

CHAPTER I

INTRODUCTION

This chapter is the introduction to the study. It discusses the background of the study, research question, aim, limitation, significance of the study, and the methodology applied in the present study. This chapter is expected to provide some highlights on the present study.

1.1. Background of the Study

Individuals with Down syndrome (hereafter DS) encounter problems in many aspects. One of which is in cognitive aspects. According to Abbeduto et al (2007), most individuals with DS merely have IQ between 30 and 70. In 1960s, having low number of IQ, individuals with DS were often considered moderately to severely retarded (Evans-Martin, 2009). This may mean that individuals with DS have cognitive deficit. Since language is a cognitive property of human (Carnie, 2006), cognitive deficit makes negative impact on language learning and language use (Abbeduto et al., 2007). Abbeduto et al. (2007) further explains that linguistic success is determined by cognitive abilities.

One of linguistic areas contributing to the linguistic failure of individuals with DS is syntax. The problems individuals with DS encounter have triggered linguists to conduct research on various problematic aspects of syntax. One of problematic syntactic aspects for individuals with DS that has caught linguists' attention is syntactic binding or also known as binding principles.

Binding principles or binding theory was proposed by Chomsky (1981). Binding principles consist of three principles, namely Principle A, Principle B, and Principle C. Binding Principle A governs the distribution and interpretation of reflexives; Principle B is concerned with pronouns; and Principle C is about referential expressions.

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Previous studies in regard to binding principles have revealed two trends. First, it is known as Delay of Principle B Effect (DPBE) and second is non DPBE (delay is found in Principle A).

DPBE is observed when the subjects have delay in understanding or acquiring pronouns (Principle B) and they do not have delay or difficulty in understanding reflexives (Principle A). Jakubowicz (1984) confirms that DPBE is found in typically developing children. His finding shows that the subjects initially miscategorize pronouns and interpret them as reflexive.

Chien & Wexler (1990) in their article entitled “*Children’s Knowledge of Locality Conditions in Binding as Evidence for the Modularity of Syntax and Pragmatics*” also find that children have delay in pronoun acquisition but they do not find difficulties in comprehending reflexives. However, Chien & Wexler (1998) propose a hypothesis that the reason why the children have delay in comprehending pronoun is because they have yet to acquire pragmatic principles not the Binding Principle B (Principle P).

The second trend reported in the previous study is the presence of delay in Principle A. With regard to this second phenomenon, Ring and Clahsen (2005) conducted a study on DPBE. They intend to seek a distinct pattern that occurs in individuals with DS and William’s syndrome by examining subjects’ comprehension of passive sentences and binding principle. They find that individuals with DS have some difficulties in both comprehending passive sentences and binding principle, specifically in comprehending the reflexive pronoun (Principle A) (Ring & Clahsen, 2005). In short, subjects in Ring & Clahsen (2005) do not observe the Delay of Principle B Effect in their subjects.

Another study that does not reveal the presence of DPBE is conducted by Perovic (2001). Unlike Ring and Clahsen (2005), Perovic (2001) merely focuses on the binding principle. By applying the Picture truth value judgment task adapted from Chien and Wexler (1990) and using four adolescent girls with DS

between 17 and 21 years of age, she found that the subjects do not observe delay in Principle B, instead, they observe delay in Principle A.

Those previous studies indicate that individuals with DS may and may not have a delay in Principle B acquisition or DPBE. The present study is intended to observe the binding principles in Bahasa Indonesia used and learned by individuals with DS. The present study uses three individual with DS and three typically developing children. Picture judgment value task adapted from Chien and Wexler (1990) is applied in this study. By leaning on that fact, this study is conducted in order to confirm whether the individuals with DS violate Principle B and obey Principle A (DPBE) or vice versa. This study is also conducted with the purpose of adding some more literature in respect to the language phenomenon of individuals with DS. Also, the small number of study on Bahasa Indonesia regarding individual with DS motivates the study in order to make contribution in gaining knowledge into how individuals with DS use and learn Bahasa Indonesia.

1.2. Research Question

The present study is carried out in order to discover the answer to the following question: how do individuals with DS observe the binding principles?

1.3. Aim of the Study

The study's objective is to ascertain how individuals with DS observe the binding principles in Bahasa Indonesia; that is, whether they obey Principle A and violate Principle B or vice versa. Other objective of the study is to help researchers, and people to comprehend the language of individuals with DS. In addition, this study is intended to provide insight into how individuals with DS communicate.

1.4. Limitation of the Study

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This study focuses on the reflexive and non-reflexive pronoun in Bahasa Indonesia of individuals with DS. The area of the present study is syntax, specifically binding principles. Pragmatic, semantic and other linguistic area are not included into the present study discussion. Picture judgment value task adapted from Chien & Wexler (1990) is the method applied in this study.

1.5. Significance of the Study

Since the study on Bahasa Indonesia of individuals with Down's syndrome is still small in number, this study is expected to be a reliable literature for other researchers in conducting similar study and for everyone who wants to understand further how individuals with DS communicate in Bahasa Indonesia.

This study is also expected to provide insight into how Bahasa Indonesia is used and learned among the individuals with DS, specifically how they comprehend and use reflexive and non-reflexive pronoun in their communication. In addition, to a wider area, this study is also expected to contribute to the discussion of the innateness of binding theory which is currently topic to debate among linguists.

1.6. Methodology

1.6.1. Participants

The study will use six participants consist of three individuals with DS at a SLB-C in Bandung and three typically developing children at SD Labschool UPI. The age of the individual of the DS is between 20-30 years old. Meanwhile the age of typically developing children is ten years old.

1.6.2. Data Collection

The data for the study will be collected by using sentence-picture judgment task picture judgment value task adapted from Chien & Wexler (1990). Sixteen pictures will be used to collect the data from the subjects by asking them a yes-no question for each picture, for example “The *Bear is pinching himself*”. Each

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picture contains two characters representing the sentence contains reflexive or non-reflexive pronoun i.e. a picture of a bear and Hansel which represent the sentence “*The Bear pinches himself*” or “*The Bear pinches him*”. In quantifier experiments, three to four characters are depicted. Before each picture is presented to the subject, an introductory sentence will be read for them: “*This is The Bear and this is Hansel*”.

1.6.3. Data Analysis

After collecting data, the data will be then analyzed in order to discover the tendency whether the participants have problems in Principle B or vice versa. The conclusion of the data is expected to be obtained by paying attention to number presented after the data is processed. The number of each participant’s score is also compared to each other in both the same and different conditions. By doing so, it is expected that some patterns would emerge indicating whether the subjects, especially the children with DS, have delay in either binding Principle A or in Principle B.

1.7. Organization of the Paper

This paper is divided into five chapters. Each chapter consists of subchapters that elaborate the content of the chapter.

The first chapter is the introductory part of the paper. It consists of background of the study, research question, aim, limitation and significance of the study, methodology and the organization of the paper.

Chapter two, which is entitled Literature Review, discusses the theoretical foundation of the present study. In this chapter, the theories of Down’s syndrome, Binding Principles and the previous studies related to the present study are explained.

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Research Methodology is the title of the third chapter. This chapter provides some explanations on methodology in conducting the present study. Subjects of the present study, research questions, research design, key terms clarification, data collection, and data analysis are explained in this chapter.

Chapter four, Finding and Discussion, explains the data and its analysis. Furthermore, in this chapter, the interpretation of the data analysis will be discussed. The answer of the research question is discussed in this chapter as well. Chapter four also discusses the result of the study and how it either differs from or is similar to the previous studies.

Conclusion and Suggestion is the last chapter of the paper. This chapter concludes the present study which consists of the summary of the answer to the research question, and result of the present study. Some suggestions for future study which can be drawn from the present study is provided in this chapter as well.

1.8. Clarification of the Key Terms

The present study contains some specific terminologies. To clarify these terminologies, this section provides a brief explanation on such terms

a. Typically Developing Children

This is a term referring to children who develop normally (normal children).

b. Binding Principles

Binding Principles consist of Principle A, which deals with reflexive, Principle B, which deals with Pronoun and Principle C which is about R-expressions (Chomsky, 1981).

c. Down syndrome

Down syndrome is a kind of mental retardation that is caused by an extra 21st chromosome. The development of individuals with DS is mostly delayed.

d. Delay of Principle B Effect

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This is a phenomenon first found by Chien & Wexler (1998). The Principle B acquisition is slower than Principle A acquisition.

e. Delay of Principle A Effect

This delay is the opposite of the DPBE. It was first found by Perovic (2001). In this case, the Principle A is the one that suffers delay.