The Correlation Between Language Learning Strategies and Students' Thinking Styles of IAIN Langsa

Muslem [1]✉, Shafrida Wati [2], Sagita Devi Siregar [3]
[1] Language Institute, IAIN Langsa, Aceh, Indonesia,
[2] Language Institute, IAIN Langsa, Aceh, Indonesia,
[3] Language Institute, IAIN Langsa, Aceh, Indonesia
✉ email: muslemabubakar@iainlangsa.ac.id

ABSTRACT

This study was the correlation between language learning strategies and students' thinking styles. This study aimed to determine whether there is a significant correlation between language learning strategies and student thinking styles. This study used a quantitative correlational approach as a research method. The data were collected by Likert scale questionnaire. The research data were analyzed using SPSS 26.0 program. This program was used to find out whether there is a significant correlation between language learning strategies (X) and students" thinking styles (Y). The result of the questionnaire showed there is a positive correlation between language learning strategies and student thinking styles. It can be proved by the correlation coefficient (r count) and significance value (ρ) got from the calculation r count = 0.507, ρ = 0.002 < 0.05. Based on the findings of the data analysis, there is positive significant relationship between language learning strategies and student thinking styles of students' English education department IAIN Langsa.

Keywords: *Correlation; Language Learning Strategies; Students Thinking Styles.*

INTRODUCTION

English language proficiency which includes listening, speaking, reading, and writing skills is determined by the speakers' English language competence. The goal of principles of language teaching and learning is to achieve communicative competence. Murcia (2008) argued one of the aspects of communicative competence is strategic competence; Strategic competence is part of communicative competence which involves a number of learning and communication strategies that can be learned by language learners. In Indonesia English is taught as a Foreign Language (EFL), which is strategic competence is very important in the language teaching and learning process. Even though strategic competence is important, many language learners do not have an awareness of this competence. They have weaknesses in some parts of language learning strategies. For example, lack of memory strategy, which is direct strategy in language learning. This lack of memory strategy is influenced language learners facing obstacles in learning variety of vocabulary so it caused their reading and writing skills develop slowly.

The successful of learning process is not only determined by good learning strategies and methods but it also depends on student' thinking styles. Students thinking styles make an impact on learning process. M Nyikos (1990) There are positive and negative factors that influenced students learning in the class. Even with the best teachers and methods, students are the only one who can actually do the learning. C. S. Dweck (2006) From the problems above the researchers assume that the factors that influenced the learning process depends on students thinking styles. There are two kinds of approach in students thinking styles; they are fixed mindset and growth mindset. In a fixed mindset, students always feel anxious and nervous to setbacks or criticisms.

Students with growth mindset feels eager to learn to boost their performance and enjoy exploring, experimenting and stretching themselves. Students who can focus on the learning process usually they can get much information. The way the students act can explain how they think. Every student has differences about what they need in language learning process and has his own way to think. Students at the seventh semester of English Department seems to be confuse when learning English, it showed when they worked on questions or exams which were still irrelevant to the actual answer. From this problem the researchers analyze that they have their own different strategy to accept an information.

There are some strategies in language learning that are cognitive learning strategies, metacognitive learning strategies, communication strategies and social strategies. Concerning problems students faced in learning teachers as the main component of education is challenged to be as creative as possible to provide opportunities for their students to expose and to reinforce their skills. To encourage students to practice their language, the researchers try to help teacher to solve the problems of students.

In this research, the researchers aim to find out the significant relationship between language learning strategies and students' thinking style. The researchers wanted to find out if there any significant correlation between language learning strategy and students' thinking styles in the seventh semester of the English Education Department of IAIN Langsa. This research limits its study to the correlation between language learning strategies especially indirect strategies; metacognitive, affective, social ones used by students, and their thinking styles that focus on internal and external types of thinking styles.

METHOD

In this research, the researchers used quantitative research approach to collect and analyze the data to get the result of the correlation between language learning strategies and students' thinking styles. Seeram, Euclid (2019) The correlation research is a type of non-experimental research that facilitates prediction and explanation of the relationship among variables. The objective of this research was to find out the correlation between language learning strategies and students' thinking styles.

The population of this research was students of IAIN Langsa especially the seventh semester of English Education Department. The number of populations were 46 students. Technique of selecting the sample that the researchers used in this research was random sampling. The sample was the seventh semester of students of English education department consisted of 40 students.

In this research, the researchers used independent and dependent variables. Independent variable is a type of variable that explains or affects other variables. The independent variable of this research is language learning strategies noted as (X). Meanwhile, Indriantoro & Supomo (2016) argued that dependent variable is a type of variable that is explained or influenced by the independent variable. Dependent variable of this research is students' thinking styles noted as (Y).

The researchers used a questionnaire to collect the data. And this related to Hasbalnikistan, et al (2020) Questionnaire is a set of printed or written questions with a choice of answers, devised for the purpose of survey or statistical study. Questionnaire is equally used in survey research, experiments and other modes of observation. A questionnaire is defined as a document containing questions and other type of items designed solicit information appropriate to analysis. The researchers used; (1) open-ended questionnaire; it is a type of questionnaire which allows the respondents to fill out the questionnaire according to their will and circumstance; (2) close-ended questionnaire, in this questionnaire the respondents only need to give check list (√) on the provided space; (3) mixed questionnaire, this questionnaire is a mixture of open-ended questionnaire and close-ended questionnaire. In this research the researchers used a Close-ended questionnaire to collect the data. This questionnaire consisted of 35 questions and allotted into 2 variables. The first was about language learning strategies which was in the statement number 1-15 and the second was about students thinking styles which were in the statement number 16-35. The participants gave check list (√) based on their own experiences.

1. Test of the Research Instrument

Related to Creswell (2012) Validity and reliability are parts of a good research instrument. The research instruments should be valid and reliable to get a valid and reliable result.

a. Validity

Validity is the development of sound evidence to demonstrate that the rest interpretation (of scores about the concept or construct that the test is assumed to measure) matches its proposed use. The instrument is valid if the r count > r table with significant value 0.05. If r count < r table with significant value 0.05, the instrument is not valid and cannot be used to collect data in the research. The amount of the sample (N) is 40. Thus, the degree of freedom (df) is 40-2= 38 and alpha= 0.05. It is gained r table=0.316.

Table 1.1 The Validation Result of Questionnaire Language Learning Strategies

No	R count	R table	Interpretation
1	0.655	0.316	Valid
2	0.760	0.316	Valid
3	0.683	0.316	Valid
4	0.367	0.316	Valid
5	0.451	0.316	Valid
6	0.538	0.316	Valid
7	0.218	0.316	Not Valid
8	0.242	0.316	Not Valid
9	0.563	0.316	Valid
10	0.151	0.316	Not Valid
11	0.579	0.316	Valid
12	0.436	0.316	Valid
13	0.388	0.316	Valid
14	0.666	0.316	Valid
15	0.403	0.316	Valid

Table 1.2 The Validation Result of Questionnaire Student Thinking Styles

No	R count	R table	Interpretation
1	0.185	0.316	Not Valid
2	0.570	0.316	Valid
3	0.402	0.316	Valid
4	0.756	0.316	Valid
5	0.462	0.316	Valid
6	0.566	0.316	Valid
7	0.580	0.316	Valid
8	0.650	0.316	Valid
9	0.566	0.316	Valid
10	0.785	0.316	Valid

11	0.435	0.316	Valid
12	0.625	0.316	Valid
13	0.589	0.316	Valid
14	0.485	0.316	Valid
15	0.684	0.316	Valid
16	0.481	0.316	Valid
17	0.427	0.316	Valid
18	0.463	0.316	Valid
19	0.594	0.316	Valid
20	0.181	0.316	Not Valid

b. Reliability

Related to Alhaysony (2017) After the researchers determined the valid item of test validity then the researchers measured the reliability of the instrument. Reliability means that scores from an instrument are stable and consistent. Scores should be nearly the same when researchers administer the instrument multiple times at different times. In this research, to find out the reliability of the instrument, the researchers used formula as follows:

$$r11 = \left(\frac{k}{k-1}\right)\left(1 - \frac{\Sigma pq}{Vt}\right)$$

Where:
r11 = the reliability of the instrument
k = the number of test items
Vt = the total variants
p = the proportion of the subject that get score 1
q = the proportion of the subject that get score 0
Σpq = the sum of multiplication among the numbers of subject who got the correct answer and the sum of multiplication among the numbers of subject who got the wrong answer.

The criteria of reliability values were as follows:
0.20 = there was no reliability
 0.21 − 0.40 = very low reliability
0.61 − 0.60 = enough reliability
0.61 − 0.80 = high reliability
0.81 − 1.00 = very high reliability

Table 1.3 The Reliability result of Questionnaire Language Learning Strategies

Reliability Statistics	
Cronbach's Alpha	N of Items
.788	12

From the table 1.3 it can be seen that the instrument is reliable because the value more than 0.7 or 0.788.

Table 1.4 The Reliability Result of Questionnaire Students Thinking Styles

Reliability Statistics	
Cronbach's Alpha	N of Items
.838	18

From the table 1.4 it can be seen that the instrument is reliable because the value more than 0.7 or 0.838

2. Technique of the Data Analysis

In this research, the researchers used correlational quantitative research. The researchers used Correlation Product Moment which was developed by Carl Pearson (2012) to know the correlation between two variables. The formula is:

a. Finding the correlation uses formula

$$r = \frac{N\left(\sum XY\right) - \left(\sum X\right)\left(\sum Y\right)}{\sqrt{\left[\left(\sum X^2\right) - \left(\sum X\right)^2\right]\left[n\left(\sum Y^2\right) - \left(\sum Y\right)^2\right]}}$$

r = Pearson Correlation Coefficient
N= Number of Participants
X = Students'' Language Learning Strategies
Y = Students'' Thinking Styles
$\sum X$ = The Sum of Language learning Strategies
$\sum Y$ = The Sum of Students Thinking Styles
$\sum X^2$ = The Sum of Squared Language Learning Strategies
$\sum Y^2$ = The Sum of Squared Students Thinking Styles
$\sum XY$ = The Sum of Multiplied Scores between X and Y

This formula is used to find out an index correlation "r" product moment between variable X and Y.

b. To interpret the index scores of correlation "r" product moment between variable X and Y (rxy).

FINDINGS AND DISCUSSION

In this section, the researchers show the result of data gained from the questionnaire. There are two kinds of questionnaires in this research. The first questionnaire is about language learning strategies (X) consist of 15 questionnaires. The second questionnaire is about students thinking styles (Y) consist of 20 questionnaires. The total amount of questionnaire is 35. In this research, the researchers conducted the research at IAIN Langsa. The researchers chose several students of English Education Department of IAIN Langsa. The total amount of the participants was 40 students. The data of independent variable and dependent variable gained from the participants are described as follows:

1. Language Learning Strategies and Students Thinking Styles Scores

To measure the level of language learning strategies and students thinking styles the researchers distributed a questionnaire. There were 2 kinds of questionnaires in this research. The first questionnaire was about language learning strategies and it consisted of 15 items. The second questionnaire was about students thinking styles and it consisted of 20 items. The students only needed to checklist on the answer options provided because it classified into close-ended question.

The Scores of Language Learning Strategies

No	Students Code Name	LLS (X) (Scores of Language Learning Strategies)
1	AAA	63
2	BBB	61
3	CCC	59
4	DDD	58
5	EEE	59
6	FFF	64
7	GGG	53
8	HHH	63
9	III	69
10	JJJ	67
11	KKK	56
12	LLL	71
13	MMM	61
14	NNN	63
15	OOO	63
16	PPP	60
17	QQQ	57
18	RRR	55
19	SSS	56

No	Students Code Name	
20	TTT	59
21	UUU	66
22	VVV	66
23	WWW	65
24	XXX	65
25	YYY	68
26	ZZZ	69
27	AAAA	69
28	BBBB	62
29	CCCC	67
30	DDDD	64
31	EEEE	60
32	FFFF	68
33	GGGG	68
34	HHHH	59
35	IIII	60
36	JJJJ	67
37	KKKK	72
38	LLLL	68
39	MMMM	63
40	NNNN	69

The Scores of Students Thinking Styles

No	Students Code Name	STS (Y) (Students Thinking Styles)
1	AA	80
2	BB	66
3	CC	55
4	DD	85
5	EE	68
6	FF	84
7	GG	65
8	HH	74
9	II	74
10	JJ	81
11	KK	66
12	LL	77
13	MM	85
14	NN	83
15	OO	68
16	PP	65
17	QQ	61
18	RR	70
19	SS	71
20	TT	58
21	UU	67
22	VV	70
23	WW	83
24	XX	83
25	YY	77
26	ZZ	75

27	AAA	75
28	BBB	79
29	CCC	78
30	DDD	69
31	EEE	70
32	FFF	80
33	GGG	87
34	HHH	68
35	III	69
36	JJJ	81
37	KKK	76
38	LLL	89
39	MMM	65
40	NNN	80

a. The Profile of Language Learning Strategies

The researchers calculated the statistical scores of language learning strategies data including mean, median, mode, maximum score, minimum score, and range of the data. The researchers used SPSS 26.0. to find out the data needed.

Table 1.5 The Profile of Language Learning Strategies

Statistics		
Language Learning Strategies		
N	Valid	40
	Missing	0
Mean		62,93
Median		63,00
Mode		63
Std. Deviation		5,131
Variance		26,328
Range		19
Minimum		53
Maximum		72
Sum		2517

From the table 1.5 above, it can be seen that the mean is 62, 93, the median is 63, 00, the mode is 63, the range is 19, the minimum score is 53 and the maximum score is 72.

b. The Profile of Students' Thinking Styles.

The researchers calculated the statistical scores of students thinking styles data including mean, median, mode, maximum score, minimum score, and range of the data. The researchers used SPSS 26.0. to find out the data needed.

Table 1.6 The Profile Students Thinking Styles

Statistics		
Thinking Styles		
N	Valid	40
	Missing	0
Mean		73,93
Median		74,50
Mode		65[a]
Std. Deviation		8,275
Variance		68,481
Range		34
Minimum		55
Maximum		89
Sum		2957
a. Multiple modes exist. The smallest value is shown		

From the table 1.6 above, it can be seen that the mean is 73.93, the median is 74.50, the mode is 65, the range is 34, the minimum score is 55 and the maximum score is 89. In this research as mentioned in the previous chapter, the researchers analyzed the result of the questionnaire used SPSS 26.0 to see whether there is any correlation between language learning strategies and students thinking styles.

Table 1.7 The Coefficient Correlation between Language Learning Strategies and Students Thinking Styles Correlations

Correlations		Language Learning Strategies	Thinking Styles
Language Learning Strategies	Pearson Correlation	1	,507**
	Sig. (2-tailed)		<,001
	N	40	40
Thinking Styles	Pearson Correlation	,507**	1
	Sig. (2-tailed)	<,001	
	N	40	40
**. Correlation is significant at the 0.01 level (2-tailed).			

Based on the table 1.7 guidelines of Pearson's correlation the final score shows that the correlation coefficient is r count 0.507. It includes in the third level as moderate correlation (0.40-0.599) which means the correlation between two variables is high. The significant value is 0.002 which mean that the correlation between two

variables is significance. It considers that there is positive correlation between language learning strategies and students thinking styles.

2. Regression Result

In this research, the researchers found out the effect language learning strategies towards students thinking styles.

Table 1.8 The effect of Language Learning Strategies toward Students

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,507[a]	,257	,238	7,226
a. Predictors: (Constant), Language Learning Strategies				

a. Predictors: (Constant), Language Learning Strategies

b. Dependent Variable: Students Thinking Styles Based on the table guidelines of Pearson, the table shows that the correlation coefficient (r count) is 0.507 and the determination coefficient (R Square) is 0.257. This means that there is effect of language learning strategies toward students thinking styles. The effect of language learning strategies towards students thinking styles is 25.7 %.

3. Hypothesis Testing

This research is aimed to answer the hypothesis that it can be accepted or rejected.

a. Null Hypothesis (Ho)

There is no significant correlation between language learning strategies and students thinking styles

b. Alternative Hypothesis (Ha)

There is significant correlation between language learning strategies and students thinking styles. The hypothesis will be tested as the following criteria: If r count< r table means Ho is accepted and Ha is rejected. If r count> r table means Ho is rejected and Ha is accepted. The correlation coefficient is r count = 0.507, significant value 0.0 0.05, thus Ho is accepted Ha is rejected. If ρ <0.05, thus Ho is rejected Ha is accepted. It can be summed up that there is a significant correlation between language learning strategies and students thinking styles.

The researchers stated in the first chapter the aim of this study was to investigate whether there is significant correlation between language learning strategies and

students thinking styles of the students of English education department of IAIN Langsa. English is considered as the world prime language which is used all people in this world. Many schools in Indonesia make English as their compulsory lesson in junior and senior high school. The researchers have collected the data needed in this research for verifying the hypothesis.

According to the calculation above, the correlation result between language learning strategies and students thinking styles is higher than r table (0.507> 0.316). Based on the table interpretation, the correlation coefficient r count = 0.507 was considered as high correlation because it included in the third category (0.40 – 0.599). It means there is positive correlation between the two variables. In addition, the significance values is $\rho = 0.00 < 0.05$ which means that the correlation was significant. And the coefficient determination is R Square = 0.257, which means that the effect of language learning strategies toward students thinking styles is 25.7 %.

CONCLUSION

Based on the findings of the data analysis, the researchers formulate several conclusions to answer the research problems:

1. The profile of language learning strategies such; the mean is 61.73, the median is 62.00, the mode is 60, the range is 18, the minimum score is 53 and the maximum score is 73.

2. Based on the research finding in table 4.4, it can be seen that the mean is 74.22, the   median is 75.00, the mode is 75, the range is 30, the minimum score is 55 and the   maximum score is 85.

3. There is positive significant relationship between language learning strategies and student thinking styles of the students' English education department IAIN Langsa. It   can be proved by the correlation coefficient (r count) and significance value (ρ) got   from the calculation r count = 0.507, $\rho = 0.002 < 0.05$. Therefore, the correlation between language learning strategies and students thinking styles is significant.

4. Although this research has presented various results from research figures from various aspects of SPSS, this research still cannot clearly describe descriptively the phenomena that occur in the field. Therefore, this research is very possible to do further research that focuses on descriptively explaining what is the main cause of the presence of seventh semester students at IAIN Langsa who experience misunderstanding in answering exam questions.

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