

## CHAPTER III

### METHODOLOGY

This chapter presents the methodology to investigate children's syntactic awareness at two kindergartens in Bandung. The chapter is subdivided into research design; participants; data collection consisting instruments, materials, and procedure; data analysis; and concluding remarks.

#### 3.1 Research Design

The present study employed a quantitative descriptive in collecting and analyzing the data. As Cresswell (2003) mentions that a quantitative approach employs strategies of inquiry such as experiments and surveys, and collects data on instruments that yield statistical data. The objective of quantitative research is to develop and employ mathematical models, theories and hypotheses pertaining to natural phenomena (Cohen, Wiley, Capuano, Baker, & Shapiro, 2004). Therefore, measuring is a key in quantitative research because it shows the relationship between data and observation. Meanwhile, descriptive method helps the writer to provide description of reality as objective as possible (Lans & Van der Voordt, 2002). Additionally, William (2007, as cited in Nurdiansyah, 2016) mentions that descriptive approach is also aimed to identify the relation between attributes and variables on the phenomenon in question without manipulating the samples. Therefore, quantitative descriptive approach is relevant because the present study is aimed at providing empirical description of syntactic awareness of Indonesian children aged 5 to 6 in a single period of time. The observation in this research is specified into the ability to identify and correct word order tasks, specifically in active and passive sentence tasks. To generate meaning, the collected data are calculated using statistical descriptive calculation.

After the data has been calculated, then the next step is to conducted descriptive statistics. Descriptive statistics is a way to summarizing a set of

quantitative (numerical) information (Nicholas, 1990). In descriptive statistics, statements are only made based on the data from which they calculate. In other words, even though a sample is always taken from a population, and even though the long-term goal is usually to make a statement about a population, descriptive statistics only make statements about the sample. Therefore, to get the descriptive data, this study makes statements based on simple percentage and the charts that listed on chapter 4.

### **3.2 Participants**

The present study was conducted at two kindergartens located in Bandung. The total numbers of students were forty-two students. The two kindergartens were selected based on activities that are implemented by the teachers in the classroom. The teachers at kindergarten A do not teach the students how to read and write (Non - Calistung). Meanwhile, the teachers at kindergarten B teach the students how to read, write and even count numbers (Calistung). These students are five and six years old, and most of them are able to read and some others are not: however, most of them could not read. They were chosen because the requirement of the researcher to find out syntactic awareness in kindergarten students. As Tsang and Stokes (2001, cited in Komara, 2016, p. 11), mentions that age of five is a phase in which a syntactic awareness of the children appears. The task that was given to the children consisted of pictures and jumbled sentences. All the pictures were based on cartoon for children.

### **3.3 Data Collection**

The data were collected using instrument to meet the purpose of the study. In this study, there were three ways of collecting the data: the assessment test of syntactic awareness, the parents' questionnaire, and the parents' interview.

### 3.3.1 Instruments and Materials

#### 3.3.1.1 The Assessment Test of Syntactic Awareness

The assessment test of syntactic awareness was conducted to measure students' awareness in English structure. However, the present study covered children's syntactic awareness in Indonesian structure. The assessment test covered two main principles of syntactic abilities: identification and correction (Komara, 2016). Those identification and correction are important assessments in the study. As for the tests, the writer constructed 24 sentences (12 active sentences, and 12 passive ones) and all are in the form of simple Subject – Verb – Object sentences (e.g., *Ibu membeli baju*) to investigate the students' identification and correction skill. Since syntactic awareness has been used in word order correction tasks, the present study also assesses children by letting them hear scrambled sentences and ask them to repeat the sentences by putting the words into the right order (Tunmer, 1987). Therefore, the study used word order tasks to examine syntactic awareness in Indonesian children aged 5 to 6. The tests are inspired by Nation & Snowling (2000) study who examined children's syntactic awareness in English structure of active and passive sentences. Before designing the instrument, the writer defined the indicators which represent syntactic awareness.

**Table 3.1** Aspect of Syntactic Awareness Tests

<i>Variable</i>	<i>Aspect</i>	<i>Indicators</i>	<i>Sub-indicators</i>
Syntactic awareness	Active	1. Children are able to identify wrong sentences in active and passive forms.	Children are able to arrange jumbled sentences in active and passive forms.
	Passive sentences	2. Children are able to correct wrong sentences in active and passive forms.	

In syntactic awareness tests, there are two aspects that are assessed: active and passive sentence (see Table 3.1). Each of the aspects consisted of two assessments' criteria: the ability of the children in identifying the wrong sentences the ability of the children in correcting the wrong sentences into a good one. The instrument of this research consisted of visual only, and the writer used two media: pictures and flashcards. Each picture consisted of cartoon that performing an activity, and then the flashcards were used to arrange jumbled sentence to show the children separate words based on the pictures. A detailed indicator and test items can be seen in the table below:

**Table 3.2** Detailed indicators and test items

<i>Variable</i>	<i>Indicator</i>	<i>Sub-indicator</i>	<i>Test Items (example)</i>
Syntactic Awareness: Active and Passive sentences	Children are able to correct and identify wrong sentences in the form of active and passive sentences.	Children are able to arrange jumbled sentences in active forms	<ul style="list-style-type: none"> <li>a. Memakan Pisang Monyet</li> <li>b. Pisang Monyet Memakan</li> <li>c. Memakan Monyet Pisang</li> <li>d. Pisang Memakan Monyet</li> <li>e. Monyet Pisang Memakan</li> </ul>
		Children are able to arrange jumbled sentences in passive forms.	<ul style="list-style-type: none"> <li>a. Buaya Dibaca Buku</li> <li>b. Dibaca Buaya Buku</li> <li>c. Buaya Buku Dibaca</li> <li>d. Buku Buaya Dibaca</li> <li>e. Dibaca Buku Buaya</li> </ul>

On the test items (see Table 3.2), the writer constructed five possible jumbled sentences. These sentences are required to assess Identification skill. If the students noticed wrong sentences, then the writer asked them to correct it. McNeill (1970, cited in Otto, 2005), mentions that children in early childhood are able to compile sentence with less difficulties. Therefore, all sentences are simple S-V-O pattern, so that both active and passive sentences were three words long. The visual task was to assess children's ability to produce verbal utterances related to the picture. The students were scored as correct whenever he/she successfully corrected the scrambled sentences spoken by the writer. Since most of the children could not read, the pictures help the students in arranging jumbled sentences. In other words, the pictures are used only as stimulus for children. The example of the instrument can be seen in the figure below.



**Figure 3.1.** The example of pictures for active sentence



**Figure 3.2.** The example of flashcards for active sentence

### 3.3.1.2 Questionnaire

The questionnaire was given to the students' parents. The questionnaire was closed-ended and open-ended questions. Closed-ended questions were frequently used so

that the parents only put a check in one of the boxes in each statement. Meanwhile, open-ended questions were used when the questionnaire needed a further explanation that was beyond researcher's knowledge. The materials were adapted from Language, Social and Background Questionnaire (LSBQ) (cited in Luk & Bialystok, 2013 and putri, 2017). The questionnaire consisted of three parts; the information of parents and the child in general, family's background and language impairments. The materials are elaborated below.

**Table 3.3.** Manual Parent's Questionnaire

The information of parents and the child in general
<ul style="list-style-type: none"> <li>a. Name of the parents</li> <li>b. Name of the child</li> <li>c. Age of the child</li> <li>d. Gender's information of the child</li> <li>e. Birth order of the child</li> </ul>
Family's Background
<ul style="list-style-type: none"> <li>a. The age of the parents</li> <li>b. The latest educational background of the parents</li> <li>c. The socioeconomic status of the parents</li> <li>d. Parents' Job</li> <li>e. The number people in the family</li> <li>f. The number of children in the family</li> <li>g. Linguistic backgrounds in the family</li> </ul>
Language Impairments
Information about the child:
<ul style="list-style-type: none"> <li>a. Hearing</li> <li>b. The clarity of speech</li> </ul>

### 3.3.1.3 Interview

The interview was conducted to the parents in open-ended questions. The interview aimed to validate the questionnaire that had been filled by parents. The materials were adapted from Hoff (2016) about Social Variables and some references were from Putri (2016). Furthermore, the researcher inserted some materials that were relevant and necessary to elaborate this study. The interview consisted of four parts: parents' socioeconomic status, linguistic background, and home literacy environment. The materials are elaborated below:

**Table 3.4.** Manual Parent’s Interview

Parents’ Socioeconomic Status
a. Parents’ Monthly Income
b. The latest educational background of the parents
Linguistic Background
a. Children’s Reading Ability
b. Children’s Language use at their environments
Home Literacy Environment
a. The amount of time to the use of gadget.
b. The amount of time to do those activities
c. The quantity of children’s directed-speech
d. Activities to improve language development and syntactic awareness
e. Favorite books and also the language
f. The use of gadgets; whether they have language’s applications for children.

### 3.3.2 Research Procedure

There were three stages of collecting the data: administrating the assessment test, distributing parents’ questionnaire, and conducting parents’ interview. After all the steps were done, the collected data were analyzed and described for further explanation.

#### 3.3.2.1 Administering the Assessment’s Tests

The assessment test was administered to find out students’ syntactic awareness in Indonesian Language. The students were asked to answer the assessment test that was given by the writer. However, before administering the test, the writer did a pilot test to ten children aged 5-6. The purpose was to find out whether the instrument worked out or needed revisions. Then, after pilot test was conducted, the writer

attempted to find out the reliability of the test by using *Anates*. Reliability concerns the extent to which any measuring procedure yields the same results on repeated trials (Whichards, 2006). The more consistent the results achieved by the same children in the same measurements, the higher the reliability of the measuring procedure; conversely the less consistent the results, the lower the reliability. After that, the writer started the test at two kindergartens that has been selected.

The two kindergartens were selected based on activities that are applied by the teachers in the classroom. The teachers on Kindergarten A do not teach the students how to read and write (Non - Calistung). Meanwhile, the teachers at Kindergarten B teach the students how to read, write and even count numbers (Calistung). During the test, students came to the class in turn and individually. The teacher gave the writer a room for the test, and the test lasted for about a month. Before starting the test, the writer made the students comfortable, such as asked them how old they were, and then following their conversation. When the test began, the writer gave instructions in Indonesian language so that they could follow the test well. Then, the students were first asked what characters on the pictures and also what the characters did. It was the stimulus that would raise the students' knowledge of the characters in the pictures and to make sure whether the students really knew what the characters were doing in the pictures. The writer gave jumbled sentences that were provided on flashcards. Then, the writer read the jumbled sentence and asked whether it sounded '*enak*' (good) or '*gak enak*' (not good). When the children said '*enak*', the writer gave the next pictures and sentences. However, when the student said '*gak enak*' (not good), the writer asked the student to correct the sentence on flashcards. Then, after the test finished, the writer proceeded to the test results by checking the children who had highest and lowest scores. Example of the right sentences can be seen in the following table:



No	Active Sentences	Passive Sentences
1	Monyet Memakan Pisang	Wortel Dimakan Kelinci
2	Kakak Menyiram Bunga	Air Diminum Jerapah
3	Anjing Menggigit Pak Pos	Jari Digigit Spongebob
4	Ibu Menyetrika Baju	Baju Disetrika Ibu
5	Bayi Meminum Susu	Tikus Dikejar Kucing

**Table 3.5** Samples of active and passive sentences

### 3.3.2.2 Distributing the Questionnaire

The questionnaire was given after the assessment test was done in the classroom. Then, based on the test's result, the writer chose three students in each kindergarten with highest and lowest score. Those students were selected to find out what social features could be seen between high performing students and low performing students. The questionnaire was written in Indonesian language, so that the parents could understand each statement well. The questionnaire had three main parts of information and the parents were asked to put a check in one of the boxes according to their opinion of each statement.

### 3.3.2.3. Conducting the Interview

The interview was conducted to validate the questionnaire and to find out children's home literacy. The interview was given after the parents filled the questionnaire. The interview was asked in Indonesian language, so the parents could understand each question well. The interview consisted of three main parts of information.

## 3.4 Data Analysis

After gathering the data, all data were processed quantitatively and presented in the form of charts to give descriptive quantitative results on the score of each tests. Then, the writer handed questionnaire and interviewed the parents. Not only qualitative, interviews can also be conducted for quantitative approach (Blackstone, 2012).

This study consisted of two section tasks, the first was assessing active sentences and the second was assessing passive sentences. Both active and passive

sentences composed of two assessments; identification and correction. The study employed calculation of mean, standard deviation, and percentage for analyzing the collected data. Mean was employed to calculate the overall score of the children participated in the study as well as generating the meaning of the average performance of the children. Standard deviation was calculated to observe the variation of the scores of the children. Calculation of percentage was employed to discover the highest and the lowest test item answered by the children. Then, the questionnaire and interview were presented in form of descriptive explanation to fulfill the data.

### **3.5 Concluding Remarks**

This chapter has covered the overall research methodology of the present research. The research design, data collection, the participants, the instrument, and the data analysis process are described respectively. The following chapter will provide the detailed findings of the study.