

CHAPTER I

INTRODUCTION

In this chapter, the researcher presents about the beginning part of this thesis. It is concerned with background of the study, problems of the study, objective of the study, assumption, hypothesis, significance of the study, scope and limitation, and definition of keyterms.

A. Background of Study

English includes four basic skills. Those are speaking, reading, writing, and listening. Those skills are very important in our life, especially the speaking skill which plays a more important role than the other skills. People called mastering English if they are able to speak english fluently or they can communicate with other people as connect as they can. However, eventhough people are not able to write, to read and to listen, but if they are able to speak, it means that they are mastering English. Therefore, speaking can represent the other skills and it is considered as the soul of language.¹

Speaking is a complex skill requiring the simultaneous use of a number of different abilities which often develop at different rates.² Sanggam Siahaan states in his book that the spoken productive language skill is called speaking.³ To produce a spoken word, a person chooses a word from the mental dictionary first. The process is called speaking mechanism in Psycholinguistics. One of the factors

¹Ibrahim, *Improving Students: Speaking Ability By Using Video* (Universitas Kanjuruhan Malang, 2008), 27.

²David P Harris, *Testing English as A Second Language* (New York: McGraw-Hill Book Company, 1959), 81.

³Sanggam Siahan, *The English Paragraph*, 1st ed. (Yogyakarta: Graha Ilmu, 2008), 2.

people can speak English is there is no damage in their hemisphere as Paul Broca's experiment. That is why hemisphere can influence our speaking skill.

Almost all of us learn to speak and in fact speaking is so much part of daily life that we tend to take it for granted. Learning to speak involves developing a number of a complex skill and different types of knowledge about how and when to communicate.⁴ Speaking is about conversation between one people to other people to deliver message in their conversation. We always use speaking in our daily life to communicate each other and to convey ideas in our mind.

A research has determined that the human brain consists of two distinct organs rather than one namely left hemisphere and right hemisphere. Both hemisphere have simplification function called lateralization. Left hemisphere functions are logic, mathematics, science, and language while right hemisphere function is imagination, creative, music, and spatial awareness.⁵ Vocabulary possessed by a person comes from the cognitive structure in the left hemisphere of the brain. Additionally, speaking is also comes from the left hemisphere of the brain. As Paul Broca argued that our ability to speak is centered on the left hemisphere.⁶ Generally every one has a tendency to be dominant in one of the brain hemispheres itself. It could be right or left.

Students have a unique brain pattern that underlies their speaking ability. According to Chaer some people get less lateralization than others.⁷ It means that

⁴Anne Burns and Helen Joyce, *Focus on Speaking* (National Centre for English Language Teaching and Research, n.d.), 2.

⁵Bobbi Deporter, *Quantum Learning: Membiasakan Belajar Nyaman Dan Menyenangkan* (Bandung: Kaifa, 2008), 36.

⁶A Suherman, "PSIKOLINGUISTIK," n.d., 3.

⁷Abdul Chaer, *Psikolinguistik Kajian Teoritik* (Jakarta: Rineka Cipta, 2009), 132.

certain students speaking skill is controlled by their left hemisphere and others controlled by their right hemisphere. Hemisphere itself is part of brain that are separated by a groove, the medial longitudinal fissure. There are two types of hemisphere, those are left hemisphere and right hemisphere. Speaking skill or speaking ability tend to be more directed to the left hemisphere than right hemisphere. It because of the activity of the left hemisphere tend to language acquisition. And speaking skill also includes to the left hemisphere.

Human have dominant hemisphere. A professor of curriculum and learning in University Connecticut concluded that there are two possible brain dominations.⁸ Those are abstract and concrete perception and ability of nonlinear and linear arrangement. People who are included to sequential (linear) thinking have left hemisphere domination, while people with random order thinking are included dominantly right hemisphere. And most of people lean to one hemisphere than another. It is called hemisphere dominance.

The domination of the brain will lead someone skill based on the lateralization they have. For example, when people is dominantly left hemisphere they will easily to learn formula, language, mathematic. Wittrock stated in Margaret's journal that the left hemisphere specializes in sequential, linear, and analytical processing and is well adapted to learning and remembering verbal information. It is associated with reading, writing, speaking, understanding the spoken word, and calculations. While the right hemisphere processes information holistically, and focusses on simultaneous, spatial, intuitive operations, and

⁸Deporter, *Quantum Learning: Membiasakan Belajar Nyaman Dan Menyenangkan*, 12.

remembering in images. It is associated with visuo-spatial task such as visual pattern identification and imagery.

Then there are the language centres of the brain.⁹ The language centre is part of brain which is only used for the production and comprehend the grammar. These three centres are only found in the left hemisphere area and it is specialized for language. The three centres are Broca's area, Wernicke's area, and Angular Gyrus. The first centre is Broca's area. Its located at the base of motor cortex, this language centre appears to be responsible for organizing the articulatory patterns of language and directing the motor cortex when we want to talk. The second centre is Wernicke's area. Its located near the back section of the auditory cortex. This section of the brain is involved in the comprehension of words and the selection of words when producing sentences. The last centre is Angular Gyrus. It is a region of the brain in the parietal lobe. It is involved in a number of processed related to language, number processing and spatial cognition, memory retrieval, attention and theory of mind.

However, the students of TBI IAIN Madura is not gotten any test or interview to know whether they have dominance in left or right hemisphere. Whereas, according to the theory which researcher discussed above, it is important to know the hemisphere dominance in order to get better capability in their speaking especially in speaking English. Moreover, TBI IAIN Madura did not divide the class based on left and right hemisphere dominance. All students get similar lesson and lecturers use similar method to teach the students.

⁹Stefanie Jannedy, *Language File: Materials for an Introduction to Language and Linguistic* (USA: Ohio State University Press, 1994), 253.

Furthermore, researcher intends to conduct this study entitle the comparison between left hemisphere dominance students and their right one in speaking skill at the third semester of TBI IAIN Madura in order to find out whether left hemisphere and right hemisphere dominance get the same capability in speaking skill or not and to support teaching learning process in TBI department be better in managing the class based on left and right hemisphere dominances theory.

B. Problem of Study

According to Donald Ary research problem is some questions to be answered by research project.¹⁰ From that definition, researcher interprets that research problems are some questions that researcher makes about important subjects relates with the topic in the research.

Based on the background of the study that explained above, the researcher formulates a research problem as follow:

1. Do speaking skill of left hemisphere dominance students at the third semester of TBI IAIN Madura is better than the right one?
2. Is there any statistically significant difference between left hemisphere dominance students and the right one at the third semester of TBI IAIN Madura in speaking skill?

¹⁰Donald Ary et al., *Introduction to Research in Education*, 8th ed (Belmont, CA: Wadsworth, 2010), 44.

C. Objective of Study

Research objectives are statement that used to specifies goals that the investigator plans to achieve in a study.¹¹ From this definition the researcher defines that research objectives is the aims of the research that the researcher wants to reach in the process of conducting research.

From the definition above, the researcher formulates a research objective as follow:

1. To measure speaking skill comparison between left hemisphere dominance students and the right one at the third semester of TBI IAIN Madura.
2. To analyze statistically significant difference between left hemisphere dominance students and the right one at the third semester of TBI IAIN Madura.

D. Assumption of Study

Assumption underlies any statement that declares that under specific conditions certain event will occur.¹² In other definition, assumption is the basic belief of the researcher that relationship between two variables really exists and can be discovered.¹³

The researcher starts the assumption based on Paul Broca statement that our ability to speak is centered on the left hemisphere. The statement also related to more reliable theories which said that the language is especially closely related to the left hemisphere. Assumption of this research is “there is difference between

¹¹John W. Creswell, *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, 4th ed (Boston: Pearson, 2012), 111.

¹²Ary et al., *Introduction to Research in Education*, 12.

¹³Mohammad Adnan Latief, *Research Methods on Language Learning*, 2nd ed. (Malang: Universitas Negeri Malang, 2015), 52.

left hemisphere dominance students and the right one at the third semester of TBI IAIN Madura on their English speaking skill”.

E. Research Hypothesis

Hypothesis is statements in quantitative research in which the investigator makes a prediction or a conjecture about the outcome of a relationship among attributes or characteristics.¹⁴It is selected based on what the researcher believe after considering the theories. There are two types of hypothesis; the Null hypothesis (Ho) and the Alternative to the null hypothesis.¹⁵

a. Null hypothesis (Ho)

There is no difference between the left and right dominance hemisphere students in speaking skill at the third semester of TBI IAIN Madura.

b. Alternative hypothesis (Ha)

There is difference between the left and right dominance hemisphere students in speaking skill at the third semester of TBI IAIN Madura.

In this research the researcher uses alternative hypothesis which states “there is difference between left and right dominance hemisphere students in speaking skill at the third semester of TBI IAIN Madura”.

¹⁴Creswell, *Educational Research*, 111.

¹⁵Creswell, 126.

F. Significance of the Study

The significance of the study explains the benefit of the research theoretically and practically.¹⁶ This research is expected to have significances as follow:

1. Theoretical

This study will provides new data or information that brain dominance influence the student's achievement, specifically speaking skill. Furthermore, this study can be used as an alternative references for other researchers whom have the same focus.

2. Practical

a. For English Students

The English students will learn based on the left and right hemisphere dominance. It id expected to be a good graduation that have good English ability.

b. For English Lectures

The English lectures will teach their students based on the left and right hemisphere dominance. This theory will help lecturer to reach the students better and understand what the students need.

c. For The Researcher

This study will help the researcher to know the comparison of left and right hemisphere dominance students in speaking skill.

¹⁶*Pedoman Karya Tulis Ilmiah Sekolah Tinggi Agama Islam Negri Pamekasan, Revisi (Pamekasan: STAIN PMK Press, 2015), 28.*

G. Scope and Limitation of Study

Scope indicates the area or subject of study which will be researched by researcher. It is a range in which observation and discussion of objects are included in. Limitation is potential weakness or problem in quantitative research that is identified by researcher.¹⁷ It may be said that scope and limitation of a research help the researcher to do a specific research in a certain time, place, and population which there is the sample inside.

The scope of this research focuses on comparing between left and right hemisphere dominance students. And the limitation of this research is students' speaking skill at the third semester of TBI IAIN Madura.

H. Definition of Key Terms

Key term is a word which eases them, as to find the meaning of word in sentence. The terms that are needed to explain are terms that concerned with the main in thesis.¹⁸ It is needed to interpret and define the meaning of the some key terms to avoid some incorrect interpretation of the readers. In other word, key terms is provided to match the same understanding of research between the researcher and the readers.

The key terms of this study are briefly defined as follows:

1. Dominant hemisphere is part of brain which distinguish how some cognitive functions tend to be dominated by one side or the other.

¹⁷Creswell, *Educational Research*, 128.

¹⁸*Pedoman Karya Tulis Ilmiah Sekolah Tinggi Agama Islam Negeri Pamekasan*, 19.

2. Speaking skill is one of basic skills in learning English to convey information or expressing someone's thoughts and feeling in the form of spoken language.