## CHAPTER IV

## FINDINGS AND DISCUSSIONS

This chapter presents the results of the study and answer the research question stated in chapter one. This chapter is divided into two parts: description of the data and findings and discussion. The explanation of each part was presented below:

### 4.1 Description of the Data

This study was to discover the syntactic knowledge of senior high school teachers of English in Jakarta. The data gathered in this study were analyzed, interpreted, and discussed after collecting the data was done. The result of the test will represent how syntactic knowledge of senior high school teachers of English in Jakarta was.

The data was the syntactic knowledge of the teachers which is having given the test and interview. There were 45 numbers of the test. The test was divided into three parts; grammaticality judgment, phrase structure rules, and structural ambiguity. Grammaticality judgment (GJ) consisted of twenty numbers, phrase structure rules (PSR) consisted of fifteen numbers, and structural ambiguity (SA) consisted of ten numbers.

The rank of syntactic knowledge which was achieved by the teachers of English presented into table and pie chart. The result of each sub-question is showed by pie chart. In analyzing the finding of the teachers' rank which indicates
the teachers' syntactic knowledge, this study used a colored (blue, red, and green) pie chart. The blue color represented fair category, red color represented good category, and green color represented excellent category.

For the result of each sub-question, this study used a colored (purple, green, and blue) pie chart to show the percentage of the correct answer. The purple color represented of grammaticality knowledge, green color represented of phrase structure rules knowledge, and blue color represented of structural ambiguity knowledge. The interview was used to support the main data.

### 4.2 Findings and Discussion

This part explained and presented the finding of the study based on the teachers' answer from the test. All of the data was completely shown with the frequency, percentage, and the chart.

### 4.2.1 Syntactic knowledge

Based on the analysis of 20 teacher's test result, it showed that syntactic knowledge of Senior High School Teachers of English in Jakarta varied. The researcher found that their score were between 48 as the lowest and 91 as the highest and almost teachers' score were achieve between 70 89. The table below was explained briefly.

Table 4.1 Teachers' Syntactic Knowledge

| Rank | Scores | Frequency | Percentage |
| :---: | :---: | :---: | :---: |
| Fair | $40-69$ | 4 | $20 \%$ |
| Good | $70-89$ | 15 | $75 \%$ |
| Excellent | $90-100$ | 1 | $5 \%$ |

From the table 4.1, it can be seen that there were four teachers had achieved score in the range on 40 to 69 , fifteen teachers in the range on 70 to 89 , while on the 90 to 100 score range was only one teacher. The chart below discussed information of the percentage of teachers' syntactic knowledge.

Figure 1. Percentage of Teachers' Syntactic Knowledge


Based on the figure 1, there was one teacher or $5 \%$ teachers of English represented that their syntactic knowledge was excellent. The teacher correctly answered more than forty numbers. There was $20 \%$ or four teachers of English represented that their syntactic knowledge was fair. They correctly answered 22 to 31 numbers. There was $75 \%$ or fifteen teachers of English represented that their syntactic knowledge was good. They correctly answered 32 to 40 numbers.

By using the formula which calculates the overall total correct items divided with the total of test items, the researcher found the teachers of English in Jakarta acquired score of 77 on average (see appendix 5). Based on the scale above, it could be concluded that senior high school teachers of

English in Jakarta had good knowledge of syntax; grammaticality knowledge, phrase structure rules knowledge, and structural ambiguity knowledge.

Based on the interview, teachers of English said that they had learned linguistics including Syntax when they were in college. Their teaching experiences also contributed in possessing their syntactic knowledge.
"...... Guru sebagai pemimpin dalam kelas harus mengetahui syntactic knowledge itu sendiri yang sudah saya pelajari sewaktu saya kuliah dahulu". "....... Linguistik itu sangat penting dimiliki seorang guru karena itu juga salah satu kemampuan guru dalam mengajar siswa."

It might be concluded that the teachers of English had learned linguistics study including syntax area in their previous formal study in college helped them with good background knowledge of syntax.

### 4.2.1.1 Grammaticality Knowledge

The chart below answered and discussed the sub question "How is the grammaticality knowledge of senior high school teachers of English?".

Figure 2. Percentage of Correct Answer of GJ Test


In Grammaticality Judgment test, the teacher was presented with both grammatical and ungrammatical sentences. $\mathrm{He} /$ she was required to indicate which grammatical and ungrammatical sentences are. Teachers' score were calculated based the total correct judgments. The pie chart above showed that there was $80 \%$, more than a half total numbers, correctly answered by the teachers. It means that there were 322 numbers correctly answered from 400 total numbers. There were $20 \%$ or 78 numbers wrong answer.

The most common mistakes were found in number four, five, seven, twelve, seventeen, and twenty in which the sentence was similar type. The answers were incorrect sentence, except number twelve. As the research interpretation, it might be occurred because of the teachers of English lack of ditransitive verbs $\left(\mathrm{V}_{\mathrm{dt}}\right)$ and intransitive verbs $(\mathrm{Vt})$.

Ditransitive verbs took two objects or two noun phrases, both direct object and indirect object. On the other hand, transitive verbs took only one object (Brinton, 2000). For example the sentences number twelve, she pronounced me the difficult word, this sentence seems incorrect sentences but the structure showed that it was grammatical. The verb was a ditransitive verb: pronounced, the subject was the person doing the action of pronounced: she, to whom the action of the verb was performed: me and a direct receiver of the action of pronounced: the difficult word. The sentence had subject, verb, and two objects so that the sentence was not ill formed or ungrammatical sentence. There were $40 \%$ or eight teachers of English wrong answer for this number.

Another mistake was found in sentence number four, "She reviewed Mary the sentences". There were $55 \%$ or eleven teachers of English answered correct sentence. The verb was a transitive verb: reviewed, the subject was the person doing the action of reviewed: she, and two objects were Mary as indirect object and the sentences as direct object. The sentence had subject, verb, and two objects but it was not grammatical sentence or incorrect sentence. The verb was a transitive verb
where the object or noun phrase was only one. Whereas, the rule of verb phrase for English sentences can be stated as: a transitive verb followed by a noun phrase $\left(\mathrm{VP} \rightarrow \mathrm{V}_{\mathrm{t}} \mathrm{NP}\right)$ and also can be a ditransitive verb followed by a noun phrase followed by a noun phrase ( $\mathrm{VP} \rightarrow \mathrm{V}_{\mathrm{dt}} \mathrm{NP}$ NP). It might be concluded that the sentence number four is ungrammatical or incorrect sentence.

The most common mistakes were found in number twenty. There were $65 \%$ or thirteen teachers of English wrong answer in this number. Another common mistake was found in number seven. There was $60 \%$ wrong answer in this number. Those sentences were similar type with the number four.

Based on the interview, the teachers of English were still confused of the sentence which is correctly in grammar but incorrectly in sense or meaning so that some of the teachers responded that the sentence is incorrect. Some teachers responded that the sentence was ungrammatical because of did not appropriate with the rule of grammar and did not have sense or meaning. "...grammar secara benar berarti dia mengikuti aturan ada subject nya, verb nya, object nya gitu. Jadi aturannya benar, trus ada meaningnya juga, "..... Ungrammatical jika sudah sesuai structure tapi gak ada meaningnya, itu dikategorikan sebagai ungrammatical".

According to Fromkin et al., (2003) grammaticality and sense or meaning could be independent of one another. If the sentence was grammatical but the meaning was not comprehensible, the sentence should
be grammatical. Although some teachers had problems about that, they could answer more than half total numbers correctly. It might be concluded that teachers of senior high school of English in Jakarta had good grammaticality knowledge.

### 4.2.1.2 Phrase Structure Rules Knowledge

The chart below answered and discussed the sub question, "How is the phrase structure rules knowledge of senior high school teachers of English?"

Figure 3. Percentage of Correct Answer of PSR Test


In phrase structure, the teacher should decide the rules of phrase structure in English, match the phrase structure rules to the phrase, and identify lexical category of the words. This diagram showed that there were 249 numbers of phrase structure are correctly answered from 300 total numbers. There was $83 \%$, more than a half total numbers, correctly answered by the teachers. There was $17 \%$ teachers of English wrong answer this test. The result showed that the teachers had good knowledge of phrase structure.

The researcher found that almost the teachers got difficulty in answering the rules of preposition phrase. They answered yes that the rule of preposition phrase was followed by noun phrase and preposition. It was wrong answer because its phrase was not a postulated phrase structure rule in English. The correct answer was preposition should be laid before noun phrase: PP $\rightarrow$ P NP. Prepositional phrase was a phrase whose head was a preposition. It would begin with a preposition and end with a noun, pronoun, gerund, or clause, the "object" of the preposition.

The researcher also found that the teachers were difficult to identify the lexical category of the word 'is'. The correct answer was auxiliary but almost the teachers answer was a verb. And also the lexical category of the word Randy in item four number six, the answer was noun but some of English teachers answered a determiner.

Based on the interview, phrase structure rules test was easier than another test (GJ and SA). They could explain the rules correctly, ".... dari
kalimatnya kan very suprisingly, very itu kan intensifier ya mbak, ya makanya karena suprisingly itu adverb, makanya saya pilih adverb phrase", "..... Disini verb phrase ya, terdiri dari auxiliary dan verb phrase. Auxiliary itu contohnya does, does not. Contoh kalimatnya 'Does not to go to the market'.

By calculating the correct items divided total items, it was found that this test had the highest percentage of correct items. It might be concluded that teachers of English had good knowledge of phrase structure rules

### 4.2.1.3 Structural Ambiguity Knowledge

The chart below answered and discussed the sub question, "How is the structural ambiguity knowledge of senior high school teachers of English?"

Figure 4. Percentage of Correct Answer of SA Test


This pie describes that the structural ambiguity was the most difficult than other parts. There was $64 \%$ correct answer or 128 numbers correctly answered from 200 total numbers for structural ambiguity test that the writer found. There was $36 \%$ teachers of English wrong answer this test. It means that there were 72 numbers incorrectly answer by teachers of English. This test had the lowest percentage of correct items.

The most common mistakes were found in number seven (yellow gold ring). There were $45 \%$ or nine teachers of English wrong answer in this number. When two adjectives modified a noun, the second adjective could be categorically ambiguous between an adjective and a noun. Yellow may modifies a noun gold, and the noun phrase 'yellow gold' becomes a modifier function that modifies 'ring' as a head, so that 'ring made of yellow gold' for tree structure number two and the noun phrase gold ring in which gold was an adjective-head, so that 'gold ring painted in yellow' for tree structure number one.

Based on the result of the study, the writer concluded that English teachers in Jakarta still had difficulties to answer the structural ambiguity test. The researcher assumed that the teachers were confuse in producing different structures with the same meaning but not all the teachers were difficult to answer this item (See Appendix in the item test scores). Although some teachers had problem about that, the teachers of senior high school of English in Jakarta had good structural ambiguity knowledge.

