CHAPTER I

INTRODUCTION

In this chapter, the researcher describes the background of the research, research questions, research purposes, significances of research, rationale, research methodology, and data analysis.

1.1 Background

The aim of this research is to investigate the correlation between the students' metacognitive knowledge and their writing achievement. Writing plays an important role in an academic context (Anderson, 2002 as cited in Khaki, 2013). However, some students are incompetent in writing. EFL writers are often frustrated and overwhelmed by such problems as lacking appropriate English lexical expressions and struggling with mechanics, grammar, sentence structure, paragraph coherence, rhetorical patterns, revision at both higher and lower ends, and English writing conventions (Xiao, 2007). The students in writing below grade level need to be improved in writing achievement (Malaysian Examination Board Report, 2010). In Indonesia, the students are lack of their writing in terms of content, organization, and grammar (Budiyanti, 2014). Therefore, it can be inferred that the researcher finds out strategies to be able to cope with these problems.

Metacognition can help students in writing. Metacognition is one way to think in depth with focusing self in control and students' awareness (Russian et al., 1997 cited in Magogwe, 2013). Metacognitive strategy is a term used in information-processing theory to indicate an "executive" function and it refers to

the strategy that is used by students as the means to manage, monitor and evaluate their learning activities (Lv & Chen, 2010).

Based on the description above, the researcher conducted this research because problem in learning English is about the difficulties to write. In writing, students often find it hard even to write in academic writing. The students cannot write well if they do not have a good idea and strategy. This research is conducted to help the students to improve writing skill and develop their metacognitive knowledge.

As previous research, using the metacognitive strategy in writing will enhance students writing skill (Surat et al., 2014). This metacognitive strategy just has been implemented by a few researchers. The results showed that there was a positive effect of planning and monitoring skills as metacognitive strategies on Iranian intermediate EFL learners' argumentative writing (Panahandeh & Asl, 2014). Nevertheless, the researcher tries to do research with a different method, populations, and samples. Therefore, the aim of this research is to investigate **"THE CORRELATION BETWEEN THE STUDENTS' METACOGNITIVE KNOWLEDGE AND THEIR WRITING ACHIEVEMENT."**

1.2 Research Questions

In accordance with the previous information, a few problems emerged:

1. How is the students' metacognitive knowledge?
2. How is the students' writing achievement?
3. Is there any correlation between the students' metacognitive knowledge and their writing achievement?

1.3 Research Purposes

Based on the research questions, the purposes of this research are:

1. To identify the students' metacognitive knowledge.
2. To identify the students' writing achievement.
3. To examine the correlation between the students' metacognitive knowledge and their writing achievement.

1.4 Significances of Research

The theoretical significance of this research is to clarify and to add some theories of the previous research regarding metacognitive strategies using by students and can develop that strategies for writing skill. The researcher hopes this research will contribute for English educator in the future. Moreover, in term of practically, this research will be useful for the English educator in their practical study. And for the future researchers, they can learn this research and get motivation.

1.5 Rationale

Educational psychologists have long promoted the importance of metacognition for regulating and supporting students learning**.** Metacognition has been shown to improve academic achievement across a range of ages, cognitive abilities, and learning domains. This includes reading and text comprehension, writing, mathematics, reasoning and problem solving, and memory (Dignath & Büttner, 2008).

Metacognition allows people to take charge of their own learning. It involves awareness of how they learn, an evaluation of their learning needs, generating strategies to meet these needs and then implementing the strategies. (Hacker, 2009)

According to Flavel (1979) metacognition as knowledge that focuses on or regulates any part of the cognitive activity and identified two general dimensions of metacognition: knowledge and experience. Flavell (1985), metacognitive knowledge involves three distinct and highly interactive knowledge variables as following:

1. Person knowledge refers to recognise about strengths and weaknesses in learning and processing information.
2. Task knowledge refers to know or can figure out about the nature of the task and the processing demands required to complete the task.
3. Strategy knowledge refers to the strategies a person has "at the ready" to apply in a flexible way to successfully accomplish a task.

In this research, the researcher will try to investigate the correlation between students' metacognitive knowledge and their writing achievement.

"Writing is a process of synthesis. As you write, you used words and information to express your viewpoint in a coherent whole, an essay. But writing draws on intuition as well as reasoning, on sensation and emotion as well as fast and memory" (Fowler, 2001). Writing is an expression of ideas, thoughts, and stories on a piece of paper. For some people, writing might be hard even in their first language. It could be more difficult for them to write in the foreign language.

Writing achievement has five components (Harris, 1969), they are:

1. Content is the substance of the writing or the ideas expressed
2. Form is the organisation of the content
3. Grammar is the employment of grammatical forms and syntactic patterns
4. Style is the choice of structures and lexical items to give a particular tone or flavour to the writing
5. Mechanics is the use of graphic conventions of the language

Finally, to comprehend the rationale the researcher uses the scheme, as follows:

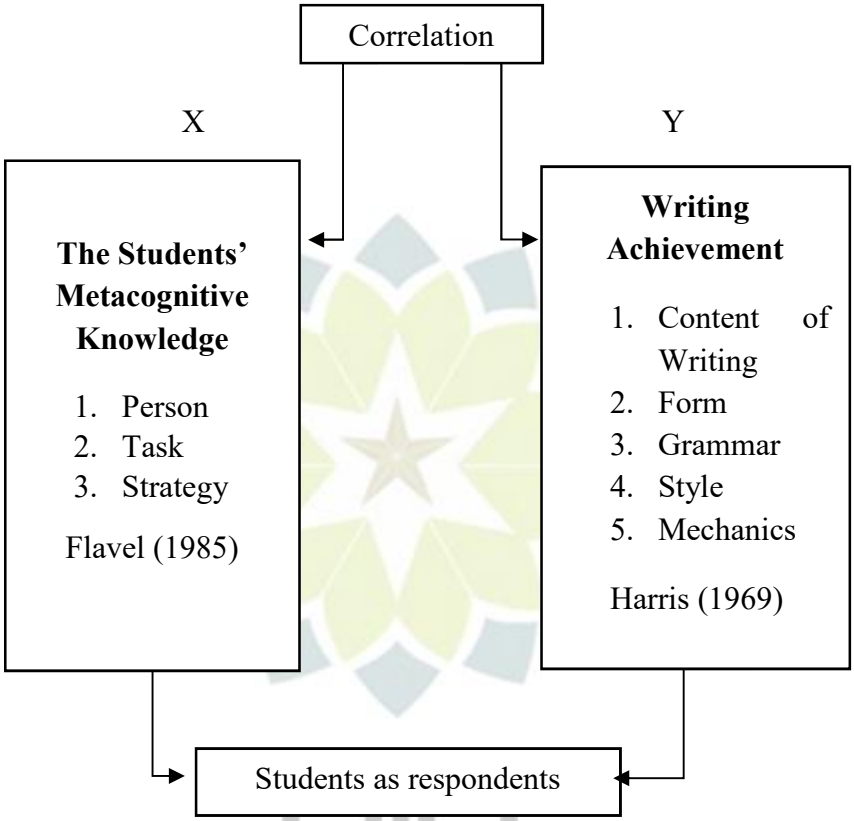

Figure 1.1 Frame of Research

Students' Metacognitive Knowledge and Their Writing Achievement

To find out the correlation between students' metacognitive knowledge and their writing achievement, the researcher investigates two variables, variables X and Y. Students' metacognitive knowledge is variable X as independent variable while, variable Y is students writing achievement as the dependent variable. Students' metacognitive knowledge is measured by questionnaires, and students writing achievement will be taken from the report of the students' writing III's score of English Education Department. The results of metacognitive knowledge

questionnaire are correlated with their score of Writing III subject. It means that variable X is correlated by variable Y.

1.6 Hypotheses

Hypotheses are statements in quantitative research in which the researcher makes a prediction or conjecture about the outcome of the relationship among attributes or characteristics (Creswell, 2012). It means in hypotheses, it predicts whether the research influences the outcome or not.

According to the explanation above, the hypotheses of this study are as follow:

1. H_0 accepted if t account < t table: it means that there is no significant correlation between the students' metacognitive knowledge and their writing achievement.

2. H_a accepted if t account > t table: it means that there is a significant correlation between the students' metacognitive knowledge and their writing achievement.

1.7 Research Methodology

1.7.1 Research Design

The researcher uses the quantitative approach in conducting this research. In correlational research designs, researcher uses the correlation statistical test to describe and measure the degree of association (or relationship) between two or more variables or sets of scores (Creswell, 2012). The researcher collects and analyses the data statistically from the students' scores of variables to find out the correlation between students' metacognitive knowledge and students' writing

achievement. This research is categorised into correlational research. Correlational research involves collecting data in order to determine whether, and to what degree, a relationship exists between two or more quantifiable variables (Gay, 1987). So that, the researcher correlates two variables of this research; they are metacognitive knowledge is X variable and writing achievement is Y variable.

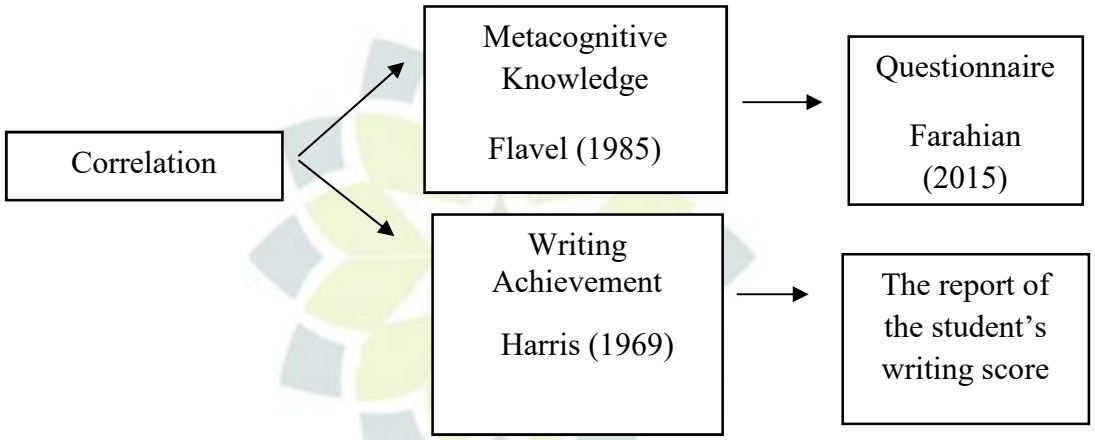

Figure 1.2 Research Design

1.7.2 Research Procedure

In this research, the researcher adopts the process of quantitative data collection by Creswell (2012). The process involving five steps:

1. Selecting subject for the research.

   For this research, the researcher takes the B class of sixth-semester students of English Education Department of UIN Sunan Gunung Djati Bandung.

2. Obtaining permission from important parties of the university.

   To obtain the permission the researcher conducts several steps are as follows:

   a. Asking permission to Dean of Tarbiyah and Teacher Training Faculty of UIN Sunan Gunung Djati Bandung.

b. Asking permission to the Chief English Education Department study.

3. Deciding what type of data needed to collect based on the research questions and hypothesis.

   The researcher requires seeking out the correlation between the students' metacognitive knowledge and their writing achievement, thus type of data collected are through questionnaire and the report analysis including students' writing score.

4. Locating, selecting and assessing the instrument

   To make sure the validity and reliability of the instrument, the researcher has observed several data needed regarding students writing achievement.

5. Collecting the data

   There are two steps of collecting data; giving the questionnaire to sixth-semester students and asking the data of the students' writing score to the writing lecturer.

1.7.3 Source of data

1.7.3.1 Research site

This research was conducted in State Islamic University of Sunan Gunung Djati Bandung that was located at Jl. A.H. Nasution No. 105 Bandung. The location was suitable to do this research based on problems, while problems are not examined yet by others.

1.7.3.2 Research subject

1. Population

A population is a group of individuals who have the same characteristic. The population that the researcher can identify and study is called as a target population (Creswell, 2012). The population of this research was the whole students of the sixth semester in English Education Department students of State Islamic University of Sunan Gunung Djati Bandung in the mastery of writing skill. The population was chosen for the following reason: firstly, the purpose of the research was to find out the correlation between the students' metacognitive knowledge and their writing achievement, and secondly, the sixth-semester students already had writing III. Whereas, the total numbers of them were 131 students. They were divided into three classes 6A, 6B, and 6C.

2. Sample

This research used the random sampling technique. A random sampling technique was a technique in selecting a sample in which each individual in the population has an equal probability of being selected (a systematic or probabilistic sample) (Creswell, 2009). Accordingly, by selecting randomly the subjects taken here was the B class of sixth-semester students of English Education Department of UIN Sunan Gunung Djati Bandung.

1.7.4 Research instruments

To collect the data the researcher usestwo different instruments. First is questionnaire metacognitive knowledge and the second isthe report of the students' writing score.

1.7.4.1 Questionnaire

The questionnaire was design to find out metacognitive knowledge score. This questionnaire consists of 24 close questions, it adopts the questionnaire used by Farahian (2015).

The questionnaire consists of three indicators. The indicators are taken from Flavel's (1985) theory of metacognitive knowledge, the indicators involves person knowledge, task knowledge, and strategy knowledge.

The table of the specification of the questionnaire are summarised below:

Table 1.1 Specification of Metacognitive Knowledge Questionnaire

No.	Metacognitive Knowledge Indicators	Item Number
1.	Person Knowledge	3,5,9,13,15,17,21,24
2.	Task Knowledge	2,7,10,12,14,18,20,22
3.	Strategy Knowledge	1,4,6,8,11,16,19,23
TOTAL		24

As all the metacognitive knowledge items are on a five-point Likert scale, with the options ranging from "strongly agree" to "strongly disagree", the options were given values from 5 to 1 accordingly. The criteria of metacognitive knowledge level are shown in the following Table 1.2.

Table 1.2 Grading Criteria of Metacognitive Knowledge Level

Metacognitive Knowledge Level	Mean	Option
High	4.5-5.0	Strongly agree
	3.5-4.4	Agree
Medium	2.5-3.4	Uncertain
Low	1.5-2.4	Disagree
	1.0-1.4	Strongly disagree

1.7.4.2 The report of the students' writing score

The report of the students' writing score was of Dra. Erni Haryanti, MA., Ph. D. The score from "Writing III" subject especially. The report of the students' writing score was secondary data, which has some advantages (Xaquin, 2014), they are:

a. The first advantages of using secondary data have always been the saving of time.
b. The second is easy to access the data.
c. The third is the saving money.
d. The forth is Feasibility of both longitudinal and international comparative studies.
e. The last is generating new insight from previous analyses.

Table 1.3 Instrument of Data Collection

No.	Variable	Indicators	No. Item	Source
1.	Independent variable (X): Metacognitive Knowledge	1. Person Knowledge	3,5,9,13,15,17,21,24	Students
		2. Task Knowledge	2,7,10,12,14,18,20, 22	
		3. Strategic Knowledge	1,4,6,8,11,16,19,23	
		Flavel (1985)		
2.	Dependent variable (Y): Writing Achievement	1. Content of Writing 2. Form 3. Grammar 4. Style 5. Mechanics Harris (1969)	The report of the students' writing score	Lecturer

1.7.5 Data analysis

The researcher used quantitative data. The analysis is aimed to answer the research questions variable X and variable Y separately, the steps are as follows:

1. Testing normality of two variables

   Normality test is one of the most common assumption made in the development and use of statisctical procedures (Thode, 2002:1).

   (a) Making list of frequency distribution

      1) Determining range (R), by using the formula:

         R=H-L+1

(The high score- the lowest score) (Sudjana, 2005, p. 91)

2) Determining interval class (K), by using the formula:

K=1+3.3 log n (Sudjana, 2005, p. 130)

3) Determining the length of class (P), by using the formula:

$P=\frac{R}{K}$ (Sudjana, 2005, p. 47)

a. Determining the central tendency central, by following formula:

1). Determining Modus (Mo), by the formula:

$Mo=b+p\ \frac{b1}{b1=b2}$ (Sudjana, 2002, p. 79)

2). Determining Median (Me), by formula:

$Me=b+p\frac{\frac{1}{2}n-f}{f}$ (Sudjana, 2002, p. 79)

3). Determining Mean, by the formula:

$X=\frac{\sum PiXi}{\sum Pi}$ (Sudjana, 2002, p. 67)

b. Determining the standard deviation (SD), by the formula:

$S=\sqrt{\frac{n\sum PiX2-(\sum PiXi)2}{n(n-1)}}$ (Sudjana, 2002, p. 95)

Counting Variants by the formula:

$KV=\frac{S}{X}$

c. Examining the distribution normality, by steps:

1). Making the table of observation frequency

2). Testing the distribution normality, by the formula:

$X^{2=}\sum\frac{(Oi-Ei)2}{Ei}$ (Sudjana, 2002, p. 73)

3). Finding out dk (derajatkebebasan), by the formula:

Dk=K-3

4). Determining table list with significance 5%

5). Examining normally, by criterion:

If x^2 count < x^2 table, distribution normal

If x^2 count > x^2 table, distribution abnormal

(b) Correlation Analysis

After normality test, using correlation product moment which developed by Carl Pearson. "Correlation product moment is used to show whether there is correlation between X variable and Y variable. The symbol of the correlation product moment is "r", by the formula:

$$r = \frac{n\sum XY - (\sum X)(\sum Y)}{\sqrt{[n\sum X^2 - (X)^2][n\sum Y^2 - (Y)^2]}}$$

Source : Wijaya (2012 :89)

r = correlation coefficient

N = Number of participants

X = Students' metacognitive scores

Y = Students' writing scores

ΣX = The sum scores of metacognitive X

ΣY = The sum scores of writing Y

ΣX2 = The sum of squared scores of metacognitive X

ΣY2 = The sum of squared scores of writing Y

ΣXY = The sum of multiplied score between X and Y

This formula is used in finding index correlation "r" product moment between X variable and Y variable (r_{xy}).

To know the significance between two variables, the formula of significance test is:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r2}}$$

t_{count}= t value

r = value of correlation coefficient

n = number of participants

2) Identification the degree of the coefficient, by criterion as follows:

0.00-0.20 : very low correlation

0.21-0.40 : low correlation

0.41-0.60 : average correlation

0.61-1.80 : high correlation

08.0-1.00 : very high correlation