Chapter Four

Research Findings and Discussions

In this chapter, the researcher provides findings and discussions based on the data that was taken from the respondents which analysed by SPSS. The first result is the most-frequently used language learning strategies used by the students. The second result is the differences between male and female in the use of language learning strategies. The discussion are embedded to the results.

The Most-frequently Used Language Learning Strategies by English Language Education Department's Students

This result answers the first question which was "What are the most frequently used language learning strategies among English Language Education Department students?". There were two main categories of LLS which are direct and indirect strategies. Direct strategies consisted of memory strategies, cognitive strategies, and compensation strategies. Indirect strategies comprise of metacognitive strategies, affective strategies, and social strategies. The following mean score of each category of language learning strategies were obtained by calculating the result of the questionnaire items using SPSS version 24. The total data of participants in this study were 164 students. Furthermore, the researcher categorized the language learning strategies into 2 main categories with the total of 6 sub-categories to provide more details information.

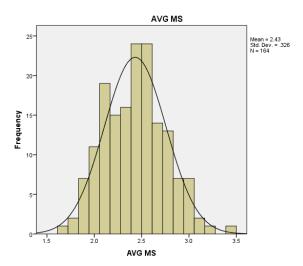
| Table 9 | | | | | | | |
|---|--------------------------|-----------------------|--------------------------|--|--|--|--|
| Results of the Student's Language Learning Strategies Use | | | | | | | |
| Main Categories | Sub Categories | Mean Main of | | | | | |
| _ | - | Categories | Sub Categories | | | | |
| Direct Strategies | Memory Strategies | 2.43 "Rare Category" | 2.53 "Often | | | | |
| | Cognitive Strategies | 2.50 "Often Category" | | | | | |
| | Compensation Strategies | 2.65 "Often Category" | Category" | | | | |
| Indirect Strategies | Metacognitive Strategies | 2.94 "Often Category" | 2.57 "Often Category" | | | | |
| | Affective Strategies | 2.43 "Rare Category" | | | | | |
| | Social Strategies | 2.33 "Rare Category" | | | | | |
| Total | | | 2.55 "Often | | | | |
| | | | Category" | | | | |

Table 9 demonstrated the mean of the sub categories and the main categories. The main categories are direct strategies (M=2.53) and indirect strategies (=2.57). This table showed the mean of each of sub-categories from metacognitive strategies (M=2.94 "Often Category"), compensation strategies (M=2.65 "Often Category"), cognitive strategies (M=2.50 "Often Category"), memory strategies (M=2.43 "Rare Category"), affective strategies (M=2.43 "Rare Category"), and social strategies (M=2.33 "Rare Category"). It can be concluded that the most frequently used LLS from the students of ELED in one private university of Yogyakarta was Indirect strategies (M=2.57 "Often Category"), with metacognitive strategies (M=2.94 "Often Category") as the strategies frequently used by students. The detail of the result of this research can be seen as follows.

Direct strategies. The two main categories of LLS are direct and indirect strategies. This paragraph describes the result of the mean from direct strategies. The mean from direct strategies was 2.53 "Often Category". According to the category of student's language learning strategies (see table 9), the mean score of memory strategies belongs to "often" category. It means that the students were often used direct strategies to learn English. Direct strategies are consisted of compensation strategies (M=2.65), cognitive strategies (M=2.50), and memory strategies (M=2.43). Compensations strategies had the highest mean score in the direct strategies. It implied that from the direct strategies, the most preferred sub-strategy was compensation strategies.

Figure 2.

Memory Strategies

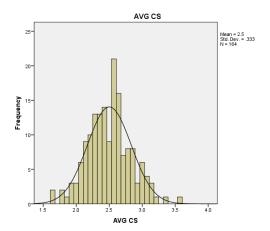


Memory strategies. Based on the category of students' language learning strategies, the memory strategies (M=2.43) was considered as "rarely" category. It showed that the students rarely used memory strategies. This result might not really

differ from Hong (2009) (M=2.58) and HO and NG (2016) (M=3.03). Even if those two studies had higher mean of memory strategies, it was still lower compared to other strategies in their research which was quite similar with the result of this research.

Figure 3.

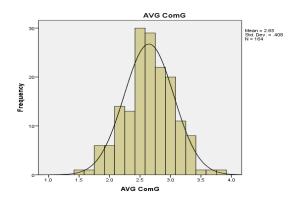
Cognitive strategies



Cognitive Strategies. Cognitive strategies (M=2.5) was considered as "Often" category based on the data. From this result, it can be said that the students rarely applied the cognitive strategies. Yet, this result was significantly different with HO (2016) from Malaysia (M=3.21) and Hong (2009) from Vietnam (M=2.87) for the mean of cognitive strategies. From those two studies, cognitive strategies categorized as "often" use of strategy. This result implied that there were differences even in non-English speaking countries towards the LLS especially for the cognitive strategies.

Figure 4

Compensation Strategies



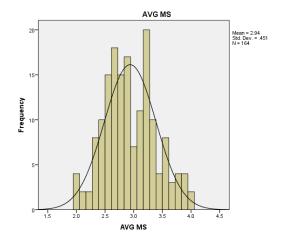
Compensation strategies. The mean score of compensation strategies was 2.65. This strategy had the highest mean compares to other sub-strategies in the direct strategies. It indicated that compensation strategies are categorized as "often" category. The students frequently used the compensation strategies in their language learning process. It helps the learner to be able to understand the information by guessing the missing world through the context. Both HO (2016) (M=3.26) and Hong (2009) (M=3.35) had the same range of mean in compensation strategies as well as this research which was "often" category. This means those two studies and this research had the same result where students often use compensation strategies.

Indirect strategies. This section describes the result of indirect strategies. The mean from Indirect strategies was 2.57 "Often Category". According to the

category of student's language learning strategies (see table 9), the mean score of memory strategies belongs to "often" category. It means that the students of ELED of one private university in Yogyakarta were often to use indirect strategies to learn English. Indirect strategies are consisted of metacognitive strategies (M=2.94), affective strategies (M=2.43), and social strategies (2.33) while metacognitive strategies had the highest mean score in the indirect strategies. It implied that from the indirect strategies, the most preferred sub-strategy was metacognitive strategies.

Figure 5

Metacognitive Strategies

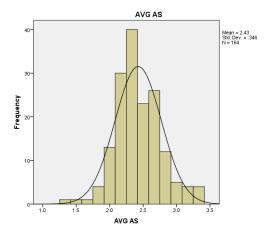


Metacognitive strategies. According the data, the mean of metacognitive strategies was the highest mean from all the sub-categories and from indirect strategies category which was 2.94. This mean categorized as "often" category based on the table 9. It means that the students often use metacognitive strategies to learn English compare to other sub-categories. It helps the learners to have a control on their learning process, so the learners are able to set their learning process based on

their consideration. The research from Ho and Ng (2016) (M=3.42) and Hong (2009) (M=3.02) also had the same range in metacognitive strategies mean which are "often" category. In Ho and Ng's research, metacognitive strategies ranked as the highest sub-strategies in their research of the use of LLS, while Hong's research revealed different result where compensation strategies (M=3.35) as the highest sub-strategies that the students used.

Figure 6

Affective Strategies

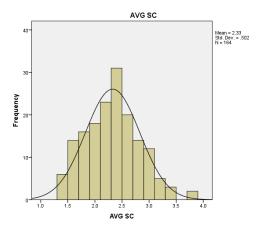


Affective Strategies. The mean of affective strategies was 2.43. It means that affective strategies were categorized as "rarely" categories. It showed that the students rarely used affective strategies in their language learning process. Affective strategies assist the learners to manage their attitudes, emotional factors, and motivations towards the learning process. Being motivated, having a good attitude, and having a controlled emotion are manageable to begin with. For instance, learners may lower their anxiety before learning the language, encouraging themselves to learn and explore, and try to

be patient. In conclusion, the students of ELED in one private university of Yogyakarta had low motivation and anxiety in learning English. This result is different with Ho and Ng (2016) where the mean of affective strategies was 2.97, which was categorized as "often" category. While the research from Hong (2009) showed similar result (M=2.24) of affective strategies, which was categorized as "rarely". Yet, both from those two studies, affective strategies were the lowest sub-strategies in their research.

Figure 7

Social Strategies



Social strategies. The mean of social strategies was the lowest mean of all sub-categories of LLS. The mean was only 2.33. Even if the mean of social strategies was the lowest one, it was still categorized as "rarely" category, which was the same like affective strategies. It implied that the students rarely used social strategies in their language learning process. There is an interaction that needs to be conducted in this strategy from having a conversation for practicing daily conversation in English, asking a question, discussing some topics, and others. Yet, this strategy is not limited

in enhancing the learner's speaking skill. Thus, the students were lack of having a conversation and practicing English with other students. The mean of social strategies in this research is different with the other two researchers from Ho and Ng (2016) and Hong (2009). HO's result (M=3.26) and Hong's result (M=2.78) are categorized as "often" category.

In conclusion, the most used language learning strategies from the students of ELED in one private university of Yogyakarta was Indirect strategies (M=2.57), with metacognitive strategies (M=2.94) as the most used in sub-categories. Therefore, the students mostly used Indirect strategies to learn English compares to the direct strategies. Students preferred to cantering, arranging, planning, and evaluating the learning process from managing the time for studying, setting the focus or the goal of the learning, and prioritizing the learning materials. From direct strategies (M=2.53), the most used sub-categories were compensation strategies (2.65) where the students guessed through the context where they learn English.

This conclusion has some similarities and differences with the research from Ho and Ng (2016) and Hong (2009). Both of these studies shared the same result of the highest used of sub-strategies which was metacognitive strategies as well as this study. It implies that students English speaking country are more-likely used metacognitive strategies to improve their English. The research from Ho and Ng (2016) agreed that indirect strategies has the highest mean of the use of LLS (M=3.22) compare to the direct strategies (M=3.14). Yet, the margin of the mean was

not so significant which is similar to this study. Meanwhile, the research from Ho (2009) shared different result where direct strategies has higher mean (M=2.93) compared to indirect strategies (M.=2.62). From this, it can be concluded that there are some similarities and differences in non-English speaking countries towards the use of LLS. The differences of the result might be affected by the student's background, personality, age, and the gender itself.

The Differences of Language Learning Strategies Based on Gender Differences

The second research question of this study is what are the differences of language learning strategies based on the gender differences. In order to answer this question, the researcher needs to find the significance of the use of LLS between male and female students. Thus, an independent sample t-test is needed to figure out the answer of this research question. Statistically, this test compares means of language learning strategies between males and females. But before the t-test is tested, the researcher will run the normality test and homogeneity test in order to justify that the data are normally distributed and homogenic. After running the t-test, the researcher provides the detail information of the use of LLS based on gender according to Oxford (1990) LLS' category.

Normality test. The researcher tested the normality using One-Sample Kolmogorov-Smirnov test to see whether the data were distributed normally. SPSS program ran the analysis and the results were shown in a Table below. In order to determine the result, it can be seen from significance score (Asymp. Sig.) from

dependent variable which is students' language learning strategies. The data distribution is normal if Asymp. Sig. (2-tailed) score is greater than 0.05 ($\rho > 0.05$)

| Table 10 | | | | |
|------------------------------------|---------------------|---------------------|--|--|
| One-Sample Kolmogorov-Smirnov Test | | | | |
| | Student's language | | | |
| | learning strategies | | | |
| N | 164 | | | |
| Normal Parameters ^{a,b} | Mean | 125.421 | | |
| | Std. | 13.0994 | | |
| | Deviation | | | |
| Most Extreme | Absolute | .059 | | |
| Differences | Positive | .059 | | |
| | Negative | 042 | | |
| Test Statistic | .059 | | | |
| Asymp. Sig. (2-tailed) | | .200 ^{c,d} | | |

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.

The result stated that the significance value of students' language learning strategies is .200. This score is higher than 0.05 (0.200 > 0.05). It means *the data was normally distributed*. So, the data can proceed to the next process.

Homogeneity test. Homogeneity test aim to find out whether the samples are collected from the same populations (Sharma & Kibria, 2012). In order to test the homogeneity of variance, the researcher used the Levene test that will be launched by SPSS. The data are homogenic if the value of sig is Sig>0.05.

| Table 11 | | | | | |
|--|-----|-----|------|--|--|
| Test of Homogeneity of Variance | | | | | |
| Student's Language Learning Strategies | | | | | |
| Levene Statistic | df1 | df2 | Sig. | | |
| .196 | 1 | 162 | .658 | | |

The results showed that the value of significance is 0.658. It means that it is greater than significance level (0.658 > 0.05). It showed that *the data distribution is homogenous*. This test also appears in the independent samples t-test result that can be used to see the homogeneity of variances. The value of significance (0.658) was also used to determine which t score used to see the mean differences which were tested. It was explained in the following.

Independent sample t-test. In order to answer the second research question, an independent-samples t -test used in order to test the means of two different group. It means that the researcher wants to figure out whether there are significance differences between males and female studenst in the use of language learning strategy. In this study, the independent variables are male and female students, and dependent variable is student's language learning strategy. This test examines independent samples, male and female students, on the dependent variable. Then, this test is also examined if the alternative hypothesis (H1) is accepted. Thus, the researcher needs to accept this hypothesis that there is any statistically significant difference between the means of the male and female students on language learning strategies.

Figure 8. The result of independent sample t-test

The result of Levene's Test for Equality of Variances in *Figure 7* is a guide to choose which row of the two ('equal variances assumed' and 'equal variances not assumed'). According to the table of Levene's Test for Equality of Variances, if significance is p < 0.05, the researcher needs to move on to the second row of data and look at Sig (2-tailed). It can be seen that the significance value (ρ value) is not significant (ρ =0.658, ρ >0.05) which means that the equal variances were assumed or homogenous, so then the researcher needs to choose the first row of the data ('Equal variances assumed'). After deciding which row to follow, the result of independent samples t-test can be seen from significance value. The result showed that the

Independent Samples Test

| | | | e's Test ality of ances | t-test for Equality of Means | | | | | | |
|------------|-----------------------------|------|-------------------------------|------------------------------|-------------|---------|------------|-----------------------------|----------|-------|
| | | | | | Sig. (2- | Mean | Std. Error | 95% Con Interva Diffe | l of the | |
| | | F | Sig. | t | df | tailed) | Difference | Difference | Lower | Upper |
| AVG ALL | Equal variances assumed | .196 | .658 | 1.481 | 162 | .141 | .0668 | .0451 | 0223 | .1560 |
| | Equal variances not assumed | | | 1.510 | 98.020 | .134 | .0668 | .0443 | 0210 | .1547 |

significance value is more than the significance level (0.141 < 0.05) which means that H1 is rejected. It also implies that there is no statistically significant difference between male and female on the use of language learning strategies.

In conclusion, there is no statistically significant difference between male and female students' in the use of language learning strategies. Thus, students' gender may not cause the students' language learning strategies, meaning that students' gender may not be the factors influencing the use of language learning strategies.

Descriptive analysis of male and female students' language learnings strategies reference. In this section, there are detail information of mean of category and sub-categories of LLS based on gender. Even there is no statistically significance differences between male and female in the overall use of language learning strategies, there are still some tendency of male and female in the use of language learning strategy. Thus, the researcher conducted the descriptive analysis and t-test of each categories to see the tendency of male and female in the use of each strategies in language learning strategies.

| Table 12 | | | | | |
|------------------------------|--------|-----|-------|-----------|------------|
| Group Statistics | | | | | |
| | Gender | N | Mean | Std. | Std. Error |
| | | | | Deviation | Mean |
| Student's | Male | 50 | 2.592 | .2569 | 0.363 |
| language learning strategies | Female | 114 | 2.525 | .2700 | 0.253 |

Table 13 demonstrated the result of group statistics of independent samples ttest. The mean score of male students' LLS was 2.592 and the mean score of female students' LLS was 2.525. The results indicated that the mean score of the male students is slightly higher than the mean score of the female students (2.592> 2.525). It means that male students performed LLS slightly higher than female students, yet it does not necessarily mean male students are more frequent in the use of LLS compares to female students since the margin of mean is very close (0.067). This statement also supports the result of t-test which there is no statistical significance between male and female in the use of LLS.

Table 13 Language Learning Strategies used by English language education department's students by gender Learning Strategies Male Female (n=50)(n=114)df t p M SDM SDMemory .394 Direct 2.46 .32 2.42 .33 .855 162 Cognitive 2.55 .31 2.48 .34 1.122 162 .264 Compensation 2.77 .43 2.59 .39 2.692 162 .008 **Direct Strategies (M)** .034 2.594 .26 2.50 .27 2.134 162 .49 2.94 -.040 Indirect Metacognitive 2.94 .44 162 .968 Affective 2.43 .39 2.43 .32 -.004 162 .997 Social 2.40 .50 2.29 .50 1.306 162 .193 **Indirect Strategies (M)** 2.589 .34 2.55 .34 **162** .533 .625 Total All Strategies 2.59 .26 2.53 .27 1.481 162 .141

Direct strategies. From the table, we can see that the male (M=2.593 "Often Category") had the higher mean compares to the female (M=2.50 "Often Category"). It indicated that the male students had higher tendency in using direct strategies compares to their female counter parts. In direct strategies, there is a significance

differences between male and female since the p value is lower than the significance level (0.034<0.05). Thus, H1 is accepted for the direct strategies.

Memory strategies. From the table, the value of mean from male students (M=2.46 "Rare Category") is higher compares to the female students (M=2.42 "Rare Category"). It means, the male students had higher tendency in the use of memory strategies. Yet, there are no statistical significance differences in memory strategies between male and female since the p value is higher than significance level (0.394>0.05).

Cognitive Strategies. From the table, we can see that the mean from male in cognitive strategies (M=2.55 "Often Category") had the higher mean from the female students (M=2.48 "Rare Category). It proves that the male's student had higher use of cognitive strategies in learning English compares to their female counterparts. But there are no statically significance differences between male and female in the use of cognitive strategies since the p value is higher than the significance level (0.264>0.05)

Compensation Strategies. In compensation strategies, male students also had higher mean (M=2.77 "Often Category") compares to the female students (M=2.59 "Often Category"). It stated that male students had higher use of compensation strategies compares with female students in learning English. Moreover, there is a statistical significance differences between male and female in the use of compensation strategies because the p value is lower than the significance level

(0.008<0.05). In addition, compensation strategies is the only sub-strategies where the p value is lower than 0.05.

Indirect strategies. In table 14, it can be seen that the mean of indirect strategies of male (M=2.589 "Often Category") and female (M=2.55 "Often Category") are different but not so much significance. The mean from male students approved that they show slightly higher use of indirect strategies compare to the female students. Unlike direct strategies which had a statistical significance between male and female, indirect strategies had no statistical significance. It can be seen from the p value where it is higher than the significance level (0.533>0.05). Therefore, H1 is rejected for indirect strategies which means there is no statistical significance between male and female in the use of indirect strategies.

Metacognitive strategies. Based on the table 14, male and female students had the same mean in metacognitive strategies (M=2.94 "Often Category"). It means that both male and female students were equally performed metacognitive strategy in their language learning process. Indeed, there's no statistical significance between male and female in the use of metacognitive strategies since the *p* value is higher than the significance level (0.968>0.05). Therefore, there's no tendency in the use of metacognitive strategies between male and female since they had an exact mean in the use of metacognitive strategies. Moreover, metacognitive strategies had the highest mean in both male and female among the sub-categories

Affective strategies. The mean of affective strategies between male and female also exactly the same (M=2.43 "Rare Category"). It implies both male and female students also equally performed affective strategies in their language learning process. Obviously, there is no statistical significance between male and female in the use of affective strategies since the p value is higher than the significance level (0.997>0.05). Therefore, there is no tendency in the use of affective strategies between male and female since they had an exact mean in the use of affective strategies.

Social strategies. Based on the table 14, male students (M=2.40 "Rare Category") had higher mean compares to the female students (M=2.29 "Rare Category") in the use of social strategies. It described that male students had higher use of social strategies compare to the female students. Yet, the *p* value (0.193) from social strategies implied that there is no statistical significance since it is higher than the significance level (0.05). In addition, social strategies had the lowest in the subcategories both for male and female students. This means both male and female students rarely used social strategies in their language learning process.

From all the description above, it can be concluded male students performed LLS slightly higher than female students, yet it does not necessarily mean male students are more frequent in the use of LLS compares to female students since the margin of mean is very close (0.067). This statement also supports the result of t-test which there is no statistical significance between male and female in the use of LLS.

This result is in line with the result from Hong (2009) where he found no significance in the use of overall LLS based on gender differences. While Ho and Ng (2016) found that there was statistical significance in their t-test of male and female in the use of LLS with female perform higher use of LLS with margin of the means was 0.08. It means that the research from of different countries might affect the result of the overall use of LLS based on gender differences.

Second, male students had higher mean in direct strategies (M=2.594 "Often Category") compares to indirect strategies(M=2.589 "Often Category") even the margin is very small and there is no statistical difference among them. In direct strategies, male students had the highest mean in compensation strategies (M=2.77 "Often Category") which mean compensation strategies is the most frequent used strategies in direct strategies. This result is also with Ho and Ng (2016) (M=3.18) and Hong (2009) (M=3.22) where compensation strategies are the highest strategies in direct strategies. It implies that even from different countries, male students tend to use compensation strategies from direct strategies.

In the indirect strategies, metacognitive strategies (M=2.94 "Often Category") had the highest mean in indirect strategies and sub-categories This result also in line with Ho and Ng (2016) (M=3.33) and Hong (2009) (M=2.97) where metacognitive has the highest mean in indirect strategies. Meaning that male students tend to use metacognitive strategies in indirect strategies to learn English regardless their countries. Thus, it can be concluded that the most used LLS of male students

from ELED of one private university in Yogyakarta is direct strategies based on the main category, and metacognitive strategies based on the sub-categories.

Third, female students had higher mean in indirect strategies (M=2.55 "Often Category") compares to direct strategies (M=2.50 "Often Category"). In indirect strategies, female students had the highest mean in metacognitive strategies just like their male counterparts (M=2.94 "Often Category"). This result also in line with Ho and Ng (2016) (M=3.46) and Hong (2009) (M=3.05) where metacognitive has the highest mean in indirect strategies. Meaning that female students tend to use metacognitive strategies in indirect strategies to learn English regardless their countries. In the direct strategies, the highest mean from this sub-category is compensation strategies (M=2.59 "Often Category"). This result is also with Hong (2009) (M=3.43) where compensation strategies are the highest strategies in direct strategies. It implies that even from different countries, female students tend to use compensation strategies from direct strategies. From this data, it can be concluded that the most used LLS of female students from ELED of one private university in Yogyakarta is Indirect strategies based on the main category, and metacognitive strategies based on the sub-categories.