

**THE CORRELATION BETWEEN THINKING STYLES AND
WRITING ACHIEVEMENT OF THE TENTH GRADE
STUDENTS OF MAN 1 PALEMBANG**



UNDERGRADUATE THESIS

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STATEMENT PAGE

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State that;

1. All the data, information, interpretation, and conclusion presented in this thesis, except for those indicated by the sources, are the results of my observation, process and thought with the guidance of my advisors.
2. This thesis that I wrote is original and has never been handed in for another academic degree, neither at UIN Raden Fatah Palembang or other universities.

This statement is made truthfully and if one day, there is evidence of forgery in the above statement, I am willing to accept the academic sanction of the cancellation of my sarjana degree (S1) that I have received through this thesis.

Palembang, April 2017

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Palembang, April 2017

YS

MOTTO AND DEDICATIONS

Motto : We should never regret anything in life. If it is good, it's wonderful. If it is bad, it's experience.

This thesis is dedicated to:

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ABSTRACT

The objectives of this study are (1) to find out whether or not there is a significant correlation between thinking style and writing achievement of the tenth grade students of MAN 1 Palembang, and (2) to know if students' thinking styles influence their writing achievement. In this study, 248 students of the tenth grade students of MAN 1 Palembang in academic year 2016-2017 became the population of this study. 87 students became the samples of this study by means of purposive sampling technique. The method used in this study was a correlational study. The data were collected by using a questionnaire and a writing test. Pearson product moment correlation was applied in this study. The analysis was continued using multiple regression to find out the contribution of sub variables of thinking styles to the students' writing achievement. The results showed that (1) there was a weak correlation between thinking styles and writing achievement (r -table .208, $<.05$), but there was no significant between thinking styles and writing achievement (sig.2tailed was .022, $<.05$). (2) there was significant influence between thinking styles and writing achievement (R^2 was .108) of the tenth grade students of MAN 1 Palembang.

Keywords: *Thinking styles, writing achievement.*

Hal : Pengantar Skripsi

Kepada Yth,
Bapak Dekan Fakultas Ilmu
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Raden Fatah Palembang.

Di

Palembang

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Setelah kami periksa dan diadakan perbaikan-perbaikan seperlunya, maka skripsi berjudul **“THE CORRELATION BETWEEN THINKING STYLES AND WRITING ACHIEVEMENT OF THE TENTH GRADE STUDENTS OF MAN 1 PALEMBANG”**. Ditulis oleh saudari Yulia Sari (12250154) telah dapat diajukan dalam sidang munaqosah Fakultas Tarbiyah dan Keguruan UIN Raden Fatah Palembang.

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Pembimbing I

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CHAPTER I

INTRODUCTION

This chapter presents: (1) background; (2) problems of the study; (3) objectives of the study; and (4) significance of the study.

1.1 Background

Language as a means of communication plays a very important role in human beings' life. Without language, there will not be any communication among human beings. According to Santosa (2011, p. 2), language is basically speech. Its written form developed later on. It is universal among human beings who use it for carrying out various activities of life. It is such a common phenomenon that we always take it for granted.

Nowadays, people can communicate with one another easily, not only among people in our country but also among those in the whole world. English is language which is spoken by people in almost all of countries in the world. The mastery of good English is deemed as having an edge and can bring a lot of advantages in many ways. Harmer (2001, p. 20) suggested that they need a certain language as a Lingua Franca to communicate between two people who do not share the same languages; one of that Lingua Franca is English. English is used as well as medium of developing relationship with other nation, English is also to absorb and develop science, technology, economy, and culture.

In learning English there are four skills such as writing, speaking, reading, and listening. According to Harmer (2004, p. 79), writing is a basic language skills,

as important as speaking, listening, and reading. Nunam (2003) cited in Santosa (2011, p. 23) stated that writing can be defined by a series of contrasts; it is both a process and product. Physical and mental mean that writing is physical action to pour some words or idea to some medium, while at the same time our mental working to inventing ideas, thinking how to express into some words and arranging them into statements and paragraphs that are able to be understood by the readers.

Writing is one of the important skills of a language. Mastering one of the skills will help students in learning the other skills. For example, when the students are asked to say something in front of the class or in a group discussion, they usually write first what they want to say and how to say it in a good way. This shows that speaking skill is supported by writing skill.

Nowadays, having a good mastering in writing achievement plays a pivotal role in achieving success (Marzban & Sarjani, 2014, p. 293). Because by mastering writing achievement people especially the students can be more confident when students join essays contests and become good raters for their classmates. Among other skills, it is a fundamental language skill that is vital to academic success and a basic requirement for participation in civic life and global economy (Graham & Perin, 2007). And also among the other skills, writing is considered the most difficult skill in language teaching and learning process. It requires the students to understand the spelling and punctuation, the sentence structures, the vocabulary, and the paragraph development. As supported by those statements, it is reported in Kompas, based on the observation of English achievement tests, most of people in

Indonesia usually have a good mastery in speaking and listening but have less in academic writing.

The first reason why writing is considered difficult is for creating a well – organized writing someone must be able to use his/her rational thinking. Levin (1982) cited in Mardasari (2008) suggest that rational thinking or commonly called as logic has a predominant role in attempting to write well. Logic guides a writer how to be consistent in their thinking and writing. It can also to teach them how to see the implications in statement and how to test the relevant of arguments and evidence and help to central idea. In the other words, logic enables the writer to be consistent and help them to identify the relevance in their writing. As we know relevance and consistency are significant characteristics for all good writing.

The second reason that students must able to use their rational thinking to create a well-organized writing. It can be said that everyone has their own styles on writing. When a teacher provides a topic and asks students to write a paragraph, it is likely that what one students writes not similar to the others' different perception may due their way thinking.

Thinking plays an important role in every aspect of our live. At certain points in our live, we sometimes have make decision on certain problem to which we are required to apply our own thinking. Our decision we have different strategies or ways in doing certain tasks due to different ways of thinking we have.

Stenberg and Zhang (2001, p. 2) defined thinking style is the path that an individual prefers on processing the information and dealing with given task is a fundamental and deciding working area. Style is an individual-difference factor that

has received particular attention (Zhang, 2001). Style is a term refers to consistent and rather enduring tendencies or preferences within an individual (Brown, 2007, p. 65). Learning style and such other individual-difference factor as self-concept also have influence on students' achievement. Besides learning style and self-concept, thinking style is also the individual-difference factor that has drawn the attention of researchers. Many theories of thinking style have been postulated (Zhang, 2001).

Sternberg (1997) identified thirteen distinct thinking styles that incorporate aspects of cognitive problem solving and coping strategies. These thinking styles have been found to predict positive academic outcome as well as or better than traditional measures; such as personality, motivation, and learning approach (Zhang & Sternberg, 2001). Thinking plays an important role in every aspect of our lives. At certain points in our lives, we sometimes have to make decision on certain problem to which we are required to apply our own thinking. In addition, we sometimes have in carry out some tasks in certain ways. Our decision on something may be different from others and we may also have different strategies or ways in doing certain tasks due to different ways of thinking we have.

In relation to writing achievement, the people with their thinking styles (Sternberg, 1997) it is tent to get engaged in tasks that provide opportunities for developing interpersonal relationship that students with their thinking styles. Thinking styles refers to a preference for doing tasks that allow social interaction and collaboration. Therefore, students with their thinking styles may discuss what they want to write their peers and ask their peers to give feedback for their writing.

In curriculum 2013 2013 syllabus for junior and senior high schools students are require to write some kinds of genre in writing. They are narrative, recount, descriptive, report, explanation, analytical exposition, hortatory exposition, procedure, discussion, reviews, anecdote, spoof, and news items.

Based on explanation above, descriptive text is one of genre that must be mastered by students in learning English. According to McDougal and little; 1980 cited in Mandasari, (2008, p. 9) a descriptive text present a picture of a real or imaginary person, place, or thing. In fact, not all of the students are able to write descriptive text properly and in accordance with the existing elements in the descriptive text. When the students must use their thinking to create well-organized writing because the students describe something, so it can be said that everyone has their own style in writing.

The writer did preliminary study by informal interview with one of the teacher of English and 20 students at MAN 1 Palembang. The researcher asked the teacher about the students' problem in learning English and the students' problem in writing. The results showed that the students were very difficult in writing English because in writing the students are lazy to think about something, the students cannot create a well-organized in writing achievement, and also the students do not know some vocabularies.

Rihlaini S.Pd, the teascher of English in MAN 1 Palembang agreed that writing is the most problems which faced by students. The students' problem in writing English because the students were difficult in comprehending writing texts.

They do not know how to figure out particularly the components of the text. Such as main idea, topic sentences, detail of the text and also the conclusion.

The situation supported by Mardasari (2008) with the title the correlation between students' thinking style and writing achievement of English education study program students of Sriwijaya University. This research found that there is no significant correlation between students thinking style and their writing achievement with the ability in writing descriptive text of the English education study program students of Sriwijaya University in academic year 2008/2009.

The second delivered Vianty (2006) with the title the correlation among students' academic achievement, students' thinking style, and the three factors of students' thinking style, gender, and year of study. The research found between students' academic achievement and their thinking style.

Based on the above descriptions, this study interested in conducting a research entitled **“The Correlation between Thinking Styles and Writing Achievement of the Tenth Grade Students of MAN 1 Palembang”**.

1.2 Problems of the Study

The problems of this study are formulated in the following questions:

1. Is there any significant correlation between thinking style and writing achievement of the tenth grade students of MAN 1 Palembang?
2. Do students' thinking styles influence their writing achievement?

1.3 Objectives of the Study

Based on the problems above, the objectives of this study are:

1. To find out whether or not there is a significant correlation between thinking style and writing achievement of the tenth grade students of MAN 1 Palembang.
2. To know if students' thinking styles influence their writing achievement.

1.4 Significance of the Study

The results of this study is to give a useful contribution to teaching and learning process. In addition, this study can provide useful information for the teacher of English about the importance of students' thinking style in order to help the students improve their writing skill. The teacher anticipates specific problems why the students are not interested in writing English and how to prove it. And can help the students improve their writing skill. It is also hoped that this study will give some useful information to the students. It is hoped that the students will get knowledge more in learning writing by focus on increasing their knowledge about writing achievement. The students can govern or manage their activities and they may choose styles of managing themselves that they are comfortable. And also can know students thinking styles when the students want to write, because every student has their own styles when they are writing.

CHAPTER II

LITERATURE REVIEW

This chapter presents: (1) correlational research; (2) the concept of thinking styles; (3) dimensions of thinking styles; (4) thinking styles, characterizations and implications; (5) the concept of writing; (6) previous related study; (7) hypotheses; and (8) criteria of hypotheses testing.

2.1 Correlational Research

Fraenkel, et al (2011, p.331) suggested that correlational research, like causal-comparative research is an example of what is sometimes called *associational research*. In associational research, the relationships among two or more variables are studied without any attempt to influence them. In their simplest form, correlational studies investigate the possibility of relationships between only two variables, although investigations of more than two variables are common. In contrast to experimental research, however, there is no manipulation of variables in correlational research.

According to Fraenkel, et al (2011, p. 331), correlational research is also sometimes referred to as a form of descriptive research because it describes an existing relationship between variables. The way it describes this relationship, however, is quite different from the descriptions found in other types of studies. A correlational study describes the degree to which two or more quantitative variables are related, and it does so by using a correlation coefficient.

When a correlation is found to exist between two variables, it means that scores within a certain range on one variable are associated with scores within a

certain range on the other variable. You will recall that a positive correlation means high scores on one variable tend to be associated with high scores on the other variable, while low scores on one are associated with low scores on the others.

Moreover, Creswell (2005, p. 344) states that to interpret correlations, a researcher examined the positive or negative direction of the correlation scores, a plot of the distribution of scores to see if they are normally or non-normally distributed, the degree of association between scores, and the strength of the association of the scores. More specifically, the correlation coefficient is a number that can range from -1 to 1, with zero standing for no correlation at all. If the number is greater than zero, there is a positive correlation. If the number is equal to +1.00 or equal to -1.00, the correlation is called perfect. Positive correlation is present when scores on two variables tend to move in the same direction while negative correlation is present when scores on two variables tend to move in opposite directions – as one variable goes up, the other tends to go down, and vice versa.

The meaning of a given correlation coefficient can be seen below based on Cohen, Manion, and Marison (2007, p. 536):

Table 1
The Distribution of a Given Correlation Coefficient Level

Internal Coefficient	Level of Correlation
0.20 – 0.35	Weak
0.35 – 0.65	Fair
0.65 – 0.85	Strong

Over 0.85	Very Strong
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2.2 The Concept of Thinking Styles

Thinking styles is another concept that has drawn the attention of researchers. According to Stenberg and Zhang (2001), thinking styles refer to how people prefer to think. In the other word Stenberg and Zhang (2005, p. 2) define thinking style is the path that an individual prefers on processing the information and dealing with given task is an fundamental and deciding working area. Horrison and Bramson (1983) cited in Vianty, (2007, p. 13) identified five inquiring styles of thinking. They are the synthesis, idealist, pragmatist, analytical and environment demand or the ways people learn and think. The various confusing affected the theoretical foundation of this style construct, as well as its capacity to be operationalized in the educational context. Therefore, Stenberg restricted the style construct and proposed a more general theory of thinking style theory of mental self-government in which three approaches of styles are embraced in the theory.

Thinking styles does not donate the ability, it shows the way people use their abilities (Stenberg, 1997). Thinking styles are different from the intelligence; intelligence refers to the individual potentials and abilities; however, thinking style refers to the individual preferences (Seif, 2008). According to Heidari and Bahrami, (2012, p. 723), thinking style correspond to the preferred manner of utilizing one's own abilities. Style of thinking is unique and adaptive.

Based on the explanation above, thinking styles is a different ways of using the abilities that students have to solve problems, carry out tasks or projects and make a decisions.

2.3 Dimension of Thinking Styles

Sternberg and Zhang (2001) suggested that thinking styles refer to how people think. Sternberg (1997) proposed a theory of thinking styles that term as the theory of mental self-government. The basic idea of this theory is that people have to organize or govern themselves in everyday activities as society needs to govern itself. Using the word “government” metaphorically, contended that just as there are many ways or governing or managing our activities. These different ways can be constructed as our thinking styles. The theory of mental self-government describes 13 thinking styles that fall along five dimensions. They are: (1) function; (2) form; (3) level; (4) scopes; and (5) leaning.

2.3.1 The Ways of Thinking in Terms of Functions

In analogy to governments, people carry out legislative, executive, and judicial functions.

1. Legislative Style

The legislative function, as one of the three main function in people’s mental self-government, is concerned with formulating ideas and creating rules. Ahmadi, et, al (2014, p. 76) defined legislative style means individuals prefer to obey rules and existing methods. they prefer the problems which require them to devise new strategies and to create their own laws and they enjoy giving commands (Zhang, 2004). In line with Fouladi and Shahidi (2016, p. 1730) individual with this thinker Trend to create, invent, design and do the things in their own way. Budijanto (2013, p. 8) also defined an individual with a legislative thinking style enjoys being

engaged in tasks requiring creativity. In short, this thinker can carry out the creativity and making and implicating a new idea in forming action.

2. Executive Style

The executive function is concerned with carrying out plans and implementing rules initiated by others. The advocates of this style prefer to use the ways that already exist to solve problems, and the application and implementation of laws (Obeidat & Assameed, 2007). Also, Ahmadi, et al (2014, p. 76) indicate that executive style is the ability of individual to enjoy creating and formulating their own rules. Also, Budijanto (2013, p. 8) indicated An individual with an executive thinking style is more concerned with performing tasks with clear instructions. It can be concluded that executive thinker just focus on the real ways in reaching the activities.

3. Judicial Style

The judicial function is concerned with evaluating the products of others' activities. Ahmadi, et al (2014, p. 76) argued that judicial style is the ability of individual to like to judge and evaluate rules, ways, ideas, and procedures. The advocates of this method care about the assessment of the stages of the work and the results. They often ask questions such as: Why? What is the reason? What is assumed, (Bernardo et al., 2002). They analyze the main idea in the scientific stance and hate experimentation, evaluate the work of others, and hate to be evaluated by others.

2.3.2 The Ways of Thinking in Terms of the Form

The following four types of government in term of form, those are oligarchic, monarchic, hierarchic, and anarchic. Applied to mental self-government, these four styles concern the way a person organizes information processing.

1. Monarchic Style

The monarchic form is mainly concerned with pursuing goals single-minded. A person with monarchic style tends to be single-minded driven. Individuals with a monarchic style prefer to focus on one goal at the time and address the next goal when the first goal is completed (Ahmadi, et, al, 2014, p. 76). Individuals are characterized by going towards a single goal all the time, they are flexible, and able to analyze and think logically is low. They prefer works that highlight their individuality. (Sternberg, 1994). Also, Budijanto (2013, p. 28) argues An individual with a monarchic thinking style enjoys being engaged in tasks that allow him/her to concern fully on one goal at a time. It can be claimed that this thinker consistent in one thing or idealist person.

2. Hierarchic Style

The hierarchical form is concerned with prioritizing. A person with hierarchical style tends to distribute attention to several prioritized tasks. Ahmadi, et, al (2014, p. 76) explain Individuals with an oligarchic or hierarchic style like to deal with multiple goals. They describe the former individuals have difficulty in assigning priorities to the various goals, thus creating conflict and tension. The owners of this method tend to do many things at one time. They put their goals in

the form of hierarchy depending on their importance and priority. They are realistic, logical and organized in solving problems and decision-making (Sternberg & Wagner, 1991). Budijanto (2013, p. 28) describes that a individual with a hierarchic thinking style prefers concerning his/her attention on tasks according to an order of importance. All in all, this style will be done activities based on the requirement.

3. Anarchic Style

The anarchic form is concerned with taking a random approach to goals and problems. A person with this style enjoys working on tasks that would allow flexibility as to what, where, when, and how one works. Fouladi and Shahidi (2016, p. 1730) explain anarchic thinker has ability to apply random methods to solve problems and dislike systems, rules, guidelines and generally any restrictions. Also, individuals with an anarchic thinking style tend to be motivated by a wide range of needs and goals and are flexible in their approach (Ahmadi, et, al, 2014, p. 76). However, they have difficulty setting priorities since they have no firm set of rules. they tend to adopt a method of random and non-compliant in a particular order to solve the problems, their performance is better when the tasks and positions that are assigned to them are disorganized, and they are confused (Sternberg & Wagner, 1991, 2006, Tayeb, 2006). Besides, Heidari, and Bahrami (2012, p. 724) indicate that anarchic people prefer the tasks that can be accomplished flexibly. In short, anarchic thinker can be imply as energetic style in finding solution of problem and growing motivation to achieve their goals.

4. Oligarchic Style

The oligarchic form involves pursuing multiple goals. A person with this form also favors to work toward multiple objectives within the same but she/he may not like to set priorities among the objectives. Fouladi and Shahidi (2016, p. 1730) explain individual with oligarchic style Prefer to do many things at the same time but he/she has the problem to prioritize them. Furthermore, these individuals are characterized by being nervous, confused and they have many conflicting goals, all of these goals are equally important for them. (Sternberg 2006 , Grigorenko & Sternberg, 1995). it can be claimed that oligarchic thinker have many planning but difficulty in doing the action.

2.3.3 Methods of Thinking in Terms of Level

Theory mental self-government also operate at different levels, such as the global or the local level, and are therefore more concerned with either general or specific policy making.

1. Global Style

The global level is concerned with a preference for problem at relatively high level of abstraction. In analogy, individual with a *global thinking style* prefer general, abstract reasoning, pondering in the world of ideas (Ahmadi, et, al, 2014, p. 77) They prefer to deal with broad , abstract and relatively large and. high-level concepts. They prefer change and innovation, and vague positions. They often ignore the details. Sharma, and Netu, (2011, p. 116) argued that global thinkers (or "strategic thinkers") are more comfortable with new information if they can adapt

it into context, they also tend to be impatient with linear subjects and linear-oriented instruction because they prefer access to all the information (early on) so they can relate overall goals.

2. Local Style

The local level is concerned with preference for problems that demand attention to details. Ahmadi, et, al (2014, p. 77) describe individuals with a *local thinking style* are more down to earth and oriented towards the pragmatics of the situation. The persons of this method characterized by being attracted by the practical situations. Fouladi and Shahidi (2016, p. 1730) add that the local style as the realistic ability to Tend to be involved with details and objective and specific examples. It can be conclude this style can be claim as realistic person that stand on the fact.

2.3.4 The Ways of Thinking in Terms of Scopes

Governments also differ in scope dealing primarily with internal and external issues. Likewise, individuals with an *internal thinking style* differ from individuals with an *external thinking style*, preferring to work independently from others. They are more introverted and less socially sensitive than persons with an external style.

1. External Style

The external scope of self-government refers to a preference for doing tasks that allow social interaction and collaboration. External persons seek to work collaboratively (Heidari, & Bahrami, 2012, p. 724), followers of this method tend

to work, interact and collaborate with others within the team, and they have a sense of social contact with others comfortably and easily. (Sternberg & Wagner, 1991, Zhang & Sternberg, 2002). Also, Fouladi and Shahidi (2016, p. 1730) argue the external style person Work with others, rely on outside world and are dependent on others. It can be implied that external thinker is social able person in working and making interaction with others.

2. Internal Style

The internal scope of self-government refers to a preference for doing task independently. Internal thinker perform different activities independently (Heidari, & Bahrami, 2012, p. 724). It is supported by Fouladi and Shahidi (2016, p. 1730) argue this style Tend to work alone, rely on their own world. The followers of this style prefer to work individually; they are introvert and tend to be lonely. They are directed toward work or task, and they are characterized by internal focus, and they prefer the analytical and creative problems. All in all, thus thinkers are individualism and enjoy in the lonely situation.

2.3.5 The Ways of Thinking in Terms of Leaning

Finally, governments prefer liberal or conservative style and so have individuals.

1. Liberal Style

Those with a *liberal thinking style* give preference to tasks and projects and allow them to cover unexplored ground. They seek rather than avoid ambiguous

and uncertain stimuli (Ahmadi, et, al, 2014, p. 77). The followers of this method tend to go beyond the laws and measures, and the tendency to be ambiguous and unfamiliar positions. They are seeking through the tasks undertaken by them to by pass laws that imposed upon them, whether at work or in school in order to bring the biggest possible change (Sternberg2006, Bernardo et al, 2002).

2. Conservative Style

Fouladi and Shahidi (2016, p. 1730) explain the conservative person prefer to do things in before experienced and right ways and follow the customs. Ahmadi, et, al (2014, p. 77) expressed the contrast, individuals with a *conservative thinking style* prefer familiar, non-threatening situations. Together, these thirteen thinking styles can characterize individuals to a greater or lesser extent. They prefer situations that are familiar in life, and they are characterized by diligence and order, they follow the rules and procedures that exist, and they refuse change and would prefer the least possible change (Hashim, 2007). It can be concluded that conservative thinker is the style which like to try something unpopular for them.

Table 2

The Distribution of Dimension of Thinking Styles

No.	Thinking Styles	Dimension
1	Legislative Style	Function
2	Executive Style	Function

3	Judicial Style	Function
4	Hierarchical Style	Form
5	Oligarchic Style	Form
6	Monophasic Style	Form
7	Anarchic Style	Form
8	Global Style	Level
9	Local Style	Level
10	Internal Style	Scope
11	External Style	Scope
12	Liberal Style	Leaning
13	Conservative Style	Leaning

2.4 Thinking Styles, Characterizations, and Implications

Categories and dimensions of Thinking Styles in the mental self-government theory of Thinking Styles extracted from Sternberg and Wagner (1992) in Table 3.

Table 3
The Distribution of Characterizations and Implications of Thinking Styles

No	Thinking Styles	Characterizations	Implications
1	Legislative	Likes to create, invent, design, do things his or her own way, have little assigned structure	Likes doing science projects, writing poetry, stories, or music, and creating original artworks.
2	Executive	Likes to follow directions, do what he or she is told, be given structure.	Likes to solve problems, write papers on assigned topics, do artwork from models, build from designs, and learn assigned information.
3	Judicial	Likes to judge and evaluate people and Things	Likes to critique work of others, write critical essays, give feedback and advice
4	Monarchic	Likes to do one thing at a time, devoting to it almost all energy and resources.	Likes to immerse self in a single project, whether art, science, history, and business.
5	Hierarchic	Likes to do many things at once, setting priorities for which to do when and how much time and energy to devote to each.	Likes to budget time for doing homework so that more time and energy is devoted to important assignments.
6	Oligarchic	Likes to do many things at once, but has trouble setting priorities.	Likes to devote sufficient time to reaching

			comprehension items, so may not finish standardized verbal- ability tests.
7	Anarchic	Likes to take a random approach to problems; dislike systems, guidelines, and practically all constraints.	Writes an essay in stream – of- consciousness form; in conversations, jumps from one point to another; starts things but doesn't finish them.
8	Global	Likes to deal with big picture, generalities, and abstractions.	Writes an essay on the global message and meaning of a work of art.
9	Local	Likes to deal with details, specifics, concrete examples.	Writes an essay describing the details of a work of art and how they interact.
10	Internal	Likes to work alone, focus inward, be self-sufficient.	Prefers to do science or social studies project on his or her own.
11	External	Likes to work with others, focus outward, be inter-dependent.	Prefers to do science or social studies project with other members of a group.
12	Liberal	Likes to do things in new ways, defy Conventions	Prefers to figure out how to operate new equipment even if it is not the recommended way; prefers open classroom setting.

13	Conservative	Likes to do things in tried and true ways, follow conventions.	Prefers to operate new equipment in traditional way; prefers traditional classroom setting.
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2.5 The Concept of Writing

Writing is a way of communicating information, ideas, and feelings to other people by reproducing the thoughts, ideas, and feelings in written symbols. It means that we write, we also compose or create meaning with words. Writing is more complicated and challenging than the other language skills (Muslim, 2014; Javed, Juan & Nazli, 2013; and Harmer, 2004). While according to Mora-Flores (2012, p. 12), writing is a process by which we transfer our thinking, our ideas, and our experiences into written form. It is not only the combination of letter, which relate to the sounds when people speak, but writing is more than production of these graphic symbols.

Writing is significant when the readers enjoy it and can take a lesson from it. Writing is clear when the readers do not trouble to understand it. Valette (1997, p. 4) cited in Wijaya (2015, p. 16) mention that writing frequently, not only your mastering of elements of writing can improve but also the acquisition of new vocabulary and grammatical structures. The process of writing is complex in which these processes should be followed from its first step until the final step of writing. In every step of writing, the writer should make an evaluation in order to produce good writing quality. It is because once the writer misses to evaluate one step which

could be a mistake, than another step will be followed by another mistake that connected to the previous step. Hedge (2000, p. 302) stated that:

“Writing is the result of employing strategies to manage the composing process, which is one of gradually developing a text. It involves a number of activities: setting goals, generating ideas, organizing information, selecting appropriate language, making a draft, reading and reviewing it, then revising and editing. It is a complex process which is neither easy nor spontaneous for many second language writers”.

The concept of writing process (Harmer, 2004, p. 4):

1. Planning: Before starting to write, writer plans what they are going to write. For detailed notes or jotting a few words. Still others may not actually write down any notes because they may do all their planning in their mind.
2. Drafting: A draft can be referred to the first version of a piece of writing. It is often done on the assumption that it will be amended later.
3. Editing: After writers have produced a draft, they usually read through what they have written to see where it works and where it does not. The order of information is probably not clear even they may use a different form of words or sentences.
4. Final version: Final version is the changes writing that writers make after they have edited their draft. It can be different from both the original plan and the first draft because it has changed in the editing process.

There are eleven elements of current writing instruction found to be effective for helping adolescent students learn to write well and to use writing as a tool for learning in accordance with Graham and Perin (2007, pp. 5-6):

1. Writing Strategies, which involves teaching students strategies for planning, revising, and editing their compositions.
2. Summarization, which involves explicitly and systematically teaching students how to summarize texts.
3. Collaborative Writing, which uses instructional arrangements in which adolescents work together to plan, draft, revise, and edit their compositions.
4. Specific Product Goals, which assigns students specific, reachable goals for the writing they are to complete.
5. Word Processing, which uses computers and word processors as instructional supports for writing assignments.
6. Sentence Combining, which involves teaching students to construct more complex, sophisticated sentences.
7. Prewriting, which engages students in activities designed to help them generate or organize ideas for their composition.
8. Inquiry Activities, which engages students in analyzing immediate, concrete data to help them develop ideas and content for a particular writing task.
9. Process Writing Approach, which interweaves a number of writing instructional activities in a workshop environment that stresses extended writing opportunities, writing for authentic audiences, personalized instruction, and cycles of writing.
10. Study of Models, which provides students with opportunities to read, analyze, and emulate models of good writing.

11. Writing for Content Learning, which uses writing as a tool for learning content material.

2.6 Previous Related Study

The first, Mardasari (2008) conducted a research with the title the correlation between thinking styles and writing achievement of English education study program students of Sriwijaya University in the academic year 2008/2009. The population of this study is first, third, fifth, and seventh semester students of English education study program. The number of sample is 127 students Sriwijaya university which is taken by using convenient sampling. There are two test forms to collected the data, they are questionnaire and writing test. The data were collected by using thinking style inventory (TSI) and writing descriptive text. The results showed that there is no significant correlation between students' thinking styles and their writing achievement.

Mahmood, Hossein, and Shahrooz (2013) investigated the correlation between language learning strategies and thinking styles of Iranian EFL learners this study aimed at substantiating the relationship between Iranian EFL learners' thinking styles and their language learning strategies. To this end, measures of the language learning strategies of 251 non-randomly chosen Iranian EFL learners (169 female and 82 male) studying English at Urmia and Tabriz Islamic Azad universities were obtained using questionnaire on language learning strategies. Additionally, the thinking styles inventory, a self-report test, was used to evaluate participants' thinking styles. The Pearson product-moment correlation analysis

indicated a statistically significant relationship between the two sets of measures. Further analysis demonstrated that thinking styles and language learning strategies have positive correlation with gender.

Fatemi, and Heidarie (2016) found a significant relationship between the variables of legislative, executive, oligarchic, monarchic, anarchic, hierarchic, judiciary thinking styles and academic achievement. The statistical population included all high school students of Ahvaz, of who 320 students of English department were selected using the multistage random sampling method. Thinking styles scale was used to measure the variables and the mean scores of the students was used for measuring their academic achievement.

Negahi, Nouri, and Khouram (2015) identified the study of learning styles, thinking styles, and English language academic self-efficacy among the Students of Islamic Azad University of Behbahan considering their field of study and gender. The sample (367 students) was determined based on Morgan and Jesri table and was selected via stratified sampling technique. To collect data, Kolb's learning styles questionnaire, Sternberg's thinking styles questionnaire and the researcher-made questionnaire on the English lesson academic self-efficacy of students were used. In the term of thinking style, the result showed that the results also showed that the prevailing thinking style among male students was the judicial thinking style, but the prevailing thinking style among female students was the executive thinking style. Humanities students had more executive thinking style, but engineering students had more legislative thinking style.

In addition, Vianty (2006) conducted research among 430 students of the English education study program, faculty of teacher training and education from three universities in Palembang, Indonesia. In order to investigate whether there were significant correlation among students' academic achievement, students thinking styles the three factors of students' thinking style, gender, and year of study, correlational analysis was administered. The result of the correlational analysis showed that although the correlational coefficient was relatively low, a statistically significant positive correlation was found between students' academic achievement and their thinking styles.

In this study conducted a research with the title the correlation between thinking styles and writing achievement of the tenth grade students of MAN 1 Palembang. The population of this study is the tenth grade students of MAN 1 Palembang which is taken by using purposive sampling. There are two test forms to collected the data, they are questionnaire and writing test. The data were collected by using thinking style inventory (TSI) and writing descriptive text.

2.7 Hypotheses

1. H_0 : There is no correlation between students' thinking styles and their writing achievement of the tenth grade students of MAN 1 Palembang.
 H_a : There is a correlation between students' thinking styles and their writing achievement of the tenth grade students of MAN 1 Palembang.
2. H_0 : There is no influence of students' thinking styles over their writing achievement.

H_a : There is an influence of students' thinking styles over their writing achievement.

2.8 Criteria of Hypotheses testing

To test the hypotheses above, the researcher is used these criterions based on Cohen, Manion, and Marison (2007, p. 536);

1. If p- output (sig. 2- tailed) is higher than 0.05, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_a) is accepted.
2. If p- output (sig. 2- tailed) is lower than 0.05, the null hypothesis is accepted (H_0) is accepted, and the alternative hypothesis (H_a) is rejected.

CHAPTER III

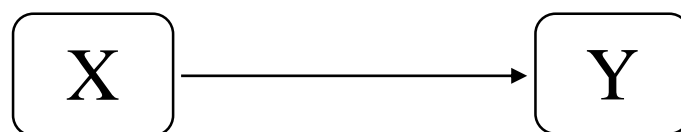
METHOD OF RESEARCH

This chapter presents: (1) research design; (2) research variables; (3) operational definitions; (4) population and sample; (5) data collection; (6) validity and reliability; and (7) data analysis.

3.1 Research design

The research design is a correlational research. Correlation research as a statistical test is to determine the tendency or pattern for two even more variables or two sets of data to vary consistently. It provides an opportunity to predict scores and explain the relationship among variables (Fraenkel et.al, 2011, p. 331).

This research describes the correlation between students' thinking style and writing achievement. There are two variables of this research. They are independent and dependent variables. Independent variable is the students' thinking style which is symbolized by 'X', and dependent variable is their writing achievement, which is symbolized by 'Y'. The following diagram is the design of this research:



3.2 Research variables

Based on the title, there are two variables in this study; 1) Independent variable and 2) dependent variable. Fraenkel et al. (2012, p. 80) suggested that, a common and useful way to think about variables is to classify them as *independent* or *dependent*. Independent variable is what the researcher chooses to study in order

to assess their possible effect(s) on one or more other variables. The variable that the independent variable is presumed to affect is called a dependent variable. In the other words, dependent variable is a variable that is simply measured by the researcher, it is the variable that reflects the influence of the independent variable.

In this study, the independent variable is the thinking styles of the tenth grade students of MAN 1 Palembang, while the dependent variable is their writing achievement.

3.3 Operational Definitions

Concept is important in a scientific study because it is a main element to avoid misinterpreting and misunderstanding. To gain about students' thinking style and writing achievement at the tenth grade students of MAN 1 Palembang, there are some indicators from the variables (variable X and variable Y). Therefore, the operational concept can be used to avoid misinterpreting and misunderstanding by looking at some indicators.

Writing is a way of communicating information, ideas, and feelings to other people by reproducing the thoughts, ideas, and feelings in written symbols. It means that we write, we also compose or create meaning with words.

The thinking styles referred to the thinking styles within Sternberg's Theory of mental self-government, that is different ways of using the abilities that an individual has solve problems, carry out tasks or projects, and make decisions. The first dimension is functions, including the legislative, the executive, and judicial thinking styles. The second dimension is related to forms, including the monarchic,

the hierarchical, the oligarchic, and the anarchic thinking styles. The third dimension concerns levels, including the global and local thinking styles. The fourth dimension is scopes, including the internal and the external thinking styles. The last dimension is leanings, including the liberal and conservative thinking styles.

3.4 Population and Sample

3.4.1 Population

According to Fraenkel, et.al (2012, p. 122), population is a sample in a research study is the group on which information is obtained. The larger group to which one hopes to apply the results. The population of this study is all of the tenth grade students of MAN 1 Palembang that consists of 10 classes. The total of the students are 248 students. The distribution of population of the study can be seen below.

Table 4
The Distribution of Population

No.	Class	Number of Students
1	X IPA 1	29 Students
2	X IPA 2	29 Students
3	X IPA 3	29 Students
4	X IPA 4	25 Students
5	X IPA 5	24 students

6	XI IPS 1	26 Students
7	X IPS 2	23 Students
8	X IPS 3	21 Students
9	X IPS 4	22 Students
10	X IPS 5	20 students
	Total	248 Students

Source: Staff Administration of Man 1 Palembang in academic year 2016/2017.

3.4.2. Sample

According to Creswell (2012, p. 142), sample is a subgroup of a target population that the researcher plans to study for generalizing about the target population. In this study the researcher used purposive sampling method. Purposive sampling (judgment sampling) is used in both qualitative and quantitative research (Johnson & Christensen, 2012, p. 235). The technique was taken because of some purposes including the background knowledge and the recommendation of the teacher of MAN 1 Palembang to take the tenth grade students who are in the science class. The total number of sample consists of 87 students. The distribution of the sample can be seen in table:

Table 5
The Distribution of Sample

No.	Class	The number of students

1	X IPA 1	29 Students
2	X IPA 2	29 Students
3	X IPA 3	29 Students
	Total	87 students

Source : Staff Administration of Man 1 Palembang in academic year 2016/2017

3.5 Data Collection

In this study, there were two kinds of the instruments for collecting the data; questionnaire and writing test.

3.5.1 Questionnaire

The Thinking Styles Inventory (TSI) questionnaire was administered to gain the information about students' thinking styles. The TSI is originally developed by Stenberg, Wagner and Zhang (2007). The TSI consists of 65 items divided in 13 scales, each containing 5 items that correspond to one of the 13 thinking styles described Stenberg's Theory (1988,1997).

Table 6

The Distribution of Thinking Styles Inventory

No.	Thinking Styles	Question
1	Legislative	5, 10, 14, 32, 49
2	Executive	8, 11, 12, 31, 39

3	Judicial	20, 23, 42, 51, 57
4	Global	7, 18, 38, 48, 61
5	Local	1, 6, 24, 44, 62
6	Liberal	45, 53, 58, 64, 65
7	Conservative	13, 22, 26, 28, 36
8	Hierarchical	4, 19, 33, 25, 56
9	Monarchical	2, 43, 50, 54, 60
10	Oligarchic	27, 29, 30, 52, 59
11	Anarchic	16, 21, 35, 40, 47
12	Internal	9, 15, 37, 55, 63
13	External	3, 17, 34, 41, 46

Source: Garcia (2010) The relationship between thinking styles and resilience

3.5.2 Writing Test

In order to measure students' writing achievement, writing test was conducted. The students were asked to write a descriptive text based on the topic, and the student were given freedom to choose the topic among My mother, My best friend, and My Idol. They had to write a composition in the form of descriptive text writing. The students were assigned to write a descriptive text that should contain

approximately at least two paragraphs and the time location was 45 minutes to do the test. The students score in writing test was analyzed by using rubric on assessing the students' writing descriptive text (see appendix c).

3.6 Validity and Reliability

Validity and reliability are important to consider when it comes to the selection or design of the instruments a researcher intends to use.

3.6.1. Validity

According to Frankel and Wallen (1990, p. 138) Validity refers to the appropriateness, meaningfulness, and usefulness of any inferences of researcher draws based on the data obtained through the use of an instrument. Validity is the most important idea to consider when preparing or selecting an instrument for use. Then validity refers to the appropriateness, meaningfulness, correctness, and usefulness of the specific inferences researchers based on the data collect. The researcher will be used Content validity.

3.6.1.1 Content Validity

According to Hughes (1989) cited in Hollandyah (2014, p. 29) a test is said to have content validity if its content constitutes a representative sample of the language skills, structures, etc., with which it is meant to be concerned. In this study, content validity is very important since it is an accurate measure of what it is supposed to measure. Content validity will use to see whether the tests are appropriate and comprehensible enough to samples, content validity will be used.

Relating to this, the test is constructed based on the curriculum and syllabus used at MAN 1 Palembang.

Further, Thinking Styles Inventory (TSI) questionnaire was translated into Bahasa Indonesia by the writer since the sample was non-English major students. To ensure that the questionnaire has a good content, the writer asked feedback from three English lectures to check the questionnaire translation. As the results, all validators accepted the questionnaire translation with some revision based on EYD (Indonesia spelling).

The second instrument is writing test. The students will be asked to write a descriptive text. The topic are my mother, my best friend and my idol. The students are designed to write a descriptive text that should contain approximately at least two paragraphs and the time location is 60 minutes. The topic, the composition and the time location will be validate. In addition, the researcher will make use of content validity to find out the validity of the writing test by having an expert judgment. There will be three raters evaluating the test whether it will be appropriate or not. The criteria for those lecture are: 1) they have got Master's degree of English Education Study Program, 2) have score TOEFL more than 500.

3.6.2 Reliability

3.6.2.1 Questionnaire

According to Creswell (2012, p. 159) scores need to be nearly the same and consistent when researcher administer the instrument multiple times at different times. In this research, Thinking Styles Inventory (TSI) has considered reliable.

Elisabeth Ponce-Garcia (2012) had conducted the reliability of Thinking Styles Inventory (TSI) has reported by Zhang (2000) as follows : Internal (.76), External (.64), Conservative (.83), Liberal (.86), Global (.68), Local (.63), Legislative (.77), Executive (.84), Judicial (.71), Monarchic (.51), Hierarchic (.84), Oligarchic (.66), and Anarchic (.54). in this study, Elisabeth Ponce-Garcia observed the following reliabilities Internal (.78), External (.90), conservative (.83), Liberal (.85), Global (.51), Local (.74), Legislative (.77), Executive (.64), Judicial (.84), Monarchic (.57), Hierarchic (.84), Oligarchic (.62), and Anarchic (.56).

Lau, Chi-ho, Humphrey (2014) the majority of Cronbach's alphas ranged from 0.64 (the executive and local styles) to 0.87 (the liberal style), which is statistically acceptable.

3.6.2.2 Writing Test

In other side, to get the reliability of the writing test, the researcher used inter-rater technique. Then to calculate the coefficient correlation of students' score of two assessors and to find out its reliability, the researcher will use the Pearson Product Moment Formula.

3.7 Data analysis

3.7.1 Data Description

3.7.1.1 Distribution of Frequency data

In distribution of frequency data, the scores from Thinking Styles Inventory (TSI) questionnaire and Writing test were analyzed. SPSS Statistics program was used to get the result of analysis frequency data.

3.7.1.2. Descriptive Statistics

In descriptive statistics, number of sample, minimum, maximum, mean and standard deviation are obtained. Descriptive statistics have got from the scores of questionnaire and writing test. Then, SPSS statistics program was used to get the result of analysis descriptive text.

3.7.2 Pre-requisite Analysis

In terms of correlation and regression, it was necessary to know whether the data were normal for each variable and linear between to variables.

3.7.2.1 Normality Test

Creswell (1012, p. 614) confirms that the distribution of data (Normal or not) will determine what statistical test was used in analyzing relationship hypotheses. In this study, Normality test was used to find out whether the collected data from Thinking Styles Inventory (TSI) and Writing Test was normal or not.

3.7.2.2 Linearity Test

Linearity test was conducted prior to know whether to collected data was linear or not. If the score was higher than 0.05, the two variables were linear. Linearity test in SPSS was used.

3.7.3 Analysis of students' score in questionnaire

In order to find out the students' thinking styles, the study administered the thinking style inventory. The students rated themselves on a 7-point likert- type scale, with 1 indicating that the statement does not describe them at all and 7 denoting that the statement characterize them extremely well. In analyzing the data, this study use to correlation analysis method. And also this study used person product moment correlation coefficient. The computation was run by using SPSS (Statistical Package for Social Science) program.

3.7.4 Analysis of students' score in writing test

The students score in writing test was analyzed by using rubric on assessing the students' writing descriptive text from Brown (2007). There are 5 aspects in this rubric such as focus of content 30% consists of Topic and details, organization 20% consists of Identification and description, grammar 20% consist of use present tense and agreement, vocabulary 15%, mechanics 15% consists of spelling, punctuation, and capitalization. There were three raters evaluating students' writing test. The result of writing test for each raters was divided into three. The total point determined the students' writing achievement.

Above all, to analyze the data obtained from the questionnaire and writing test, SPSS program was employed to find out the correlation between students thinking style and writing achievement.

3.7.5 Correlation Analysis

Pearson Product Moment Correlation Coefficient was used. It is also applied for investigating the correlation between each type of the students' thinking style and writing achievement. Then, significance of the correlation coefficient was determined by comparing the data of the coefficient r data in the level of significance of four percent in the table of product moment (r table). The correlation coefficient could be significance if the r table in the level of significance of four percent showed less than r data. In addition, if the data got the positive r value, the correlation might be a significantly positive. Then, if the result got negative r value, there might be significant negative correlation. The meaning of a given correlation coefficient can be seen below based on Cohen, Manion, and Marison (2007, p. 536).

Table 7
The Degree of Correlation Coefficient

Internal Coefficient	Level of Correlation
0.20 – 0.35	Weak
0.35 – 0.65	Fair
0.65 – 0.85	Strong
Over 0.85	Very Strong

3.7.6 Multiple Regression Analysis

To test whether variable X (Thinking Styles) significantly determine variable Y (Writing Achievement) multiple regression analysis was applied. In addition, it was also used to see which type more contribution to students' writing achievement. Multiple regression analysis is also used to examine whether or not students' thinking style or each type of the thinking style influence writing achievement. Regression analysis was intended to support the correlation coefficient analysis. The statistical analysis of SPSS Program. Furthermore, to answer the reason why correlation and influence among variables may occur, descriptive analysis was used.

CHAPTER IV

FINDINGS AND INTERPRETATION

This chapter presents; (1) the findings of the research; (2) the statistical analyses; and (3) the interpretation.

4.1. The Findings of The Research

The findings of the research were (1) the result of the writing test and (2) the result of the thinking styles

4.1.1. The Result of Writing Test

The test was administered to find students' achievement in writing. The result of the students' writing test of the tenth grade students of MAN 1 Palembang were their scores. The distribution of their writing achievement was presented in table 8 below

Table 8
The Distribution of Writing Achievement

No.	Interval	Category	Number of Students	Percentage
1.	8,6 - 10	Very Good	0	0%
2	8,5 – 7,1	Good	12	13,8%
3	7 – 5,6	Average	59	67,81%
4	5,5 – 4,6	Poor	13	14,94%

5	0 - 4,5	Very Poor	3	3,45%
Total			87	100%

In table 8, it was found that 0% of the student obtained very good score, 13,8% of the students obtained good score, 67,81% of the students obtained average score, 14,94% of the students obtained poor score, and 3,45% of the students obtained very poor score.

4.1.2 The Result of Thinking Styles Inventory (TSI)

Before administering the test, the students were asked to fill out thinking styles inventory. The thinking styles inventory was used to gain the information about students' thinking styles. The students were asked how well the statements on the thinking styles inventory described them.

It was revealed that from the questionnaire, 13 items of thinking styles were all perceived by the students with different numbers. The distribution of students' thinking styles were described in table 9.

Table 9

The Distribution of Students' Thinking Styles.

No.	Thinking Styles	Frequency	Percentage
1.	Legislative	25	28,73%

2.	Executive	23	26,43%
3.	Judicial	15	17,24%
4.	Global	9	10,34%
5.	Local	12	13,8%
6.	Liberal	9	10,34%
7	Conservative	12	13,3%
8	Hierarchical	14	16,1%
9	Monarchical	12	13,8%
10	Oligarchic	16	18,4%
11	Anarchic	9	10,34%
12	Internal	5	5,74%
13	External	10	11,5%
Total		171	196,06%

The result of students' thinking styles found that the frequency of legislative style was 25 students and the percentage was 28,73%. The frequency of executive style 23 students and the percentage was 26,43%. The frequency of judicial style was 15 students and the percentage was 17,24%. The frequency of global style was

9 students and the percentage was 10,34%. The frequency of local style was 12 students and the percentage was 13,8%. The frequency of liberal style was 9 students and the percentage was 10,34%. The frequency of conservative style was 12 students and the percentage was 13,3%. The frequency of hierarchical style was 14 students and the percentage was 16,1%. The frequency of monarchical style was 12 students and the percentage was 13,8%. The frequency of oligarchic style was 16 students and the percentage 18,4%. The frequency of anarchic style was 9 students and the percentage was 10,34%. The frequency of internal style was 5,74%. And the last for external style, the frequency was found 10 students and the percentage was 11,5%.

From explanation above, the researcher found that the highest frequency and percentage was legislative style, and for the lowest frequency and percentage was internal style. From the result of distribution of students' thinking style found that the students have more than one of thinking style.

4.2 The Statistical Analyses

In order to analyze the data collected, the researcher used Person Product Moment Correlation Coefficient. The calculation was done by Statistical Package for Social and Science (SPSS) Computer program version 16.

Table 10

The Descriptive Statistics of Thinking Styles and Writing Achievement

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
thinking style	87	204.00	421.00	3.1778E2	64.16049
writing achievement	87	3.50	8.25	6.3698	.84435
Valid N (listwise)	87				

The descriptive statistical analysis of thinking style inventory and writing achievement for the participants was shown above. It was found the total number of participants were 87 students. The maximum score of thinking styles was 421.00 and the maximum score of writing achievement was 8.25. The minimum score of writing achievement of thinking styles was 204.00 and the minimum score of writing achievement was 3.50. The mean score of thinking styles was 3.1778E2 and the mean score of writing achievement was 6.3698. Standard deviation of thinking styles was 64.16049 and standard deviation of writing achievement was .84435.

4.2.1 Normality Test and Linearity Test

Normality test and Linearity test were conducted prior to data analysis through SPSS 16 version for windows. As parametric statistics, in term of correlation and regression were used in this research, it was fundamental to see if the distribution of data were normal for each variable and linear between variable.

4.2.1.1 The Result of Normality Test

The data were interpreted normal if $p > 0.05$. if $p < 0.0$, it means the data were normal. Kolmogorov-smirnov was used to see the normality. The result of normality test were shown in table below indicated that the data from each variable

were all normal and appropriate for data analysis with coefficients .353 for thinking styles and .154 for writing achievement.

Table 11
Normality Test

One-Sample Kolmogorov-Smirnov Test

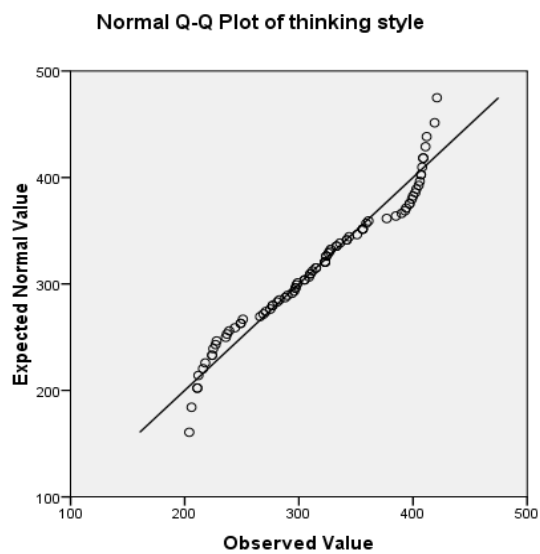
		thinking style	writing achievement
N		87	87
Normal Parameters ^a	Mean	317.7816	6.3698
	Std. Deviation	64.16049	.84435
Most Extreme Differences	Absolute	.100	.121
	Positive	.069	.070
	Negative	-.100	-.121
Kolmogorov-Smirnov Z		.930	1.133
Asymp. Sig. (2-tailed)		.353	.154

a. Test distribution is Normal.

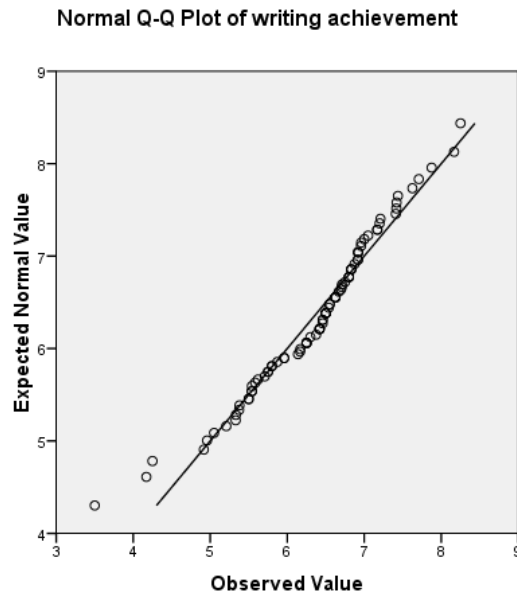
For the table of normality test above, it was found that the significant of normality test from students' thinking styles .353 and their writing achievement

was .154. From the scores, it could be stated that the obtained data were categorized normal since it is higher than .05. The normal Q-Q plot of each variable is illustrated in the following figures.

Figure 1. Distribution of Thinking Styles Data
Normal Q-Q Plot of Thinking Styles



**Figure 2. Distribution of Writing Achievement Data
Normal Q-Q Plot of Writing Achievement**



4.2.1.2 The Results of Linearity Test

For Linearity test, deviation of linearity was obtained. If probability is more than .05, the two variables were linear. The result analysis of linearity test between Thinking Styles Inventory and Writing Achievement were figured out in Table 11.

**Table 12
Linearity Test**

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
writing achievement * thinking style	Between Groups	(Combined) Linearity	52.827	66	.800	1.887	.057
		Deviation from Linearity	3.699	1	3.699	8.719	.008
			49.127	65	.756	1.781	.075
	Within Groups		8.486	20	.424		
	Total		61.312	86			

Based on measuring linearity test of thinking style inventory and writing achievement scores, they were found that the two variables were linear since it was higher than .05. The results showed that, the deviation from linearity between thinking styles and writing achievement was .075. To sum up all the data were linear for each correlation and regression.

4.2.2 Correlation between Students' Thinking Styles and Their Writing Achievement

This section answered the first research problem. By analyzing the result of descriptive statistics for thinking styles and writing achievement. Based on Pearson Product Moment Correlation Coefficient, the result indicated that there was a correlation between students thinking styles and their writing achievement. The result of Pearson Product Moment Correlation Coefficient was described in table 12.

Table 13
Correlation between Thinking Styles and Writing Achievement

Correlations

		thinking style	writing achievement
thinking style	Pearson Correlation	1	.246*
	Sig. (2-tailed)		.022
	N	87	87
writing achievement	Pearson Correlation	.246*	1
	Sig. (2-tailed)	.022	
	N	87	87

*. Correlation is significant at the 0.05 level (2-tailed).

From the result analysis above, the correlation coefficient or the r -obtained (.246) was higher than r -table (.208).then the level of probability (p) significance (sig.2tailed) was .022. It means that p (.022) was lower than .05. Thus, there was no significant correlation between students' thinking styles and writing achievement.

4.2.3 Influence of Students' Thinking Styles on Their Writing achievement

This section answered the second research problem. By analyzing the result of descriptive statistic for the thinking styles inventory and writing achievement.

In addition, there was a weak correlation between thinking styles and writing achievement but there was no significant. However, multiple regression analysis was still used to find out if students' thinking styles influence their writing achievement.

Table 14
The Regression Analysis of Students' Thinking Styles and Writing Achievement

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	5.343	.448	11.913	.000
	thinking style	.003	.001	.246	.022

a. Dependent Variable: writing achievement

From the above table in measuring regression analysis, regression analysis found that the significant score is .246. It can be stated that there was significant influence between students thinking styles on their writing achievement.

In addition, to know the percentage of thinking styles on writing achievement. R-square was obtained. R-square (R^2) was .060. It means that there was influence of students thinking styles on their writing achievement.

Table 15

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.246 ^a	.060	.049	.82329

a. Predictors: (Constant), thinking style

4.3 The Interpretation

In order to strengthen the value of this study the interpretation are made based on the result of data analysis. According to the findings, there was a significant correlation between thinking styles and writing achievement. Also, there was a significant influence of thinking styles on writing achievement.

Based on the result of person product moment correlations, it was found there was weak correlation and a significant correlation between thinking styles and writing achievement of the tenth grade students of MAN 1 Palembang ($r=.246$). It means that thinking styles had relation to their writing achievement.

The result of thinking style inventory found that the highest frequency and percentage students thinking style was legislative style, the frequency of students' legislative style was 25 and the percentage was 28,73%. And the lowest frequency and percentage students thinking style was internal style, the frequency of students internal style was 5 students and the percentage was 5,74%. It means that 28,73% students prefer the problems which require them to devise new strategies and create their own laws and they enjoy giving commands (Zhang, 2004). And 5,74% students prefer to work individually, they were introvert and tend to be lonely (Fouladi and Shahidi, 2016, p. 1730).

The result of students' writing achievement found that the dominant of category of writing achievement was average score (7-5,6), the frequency was 59 students, and the percentage was 67,81%.

Based on person product moment correlation coefficient, the result indicated that there was correlation between students thinking style and their writing achievement. The correlation coefficient .246 was higher than r -table .208. Then, sig. 2-tailed was .022, it means that .022 was lower than .05. It means that there was a weak correlation between students' thinking styles and their writing achievement but there was not significant.

Even though some statistically significant correlation were found between students' thinking styles and writing achievement, a further analysis using the stepwise procedure for the multiple regression analysis revealed that thinking styles given much contribution to students' writing achievement. Regression analysis found that the standardized coefficient score was .246. R-square (R^2) was .060 it means that there was influence students' thinking style and their writing achievement.

The implications of this study addresses the issues about teaching and learning in the classroom. One of Sternberg motives in proposing the theory of mental self-government was to provide a useful tool for teachers to enhance the effectiveness of teaching and learning process. In the context of teaching and learning Sternberg argued that it was important to allow for thinking styles. Therefore, the results of this study imply that it is imperative for teachers to design a learning context that allows students to use a variety of thinking styles, students regardless their preferred ways of thinking, could benefit from learning context. In addition allowing for different thinking styles does more than just facilitate students' intellectual development. It also helps to enhance students' development in interpersonal relationship. For example, a teacher may ask students with different dominant thinking styles to work cooperatively. Cooperatively learning provides students with the opportunity to learn from one another about more effective ways of dealing with problems (Saracho & Spodek, 1981, as cited in Zhang, 2001). In the meantime, cooperative learning also provides opportunities for students to learn how to tolerate one another's' difference, such as different values and different

ways of approaching a learning task. As the result, students will learn how to work with and deal with their peers.

The findings that thinking styles were related to writing achievement has influence for students. Research has indicated that learning in at least partially matched condition (teaching using instructional styles and materials structured to suit students' thinking styles and learning styles) is significantly superior that mismatched conditions (Grigoronko & Sternberg, 1997).

CHAPTER V

CONCLUSION AND SUGESSTIONS

This chapter Presents; (1) conclusion; and (2) suggestions.

5.1 Conclusion

From the findings and interpretations in the previous chapter, some conclusions could be presented. First, there was a correlation between two categories of the variables (.246) was higher than *r-table* (.208), meaning that students' thinking styles had a weak correlation with their writing achievement. Second, the regression analysis found that there was a significant influence of students' thinking styles and writing achievement with standardized coefficient score was .246 and R-square (R^2) was .060 of the tenth grade students of MAN 1 Palembang. This study had some pedagogical implications for foreign language teacher, students, and next researcher.

5.2 Suggestions

Based upon the result of this research, the researcher would like to offer some suggestions. First, since there was significant correlation between students' thinking style and their writing achievement, it is suggested that teachers need to focus on students' thinking style because thinking style has important role in writing achievement and. Due to this fact, since thinking styles contributed to the tenth grade students of MAN 1 Palembang for their writing achievement. Second, the researcher believed that besides thinking styles, there were still many unexplained factors that may have contribution to students' writing achievement,

such as the situation and condition of the students when they did the test, the good time for answering the test that may have influenced the results of this study due to strengthens of the researcher in conducting it. In addition, since the researcher's current study correlated Thinking Styles as a whole, it is expected that future researchers also correlate each types of thinking styles, to the other variable(s) to gain more understanding in relation to types of thinking styles giving more contribution to the other variable(s). Besides, since the researcher's current study only involves small number of sample (87 students), it is expected that future researchers will involve bigger number of sample in order to make the results more representative. More importantly, realizing the advantages of thinking styles theory and approaches teacher should still consider their existence in improving students' writing achievement.

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APPENDICES A

Name :

Class :

Thinking Styles Inventory

Instruction: To respond to this questionnaire, read each statement carefully and decide how well the statement fits the way that you typically do things at school, at home, or on a job. Give a check (✓) for scales that relevant to you if the statement does not fit you at all, that is you never do things this way. For each statement, give a check (✓) one statement fits you extremely well, that is you almost do things way.

1 = Not at all well
2 = Not very well
3 = Slightly well
4 = Somewhat well

5 = Well
6 = Very well
7 = Extremely well

No	Statements	1	2	3	4	5	6	7
1	I prefer to deal with problems that require me to attend to a lot of details							
2	When talking or writing about ideas, I prefer to focus on one idea at a time.							
3	When starting a task, I like to brainstorm ideas with friends or peers.							
4	I like to set priorities for the things I need to do before I start doing them.							

5	When faced with a problem, I use my own ideas and strategies to solve it.							
6	In discussing or writing on a topic, I think that the details and facts are more important than the overall picture.							
7	I tend to pay little attention to details.							
8	I like to figure out how to solve a problem following certain rules.							
9	I like to control all phases of a project, without having to consult with others.							
10	I like to play with my ideas and see how far they go.							
11	I am careful to use the proper method to solve any problem.							
12	I enjoy working on things that I can do by following directions.							
13	I stick to standard rules or ways of doing things.							
14	I like problems where I can try my own way of solving them.							
15	When trying to make a decision, I rely on my own judgment of the situation.							
16	I can switch from one task to another easily, because all tasks seem to me to be equally important.							

17	In a discussion or report, I like to combine my own ideas with those of others.							
18	I care more about the general effect than about the details of a task I have to do.							
19	When working on a task, I can see how the parts relate to the overall goal of the task.							
20	I like situations where I can compare and rate different ways of doing things.							
21	When working on a project, I tend to do all sorts of tasks regardless of their degree of relevance to the project undertaken.							
22	When I'm in charge of something, I like to follow methods and ideas used in the past.							
23	I like to check and rate opposing points of view or conflicting ideas.							
24	I prefer to work on projects that allow me to put in a lot of detailed facts.							
25	In dealing with difficulties, I have a good sense of how important each of them is and in what order to tackle them.							
26	I like situations where I can follow a set routine.							
27	When discussing or writing about a topic, I stick to the points of view accepted by my colleagues.							

28	I like tasks and problems that have fixed rules to follow in order to complete them.							
29	I prefer to work on a project or task that is acceptable to and approved by my peers.							
30	When there are several important things to do, I do those most important to me and to my colleagues.							
31	I like projects that have a clear structure and a set plan and goal.							
32	When working on a task, I like to start with my own ideas.							
33	When there are many things to do, I have a clear sense of the order in which to do them.							
34	I like to participate in activities where I can interact with others as a part of a team.							
35	I tend to tackle several problems at the same time because they are often equally urgent.							
36	When faced with a problem, I like to solve it in a traditional way.							
37	I like to work alone on a task or a problem.							
38	I tend to emphasize the general aspect of issues or the overall effect of a project.							

39	I like to follow definite rules or directions when solving a problem or doing a task.							
40	I tend to give equal attention to all of the tasks I am involved in.							
41	When working on a project, I like to share ideas and get input from other people.							
42	I like projects where I can study and rate different views or ideas.							
43	I tend to give full attention to one thing at a time.							
44	I like problems where I need to pay attention to details.							
45	I like to challenge old ideas or ways of doing things and to seek better ones.							
46	I like situations where I interact with others and everyone works together.							
47	I find that when I am engaged in one problem, another comes along that is just as important.							
48	I like working on projects that deal with general issues and not with nitty-gritty details.							
49	I like situations where I can use my own ideas and ways of doing things.							
50	If there are several important things to do, I focus on the one most							

	important to me and disregard the rest.							
51	I prefer tasks or problems where I can grade the designs or methods of others.							
52	When there are several important things to do, I pick the ones most important to my friends and colleagues.							
53	When faced with a problem, I prefer to try new strategies or methods to solve it.							
54	I like to concentrate on one task at a time.							
55	I like projects that I can complete independently.							
56	When starting something, I like to make a list of things to do and to order the things by importance.							
57	I enjoy work that involves analyzing, grading, or comparing things.							
58	I like to do things in new ways not used by others in the past.							
59	When I start a task or project, I focus on the parts most relevant to my peer group.							
60	I have to finish one project before starting another one.							
61	In talking or writing down ideas, I like to show the scope and context							

	of my ideas, that is, the general picture.							
62	I pay more attention to parts of a task than to its overall effect or significance.							
63	I prefer situations where I can carry out my own ideas, without relying on others.							
64	I like to change routines in order to improve the way tasks are done.							
65	I like to take old problems and find new methods to solve them.							

(Source: Sternberg, Wagner, Zhang 2007)