# THE COMPARATIVE STUDY OF STUDENTS' LEARNING STYLE ON THEIR ACHIEVEMENT IN READING SKILL

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#### **ABSTRACT**

The purpose of this study is to know the difference of students' learning style on their English achievement in reading skill of the second grades students of SMPI An-Nuqthah Cipete in Tangerang, Banten. This study uses a causal comparative research design and purposive sampling technique. The sample of this study is 34 second grade students of SMPI An-Nuqthah. They are divided into three types of learning style: visual learning style, auditory learning style and kinesthetic learning style. A questionnaire is used to determine each students' learning style. Students' learning style and their English achievement in reading skill were analyzed by using percentage and bifilar linear regression analysis. The result of this study revealed that most of students have a visual learning style (50% from 34 students). The adjusted R score = 51.8%, which means that the learning style contributes about 51.8% to the English reading skill of the second grades students of SMPI An-Nuqthah, and another 48.2% are affected by other factors and need further study. According to the results, the students' visual learning style t-test is higher than the value of the t-table. The conclusion of this research is that visual learning style is the best way to make reading comprehension easier.

Keywords: Learning style, Visual, Auditory, Kinesthetic, Reading

#### A. INTRODUCTION

The Introduction presents the purpose of the studies reported and their relationship to earlier work in the field. It should not be an extensive review of the literature. Use only those references required to provide the most salient background to allow the readers to understand and evaluate the purpose and results of the present study without referring to previous publications on the topic.

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Language is a systematic means of communication through the use of sounds or conventional symbols. This is the code we all use to express ourselves and communicate with others. It is also a system that uses sounds, gestures, symbols or marks to convey ideas and feelings. Language is a written or spoken method of combining words to create meaning, and certain people are using the language.

English is considered a universal language because it is the most spoken language in the world. As Safari & Fitriati (2016) said that "English has become the medium of communication in every field in the local and global environment". In our country, English plays an important role in international communication and the development of education, economy, science and technology. As an international language, English has been used as a foreign language in Indonesia. In fact, the government forced that English should be taught in schools as a compulsory subject from the beginning of elementary school.

Reading is an activity about understanding written text. It is not only understanding but also understanding written text. When learning English, reading some texts has many advantages, such as increasing vocabulary, grammar and understanding the use of punctuation. However, reading is a common problem for students to learn English. Students often encounter difficulties in the process of reading. According to Saadi (2012), reading difficulties are a common problem among students. He said that many students have difficulties in reading. In addition, the ability to read is also very important for English foreign language students. Facts have proved that educational institutions even attach importance to reading as a subject at the basic level of elementary and middle schools.

Every student has different ways to get information from the learning process. The way students choose during the learning process is their learning style. According to Saadi (2012), "If students understand their own learning style, their academic performance will be positively improved." Based on the above statement, it can be concluded that the learning style begins in the student's learning process. It plays an important role and affects students' reading performance because their learning style is related to the way they acquire and understand information. The students will learn easily through their own learning style.

According to Bire & Bire (2014: 44), "learning style is the easiest way for students to absorb, organize, and process the information they receive in their studies." According to the brain's ability to absorb, transmit and communicate information, students' learning styles can be divided into Visual, Auditory and Kinesthetic (VAK) three categories. These categories do not give students only one learning style, but these categories are a guide to understanding which dominant learning style a student has.

Based on the discussion above, students' learning styles: visual, auditory, and kinesthetic will all affect students' reading ability. For teachers, it is important to recognize the learning style of students in order to improve their reading ability. This study will find significant differences in reading skills among students based on their learning styles.

#### **B. LITERATURE REVIEW**

# 1. Reading

Reading is a vital skill that everyone should have. Mickulecky & Jeffries (2004) said "Reading is very important because it can improve students' general English language skills; help students think in English, expand their English vocabulary, and improve writing skills. This may be a good way to understand new ideas, facts and experiences." Therefore, reading is an important basic skill for students and is necessary for English comprehension.

Reading is an active process of understanding written text, which means extracting the required information from the text as efficiently as possible. Reading has two ways of communicating between readers and writers through written language or symbols, which require interpretation and understanding.

One of the reading comprehensions parts. Reading requires imagination to draw symbols or words to make them easier to understand. However, it is not easy for students to acquire reading skills, because it takes reading as the main goal of English or English learning. Therefore, reading is not a simple process. It requires cooperation between the eyes and brain, and mastering reading skills requires regular exercise, because acquiring a skill requires more exercise and making it a habit of our daily activities. Because reading is a complicated process, we need to concentrate so that it is easier to understand the symbols or words of the text.

It can be concluded that reading is an active process between the eyes and the brain. The eyes need to accurately see the symbols or words in the written text. At the same time, the brain should recognize the symbols or words to be explained so that the reader can understand the text and obtain new information, facts and ideas from the text.

#### 2. Learning Style

Learning style is the way in which students absorb and understand the ideas or information they obtain in the learning process. According to Hilliard in Naning and Hayati (2011: 4) Learning style is the characteristic way that individuals acquire, perceive and process information. In addition, learning style is the way students think, process and understand information.

Therefore, based on the above theories, it can be concluded that learning style is a preferred way for students to acquire, understand, absorb and process information about learning materials from the learning process. They will absorb the teacher's information in their own way of learning, so that they understand, enjoy and feel at ease. Moreover, every student has different preferred learning methods in the learning process.

Learning style is just a term used to describe attitudes and behaviours. It determines the individual's preferred learning method. Every student has all types of learning styles, but this does not mean that they use them at the same time. Every student has a dominant learning style or preferred style. They use different learning methods in different situations.

# a. Visual Learning Style

Visual is related to vision or everything we can see. According to Yong (2010: 481), "Visual learning style refers to the preference of learning through vision. Visual learners

rely on their sight to obtain information. They organize knowledge according to the spatial relationship between ideas, and use graphics Way to store it. Students' visual learning style has some characteristics; when using visual media (such as Power Point presentations, videos, pictures, charts and graphs) for presentations, they can better remember the material. Visual learners usually like themselves Read textbooks, periodicals, articles or newspapers to improve understanding."

# b. Auditory Learning Style

Auditory learning style is a way of learning in which a person learns by listening, and they learn best from what they hear. Auditory learners can remember the details of the dialogue, and they also have strong language skills. Gilakjani (2012) stated that "Auditory learners understand information by listening and interpreting information, which is the average value of pitch, focus and speed."

# c. Kinesthetic Learning Style

Kinesthetic learning style is the way students absorb information through the body. It is likely that they use their body or touch to understand the teacher's material. According to Gholami and Bagheri (2013), "kinesthetic learners refer to activities that physically participate in the learning environment, such as field trips, drama, pantomime, or interviews."

The result of the student's learning process is very important to understand the operation of their learning process. The result of the learning process is the student's achievement. Achievement is a measure of whether students know the degree to which they have acquired knowledge in the classroom learning process, and it is also a measure of how teachers know how students absorb materials from the teaching process. Mastering the results can be seen from the behavior of students, their behaviour can be knowledge, thinking ability, physical or motor skills.

### C. RESEARCH METHODOLOGY

In this research, the researcher used a causal comparative research design, because it checks the difference between two or more groups on a variable, and does not need to directly control the grouping variable, so it cannot be operated on. So, in this study the researcher wants to know the difference of students' learning style on their achievement in reading skill.

The total sample of this research are 34 students from second grade at SMPI An-Nuqthah. They were classified into three categories of learning style through learning style test or questionnaire: visual learning style, auditory learning style and kinesthetic learning style.

In collecting the data, the researcher used two instruments: questionnaires and students' daily test score about reading comprehension from the teacher. The questionnaire is used to indicate their learning style. The questionnaire was taken from SMAN 2 Tangerang and adopted from DePorter, Reardon and Singer-Nourie in the "Quantum" textbook. The questionnaire includes 36 items, 12 items for each learning style. The questionnaire in this instrument is used *Likert* scale which the given answer are: *sangat setuju* (strongly agree), *setuju* (agree), *ragu-ragu* (doubt), *tidak setuju* (disagree), dan *sangat tidak setuju* (strongly disagree). Each of given answer has score as follows: for given answer "strongly agree" has 5 score, for given answer "agree" has 4 score, for given answer "doubt" has 3 score, for

given answer "disagree" has 2 score, and for given answer "strongly disagree" has 1 score. The researcher translated the questionnaires into Indonesian to avoid misunderstanding of the students. Students' daily test score from the teacher is to know their English achievement in reading skill.

#### D. FINDINGS AND DISCUSSION

According to the results of the questionnaire, after calculating the students' learning style scores, there are 17 students with visual learning styles, 9 students with auditory learning styles, and 8 students with kinesthetic learning styles. it is known that 50% of 34 students have visual learning style, 26% of 34 students have auditory learning style, and 24% of 34 students have kinesthetic learning style. It can be concluded that most students have a visual learning style.

Table. 1 Students' Reading Skill Scores and Their Learning Style

Participants	Students' Scores	<b>Learning Style</b>	
1	70	Auditory	
2	80	Visual	
3	82	Visual	
4	80	Visual	
5	75	Auditory	
6	72	Auditory	
7	76	Kinesthetic	
8	75	Kinesthetic	
9	75	Visual	
10	72	Kinesthetic	
11	80	Visual	
12	75	Kinesthetic	
13	72	Kinesthetic	
14	76	Visual	
15	85	Visual	
16	80	Visual	
17	85	Visual	
18	78	Visual	
19	75	Visual	
20	72	Kinesthetic	
21	75	Visual	
22	70	Auditory	
23	72	Visual	
24	70	Kinesthetic	
25	75	Auditory	
26	78	Visual	
27	70	Visual	
28	80	Visual	
29	85	Visual	
30	75	Kinesthetic	

	,	
31	72	Auditory
32	70	Auditory
33	72	Auditory
34	75	Auditory

The student's English learning achievement in reading skills is the student's score in the daily reading comprehension test in the second semester. If students get 80-100 points, it means that they got excellent results. If a student's score is 70-79, it means that they got an awesome score. If students get 60-69 points, it means that they got an average score. While, if students get a score of 50-59, it means that they got a bad score. For students under 50, their grades mean poor.

Bifilar Regression as Simultan

Table. 2 The Coefficient Result of Bifilar Linear Regression Analysis as simultan

No.	Independent variable	Dependent variable	R	Adjusted R-Square	F	Sig.
1	Visual	English	51,8%	19,6%	3,676	0,023
2	Auditory	Learning				
3	Kinesthetic	- Achievement				
a	82,932					
b <sub>1</sub>	0,357	_				
b <sub>2</sub>	-0,409	-				
<b>b</b> <sub>3</sub>	-0,146	-				

It can be seen from the table that the influence of students' learning style on English reading skill is obtained by the following regression formula:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

English learning achievement in reading skill (Y) = 82,932 (a) + 0,357 Visual  $(X_1) - 0,409$  Auditory  $(X_2) - 0,146$  Kinesthetic  $(X_3)$ 

It can be seen from the above formula that b1 = 0.357, b2 = -0.409, and b3 = -0.146. It can be interpreted as if the student's learning style (visual, auditory, kinesthetic) is constant, or there is no increase or decrease. Therefore, the total learning style of students is 82,932.

The students' visual learning style coefficient or variable X1 is 0,357. This means that if the total number of students' visual learning style increases by one unit, the students' English skill increases by about 0,357, but other independent variables are constant.

The students' auditory learning style coefficient or variable X2 is 0,409, with a negative sign. The results show that the scores of ordinary students' auditory learning style and English proficiency have a relative relationship in reading skills. This means that if the average score of a student's auditory learning style increases, then the total student's English reading skill drop by about 0,409, but another independent variable remains constant.

The students' kinesthetic learning style or the coefficient of the variable X3 is 0,146 and has a negative sign. The results show that the average score of students' kinesthetic learning style is inversely proportional to students' English reading ability. Therefore, if the average score of a students' kinesthetic learning style increases, the total number of students' English scores decrease by about 0.146, but the other independent variable remains constant.

In addition, the Constanta score is 82,932 and R = 51.8%. This means that students' English learning ability (as simultan) ahave an impact of about 51.8% on students' learning style.

#### Bifilar Linear Regression as Partial

The following table shows the coefficient results of the bifilar linear regression analysis:

Table. 3 The Coefficient Result of Bifilar Linear Regression Analysis as Partial Model Sig. Correlation

Model	Sig.	Correlation		
		Zero-order	Partial	Part
(Constant)	0,000			
Visual (X <sub>1</sub> )	0,028	0,333	0,388	0,360
Auditory (X2)	0,066	-0,324	-0,372	-0,342
Kinesthetic (X <sub>3</sub> )	0,332	-0,224	-0,177	-0,154

It can be seen from the above table that the student's visual learning style (X1) has nothing to do with part of the student's English reading ability. It can be seen from the significance value of X1 that its value is 0.028, which is lower than the significance standard of 0.05. And the coefficient score has a positive sign. In addition, the students' auditory learning style (X2) and students' kinesthetic learning style (X3) are related to the students' English learning ability in some reading skills. It can be seen from the significance value of X2

that the significance value of X2 is 0.036, and the significance value of X3 is 0.032. And their coefficient scores have a negative sign.

Determining  $\alpha = 0.05$  and F table as follows;

$$\begin{aligned} F_{(\alpha;V1,V2)} &= F~(0,05~;~3~,~30) \\ V1 &= k = 3,~V2 = n - (k+1) \\ F\text{-table} &= 2,92 \end{aligned}$$

As can be seen from the above data, F-test = 3,676. Therefore, hypothesis testing can be completed by the following testing criteria:

F test = 3,676> F table = 2,92. Therefore, H0 is rejected and Ha is accepted. This means that in terms of English reading ability, students' learning styles affected the way students learn.

Determining t table and  $\alpha = 0.05$ 

df = N - nr

= 34 - 3

= 31

From the table, the value of t table with df = 31 and  $\alpha$  = 0,05 is 2,042

Table. 4 The Result of T Test

M	odel	Unsta	ndardiz	Standar	T	Sig.
		(	ed	dized		
		Coeff	ficients	Coeffic		
				ients		
			Std.	Beta		
		В	Error			
1	(Constant)	82,9	10,92		7,59	,000
_		32	7		0	
	Visual (X1)	,357	,155	,364	2,30	,028
					5	
_	Auditory	-	,186	-,348	-	,066
	(X2)	,409			2,19	
_					4	
-	Kinesthetic	-	,148	-,156	-	,332
	(X3)	,146			,986	

Dependent Variable: Score (Y)

According to the above table, the influence of students' learning style on English achievement in reading skill is described as:

1. The influence of students' visual learning style on their English achievement in reading skill

According to the analysis data using the SPSS program above, the result of the t test = 2,305. This means that the result of the t test is higher than t table = 2,042 (t test> t table). Therefore, H0 is rejected and Ha is accepted, which means that students' visual learning style has an impact on their English achievement in reading skill.

2. The influence of students' auditory learning style on their English achievement in reading skill

According to the analysis data using the SPSS program above, the result of the t test = -2,194. This means that the result of t test is lower than t table = 2,042 (t test <t table). Therefore, H0 is accepted and Ha is rejected, which means that the students' auditory learning style have not affected their English achievement in reading skill.

3. The influence of students' kinesthetic learning style on their English achievement in reading skill

Based on the analysis data of the SPSS program above, the result of the t test = -0.986. This means that the result of t test is lower than t table = 2.042 (t test <t table). Therefore, H0 is accepted and Ha is rejected, which means that the kinesthetic learning style has no effect on their English achievement in reading skills.

#### E. CONCLUSION

According to the results of SMPI An-Nuqthah's research, it can be concluded that students' learning style has an important impact on their English achievement in reading skills as simultan, because the table shows R = 51.8% This learning style contributed about 51.8% to the English reading skill of the second grades students of SMPI An-Nuqthah. Another 48.2% are affected by other factors and need further study.

In addition, after consulting the value of the t-table (r 5% or r 1%), the learning style of the second-year students of SMPI An-Nuqthah has a significant impact on the English performance of their reading skills. According to the results, the student's visual learning style t-test is higher than the value of the t table. Therefore, the alternative hypothesis is accepted and the null hypothesis is rejected. Therefore, the reading ability of students is compared according to their learning style.

The results show that visual learning style has a great influence on students' English learning achievement. Therefore, it can be concluded that most students in the second grade of SMPI An-Nuqthah have or dominant with visual learning styles.

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