significant effect of learning style on students' reading comprehension achievement. The other previous research, Febriyanti (2014) also did a research. Her finding showed that learning styles has no significant effect on students' reading comprehension. It means that learning styles is not one the significant factors that affect students' reading comprehension. Therefore, students with any learning styles does not significantly effect on their reading achievement.

In addition, the second question is to finding the most difficult aspects of reading comprehension in each style of VAK learning style. Firstly, the most difficult aspect of reading comprehension of visual learners is inference. It indicates that visual learners were mostly unable to read and to make a conclusion. It might happen because in making inference, students need to think more. This finding is supported by Riyadi (2018), he states students have to conclude the inference based on the available clues in the text by themselves. Therefore, it can be said that making inference could be the most difficult aspect of reading comprehension. Likewise, the most difficult aspect of auditory learner is understanding vocabulary. This simply means that most of aural learners are unable to understand mostly the meaning of vocabularies in the reading test. This is not in line with Armstrong (2004) who states that aural learners have good vocabulary. It is so since they have strong ability in remembering names and facts. In brief, although auditory learners are not good enough in reading comprehension but they have strong ability in vocabulary aspect. In order to solve this difficulty, visual learner should be spend time effectively looking through the information and try to rewrite specific pages of information from memory. Besides that, to solve this difficulty, students with auditory learning style should improve the quality of any notes taken in the lesson, and use their strength to rote vocabulary.

At the same time, in the research reveals that vocabulary also the most difficult aspect of reading comprehension for kinesthetic learner. We can see from the table 4, vocabulary is the lowest score of reading aspects. It might happen because kinesthetic tend to learn something by physical activities such as writing and speaking. In line with Sutarsyah (2013), the other common problems that are found basically deal with word-problem such as difficulty to guess the meaning of words and memorize words, difficulty with spelling, idiomatic expressions or culturally bound words. Based on his finding, most students got confused because they had limited vocabulary. They often forgot new words so that it was difficult for them to retrieve to their long-term memory when reading text. So, they need to more focuses on the text, conducting experiments and acting out a play.

Moreover, difficulty is something that we complicated to do. It will be seen from students' mistake or error learning process. In fact, many senior high school students often find the difficulties in reading comprehension. These difficulties make the student's poor performance in reading test. Thus, from these factors arise some difficulties in reading comprehension. Difficulties factors that are faced by students divided into external and internal. Internal factor includes physics, intellectual, and psychological, while external factors include family and

school environments (Rahim, 2006). There are some internal factors that influence the students in reading comprehension that are generally found by the reader during reading, namely; difficulty in understanding long sentence and text, difficulty is caused by limited background knowledge, difficulty in using reading strategies and difficulty in concentration (Fajar: 2009).

Based on the explanation above it can be concluded that there is no significant difference of students' reading comprehension with different learning styles. Also, it is found that inference is the most difficult aspect of reading of visual learners, while aural and kinesthetic learners get difficulty in understanding vocabulary of reading comprehension. In a word, it is believed that learning styles attempt to define the different ways in which students prefer to learn, especially in comprehending a text. Every learning style might be producing such a good effect in the way they comprehend the text. The point is that the teachers to be more aware of their methods and technique used to explain the material.

## **CONCLUSION**

Based on the data analysis, it was found that most of VIII B students of SMPN 26 Bandar Lampung were categorized as kinesthetic learners. It is showed by the percentages of kinesthetic learners which reached 40%. Auditory learners are the following style of students which reached 26.7%. Then, visual learners are classified as 20%. Having analyzed the comparison of reading mean score based on students' learning style, the result showed that P-value is higher than P-alpha ( $0.488 > 0.05$ ). Therefore,  $H_0$  is accepted that there is no significant difference on students' reading comprehension performance based on their learning style. It is caused by the nature of reading that is a complex process of learning which allows students with any style of learning to succeed in reading. In analyzing aspects of reading comprehension of each group of VAK learners, this study found the results that each learning style has their most difficult aspects of reading comprehension. Visual learners tend to have difficult in making inference of reading comprehension. It might be need some clue to making inference. While, auditory and kinesthetic face most difficulty in understanding vocabulary. They are limited in vocabulary.

## **SUGGESTION**

In teaching-learning area, the researcher suggests some recommendation for teachers and also students. Teachers are recommended to recognize their students' learning styles. It is important because each style has characteristic which will help the learners to develop their ability especially in reading. It might be possible to set a method or technique in teaching that will embrace all students with different preference ways of learning. Thus, students are no longer finding it hard to comprehend a text and become successful in learning, especially reading. The researcher also suggests the students to be more aware of their learning styles. By knowing their best way in learning, they will be helped to achieve the goals of learning. Recognizing their learning styles will also help them to set some strategies in learning especially reading so that it will be easier for them in comprehending a text.



Moreover, this research was conducted with limited number of subjects. This might be a good suggestion for other researcher to do a correlative study with a bigger number of subjects in order to get more valid data. Additionally, the technique in collecting the data in this research only used questionnaire. The next researcher can use interviews and observations to make the data more valuable. Besides, it is suggested for the following researcher to expand and explore learning style to be correlated to other skills in English speaking, writing, listening, etc. and the last the further study should also be conducted to find out the appropriate way to help students regarding the difficulty in VAK learning styles.

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