

CHAPTER I

INTRODUCTION

This chapter discuss the background of the study, research problem, objective of the study, the hypothesis of the study and the significant of the study.

A. Background of Study

Reading is one of the important thing that students of English Language Department should to learn and master. Many of students difficult to comprehend when they study of EFL, and one of student can solve they problems when they learn an English. It cannot be easily explained why learner may have completely different levels of achieving in different subject. When different factors affecting learning were examined, style was considered to be one of the important factors by researchers.

Mirza (2011) say that, Reading is an activity where someone can take many benefits from it, such as to gain the latest information, broaden the knowledge, even someone can be relax by reading. It is the reason reading be an important skill in study of EFL, students can get many information from reading and this is be a positive activities when the fill bored.

In reading text students have different learning styles to make them easy to comprehend the text. Aboe (2018) state that, Every individual has their own learning style. Learning styles that are commonly known are

three, namely Visual, Auditory and Kinesthetic. The characteristics of each



learning style make it easier for students to receive and process information or teaching material presented in front of the class in teaching and learning activities. By understanding the characteristics and learning styles of each student, it will be easier for the teacher to integrate teaching patterns through various techniques and approaches.

Nasuha , Andre , and Iskarimah (2018) state that, Learning style is the characteristic of students dealing with strengths and weaknesses in taking and processing information that affect students' learning behavior. It serves as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment. Each individual is distinct in his or her own best way to learn something and prefer his or her dominant style to always be used in learning. Some learners may rely on visual image or presentation, others prefer listening to the music while learning, and still others may respond better to hands-on activities.

To get teaching and learning activities successful in a class. Teacher should have some approaches to students to make them understand what they want to learn. It is important for the teacher to know what kind of learning style do students have in order to create such an appropriate technique in teaching because students will be more successful in getting information if the teachers match their way of teaching to students' learning styles.

In the previous study of Fithrotunnisa (2015) The Comparative Analysis of Students' Learning Style on Their Achievement in Reading

Skill, the results showed that there is significance influence with r value = 0.549 which means that learning styles give contribution about 54,9% to the students' reading achievement. Its mean, learning styles give big effect to students in learning activities. So, in this study, aimed at finding out whether there are differences of students' learning styles and their reading achievement.

In conclusion, the reason of this study very important to be discuss because the researcher want to know students' learning styles use in learning EFL activities especially in reading skill. This study have different from another study before are from population and sample the researcher choose students' in fifth semester because they have learn reading class for 3 times and to get their scores the researcher was took by TOEFL test. So this is to be a reason why the researcher choose them to know they learning styles use before and the effect.

B. Research Problem

This study discuss about The Comparison of Students' Learning Styles and Reading Achievement at IAIN Palangka Raya, that has some of question or problem that should the researcher found the answer, are :

1. Is there any differences of students' learning styles and their reading achievement ?

C. Objectives of Study

The objectives of this study are:

1. This study to find out the differences of students' learning styles and their reading achievement.

D. Hypothesis

In this study the formula of a hypothesis as follows:

1. H_a (Alternative Hypothesis)

H_a = There is significant difference of students' reading comprehension based on their learning styles; visual, auditory and kinesthetic.

2. H_0 (Null Hypothesis)

H_0 = There is no significant difference of students' reading comprehension based on their learning styles; visual, auditory and kinesthetic.

The criteria of the hypothesis are:

- a. H_a is accepted if F-value (F_o) > F-table (F_t) and probability significant (sig.) value < 0.05
- b. H_o is accepted if F-value (F_o) < F-table (F_t) and probability significant (sig.) value > 0.05

E. Scope and Limitation

This study is conducted at IAIN Palangkaraya, students' fifth semester of 2018/2019 academic year in English Education Department. The population of research are 53 students at fifth semester English Education Department of IAIN Palangkaraya. In addition, this study

focused on the difference of students' learning styles and their reading achievement.

The data of this study are students' visual, auditory and kinesthetic learning style and students' reading achievement. Furthermore, questionnaires and students' reading scores were employed as the research instrument.

F. Significance of The Study

The findings are expected to give contributions to:

1. The English Lecturers and Other Teachers

The results of the study help the English lecturers and other teachers in general and the English lecturers of IAIN Palangka Raya in particular to be accurately aware and realize that learning styles give contribution in students' reading achievement.

2. The Students in IAIN Palangka Raya

Knowing the impact of learning styles in their reading achievement or other subjects and to help them find out their learning styles.

G. Definition of Key Terms

1. Reading Achievement

In this study reading achievement is the ability to process text, understand the meaning, and to integrate with what the reader already knows.

2. Learning Style

In this study learning style is defined as the characteristics, strengths and preferences in the way people receive and process information.

3. Visual Learning Style

In this study visual is learn by seeing something. We prefer to see pictures and diagrams. We prefer to see exhibition, modeling, or watching video.

4. Auditory Learning Style

In this study auditory is learn by hearing something. Prefer to listen to audio cassette, cassette-lecturing, discussion, debate, and verbal instruction.

5. Kinesthetic Learning Style

In this study kinesthetic is learn by physical activity and direct involvement. Prefer to move, touch, feel, and experience by ourselves.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter presents about some related information topic of the recent study. It is intended to provide some theoretical concepts which could support this investigation.

A. Related Study

In this study there were several previous studies that were used as references in the study. First, Fithrotunnisa (2015), entitled *The Comparative Analysis of Students' Learning Style on Their Achievement in Reading Skill*, conducted a comparative analysis for second grade students of junior high school to investigate the students' learning styles on their achievement in reading skill. The results showed that there is significant influence with r value = 0.549 which means that learning styles give contribution about 54,9% to the students' reading achievement.

For the second is the study of Febrianti (2014) *Students' Reading Comprehension Based on Their Learning Styles*, conducted to students of Faculty of Tarbiyah and Teachers' Training UIN Syarif Hidayatullah Jakarta in academic year 2010/2015 show that the difference between students' reading comprehension based on their visual, auditory and kinesthetic learning styles is not significant.

The next is study of Nasuha, Andre and Iskarimah (2018) The Difference Between Students' Learning Styles on Their Reading Achievement, state that



the findings suggested that there are no effective learning styles that influence student's reading skill either visual or auditory. Although learning styles are one thing that students or teachers need to be known and aware of due to indication to the ability of people in reading or recognizing meaning of the text. It is likely that there is no interdependence between two kinds of style either auditory or visual that help students to gain better reading comprehension.

B. Learning Style

1. The Understanding of Learning Style

People's ability in understanding and absorbing information is definitely different from each other. Some are fast, some are moderate, and some are slow. Therefore, they have to use different learning styles according to their easiest way to understand the same information or lesson. According to Jaki, Ambun & Yunus (2018) learning styles are general approaches that students used in acquiring a second language or in learning any other subjects. Students take in information in different ways and use different cognitive schemes.

Different learning styles indicate individuals' fastest and best way to absorb and comprehend information from the outside. Wang (2007) state that, Learning style refers to an individual's habitual and preferred way of absorbing, processing and retaining new information and skills. Understanding learning style is a key to develop individuals' ability in their work, school, and environment. By

understanding it, they are be able to learn easily, communicate easily, and get maximum result in learning.

According to Fitriani (2013) state that, learning Styles are simple but, various approaches or ways of learning. They involve education methods, particular to an individual that are resumed to allow that individual to learn best. It is commonly believed that most people favor some particular method of interacting with, taking in, and processing stimuli or information. Students have different learning styles - characteristic strengths and preferences in the ways they take in and process information. Moradkhan & Mirtaheri (2011) state that, each learning style has its own strengths and weaknesses so that a person who sticks to one style is never going to be an ideal learner. It is generally considered that one's learning style will result from personality variables, including psychological and cognitive make-up, socio-cultural background, and educational experience.

The statement of Astri and Wahab (2018) state that, learning style is one of the characteristics of students who have not received enough attention. Most teachers use their own learning methods to teach rather than consider the student's own learning style. In this case, teaching materials and methods can be included as aspects that affect student performance. In fact, students will learn effectively if the teacher presents appropriate teaching materials to stimulate the learning process which will ultimately improve student learning achievement.

Many experts define what learning style actually is. Rita Dunn (2000) state that, learning style is the beginning way of students to focus on Process, absorb, and remember new and difficult information in which it is derived from biological and developmental characteristics. Moreover, Nasution (2008) states that students' learning style is students' way in receiving information in learning activity.

There are some researchers who conducted research related to Learning styles. Gilakjani (2012), which aimed to increase faculty awareness and understanding of the effect of learning styles on the teaching process, showed that Iranian EFL university students preferred visual learning style. In addition, Tanta (2010) state that, Learning style seems to play a major role in academic achievement as well as in reading and listening comprehension skill. Visual learners had the greatest academic achievement in their educational major. This research enlighten the readers about the impact of Visual, Auditory and Kinesthetic learning style on English Language Teaching hence it can enlarge the knowledge of the readers in this field.

From the definition above, it can be concluded that students' learning style is a term used to describe the students' beginning way to receive any information. It also refers to the students' easiest, fastest, and preferred way to receive and understand any information in learning activity. It is possible for every student to have the

combination of learning styles, but every student usually have a dominant learning style or their own preference style.

2. The Types and Characteristics of Learning Style

Refers Rose and Nicholl (2002) state that, the research which was done in USA by Prof. Ken and Rita Dunn, and some programming Neuro-linguists there are three types of learning style. Those types are:

a. Visual

Learn by seeing something. Prefer to see pictures and diagrams. Prefer to see exhibition, modeling, or watching video.

b. Auditory

Learn by hearing something. Prefer to listen to audio cassette, causeri-lecturing, discussion, debate, and verbal instruction.

c. Kinesthetic

Learn by physical activity and direct involvement. Prefer to move, touch, feel, and experience by ourselves.

Furthermore, students' behavior with one of those types of learning style is explained as follow:

a. Visual Learning Style

Visual learning style refers to a preference for learning through vision and visual learners rely on their sight to take the information. They typically like to be able to read the textbook,

journal, article, or newspaper on their own to increase their understanding. Yong (2010) states that, visual learning style refers to a preference for learning through vision and visual learners rely on their sight to take the information. Abidin, Rezaee, Abdullah, Singh (2011) state that, visual learners are those who prefer to receive in the form of picture, diagrams, films and demonstrations while verbal learners prefer words as a medium for information transfer. Refers to DePorter and Hernacki (2015) state that, visual students usually have problem in remembering verbal instruction. They usually forget to convey verbal message and also feel hard to choose words when they want to reveal something. Therefore visual students prefer to demonstrate something than to present it.

b. Auditory Learning Style

Auditory learners tend to like to read plays and dialogues, but they will have trouble reading silently and with speed when not allowed to vocalize. For students who have auditory style, they tend to always rely on the success of learning through hearing. Reid (2005) state that, students with auditory style prefer to learn by hearing and listening. They are easy to understand and comprehend lesson or information by listening to the lectures, discussions, or recording. Therefore, they will feel disturbed when there is noise around them.

DePorter and Hernacki (2015) state that, this type of students also have problem with visual works. They are hard to read small characters and easily tired to read. They are also usually wrong to read.

Moreover, they have sensitivity through music. They can repeat and imitate tone, rhythm, and sound of voice. These students also like to listen to music. Usually, these students prefer to spend their holiday by listening to music than to play with their friends. They also can remember lyric easily.

Furthermore, Fleeming (2014) statet that, this type of students likes oral reports. They like to speak, discuss, and explain things. They prefer to get oral test or assignment than to get written test or assignment. In discussing activity, they are usually become vocalist and they usually master the conversation.

c. Kinesthetic Learning Style

Kinesthetic learners tend to like to read books and action-oriented books, but they will have trouble sitting still or listening for more than four minutes. Student who has kinesthetic style will learn through movements as a way to get information and transfer it into brain. Reid (2005) state taht, in kinesthetic style, students have orientation to do trial-error activity. They are brave to take a risk. In answering question,

they prefer to just answer than to read the instruction before.

They also learn practically and learn through manipulation.

C. Reading

1. The Understanding of Reading

Reading is an active process of understanding the printed words, hence, they must know how to learn from reading. Islam (2019) state that, reading is the basic knowledge of all. Textbooks and other reading materials give a thousand of vocabularies and phrases to readers. Those help them to develop their spoken language skill and writing ability. Refers to Widiastuty (2011) state that, Reading ability is a basic and significant criterion to scale one's English level. The students need to read many English sources to acquire new knowledge and information. The source here means not only English material in the school but also English material outside the school. Nowadays, it is very easy to find it. They can find or search on the internet.

In general, reading is one of the important language skills in learning English. Danielle (2006) state that, "Reading is an extraordinary achievement when one considers the number of levels and components that must be mastered." Hence, it can be said that reading is fundamental skill or achievement that should be mastered for achieving one purpose. In addition, Magfirah and Catholic (2018) state that, students sometimes have less motivation and interests if the teacher uses the method of teaching which is not suitable for them,

while they are supposed to master reading skill because they will find a lot of reading materials in English subject. It means, teacher should have good approaches, method when they teach reading to make students interest and comperhands the material.

Erliana (2011) state that, among the four language skills, reading is the most important one since every aspect of life involves reading. Because reading is a skill students must to mastered when study the EFL. Refers to Miftah (2013) state that, to understand all types of information in the whole texts, it requires either reading activity or ability to understand the content. Without the ability to understand it, the students are not able to absorb or comprehend a lot of information quickly, accurately and easily.

In the teaching and learning English, there are four skills should be learned and mastered. They are listening, speaking, reading, and writing. This is clearly stated by the Department of National Education year 2003, one of the most important skills is reading (Depdiknas, 2003). Students need to improve English reading ability. It aids effectively to obtain the latest information as it needs. Priajana (2013) state that, reading is a crucial process of individual development of capacities in understanding prevailing information of the world. For now, internationalization and globalization has been competition among industries and commercial world. Hence, English reading ability becomes important skill for students to master.

Many of benefit we get from reading a text, referring to the benefit Mirza (2011) state that, reading is an activity where someone can take many benefits from it, such as to gain the latest information, broaden the knowledge, even someone can be relax by reading. However, to realize it, someone should be able to comprehend the whole text.

Reading is useful especially for language acquisition. As stated by Walled (2004), “reading is an effective process in which students think, reason, and apply strategies to construct meaning.” This is why students should improve they reading skill because reading is very need when to learn EFL. In addition Sabarun (2012) state that, reading is one of the four language skill, which should be develop in teaching English. Reading, as well as other language skill, is placed as one of the important skill for students to be mastered. From the explantaions above, we can conclud how important reading skill should students improve and mastered in life.

Meanwhile based on Grabe & Stoller (2002) statement in their book, “Reading is the ability to draw meaning from the printed page and interpret information appropriately.” It can be say reading is a skill to comperhan what the text about. Moreover, Aebersold and Field (2003) state that, everything which happens when people look at the text and compute the meaning to written symbols from the text is reading.

Hence, from the explanation above about various definitions of reading, it can be said that a universally acceptable reading definition does not exist. However, a simple conclusion can be given to make easier comprehend the definition of reading. Reading is a process, activities or ability on purpose to comprehend the meaning or information whether from printed page or not.

2. The Purpose of Reading

Everything we do it must being purpose. Reading is an activity with a pupose. Whatever the materials which people read, definitely they have an objective in reading. People may read to get a new information every day. Meanwhie, some people read in order to get further information, facts or idea to verifying an existing knowladge. In addition, people read to enlarge their knowladge. However there are some people think that reading in their hobby. They use to read to get pleasure and entertainment. Then, there are some people read to finish their task. Their reading is only to fulfilled their task.

According to the Nutal (1992) state that, when people read it means, that they wants to get something from the writing, such as facts, ideas, enjoyment or even feeling of letter. Whatever the writer express the message, the reader will get and need the message. Even though people read only for spending time, it is still a purpose or objective. In term of reading in pleasure, it is different than reading textbook or recipe, they read it for infromation. However, for term of

reading for pleasure, they read to get the information that exists in the source which they like.

Refers to Rivers and Temperly elaborate more detail about the purpose of reading as cited in Materials & Method in ELT by Jo Mc Donough & Christopher Shaw (1993), list of the following is examples of some reason that L2 students may need or want to read:

- a. To obtain information for some purpose or because we are curious about the topic
- b. To obtain instructions on how to perform some task for our work or daily life
- c. To keep in touch with friends by correspondence or to understand business letters
- d. To know when or where something will take place or what is available
- e. To know what is happening or has happened (as reported in newspapers, magazines or reports)
- f. To have enjoyment and excitement.

From various purposes of reading above, in general reading has a purpose to get information. It does not matter reading for a pleasure or a task, the basic purpose is only to get information. Because of information is an important thing for people.

3. The Understanding of Achievement

The result of learning process is an important thing to know how well the learning process running. The result of learning process is students' achievement. It is a measurement for students to know how well they get knowledge from learning process in the class and also for teachers to know how well the students can absorb the materials from teaching process.

According to Sukmadinata (2007) state that, achievement is what pupil has learned. The mastery of achievement can be seen at students' behavior, either behavior of knowledge, thinking skill, nor physic or motoric skill. Other statement state by Simpon and Weiner quoted by Yusuf , achievement is defined as measurable behavior in standardized series of test. they contended that achievement test intends to measure systematic education and trining in school occupation towards a conventionally accepted patterns of skill or knowledge. In the same occasion, Yusuf describe that achievement is regarded as actions of completing or attaining by exertion. It subsumes anything won by exertion, a feat, a distinguished and successful action.

To sum up the achievement definition, it can be concluded that the meaning of achievement is a result of activities that have been done. However, in learning activity, it means the mastering of knowledge or skill that is developed by a lesson and shown by score or mark. So, English achievement is progress toward English subject. This can be

measurment from the skill abilities, for axamples speaking, reading, listening, and writing.



CHAPTER III

RESEARCH METHOD

This chapter discussion research design, population and sample, research instrument, data collection, and data analysis.

A. Research Design

This study was a quantitative methods, used a causal comparative research design. Refers to Gay, Mills and Airasian (2009) state that, “The basic causal comparative is retrospective causal-comparative research, which starting with effects and investigating causes.” Causal comparative is sometimes called *ex post facto*, which come from Latin for “after the fact”, because both the effect and the alleged cause have already occurred and must be studied in retrospect. According to Ary (2010), et al. stated that causal comparative research purpose is to investigate cause-and-effect relationships between independent and dependent variables.

There are two variables used in this study, namely students’ visual, auditory and kinesthetic learning styles as the independent variable and reading achievement as the dependent variable. The data will take by questionner and students’ reading test.

B. Population and Sample

1. Population

The population in this research was fifth semester students’ in IAIN Palangkaraya who has learned in reading class.

2. Sample

Sample is part of population that has same characteristics as the population itself. In this study, 53 students at fifth semester in Appreciative Reading class at IAIN Palangkaraya as the sample.

Table 3.1 population and sample

1	Population	5 th semester English Education Department at IAIN Palangka Raya	53 students
2	Sample	5 th semester English Education Department at IAIN Palangka Raya	53 students in Appreciative Reading class

C. Research Instrument

The instrument of this research were:

1. Questionnaires

The questionnaire adopted from Reid (1998) in *Understanding Learning Styles in the Second Language Classroom* book. The questionnaire consists of 15 items, there are 5 items for each kind of learning styles. Here are the indicators of learning styles' questionnaire, as shown on the table below:

Table 3.2 Learning Style Questioners Key Number

No	Indicator	Total	Key Number
1	Visual learning style	5	1,2,3,4,5
2	Auditory learning style	5	6,7,8,9,10
3	Kinesthetic learning style	5	11,12,13,14,15
Total		15	

The questionnaire used is Likert Scale Form; a scale with a number of points or spaces, usually at least three but no more than seven. Five points of scale ranging are used, they are: Strongly Agree (*Sangat Setuju, SS*), Agree (*Setuju, S*), Neutral (*Netral, N*), Disagree (*Tidak Setuju, TS*), and Strongly Disagree (*Sangat Tidak Setuju, STS*). The degree of scale was described in the table below:

Table 3.3 Questioners Scale Rattng

Scale	Score
Strongly Agree	5
Agree	4
Neutral	3
Disagree	2
Strongly Disagree	1

After the reasearcher got students' total score of the questioners, to measure that there are some category of measurement of students' learning styles:

Table 3.4

Category of Measurement of Students' Learning Styles

No	Score	Categorized
1.	80% - 100%	Strongly Agree
2.	60% - 79.99%	Agree
3.	40% - 59.99%	Neutral
4.	20% - 39.99%	Disagree
5.	0% - 19.99%	Strongly Disagree

Source: Nazir 2005

2. Reading Test

the researchers get the scores of students in reading comprehension based on their achievement of reading test. Questions of the test adopted from TOEFL test.

Table 3.5

Reading Test

No	Kind of Text	Indicators	Total	Number
1	Descriptive text	1. Identify main idea 2. Synonim 3. Synonim	10	1 – 9

		<p>4. Understanding facts and details</p> <p>5. Understanding facts and details</p> <p>6. Synonim</p> <p>7. Synonim</p> <p>8. paraphrase</p> <p>9. Make inferences</p>		
2	Recount text	<p>10. Make inferences</p> <p>11. Paraphrase</p> <p>12. Understanding facts and details</p> <p>13. Synonim</p> <p>14. Understanding facts and details</p> <p>15. Synonim</p> <p>16. Understanding vocabullary in context</p> <p>17. Understanding vocabullary in context</p> <p>18. Identification of</p>	10	10 – 19

		negative		
		19. Refferents		
		location		
3	Explanation text	20. Make a title	10	20 – 30
		21. Synonim		
		22. Understanding facts and details		
		23. Understanding vocabullary in context		
		24. Understanding vocabullary in context		
		25. Understanding facts and details		
		26. Understanding facts and details		
		27. Synonim		
		28. Identification of negative		
		29. Make inferences		
		30. Determaining he main ideas		

4	Analytical exposition text	<p>31. Determining the main ideas</p> <p>32. Understanding vocabulary in context</p> <p>33. Paraphrase</p> <p>34. Understanding facts and details</p> <p>35. Understanding vocabulary in context</p> <p>36. Understanding facts and details</p> <p>37. Identification of negative</p> <p>38. Synonym</p> <p>39. Understanding vocabulary in context</p> <p>40. Understanding vocabulary in context</p>	10	31 – 40
5	Descriptive text	41. Determining the	10	41 – 50

		<p>main ideas</p> <p>42. Understanding vocabulary in context</p> <p>43. Synonym</p> <p>44. Understanding facts and details</p> <p>45. Understanding vocabulary in context</p> <p>46. Synonym</p> <p>47. Understanding vocabulary in context</p> <p>48. Synonym</p> <p>49. Refferents location</p> <p>50. Determining the purpose</p>		
	Total Items		50	

Table 3.6**Scoring Rubric for Reading**

No	Score	Categorized
1	80 – 100	Very Good
2	60 – 79	Good
3	40 – 50	Enough
4	20 – 39	Poor
5	0 – 19	Very Poor

D. Data Collection Procedure

The procedures of this research as follows:

1. Determining the population and selecting the samples.
2. Giving the questioners

In this part, the questioners adopted from Reid (1998) to know students dominant learning styles (visual, auditory and kinesthetic) use in reading class. The questioners ask the students to answer the questions by putting a check (√) on the one of the answers based on their choice

3. Giving the reading test

The test adopted from TOEFL test, this test aim to get students reading achievement.

4. Analyzing the data

After collecting the data, analyzing data was done. The first step of analyzing data was the writer classified the categorization of learning style from the questionnaire. In this study, there were 15 items of questionnaire and 5 items for each group of learning styles. To determine students' learning styles was to sum all of the scores of questionnaire items from each categorization of learning styles. The highest score from three group learning styles was the major of learning styles that students have.

Then, the second step is, descriptive and inferential statistics were used for the further analyzing score of reading achievement. Descriptive statistics are the mean, which indicates the average performance of a group on a measure of variable, and standard deviation which indicates the spread of a set of scores around mean-that is, whether the scores relatively close together and clustered around the mean or widely spread out around the mean. counting by using ANOVA (Analysis of Variance) formula to make comparison scores among variables. Hence, the study is used the inferential statistic to describe the result of hypothesis testing and analysis of variance (ANOVA).

Before analyzing the hypothesis, because of analysis of variance (one way ANOVA) includes of parametric statistic, the normality and homogeneity test are needed to be conducted

as the requirement for parametric testing. Normality test was conducted to know whether or not the data has normal distribution. Then, homogeneity test was conducted to assure that the data populations were homogenous or not. Normality and homogeneity test were analyzed by using SPSS 16 software of statistics. Furthermore, for calculating the normality test, this study used Kolmogorov-Smirnov technique. After conducting normality and homogeneity test, the research was continued by hypothesis testing. The hypothesis testing presented in this study because the purpose of the study was to compare and prove the correlation exists between to variables that can give impact to the result of one variable.

E. Data Analyzis Procedure

Inferential statistic use to analyze the variance or ANOVA (One Way Analysis of Variance) formula. In this study, ANOVA use to test the significant differences presented among students' reading comprehension score based on their learning styles, visual, auditory and kinesthetic. The formula are:

1. The formula of ANOVA test is:

$$F = \frac{MS_a}{MS_w}$$

To describe the analysis, a table of ANOVA is provided as follow:

Table 3.7 Formula of Anova

Source of Variance	Df	SS	MF	F
Among Groups	$df_a = k - 1$	$SS_a = \frac{(\sum X_1)^2}{f_1} + \frac{(\sum X_2)^2}{f_2} + \frac{(\sum X_k)^2}{f_k} + \frac{(\sum X_{tot})^2}{\sum f}$	$MS_a = \frac{SS_a}{k - 1}$	$\frac{MS_a}{MS_w}$
Within Groups	$df_w = n - k$	$SS_w = SS_{tot} - SS_a$	$MS_w = \frac{SS_w}{n - k}$	
Total	$df_{tot} = n - 1$	$SS_{tot} = \sum X_{tot}^2 - \frac{(\sum X_{tot})^2}{n}$		

Note :

F : Analysis of Variance

MS : Mean Square

MS_a : Mean Square among groups

MS_w : Mean Square within groups

SS : Sum of Square

SS_a : Sum of Square among groups

SS_w : Sum of Square within groups

SS_{tot} : Total Sum of Square

df : Degree of Freedom

df_a : Degree of Freedom among groups

df_w : Degree of Freedom within groups

df_{tot} : Total Degree of Freedom

n : Number of sample

k : Number of groups

f : Frequency of sample

f_{tot} : Total of Frequency

2. Questioners analysis

To determined the technique students' learnig styles dominant use in reading, Sudijono (2016) state that the formula of questioners used :

$$\text{Score} = \frac{TS}{B \times N} \times 100 \%$$

Note:

TS = Total score of questioners

B = The highest of questioners scale rating

N = amount of the sample

3. Reading Test Analysis

To analyzed the correct answer of reading test, used the formula :

$$\text{Skor} = \frac{B}{N} \times 100 \%$$

Note:

B = amount of the correct answer

N = amount of the test

CHAPTER IV

RESEARH FINDINGS AND DISCUSSION

In this chapter, the researcher discussed the research findings about the comparison of students' learning styles and reading achievement. The first step, the researcher discussed the students' learning styles questioners which is choose by the students to clasify the categorize of learning styles. Then the researcher showed students' reading scores that take from reading test adopt from TOEFL. Hence, the data description described from the documentation of reading achievement scores revealed the frequencies of each variables, such as total score, mean, median, the highest and lowest score for students reading achievement. Moreover, the inferential statistic reports the hypothesis test and analysis of variance (ANOVA).

Additionally, in this chapter, the data has be presented and described in the detail by using tables in this chapter.

A. Data Presentation

The research data consist of learning styles questioners as an independent variable are visual, auditory and kinesthetic. Then, reading test as a dependent variable. The data has been collected thought a questioners to clasify the categorize of students' learning styles. And the result of students' reading achievement has been took by reading test to get their scores. The description of the data shows the mean, median, the highest and lowest scores for students reading

achievement. All data description will be discuss in the following discussion comprehensively.

1. Learning Styles

In the third chapter, it had been explained that in recognizing students' learning styles is using the questionnaires. The questionnaires are distributed to 53 students of English Education Department who joining the appreciative reading class fifth semester at IAIN Palangkaraya. After that, the next step is inputting the score of questionnaire of each student to Ms. Excel 2013 and then starting to calculate or sum the score of each student. From the result, it can be determined what learning styles that students have. One of the highest score among three kinds of learning styles indicates the major learning styles that students have. The students' learning styles can be seen on the tables below:

Table 4.1 Clasification of Students' Learning Styles

NAME	LEARNING STYLES
AKW	VISUAL
AR	VISUAL
DJN	KINESTHETIC
DR	AUDITORY
FH	AUDITORY
HER	AUDITORY
IIM	VISUAL
ALP	KINESTHETIC
RID	AUDITORY
MOL	AUDITORY
MUZ	VISUAL

MF	KINESTHETIC
NFV	VISUAL
NH	KINESTHETIC
PNAR	VISUAL
RAY	KINESTHETIC
RS	KINESTHETIC
RIZ	AUDITORY
RC	VISUAL
SK	KINESTHETIC
SS	AUDITORY
YI	VISUAL
YHW	VISUAL
RWAS	KINESTHETIC
ABD	VISUAL
YUS	KINESTHETIC
HAS	AUDITORY
DF	VISUAL
DY	AUDITORY
TS	KINESTHETIC
RAF	VISUAL
NE	KINESTHETIC
RM	VISUAL
MUK	VISUAL
LT	VISUAL
WP	KINESTHETIC
MIL	KINESTHETIC
NMP	VISUAL
JEN	KINESTHETIC
NH	AUDITORY
AR	VISUAL
EM	VISUAL
AM	VISUAL
NL	AUDITORY
WD	AUDITORY
RI	KINESTHETIC
SUP	KINESTHETIC
BFD	KINESTHETIC
RAKB	KINESTHETIC
SIM	KINESTHETIC
NIM	KINESTHETIC
ARF	KINESTHETIC

SIS	VISUAL
-----	--------

From the table 4.1, the result of each student learning styles was known. The data showed that 20 students are visual, 12 students are auditory and 21 students are kinesthetic.

Table 4.2

Item 1

“I better learn by

X1.1

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid N	15	28.3	28.3	28.3
A	30	56.6	56.6	84.9
SA	8	15.1	15.1	100.0
Total	53	100.0	100.0	

reading what the teacher writes on the chalkboard”

The calculation of analysis students' learning styles item 1:

$$Score = \left(\frac{total\ score}{4 \times N} \right) \times 100 \%$$

$$Score = \left(\frac{205}{5 \times 53} \right) \times 100 \%$$

$$\text{Score} = \left(\frac{205}{265}\right) \times 100 \%$$

$$\text{Score} = 0.77 \times 100 \%$$

$$\text{Score} = 77 \%$$

Based on the table 4.2 above, it can be seen that 28.3% students choose “*netral*” option, 56.6% students choose “*agree*” option and 15.1% students choose “*strongly agree*”. In addition, based on the calculation of analysis students’ learning styles questioner item 1 show that, the score is 77 % it means “*agree*”.

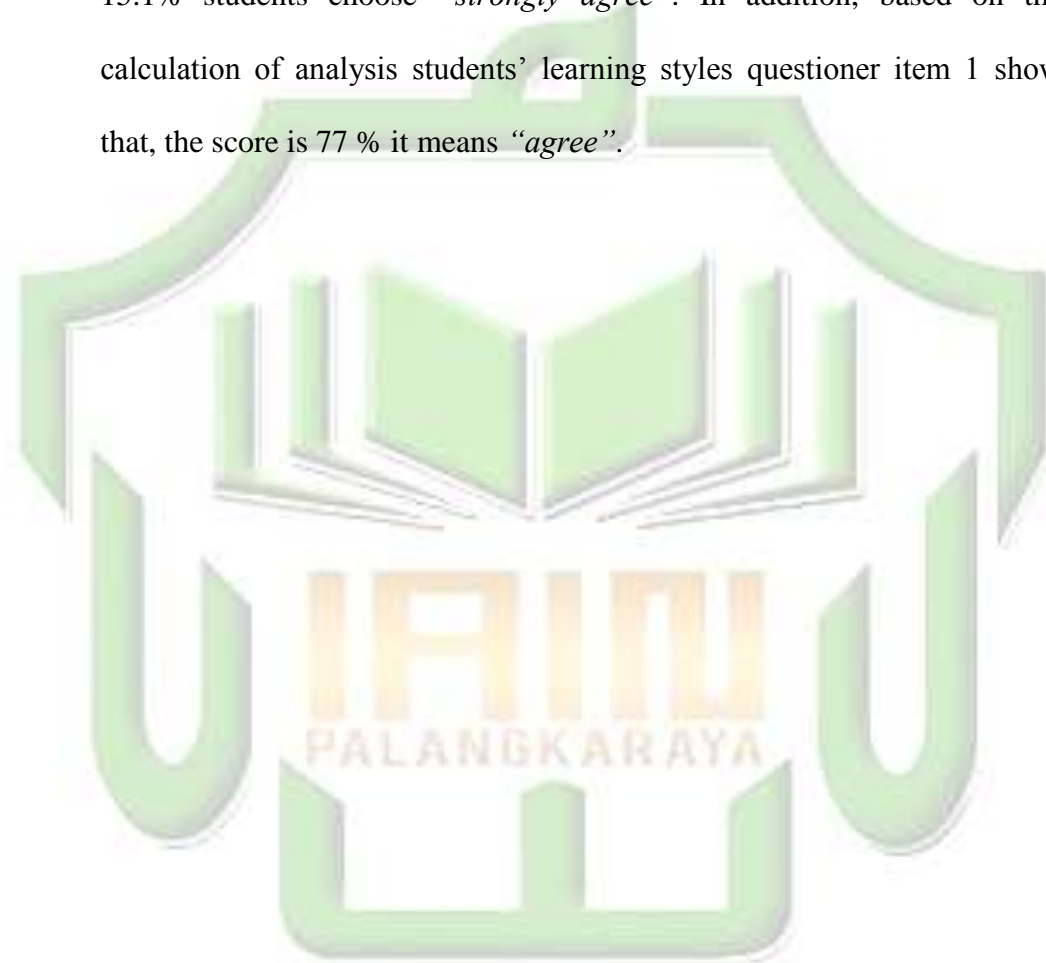


Table 4.3**Item 2**

<i>“When read</i>		X1.2			<i>I</i>
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	N	17	32.1	32.1	32.1
	A	29	54.7	54.7	86.8
	SA	7	13.2	13.2	100.0
	Total	53	100.0	100.0	

instructions, I remember them Better”

The calculation of analysis students' learning styles item 2:

$$Score = \left(\frac{\text{total score}}{5 \times N} \right) \times 100 \%$$

$$Score = \left(\frac{202}{5 \times 53} \right) \times 100 \%$$

$$Score = \left(\frac{202}{265} \right) \times 100 \%$$

$$Score = 0.76 \times 100 \%$$

$$Score = 76 \%$$

Based on the table 4.3 above, it can be seen that 32.1% students choose “*netral*” option, 54.7% students choose “*agree*” option and

13.2% students choose “*strongly agree*”. In addition, based on the calculation of analysis students’ learning styles questioner item 2 show that, the score is 76 % it means “*agree*”.



Table 4.4**Item 3***“I understand better when I read instructions”***X1.3**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	N	7	13.2	13.2	13.2
	A	39	73.6	73.6	86.8
	SA	7	13.2	13.2	100.0
	Total	53	100.0	100.0	

The calculation of analysis students' learning styles item 3:

$$Score = \left(\frac{total\ score}{5 \times N} \right) \times 100 \%$$

$$Score = \left(\frac{212}{5 \times 53} \right) \times 100 \%$$

$$Score = \left(\frac{202}{265} \right) \times 100 \%$$

$$Score = 0.8 \times 100 \%$$

$$Score = 80 \%$$

Based on the table 4.4 above, it can be seen that 13.2% students choose “*netral*” option, 73.6% students choose “*agree*” option and 13.2% students choose “*strongly agree*”. In addition, based on the calculation of analysis students' learning styles questioner item 3 show that, the score is 76 % it means “*agree*”.

Table 4.5**Item 4*****“I learn better by reading than by listening to Someone”*****X1.4**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	2	3.8	3.8	3.8
	N	19	35.8	35.8	39.6
	A	23	43.4	43.4	83.0
	SA	9	17.0	17.0	100.0
	Total	53	100.0	100.0	

The calculation of analysis students' learning styles item 4:

$$Score = \left(\frac{\text{total score}}{5 \times N} \right) \times 100 \%$$

$$Score = \left(\frac{198}{5 \times 53} \right) \times 100 \%$$

$$Score = \left(\frac{198}{265} \right) \times 100 \%$$

$$Score = 0.74 \times 100 \%$$

$$Score = 74 \%$$

Based on the table 4.5 above, it can be seen that 3.8% students choose “*disagree*” option, 35.8% students choose “*netral*” option, 43.4% students choose “*agree*” option and 17% students choose “*strongly agree*”. In addition, based on the calculation of analysis students' learning styles questioner item 4 show that, the score is 74 % it means “*agree*”.

Table 4.6**Item 5**

“I learn more by reading textbooks than by listening to a lecture”

X1.5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	N	21	39.6	39.6	39.6
	A	25	47.2	47.2	86.8
	SA	7	13.2	13.2	100.0
	Total	53	100.0	100.0	

The calculation of analysis students' learning styles item 5:

$$Score = \left(\frac{total\ score}{5 \times N} \right) \times 100 \%$$

$$Score = \left(\frac{198}{5 \times 53} \right) \times 100 \%$$

$$Score = \left(\frac{198}{265} \right) \times 100 \%$$

$$Score = 0.74 \times 100 \%$$

$$Score = 74 \%$$

Based on the table 4.6 above, it can be seen that 39.6% students choose “*netral*” option, 47.2% students choose “*agree*” option and 13.2% students choose “*strongly agree*”. In addition, based on the calculation of analysis students' learning styles questioner item 5 show that, the score is 74 % it means “*agree*”.

Table 4.7**Item 6****X2.6**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	1	1.9	1.9	1.9
	N	9	17.0	17.0	18.9
	A	35	66.0	66.0	84.9
	SA	8	15.1	15.1	100.0
	Total	53	100.0	100.0	

“When the teacher tells me the instructions, I understand better”

The calculation of analysis students' learning styles item 6:

$$Score = \left(\frac{\text{total score}}{5 \times N} \right) \times 100 \%$$

$$Score = \left(\frac{209}{5 \times 53} \right) \times 100 \%$$

$$Score = \left(\frac{209}{265} \right) \times 100 \%$$

$$Score = 0.78 \times 100 \%$$

$$Score = 78 \%$$

Based on the table 4.7 above, it can be seen that 1.9% students choose “*desagree*” option, 17% students choose “*netral*” option, 66% students choose “*agree*” option and 15.1% students choose “*strongly agree*”. In addition, based on the calculation of analysis students’ learning styles questioner item 6 show that, the score is 78 % it means “*agree*”.



Table 4.8**Item 7****X2.7**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	2	3.8	3.8	3.8
	N	5	9.4	9.4	13.2
	A	38	71.7	71.7	84.9
	SA	8	15.1	15.1	100.0
	Total	53	100.0	100.0	

“When someone tells me how to do something in class, I learn it better”

The calculation of analysis students' learning styles item 7:

$$\text{Score} = \left(\frac{\text{total score}}{5 \times N} \right) \times 100 \%$$

$$\text{Score} = \left(\frac{211}{5 \times 53} \right) \times 100 \%$$

$$\text{Score} = \left(\frac{211}{265} \right) \times 100 \%$$

$$\text{Score} = 0.79 \times 100 \%$$

$$\text{Score} = 79 \%$$

Based on the table 4.8 above, it can be seen that 3.8% students choose “*desagree*” option, 9.4% students choose “*netral*” option, 71.7% students choose “*agree*” option and 15.1% students choose “*strongly agree*”. In addition, based on the calculation of analysis students’ learning styles questioner item 7 show that, the score is 79 % it means “*agree*”.



Table 4.9**Item 8***“I remember things I have heard in class better than things I have read”***X2.8**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	4	7.5	7.5	7.5
	N	19	35.8	35.8	43.4
	A	20	37.7	37.7	81.1
	SA	10	18.9	18.9	100.0
	Total	53	100.0	100.0	

The calculation of analysis students' learning styles item 8:

$$Score = \left(\frac{total\ score}{5 \times N} \right) \times 100 \%$$

$$Score = \left(\frac{195}{5 \times 53} \right) \times 100 \%$$

$$Score = \left(\frac{195}{265} \right) \times 100 \%$$

$$Score = 0.73 \times 100 \%$$

$$Score = 73 \%$$

Based on the table 4.9 above, it can be seen that 7.5% students choose “*desagree*” option, 35.8% students choose “*netral*” option, 37.7% students choose “*agree*” option and 18.9% students choose “*strongly agree*”. In addition, based on the calculation of analysis students' learning styles questioner item 8 show that, the score is 73 % it means “*agree*”.

Table 4.10

Item 9

*“I
learn
better
in class
when
the
teacher
gives a lecture”*

X2.9

		Frequency	Percent	Valid Percent	Cumulative Percent
<i>Valid</i>	D	1	1.9	1.9	1.9
	N	17	32.1	32.1	34.0
	A	26	49.1	49.1	83.0
	SA	9	17.0	17.0	100.0
	Total	53	100.0	100.0	

The calculation of analysis students' learning styles item 9:

$$Score = \left(\frac{\text{total score}}{5 \times N} \right) \times 100 \%$$

$$Score = \left(\frac{202}{5 \times 53} \right) \times 100 \%$$

$$Score = \left(\frac{202}{265} \right) \times 100 \%$$

$$Score = 0.76 \times 100 \%$$

$$Score = 76 \%$$

Based on the table 4.10 above, it can be seen that 1.9% students choose “*desagree*” option, 32.1% students choose “*netral*” option, 49.1% students choose “*agree*” option and 17% students choose “*strongly agree*”. In addition, based on the calculation of analysis students’ learning styles questioner item 9 show that, the score is 76 % it means “*agree*”.



Table 4.11

Item 10

*“learn
better
class
when I
listen
to
Someone”*

X2.10

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SD	1	1.9	1.9	1.9
	D	1	1.9	1.9	3.8
	N	18	34.0	34.0	37.7
	A	27	50.9	50.9	88.7
	SA	6	11.3	11.3	100.0
	Total	53	100.0	100.0	

The calculation of analysis students' learning styles item 10:

$$\text{Score} = \left(\frac{\text{total score}}{5 \times N} \right) \times 100 \%$$

$$\text{Score} = \left(\frac{195}{5 \times 53} \right) \times 100 \%$$

$$\text{Score} = \left(\frac{195}{265} \right) \times 100 \%$$

$$\text{Score} = 0.73 \times 100 \%$$

Score = 73 %

Based on the table 4.11 above, it can be seen that 1.9% students choose “*strongly disagree*” option, 1.9% students choose “*desagree*” option, 34% students choose “*netral*” option, 50.9% students choose “*agree*” option and 11.3% students choose “*strongly agree*” option. In addition, based on the calculation of analysis students’ learning styles questioner item 10 show that, the score is 73 % it means “*agree*”.

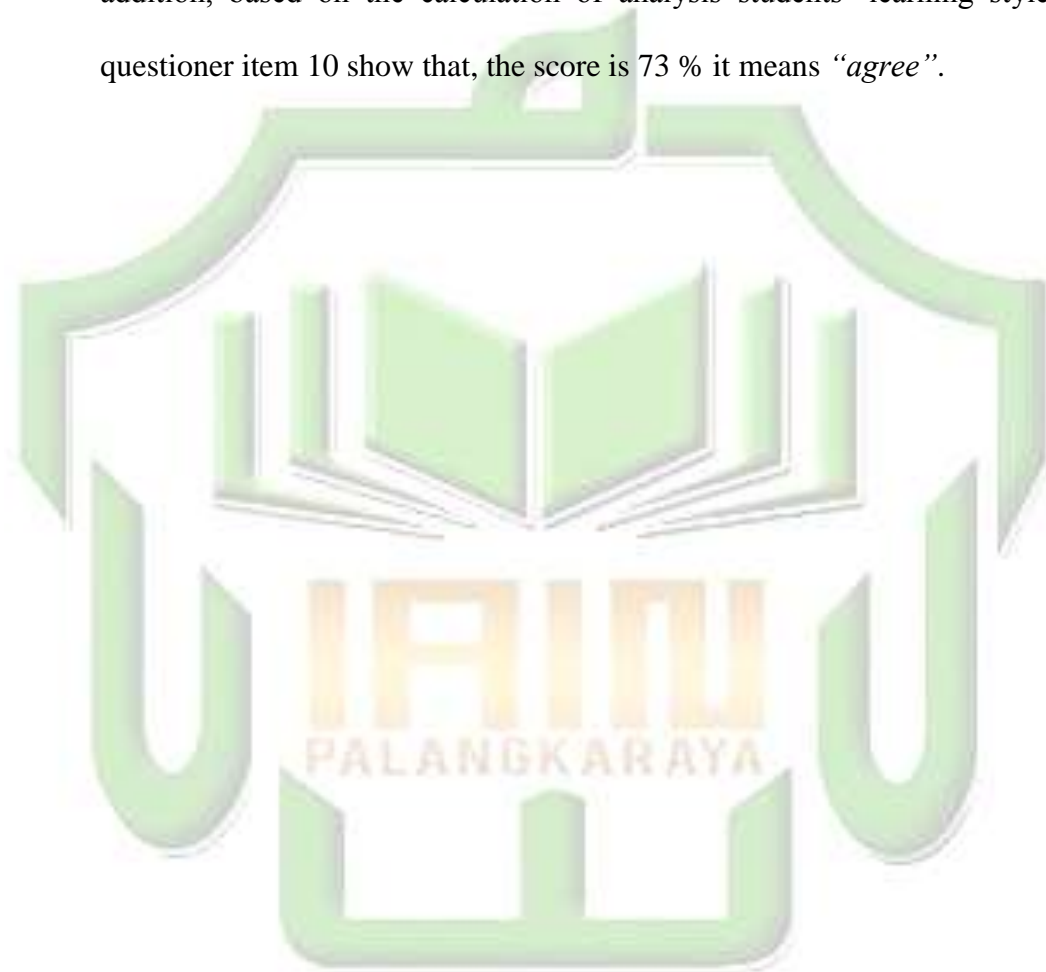


Table 4.12

Item 11

Y.11

“I prefer to learn by doing something in class”

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid N	16	30.2	30.2	30.2
A	30	56.6	56.6	86.8
SA	7	13.2	13.2	100.0
Total	53	100.0	100.0	

The calculation of analysis students' learning styles item 11:

$$\text{Score} = \left(\frac{\text{total score}}{5 \times N} \right) \times 100 \%$$

$$\text{Score} = \left(\frac{203}{5 \times 53} \right) \times 100 \%$$

$$\text{Score} = \left(\frac{203}{265} \right) \times 100 \%$$

$$\text{Score} = 0.76 \times 100 \%$$

$$\text{Score} = 76 \%$$

Based on the table 4.12 above, it can be seen that 30.2% students choose “*netral*” option, 56.6% students choose “*agree*” option and 13.2% students choose “*strongly agree*” option. In addition, based on the

calculation of analysis students' learning styles questioner item 11 show that, the score is 76 % it means "*agree*".



Table 4.13**Item 12**

Y.12

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	N	10	18.9	18.9	18.9
	A	32	60.4	60.4	79.2
	SA	11	20.8	20.8	100.0
	Total	53	100.0	100.0	

“When I do things in class, I learn better”

The calculation of analysis students' learning styles item 12:

$$Score = \left(\frac{\text{total score}}{5 \times N} \right) \times 100 \%$$

$$Score = \left(\frac{203}{5 \times 53} \right) \times 100 \%$$

$$Score = \left(\frac{203}{265} \right) \times 100 \%$$

$$Score = 0.76 \times 100 \%$$

$$Score = 76 \%$$

Based on the table 4.13 above, it can be seen that 18.9% students choose “netral” option, 60.4% students choose “agree” option and

20.8% students choose “*strongly agree*” option. In addition, based on the calculation of analysis students’ learning styles questioner item 12 show that, the score is 76 % it means “*agree*”.



Table 4.14

Item 13

“I enjoy learning in class by doing Experiments”

Y.13

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	1	1.9	1.9	1.9
	N	10	18.9	18.9	20.8
	A	28	52.8	52.8	73.6
	SA	14	26.4	26.4	100.0
	Total	53	100.0	100.0	

The calculation of analysis students' learning styles item 13:

$$Score = \left(\frac{\text{total score}}{5 \times N} \right) \times 100 \%$$

$$Score = \left(\frac{214}{5 \times 53} \right) \times 100 \%$$

$$Score = \left(\frac{214}{265} \right) \times 100 \%$$

$$Score = 0.80 \times 100 \%$$

$$Score = 80 \%$$

Based on the table 4.14 above, it can be seen that students chose 1.9% “disagree” option, 18.9% students choose “netral” option, 52.8% students choose “agree” option and 26.4% students choose “strongly agree” option. In addition, based on the calculation of analysis students' learning styles questioner item 13 show that, the score is 80 % it means “strongly agree”.

Table 4.15

Item 14

“I

Y.14

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	1	1.9	1.9	1.9
	N	10	18.9	18.9	20.8
	A	31	58.5	58.5	79.2
	SA	11	20.8	20.8	100.0
	Total	53	100.0	100.0	

understand things better in class when I participate in role-playing”

The calculation of analysis students' learning styles item 14:

$$\text{Score} = \left(\frac{\text{total score}}{5 \times N} \right) \times 100 \%$$

$$\text{Score} = \left(\frac{211}{5 \times 53} \right) \times 100 \%$$

$$\text{Score} = \left(\frac{211}{265} \right) \times 100 \%$$

$$\text{Score} = 0.79 \times 100 \%$$

$$\text{Score} = 79 \%$$

Based on the table 4.15 above, it can be seen that students chose 1.9% “*disagree*” option, 18.9% students choose “*netral*” option, 58.5% students choose “*agree*” option and 20.8% students choose “*strongly agree*” option. In addition, based on the calculation of analysis students’ learning styles questioner item 14 show that, the score is 79 % it means “*agree*”.



Table 4.16**Item 15**

“I learn best in class when I can participate in related activities”

Y.15

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D	1	1.9	1.9	1.9
	N	12	22.6	22.6	24.5
	A	29	54.7	54.7	79.2
	SA	11	20.8	20.8	100.0
	Total	53	100.0	100.0	

The calculation of analysis students' learning styles item 15:

$$Score = \left(\frac{\text{total score}}{5 \times N} \right) \times 100 \%$$

$$Score = \left(\frac{209}{5 \times 53} \right) \times 100 \%$$

$$Score = \left(\frac{209}{265} \right) \times 100 \%$$

$$Score = 0.78 \times 100 \%$$

$$Score = 78 \%$$

Based on the table 4.16 above, it can be seen that students chose 1.9% “disagree” option, 22.6% students choose “netral” option, 54.7% students choose “agree” option and 20.8% students choose “strongly agree” option. In addition, based on the calculation of analysis students' learning styles questioner item 15 show that, the score is 78 % it means “agree”.

Table 4.17**Final Result of Students' Learning Styles Questioners**

No	Score	Categorized
1.	77	Agree
2.	76	Agree
3.	80	Strongly Agree
4.	74	Agree
5.	74	Agree
6.	78	Agree
7.	79	Agree
8.	73	Agree
9.	76	Agree
10.	73	Agree
11.	76	Agree
12.	76	Agree
13.	80	Strongly Agree
14.	79	Agree
15.	80	Strongly Agree

$$\begin{aligned}
 \text{Final result} &= \frac{\text{Total score}}{\text{Total item}} \\
 &= \frac{1.151}{15} \\
 &= 76.7 \% (\text{Agree})
 \end{aligned}$$

From the result above, the total item questionners consist of 15 questions with the final result 76.7 % and the categorize is “*Agree*”.

2. Reading Test Scores

The way to get the data of reading score through documentation which asking students to answer reading test adopted from TOEFL. The following tables are presenting the frequencies of total score, mean, median, the highest and lowest score for students reading achievement of three learning styles groups can be seen on the tables below:

Table 4.18

Reading Test Scores of Visual Learning Style

READING TEST SCORES OF VISUAL LEARNERS	
NAME	SCORES
AKW	94
AR	22
IIM	100
MUZ	74
NFV	48
PNAR	100
RC	26
YI	76
YHW	76
ABD	50
DF	96
RAF	100
RM	24
MUK	82
LT	96
NMP	86
AR	62
EM	32
AM	86

SIS	70
TOTAL	1400
MEAN	70
MEDIAN	76
STD. DEVIATION	27,3

The data in table 4.18 represents score of visual learners. It shows that the total reading score of TOEFL test of English Education students in appreciative reading class is 1400. Then, the mean of the score is 70. Further, the median of the visual learners score is 76. Moreover, the highest reading score of visual learners is 100 and the lowest reading score is 22.

Table 4.19

Reading Scores of Auditory Learning Style

READING TEST SCORES OF AUDITORY LEARNERS	
NAME	SCORE
DR	56
FH	90
HER	26
RID	76
MOL	62
RS	46
SR	96
HAS	92
DY	96
NH	84
NL	100
WD	100
TOTAL	924
MEAN	77
MEDIAN	87
STD. DEVIATION	24,2

The table 4.19 represents score of auditory learners. It shows that the total reading score of TOEFL test of English Education students in appreciative reading class is 924. Then, the mean score is 77. Further, the median of the visual learners score is 87. The data point that the highest reading score of auditory learners is 100 and the lowest reading score is 26.

Table 4.20
Reading Test Scores of Kinesthetic Learning style

READING TEST SCORES OF KINESTHETIC LEARNERS	
NAME	SCORE
DJN	60
ALP	100
MF	24
NH	90
RAY	66
RS	78
SK	58
RWAS	28
YUS	96
TS	60
NE	92
WP	90
MIL	16
JEN	98
RI	96
SUP	54
BSP	86
RAKB	84
SIM	68
NIM	80
ARF	72
TOTAL	1496
MEAN	71,24
MEDIAN	78

STD. DEVIATION	24,22
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On the table 4.20, the highest reading score of kinesthetic learners is 100 and the lowest reading score is 16. The total of reading score of TOEFL test of English Education students in appreciative reading class is 1496. Then, the mean of the score is 71.24. Further, the median of the visual learners score is 78.

As the result, from three tables of learning styles' group and reading achievement above, the data reveals that highest score of reading achievement is 100 and are obtaining by visual, auditory and kinesthtic learners group. For the lowest score is 16, it comes from kinesthetic learners. Besides that, the highest total score and mean among three groups of learning styles come from kinesthetic learner group, (1496) and ($M = 71.24$). Additionally, the total frequency of students' reading achievement score from the entire groups is also analyzed by using SPSS 16.

B. Research Findings

1. Testing Normality

The test use to know whether the data in this study normally distribute or not. To analyze the normality test use Kolmogorov-Smirnov test with $\alpha = 0.05$. It use Kolmogorov-Smirnov test due to the sample of the study is > 50 . And the data was analyzed by using SPSS 16. The result of normality test shown below:

Table 4.21

Test
of
Normality

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		53
Normal Parameters ^a	Mean	.0000000
	Std. Deviation	25.29583849
Most Extreme Differences	Absolute	.133
	Positive	.130
	Negative	-.133
Kolmogorov-Smirnov Z		.968
Asymp. Sig. (2-tailed)		.306

a. Test distribution is Normal.

From the result above, it can be seen that the data are categorized normally distributed because the value of significant is higher than 0.05. The significant value is 0.306, Sig. = 0.306 > 0.05, hence it can be conclude that all the data normal distributed.

Here explanation about the degree of normality test:

Hypothesis:

H_0 : Population are normally distributed

H_1 : Population are not normally distributed (randomly distributed)

Criteria of normality test are:

H_0 is rejected if probability of significant value < 0.05

H_0 is accepted if probability of significant value > 0.05

2. Testing of Homogeneity

After tested the normality, the homogeneity test also analyze. The test conducting for recognizing that the variances of data are homogenous or not. Homogenous means the data have the same characteristics. To analyze the homogeneity test, this study use Levene statistics technique. It also calculated by using SPSS 16. The result of homogeneity test can be seen as follow:

Table 4.22

Test of Homogeneity Variance

Test of Homogeneity of Variances

SCORE

Levene Statistic	df1	df2	Sig.
.256	2	50	.775

Consequently, from the result of homogeneity presented above, we can reveal that the variance of the data is homogenous. The data are homogenous if the significance value is greater than the alpha value (0.05). Therefore, it can be stated that H_0 is

accepted and the variance of data are homogenous with the sig. 0.775 which clearly seen that it higher than 0.05.

Hypothesis:

H_0 : The variances of the data are homogenous

H_1 : The variances of the data are not homogenous

The criteria of homogeneity test:

H_0 is rejected if significant (sig.) value < 0.05

H_0 is accepted if significant (sig.) value > 0.05

3. Interpretasi of The Hypothesis Testing

After the result of normality and homogeneity test reveal that they are normally distribute and the variance of data is homogenous. Another step of this study is continuing to conduct the hypothesis testing. Hypothesis testing is important to be conducted for the study to prove whether the previous assumption is right or not. It is conducting to know the significance differences of reading achievement score based on their groups of learning styles, visual, auditory and kinesthetic learning styles. For testing the hypothesis is used *one way ANOVA*. Visual, auditory and kinesthetic learning styles are comparing by reading achievement score. The result is reporting on the following table:

Table 4.23

ANOVA

ANOVA

SCORE					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	391.889	2	195.944	.298	.744
Within Groups	32895.810	50	657.916		
Total	33287.698	52			



The table above reported that the result of sum of squares, degree of freedom (df), mean square, F-value, and significance score of between groups, within groups and total score. The result above show whether there is differences or not could be recognized from the result of F (2, 50) which is 0.298 and F-table (F_t) is 2.01.

Hypothesis:

H_a : There is significant difference of students' reading achievement based on their learning styles; visual, auditory and kinesthetic.

H_o : There is no significant difference of students' reading achievement based on their learning styles; visual, auditory and kinesthetic.

The criteria of ANOVA test:

H_a is accepted if F-value (F_o) $>$ F-table (F_t) and probability significant (sig.) value $<$ 0.05

H_o is accepted if F-value (F_o) $<$ F-table (F_t) and probability significant (sig.) value $>$ 0.05

The result showed that F- Value (F_o) 0.298 is lower than F-table (F_t) 2.01, ($0.298 < 2.01$). Then the p value is 0.744 greater than 0.05 ($0.744 > 0.05$). Hence, it can be concluded that H_o is accepted and H_a is rejected. Clearly, from the result, it can be said that there is no significant difference of students' reading achievement based on their learning styles; visual, auditory and kinesthetic.

Moreover, Post-Hoc test is conducted to show the specific data of none significant difference among students' reading achievement based on their visual, auditory and kinesthetic learning styles. The three of them are the procedure testing of Post-Hoc that most often to be used for detail information of the data comparison. Post-Hoc test presented on the following table:

Table 4.24

Multiple Comparison

Multiple Comparisons

SCORE

Tukey HSD

(I) GROUP	(J) GROUP	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
VISUAL	AUDITORY	-7.000	9.366	.737	-29.62	15.62
	KINESTHETIC	-1.238	8.014	.987	-20.60	18.12
AUDITORY	VISUAL	7.000	9.366	.737	-15.62	29.62
	KINESTHETIC	5.762	9.282	.809	-16.66	28.18
KINESTHETIC	VISUAL	1.238	8.014	.987	-18.12	20.60
	AUDITORY	-5.762	9.282	.809	-28.18	16.66

The Post-Hoc multiple comparisons showed that there is no significant difference between students' reading achievement based on their learning styles because the data clearly reports that all the result of significance value are higher than 0.05. Meanwhile, to have the significant difference, the sig. value or significance value should lower than 0.05. Moreover, the result on the Post-hoc multiple comparisons test told that between visual and auditory is 0.737, visual

and kinesthetic is 0.987. Then, auditory and visual is 0.737, auditory and kinesthetic 0,809. Also, kinesthetuic and visual 0.987, kinesthetic and auditory 0.809. It can be conclude there is no significant difference on students' reading comprehension based on their visual, auditory and kinesthetic learning styles.

C. Discussion

According to data description above, students' in fifth (5th) English Education at IAIN Palangka Raya twenty of students which are visual learners. In simple, visual learners are prefer to see pictures and diagrams or watching the video. They typically like to be able to read the textbook, journal, article, or newspaper on their own to increase their understanding. Then, twelve of students which are auditory learners, they prefer to listen to audio cassette, causeri-lecturing, discussion, debate, and verbal instruction. They have sensitivity through music, they can repeat and imitate tone, rhythm, and sound of voice. These students also like to listen to music. Moreover, twenty two of students which are kinesthetic learners. This learners' type are seem to be absorbing information through physical, likely they use their body or sense of touch to learn and understand the world around them. Kinesthetic learners prefer to think out issues, idea and problems while the teacher giving exercises.

Additionally, the result of the normality and homogeneity test in the data analysis show that the data are distributed normally and the variances of data are homogenous. After that, ANOVA conduct to know result of hypothesis. Then, the result show F-value (F_0) is lower than F-

table (F_t), ($F_o < F$ table). Further, the p value is greater than alpha (α), (p value > 0.05). As a result that H_o is accepted if F-value (F_o) $<$ F-table (F_t) and probability significant (sig.) value > 0.05 . Therefore, it can be stated that there is no significant difference students learning styles in reading achievement. For the detail data, it can be seen on the Post-Hoc test about the difference significant value among learning styles.

As a final result, Post-Hoc test data revealed that there is no groups are varied. All the significant value of comparisons is higher than the alpha (0.05). The detail is when visual group is compared by auditory, the result is 0.737, secondly, visual group is compared by kinesthetic group is 0.987 and the last, auditory group is compared by kinesthetic group is 0.809. Hence, it can be clearly said that there is no significant difference on students' reading achievement based on their visual, auditory and kinesthetic learning styles.

CHAPTER V

CONCLUSSION AND SUGGESTION

This chapter described the conclusion and the suggestion. In this subject, the researcher would like to give some conclusion that may relate to the subject.

A. Conclusion

Based on the result of this study that was presented in the previous chapter, the conclusion was summarized as the following.

1. The Significant of Students' Learning Styles in Reading Achievement

The analysis of this research show that F- Value (F_o) 0.298 is lower than F-table (F_t) 3.182, ($0.030 < 3.159$). Then the p value is 0.744 greater than 0.05 ($0.970 > 0.05$). Hence, it can be concluded that H_o is accepted and H_1 is rejected.

Beside that, the Post-Hoc multiple comparisons showed that there is no significant difference between students' reading achievement based on their learning styles because the data clearly reports that all the result of significance value are higher than 0.05.

B. Suggestion

From the conclusion above, some suggestion are presented as follows:

1. For Students at IAIN Palangka Raya

Reading is an effective process in which students think, reason, and apply strategies to construct meaning. To master the reading students should know their learning style used in learn reading like visual, auditory

or kinesthetic. Knowing the effect of learning styles in their reading achievement and to help them find out their learning style and it can make easy to comprehend the materials.

2. For English Lecturers

To get teaching and learning activities successful in a class. Teacher should have some approaches to students to make them understand what they want to learn. It is important for the teacher to know what kind of learning style do students have in order to create such an appropriate technique in teaching, because students will be more successful in getting information if the teachers match their ways based on students' learning styles. The results of the study might help the English lecturers in general and the English lecturers of IAIN Palangka Raya in particular to be accurately aware and realize that learning style has impact student reading achievement.

3. For The Researcher

Further, researcher should develop the study especially in reading skill based on students' learning styles (visual, auditory, and kinesthetic) to make students easy to receive and understand the material well. I suggest to use this study as one of the references to conduct further research dealing with learning styles and to research how learning styles affect their achievement. Beside that, other researcher can choose other aspect in reading that the researcher not yet to research.

REFERENCES

- Abidin, M. J. Z., Rezaee, A. I., Abdullah, H. N & Singh, K. K. B. (2011). Learning Styles And Overall Academic Achievement In A Spesific Educational System. *International Journal Of Humanities And Social Science*. 1(10), 143-145.
- Aebersold, Jo Ann., and Field, Mary Lee. (2003). *From Reader to Reading Teacher: Issues and Strategies for Second Language Classrooms*. New York: Cambridge University Press.
- Ahmed, O. N. (2012). The Effect of Different Learning Styles on Developing Writing Skills of Saudi Learners. *British Journal of Arts and Social Sciences*. 5(2).
- Ary, Donald, et.al. (2010). *Introduction to Research in Education 8th Edition*. Canada: Wadsworth.
- Astri, Z & Wahab, I. (2018). The Effect Of Reading Teaching Material For Different Learning Styles In Improving Students' Reading Comprehension. *Jurnal Bahasa Lingua Scientia*. 10(2), 215-230.
- Beatrice, J. A. (1995). *Learning To Study Through Critical Thinking*. Chicago: Irwin Career Education Division.
- Depdiknas. (2003). *Kurikulum 2004 sekolah menengah atas: Pedoman umum pengembangan sistem penilaian hasil belajar berbasis kompetensi*. Jakarta: Departemen Pendidikan Nasional.
- Dunn, Rita & Shirley A. Griggs. (2000) *Practical Approaches to Using Learning Styles in Higher Education*. Westport: Bergin & Garvey.
- Donough. Jo. MC & Shaw. C. (1993). *Materials & Method In ELT*. Oxford: Blakwell Publishers.
- Erliana, S. (2011). Improving Reading Comprehension Through Directed Reading-Thinking Activity (Drta) Strategy. *Journal on English as a Foreign Languge*. 1(1), 49-57.
- Febrianti, S. (2014). Students' reading comprehension based on their learning styles. Retrieved from <http://repository.uinjkt.ac.id/dspace/bitstream/123456789/25374/1/Sari%20%20Febrianti%20%40WATERMAK%20iok.pdf>
- Fithrotunnisa, E. D. (2015). The comparative analysis of students' learning style on their achievement in reading skill. Retrieved from <http://repository.uinjkt.ac.id/dspace/bitstream/123456789/30466/1/EKA%20DEWI%20FI%20THROTUNNISA-FITK.pdf>
- Fitriani, Aries. (2013). Learning Styles And Strategies In Second Language Learning: Theoretical Review. *Cendikia*. 11(2), 1-25.
- Gay, L.R., Mills, Geoffrey E., & Airasian, Peter. (2009) *Educational Research*. London: Pearson Education International.

- Gilakjani, Abbas. 2012. Visual, Auditory, Kinesthetic Learning Styles and Their Impacts on English Language Teaching. *Journal of studies in Education*. 2(1), 104-113.
- Grabe, William, and Stoller, Fredricka L. (2002). *Teaching and Researching Reading*. Harlow: Longman.
- Islam, Syaiful. (2019). Investigating Correlation Between Reading Strategies And Reading Achievement Across Learning Styles. *Englih, Teaching, Learning, amd Research Journal*. 5(1), 88-100.
- Jaki, Ambun & Yunus, M. Md. (2018). Language learning style among TSEL undergraduate students in universiti kebangsaan malaysia from different gender groups. *ASIAN EFL Journal*. 20(8).
- Magfirah, T & Catholic, M. W. (2018). Students' Reading And Listening Comprehension Based On Their Learning Styles. *International Journal of Education*. 10(2), 107-113.
- McNamara, Danielle S. (2006). *Reading Comprehension Strategies: Theories, Interventions and Technologies*. New York: Lawrence Erlbaum Associates.
- Miftah, Zaini. M. (2013). Implementation Of Intensive-Extensive Reading Strategy To Improve Reading Comprehension. *Journal on English as a Foreign Language*. 3(1), 21-30.
- Mirza, Ali. A. (2011). The Effects of Contextual Meaning Aspects on Reading Comprehension. *Journal on English as a Foreign Language*. 1(2), 79-86.
- Moradkhan, D & Mirtaheri, S. (2011). The relationship between Iranian EFL learners' perceptual learning styles and their teachers' teaching styles. *Journal of English Studies*, 1(4), 41-52.
- Nazir, M. (2005). *Metode Penelitian*. Ghalia Indonesia: Bogor.
- Nasuha, Andre, E. I, & Iskarimah, L. N. (2018). The difference between students' learning styles on their reading achievement. Retrieved from <http://www.academia.edu>
- Nasution. (2008). *Berbagai Pendekatan dalam Proses Belajar Mengajar*. Jakarta: Bumi Aksara.
- Nutall, Christine. (1992). *Teaching reading skills in foreign language*. Oxford: Heinemann International.
- Priajana, Nana. (2013). Student Teachers' Reading Habits And Preferences. *Journal on English as a Foreign Language*. 3(2), 71-76.
- Reid, Gavin. (2005). *Learning Style and Inclusion*. London: Paul Chapman Publishing.
- Reid, Joy M. *Understanding Learning Styles in the Second Language Classroom*. New Jersey: Prentice Hall regents, 1998.

- Rose, Colin & Malcolm J. Nicholl. (2002). *Cara Belajar Cepat Abad XXI, Translated from Accelerated Learning for the 21th Century*. Bandung: Nuansa.
- Sabarun. (2012). Improving The Students' Reading Comperhansion Ability Through SQ3R Strategy. *Journal on English as a Foreign Language*. 2(1), 37-47.
- Tanta. (2010). The impact of learning style towards students' study achievement on the subject of general biology, of Biology Education Program. *Kreatif Jurnal Kependidikan Dasar*, 1(1).
- Walted, Teresa. (2004). *Teaching English Language Learners*. New York: Longman.
- Wang, L. (2007). Variation in learning styles in a group of Chinese English as a foreign language learners. *International Educational Journal*, 8(2), 408-417.
- Widiastuty, Hesty. (2011). The Effects Of Reading Topic And Topic Preference On Reading Comprehension. *Journal on English as a Foreign Language*. 1(2), 61-70.
- Yong, F. L. 2010. A Study on the Cultural Values, Perceptual Learning Styles, and Attitudes Toward Oracy Skills of Malaysian Tertiary Students. *European Journal of Social Sciences*. 13(3), 478-492.