

I. RESEARCH METHOD

In this research, the researcher intended to analyze the mostly learning strategy used by field independent student in speaking English and to see correlation between students's learning strategies and their speaking score. This chapter includes the research design, source of data, data collecting technique, validity and reliability, normality of data, research procedure and data analysis.

1.1 Research Design

This research was designed to use descriptive analysis and correlation quantitative research. Firstly, the descriptive analysis was employed to analyze the result both of cognitive style questionnaire and learning strategies questionnaire.

Then, the correlation research was applied to see the correlation between students' learning strategies and their speaking score. In this research, the researcher classified student into field independent and field dependent group through cognitive style questionnaire. The researcher considered field independent student according to student's learning strategies they used in speaking by using the data of learning strategies questionnaire. The student as subject of this research was analyzed from its learning strategies point of view, why they could achieve good speaking score. At the final step of this research, the researcher could see what the mostly learning strategy that was used by them. Brown (1980 : 91-92) observed that it could be hypothesized that the field independent person is the better second language learner as he could

focus on the essential gist in language lesson or conversation than field dependent person.

This theory is also supported by Hansen and Standfield (1989), they correlated score on speaking test with scores on linguistic, integrative, and communication measures. All correlation are positively significant for field independent. Meanwhile, Brown also found that at the untutored setting of language learning, field dependent student may be more beneficial because successful foreign language acquisition was determined by how well the learner could communicate with speaker on target language (Brown, 1977).

Brown indicates that field dependent correlated quite highly with a test of language proficiency. Brown's theory also could be applied to speaking ability.

Generally the steps of research as following : making the beginning research to determine the group of student belong to field independent student (1), grouping student in field dependent and field independent by implementing cognitive style questionnaire (2), organizing the second research using learning strategies questionnaire in order to check out the most learning style used by field independent student (3), organizing a certain test in order to check their speaking ability

Actually, the researcher used the certain formula of the research, it was correlation quantitative research. The formula was shown as below:

$$\mathbf{X} \longrightarrow \mathbf{Y}$$

X = learning strategy of field independent

Y = speaking score of field independent student

1.2 Source of Data

The research data was taken from the students of the second year of SMP N 2 Bandar Lampung. Since the researcher considered that the second year of SMP N 2 Bandar Lampung had relatively high foundation in language components such as structure and vocabularies. The subjects of this research were the second year students belong to field independent group.

1.3 Data Collecting Technique

In collecting the data, the researcher used some ways as follows :

1. speaking test

Speaking test was given to the students who were belong to field independent group. It was for specifying the good language learners in speaking lesson as the subject of this research. The researcher used oral test to get student speaking score.

The researcher had determined the appropriate material preferred to school curriculum. This research was hold in SMP N 2 Bandar Lampung which considered as Pioneering International School (RSBI). The researcher had composed speaking test to conduct students making short speech based on the guiding question that had been made by the researcher. The guiding question was preferred with the background ability of student in Junior High School. The researcher had prepared some newest topic of short speech related to their closest environment and their background knowledge. This was aimed to make them easy to brainstorm their idea. Technically, the researcher asked the students to make short speech in their home. Previously, the researcher taught them about the concept of short speech. He closed session and asked students to compose the outline of their speech, then in the

following day, they must perform it in front of class individually. This performance was the simple way of the researcher collecting the data of student's speaking score.

2. questionnaire

Questionnaire was given to identify the student's cognitive style and their learning strategies. It was intended to get perfect data about their strategy system used in learning speaking. The researcher prepared some statements according to Rubin's strategy systems. This questionnaire consisted of 30 items, which were divided into 6 groups ; metacognitive, affective , social, memory, cognitive, and compensatory.

To judge the respondent's answer, the researcher used Likert scale where the researcher gave four alternative responses for each statement. They are *strongly agree, agree, disagree and strongly disagree*. They were scored 4, 3, 2 and 1 relatively. The researcher had determined the qualification where the students were judged using the certain strategy. The determination of this questionnaire was:

1. 15-20 means that the learners used the strategy.
2. 4-14 means that the learners never used the strategy.

The standard test consisted of some statement was given to field independent students in order to classify into learning strategies classification, when they were in learning speaking. This test classified in more detail according to their preference of learning something. The categories covered metacognitive, affective, social, memory, cognitive, compensatory.

1.4 Validity of Data

The validity of data was needed to measure the accuracy and the exactness of certain instrument which was used to test students or to collect the data. An instruments had

a high validity provided that that instrument could measure exactly what we measured for getting the data. To measure the validity of data in this research, the researcher used content validity dan construct validity.

a. Content validity

Patton (1988 : 166) pointed out that objectivity aspect the scientific truth. Content validity focused on whole item of questionnaire in speaking test instrument. In order to fulfill the requirement of content validity, the researcher saw the indicator of all items in questionnaire then analyze what all instruments have represented a certain material which would be measured. The validity of instruments is high even if it has covered all required material in the supposed curriculum. Content validity could be related to the material in the school curricullum in which the research was taken place.

b. Construct validity

Contract validity is needed in the research which it has two instrumenst or more for collecting data. The instruments must have some indicator to measure one certain aspect. If there is certain instrument which have some aspect, then each aspect has some indicator, so the similar indicator should be support each other positively.

Shohamy (1985: 74) stated that construct validity concern with whether the item was actually in line with the theory of what it meant to know the language.

$$D_p = \frac{U - L}{\frac{1}{2}N}$$

DP = Discrimination Power

U = Upper Class

L = Lower Class

N = the number student of both group

Shohamy (1985:79)

1.5 Reliability of Data

Since the researcher gave the speaking test for specifying field independent students, so the reliability of the speaking test was very important to judge the quality of the test. To measure the reliability of the instrument, the researcher use *the Cronbach alpha* formula, as follow :

$$r_{11} = \left[\frac{K}{k-1} \right] \left[1 - \frac{\sum \sigma b^2}{\sigma_1^2} \right]$$

Explanation :

r_{11} = reliability coefficient

K = the number of instrument item

$\sum \sigma b^2$ = the number of item varian

σ_1^2 = total of variant

Suharsimi Arikunto (2006 : 196)

Setiyadi (2001) stated that *Cronbach Alpha* formula was used to reveal the reliability instrument, the higher alpha, the more reliable the items of the questionnaire.

Table 3.1 Criteria of Reliability

r_{11} score	Criteria
0,80 - 1,00	Very high reliability
0,60 – 0,79	High reliability
0,40 – 0,59	An Average reliability
0,20 – 0,39	Low reliability
0,00 – 0,19	Very low reliability

Suharsimi Arikunto (2006 : 276)

1.6 Normality of Student's Speaking Score

The data of speaking score must be analyzed whether the collected data were normally distributed or not. This step was important in order to determine what way of statistical correlation should be used in computing the speaking score. There was certain way which could be used to test normality of speaking score. To analyze

the data, the normality test should be done firstly. Hatch and Farhady (1982:64) said that normality test is an idealized model which can be used to dealing with natural behavior. This test was used to measure whether the data in the class is normally distributed or not. In this research, the computation of normality was analyzed by using *Kolmogorov-Smirnov* SPSS.16.

1.7 Research Procedure

In conducting the research, the researcher used some procedures as follows :

1. Taking the students speaking test

The researcher took their speaking score test to support the other data, gained by questionnaire. That speaking score taken from their speaking test, conducted by teacher of their class before the this research actually was going on. In this research, the researcher took the speaking score from their speaking ability in class.

Harris (1974) said that there were four aspects that were evaluated; they are fluency, grammar, pronunciation and structure. Each component had certain weight score.

The description was as follow:

- a. Fluency (A) was scored 20% from total student mark that represent how good students utterances in speaking.
- b. Grammar (B) was scored 30% from total student mark that represent the quality of sentence's structure is spoken by each student.
- c. Structure (C) was scored 30% from total student mark that represent the quality of making utterance in order to support the communicative understanding between student and teacher

- d. Pronunciation (D) was scored 20% from total student that represent the quality of how good each student pronounce English word correctly and rightly.

Total score of speaking ability is resulted by count up all score of speaking test aspect. The formula was as $E = A + B + C + D$

Description:

- a. $E = \text{total score} / \text{speaking score}$
- b. $A = \text{Fluency score} / 20\% \text{ of Fluency score}$
- c. $B = \text{grammar score} / 30\% \text{ of grammar score}$
- d. $C = \text{structure score} / 30\% \text{ of gesture score}$
- e. $D = \text{pronunciation score} / 20\% \text{ of pronunciation score}$

2. Grouping the students

The researcher needed to group all student into required goup that reflect the sample of the research. In order to group some students in to a required group, it was done as follow :

- a. making the beginning questionnaire to determine the group of student belong to field independent student or field dependen and then grouping them into field dependent and field independent
- b. organizing the second test in order to check their speaking ability.

3. Classifying student based on Rubin's learning strategies

Giving questionnaire was to check out the mostly learning strategies used by field independent student in speaking English . This questionnaire included questions about student's learning strategies. This questionnaire was designed to find out what the student's behaviours were when they face English as learning materials.

This questionnaire classified field independent student into six categories based on Rubin's strategy system.

1.8 Data Analysis

In analyzing the data from the cognitive style questionnaire, learning strategies questionnaire and speaking test, the researcher used SPSS.16 in computing each data result. The steps of analyzing the data could be described as below:

- a. Scoring each student response in answering questions or statements in the questionnaire. Each item was scored used Likert scale.
- b. Tabulating data of scoring items from the questionnaires. The example of tabulation table could be seen in *appendix 1*. The researcher measured the inter-item reliability by computing each score of item in questionnaire toward total score of all item in same questionnaire. The researcher also measured the validity of each item in the questionnaire by using the tabulating data of all item score.
- c. Making certain classification toward the research subject. In the cognitive style questionnaire, the student's score was computed using SPSS.16 in order to correlate their score with total score of all items in such questionnaire.
- d. Data analysis is done by tabulating the result of the test given by the researcher. This data was statistically analyzed by using statistical computerization i.e. *Spearman correlation of SPSS (Statistical Package for Social Science) version 16.0 for Windows* to see whether there were a significant correlation between the student's learning strategies and their speaking ability, in which the significance is determined by $p < 0.05$. It is used as the data come from the same sample.