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Preferred Language Learning Strategies Employment Based on Gender

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ABSTRACT
Language Learning Strategies (LLSs) may be employed differently by male or female students to facilitate learning. Therefore, how LLSs may differ according to gender should be further investigated. This research aims to measure LLSs employed by students majoring in the English Department of a university in Yogyakarta, Indonesia. One hundred sixty-four (164) first-year students were given a SILL questionnaire. The findings revealed that the employment of the six learning strategies was relatively similar as all of them fell into the moderately employed category. The strategy which had the highest mean score was for metacognitive strategies (M=2.94) followed by compensation strategies (M=2.65), cognitive strategies (M=2.50), affective and memory strategies (M=2.43), and social strategies (M=2.33). The result of the t-test analysis showed that the employment of LLSs according to gender was not significantly different between male and female students ($p = 0.141$, $p > 0.05$; $t = 1.481$). The study discussed the possibility of the absence of the difference and concluded by proposing some implications.

Keywords*: gender, language learning, language learning strategies*

1. INTRODUCTION

1.1. Background

Learning a foreign language may become a challenge for learners, especially when they lack exposure and practice. To solve this problem, learners' awareness of any language learning strategies that suit their learning and preference may help. Thus, providing adequate training to students to employ language learning strategies may open more significant opportunities for their learning to be successful. It emphasizes the importance of language learning strategies for language learners. Unfortunately, Nurani [1] reported that English learners in Indonesia dealt with some difficulties in listening, speaking, reading, and writing in English. They also revealed that they were not fully aware of the language learning strategies they applied. These skills can be successfully mastered when learners learn the language by employing suitable learning strategies. Knowing someone's learning strategies and providing adequate training and information on the strategy may facilitate them to learn English more efficiently [2].

The above findings indicated that learners who did not employ suitable language learning strategies might encounter challenges in their learning process. Their preliminary observation and interview with some freshmen in an English Department of an institution in Yogyakarta indicated that the students faced difficulties learning the four English skills. Although they had been learning English for years, they did not know the effective language learning to help them understand it. Thus, the researchers were convinced to investigate their language learning strategies employment according to their gender. It is expected that providing information on the language learning strategies may benefit their learning.

1.2. Research Questions

The study was conducted to answer the two research questions:

1. How do the students' rate the learning strategies they employed in learning English?
2. Do male and female students significantly employ language learning strategies differently?

2. LITERATURE REVIEW

2.1. Language Learning Strategies

Some leading scholars on language learning strategies had provided clear definitions of language learning strategies. The expert on studying language learning strategies, Oxford [3], defined it as any actions done by learners to make their learning more autonomous, enjoyable, easier, and effective. O'Malley and Chamot [4] also

explained that anyways students took to make their learning easier were referred to as a language learning strategy. Weinstein and Mayer [5] outlined that learners' learning strategy is actions to enhance their learning. From the three definitions, language learning strategies are any actions or efforts language learners take to facilitate their language learning.

The categorization of language learning strategies used in this study was the one which was proposed by [3]. According to [3], LLSs are categorized into two main classifications: direct strategies and indirect strategies. The direct strategies are memory strategies, cognitive strategies, and compensation strategies. Learners who employ memory strategies may find learning easy when they gather new information by remembering and repeating, for instance, irregular verbs. Meanwhile, learners may also conduct some actions to comprehend concepts of a language they are learning, such as grammar, structure, and other concept-related materials. They may employ strategies such as grouping, identifying, analyzing, and practicing the language. When learners use these strategies, they employ cognitive strategies. The last strategy to discuss under direct strategies is compensatory strategies. These strategies are employed when learners try to fill incomplete information to cope with the learning barrier. For example, when learners find unfamiliar vocabulary while reading an English book and try to guess the meanings, they employ compensation strategies.

The second categorization of LLSs based on Oxford is indirect strategies. They consist of metacognitive strategies, affective strategies, and social strategies. Metacognitive strategies deal with planning and evaluating learning. Learners who employ this strategy may arrange, plan, monitor, and assess their knowledge. They have autonomy in setting their own learning goals. The second strategy under the indirect strategy is effective strategies. These strategies facilitate learners to manage their emotions, motivation, and attitude in learning. Learners who find a way to motivate themselves in learning and cope with anxiety can be an example of effective strategies. The last strategy under indirect strategies is social strategies. Social strategies enable learners to interact with others in the process of learning a language. Some people may quickly learn when they work in groups and discuss or teach by other people or classmates.

2.2. Prior Studies on Gender and Language Learning Strategies

Several studies have been conducted to investigate whether male and female students employed language learning strategies differently. In Malaysia, Ho and Ng [6] investigated employment language learning strategies among first-year students in a state university. SILL questionnaire was distributed to 1,708 students. The results showed a significant difference in language learning strategies between male and female students. The findings also indicated that metacognitive strategies were the most frequently used among the students, while affective strategies were reported as the least used.

A study to examine language learning strategies was also found in the Pakistani contest. Kazi [7] investigated similarities and differences in language learning strategies among students in a secondary level context in Lahore City. Two thousand four hundred nine (2409) students from public and private schools participated in the study by responding to two different questionnaires. The results indicated that female students employed more learning strategies than male students. Also, the study concluded a significant correlation between gender and students' induvial used language learning strategies.

In Indonesia, a study to investigate language learning strategies was conducted by Rachmawati [8]. In her research, [8] investigated the most frequently used language learning strategies among sophomores of an English Department in Serang using the SILL questionnaire. The findings indicated that the students employed various language learning strategies. Additionally, students belonging to regular classes were reported to employ more language learning strategies than those from non-regular classes.

Although prior studies in Asian contexts have investigated how gender has something to do with language learning strategies among students, only a few studies were conducted in Indonesia. While [8] also investigated the language learning strategies used in Indonesia and to English Department students, the study focused more on the employment of regular and non-regular students rather than on gender. The other studies also concentrated on non-university students and not explicitly targeted English Department students. At the same time, the researchers believed that it is imperative to investigate the employment of language learning strategies among university students in Indonesia, mainly to see whether the employee may be significantly different based on gender.

2.3. Hypothesis

H_1: Male and female students significantly employ different language learning strategies in learning English.

3. METHOD

3.1 Design

The present study aims at investigating the language learning strategies used among university students in learning English. It also aims to see whether male and female students employed LLSs differently. The study was conducted under a quantitative approach with a cross-sectional survey design to achieve the objective. Creswell [9] stated that cross-sectional survey design is suitably applied when a study collected data at one point in time to gather opinions, beliefs, or tendencies of behaviors of a population. Thus, it aligns with the study's objective to investigate students' preferred language learning strategies.

3.2 Setting

The study was conducted at an English Language Education Department of a university in Yogyakarta, Indonesia. The institution was selected as it majored in English; hence, it is suitable to investigate how The students employed lLSs in learning English. The data were collected in December 2019.

3.3 Population and Sample

The population of the study was the first-year student of the English Language Education Department. First-year students were selected as the population, considering they might not be fully aware of employing LLSs in their learning. Therefore, the students may take the findings to reflect on their learning. Also, the department may benefit from the results in conducting the teaching and learning process or in policymaking. There were 190 students as the population. Of the 190 students as the population, a sample was taken. The sample size was determined using Cohen, Manion, and Morrison's [10] table with 95% confidence level and 4% confidence interval showing that for 190 people, there should be 150 people as the sample. The samples were selected using simple random sampling to offer the sample possibility for each student in the population to be chosen as the sample. The data obtained in this study was taken from 164 students, consisting of 50 males (30.5%) and 114 females (69.5%).

3.4 Instrument

The instrument used to collect data was a questionnaire to assess students' language learning strategies by [3] called the Strategy Inventory for Language Learning (SILL). The questionnaire consisted of 50 items categorized into two main strategies: direct strategies and indirect strategies. The direct strategies consisted of memory strategies (item 1-9), cognitive strategies (item 10-23), and compensation strategies (item 24-29). Meanwhile, the indirect strategies consisted of metacognitive strategies (item 30-38), affective strategies (item 39-44), and social strategies (item 45-50). The questionnaire used a 4-point scale ranging from always (scored 4) to never (scored 1). The questionnaire was translated into Indonesian to ease the respondents' understanding of the items as it is their first language. The items were validated through expert judgment by asking three experts to assess the accuracy of the translation. The results of the expert judgment showed that of the 50 items, item 48 had low validity, so the item was deleted. Therefore, the questionnaire used in this study consisted of 49 items. Cronbach's Alpha was measured to check the reliability of the modified questionnaire. The result of the reliability test showed that the questionnaire had high reliability (α = 0.876).

3.5 Data analysis

The data obtained in this study were analyzed using both descriptive statistics and inferential statistics. The data for the first research question were analyzed descriptively by finding the frequency and mean scores [10]. The authors created category to interpret the respondents' language learning strategies employment into 3 categories, i.e. low employment (M = 1.00 – 2.00), moderate employment (M = 2.01 – 3.00), and high employment (M = 3.01 – 4.00). Meanwhile, to answer the second research question, inferential statistics were run. First of all, the authors ran tests of assumption, i.e., normality test and homogeneity test, of which the results were later reported in the findings. The next step was to test the hypothesis. An independent sample t-test was administered to measure whether there was a significant difference in language learning strategies between male and female students.

4. FINDINGS

4.1 The Language Learning Strategies Use among the First-year Students

The first finding to report is the language learning strategies reported by 164 first-year students of an English Department of a university in Yogyakarta.

Table 1. The reported use of language learning strategies

Main Categories	Sub-categories	Mean Scores	Interpretation
Direct Strategies ∑ M = 2.53	Memory strategies	2.43	Moderately employed
	Cognitive strategies	2.50	Moderately employed
	Compensation strategies	2.65	Moderately employed
Indirect Strategies ∑ M = 2.57	Metacognitive strategies	2.94	Moderately employed
	Affective strategies	2.43	Moderately employed
	Social strategies	2.33	Moderately employed

Table 1 demonstrated the mean of the main categories, i.e., direct strategies and indirect strategies, and the sub-categories under each of them. Of the two main categories, indirect strategies obtained a slightly higher mean score (M = 2.57) than direct strategies (M = 2.53). Both fell into moderately employed strategies which can be interpreted that the students sometimes employed the two strategies in general. Under direct strategies, compensation strategies obtained the highest mean score of the three categories (M = 2.65), followed by cognitive strategies (M = 2.50) and memory strategies (M = 2.43), respectively. Under indirect

strategies, the one with the highest mean score was achieved by metacognitive strategies (M = 2.94) followed by affective strategies (M = 2.43) and social strategies (M = 2.33). The findings showed slightly similar results in which all strategies fell into moderately employed language learning strategies. The first-year students of the English Department of the institution had employed language learning strategies in learning English. However, the learning strategies were not frequent.

4.2 The Differences in the Language Learning Strategies Employment based on Gender

To answer the second research question, "Do male and female students significantly employ language learning strategies differently?", the results of two assumption tests and the independent sample t-test will be reported.

a) Normality test

The researchers tested the normality using the One-Sample Kolmogorov-Smirnov test to see whether the data were distributed normally. The SPSS program ran the analysis, and the results are shown in Table 2. The significance score (Asymp. Sig.) from the dependent variable determines the result, which is students' language learning strategies. The data distribution is normal if Asymp. Sig. (2-tailed) score is greater than 0.05 ($\rho > 0.05$). 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.

Table 2 showed the result of the normality test using a One-Sample Kolmogorov-Smirnov test

Table 2. The result of the normality test

		Student's language learning strategies
N		164
Normal Parameters[a,b]	Mean	125.421
	Std. Deviation	13.0994
Most Extreme Differences	Absolute	.059
	Positive	.059
	Negative	-.042
Test Statistic		.059
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.

b) Homogeneity test

Homogeneity tests aim to determine whether the samples are collected from the same populations Sharma and Kibria [11]. To test the homogeneity of variance, the researchers used the Levene test that SPSS will launch. The data are homogenous if the value of Sig is Sig>0.05. The results showed that the significance value is 0.658, more significant than the significance level (0.658 > 0.05). Thus, the data distribution is homogenous. The results of the homogeneity test are reported in Table 3.

Table 3. The result of the homogeneity test

Student's Language Learning Strategies			
Levene Statistic	df1	df2	Sig.
.196	1	162	.658

c) Independent sample t-test

An independent-samples t -a test was used to test the means of two different groups to answer the second research question. It means that the researchers want to figure out whether there are significant differences between male and female students in language learning strategy. In this study, the independent variables are male and female students, and the dependent variable is the 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 researchers need to accept this hypothesis that there is no statistically significant difference between the means of the male and female students on language learning strategies.

Table 4. The result of the independent sample t-test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error 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

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 researchers need 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), meaning that the equal variances were assumed or homogenous, so then the researchers need to choose the first row of the data ('Equal variances assumed'). After deciding which row to follow, the independent samples t-test can be seen from the significance value. The result showed that the significance value is more than the significance level (0.141 < 0.05), meaning H1 is rejected. There is no statistically significant difference between males and females on language learning strategies. In conclusion, there is no statistically significant difference between male and female students in language learning

strategies. Thus, students' gender may not cause language learning strategies, meaning that students' gender may not influence language learning strategies.

Detailed information of mean of category and sub-categories of LLS based on gender is also worthy of discussion. Even though there is no statistically significant difference between males and females in the overall language learning strategies, males and females tend to use language learning strategies. Thus, the researchers conducted the descriptive analysis and t-test of each category to see the tendency of males and females to use each strategy in language learning strategies.

Table 5. The mean score of the language learning strategies employment based on gender

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Student's language learning strategies	Male	50	2.592	.2569	0.363
	Female	114	2.525	.2700	0.253

Table 4 demonstrates the result of group statistics of independent samples t-test. The mean score of male students' LLS was 2.592, and female students' LLS was 2.525. The results indicate that the mean score of the male students is slightly higher than the mean score of the female students (2.592> 2.525). Male students performed LLS slightly higher than female students, but it does not necessarily mean male students are more frequent in LLS than female students since the mean margin is very close (0.067). This statement also supports the result of the t-test, which there is no statistical significance between males and females in LLS.

Although there is no significant difference in language learning strategies between male and female students, some language learning strategies showed substantial differences based on gender when analyzed per sub-categories. The result is demonstrated in Table 5.

Table 6. The result of the independent sample t-test based on the main category and gender

Learning Strategies		Male (n=50)		Female (n=114)		*t*	*df*	*p*
		M	*SD*	*M*	*SD*			
Direct	Memory	2.46	.32	2.42	.33	.855	162	.394
	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)		**2.594**	**.26**	**2.50**	**.27**	**2.134**	**162**	**.034**
Indirect	Metacognitive	2.94	.49	2.94	.44	-.040	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**	**.625**	**162**	**.533**
Total All Strategies		2.59	.26	2.53	.27	1.481	162	.141

Table 5 shows that direct strategies of the two main categories of language learning strategies direct strategies are statistically reported to be employed significantly different between male and female students ($p = 0.034$, $p < 0.05$; $t = 2.134$). On the other hand, indirect strategies are not employed significantly differently based on gender ($p = 0.533$, $p > 0.05$; $t = 0.625$). Of the six language learning strategies, there is only one strategy, compensation strategies, which showed significantly different employment based on gender ($p = 0.008$, $p < 0.05$; $t = 2.692$). Thus, male and female students employed compensation strategies differently, while the difference is not shown in the other five strategies ($p > 0.05$).

5. DISCUSSION

Language learning strategies have been proven empirically to contribute to the learners' learning success. Using language learning strategies effectively can also enhance self-directed learning [12]. The findings of the present study revealed that the students became moderate users of language learning strategies. It means that they already employed language learning strategies; however, it is still possible to improve the strategies' employment in terms of frequency of the more various strategies to use in their learning. The study suggested that the students employed metacognition as the most frequently employed strategies to assist their learning. This finding corroborates with that of [13], [14], and [15], which also found that metacognitive strategies became the most frequently-used strategies among students. In learning, students had the awareness to plan, monitor, and evaluate their learning. It is a good sign as their learning can be run in the long run.

In contrast to metacognitive strategies, which were reported to be the most frequently used, social strategies were said to be the least frequently used strategies among the students. This finding resonated with Melvina, Lengkanawati, Wirza's [16] study, which also showed that the higher secondary school students least employed social strategies for their learning. On the contrary, [13] reported in their study that compensation strategies became the least frequently employed strategies among the students in Myanmar. The students in the present study may inform social strategies as the least frequently used strategies for their learning as they were still in the first year. Therefore, they may not have got along well with their classmates.

Many factors may influence the choices of learning strategies, one of which is gender. Based on the present study's findings, there was no statistically significant difference in the employment of language learning strategies between male and female students. These findings are in line with those of [14], [16] and [15], who also showed that language learning strategies were not statistically different. When analyzed per strategy, the study suggested that of the six language learning strategies, compensation strategies were the only strategy that was significantly different in its employment between male and female students. A study by

[17] also showed that the employment of LLSs found out to be applied differently in compensation strategies. Based on the comparison on the employment of male and female students, the present study revealed that both male and female students applied metacognitive strategies as the most frequently-used language learning strategies among the first-year English Department students. [13] also reported that male students in a Myanmar university also applied metacognitive strategies for their learning.

6. CONCLUSION AND IMPLICATIONS

The study showed that the students reported that they belonged to moderate users of language learning strategies. It means that they employed language learning strategies to help them learn English. Of the six strategies, the findings revealed that metacognitive strategies became the most frequently employed strategies among the first-year English Department students in the institution. On the contrary, social strategies were reported to be the least frequently employed strategies among them. In terms of gender, the statistical analysis showed no statistically significant differences in the employment of language learning strategies between male and female students. It suggested that gender may not become a factor determining language learning strategies among the students.

The findings showed that the students moderately employed language learning strategies in their English learning. Considering that applying effective and various learning strategies may facilitate students to be successful in learning, teachers are suggested to provide sufficient information on the importance of language learning strategies. Teachers can also help them apply and provide examples on how to employ language learning strategies for their learning. By doing so, it is hoped that the students can use more language learning strategies in their learning or become persistent users of language learning strategies, so it can open more significant opportunities for their learning to be successful.

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