

## **CHAPTER III**

### **RESEARCH METHOD**

#### **A. Research Design**

In this study, the researcher applied quantitative research with descriptive statistic as analysis in order to examine the data. According to Sharma (2019) descriptive statistic analysis main purpose is to provide insight or describing behavior of samples and measures done on reasarch (p. 4). Furthermore, considering the intention of researcher to get summary about the most and least and classification of metacognitive reading strategies from raw data taken, this method would be suitable for this case.

#### **B. Research Setting**

The research conducted at 4 different junior highschools in Banjarmasin City regency (North, East, South, and West Banjarmasin), South Kalimantan. Students ranging from grade 7-9 with proportional representative samples of 4 selected schools are surveyed to represent answers of junior highschool students in Banjarmasin among the total population after reduced through Slovin formula in order to simplify dense and homogenous population. The random selected representative students are samples who have went thorough their time in junior high school. In mean time they underwent the same provided curriculum of K-13 and similar English materials eventhough some schools has their own preferences in choosing source of materials but still could be considered homogenous among them to be applied.

Further reasoning for choosing 3 grades as samples for this study was predicated by the idea that the materials faced by students in these 3 levels of education basically already applied inductive learning on expressive sentences and no longer focusing on grammar translation method based on K-13 curriculum. The materials required the necessity of students to consider using inferencing, awareness towards text they faced and unknown words or phrases although still adjusted for beginner level, and not just depending on word-to-word translation as basis to solve reading materials due to the difference between English and first language of learners as well as the goal of reading comprehension.

In addition, before applying the current study researcher already considered plausibility of reasons of current field of research. The researcher already reviewed the original assesment used in current study and found the range of study can be applied of MARSI 2002 are within grade 6 until college or advance learner, and also not forget the previous study from Shen, Y.-s. (2003) and Li, Fenfang. (2010) that did earlier the current type of study however what made it different is the consideration of area, time of study, research design, first language of students, distinctive approach which students have as a result of their first language characteristics towards english as reading materials, therefore hopefully this research will be able to anwer the result among those differences.

### C. Population and Sample

According to Creswell (2005) population is a group of individuals who have the same characteristics (p.145). The population of this research was Indonesian junior high school students second semester year 2020/2021 located in Banjarmasin district and based on data from Ministry of Education and Culture data, the total number of junior high school in Banjarmasin were 63 and the sum number of students currently this semester were 22.400.

The samples from the population calculated through Slovin formula to narrow down the very high population and homogeneity among them into random and suitable representative sample with confidence level 95% and margin of error 5% until 8%.

$$\text{Slovin Formula: } n = \frac{N}{N \cdot d^2 + 1}$$

n : size of sample

N : size of Population

d : Margin of error

The calculation:

$$n = \frac{N}{N \cdot d^2 + 1}$$

$$= \frac{22.400}{22.400 \cdot 0,5^2 + 1}$$

$$= \frac{22.400}{57}$$

$$= 392,98 \text{ or } 393$$

The result 393 students as sample uses 5% margin of error, the score would be different as researcher raise the margin of error into 7% or 8% which are 266 and 201 students. As stated from Association of Public Opinion Research of Indonesia (AROPI), level of confidence which often be used for research are from range 90%, 95% and 99%. Level of confidence 90% means probability the result of sample same as population is 90%, possibility error is 10% and if we use 95% level of confidence then the possibility of error is 5% and so on. In this study researcher would use the result of 201 students as preference to obtain the samples as it is still permissible to apply 1-10% range margin of error in conducting research. The expected number of samples might be changed in future if certain conditions occur however researcher would not exceed the 10% maximum margin of error.

Due to the homogenous characteristics of large number of population and stratum which were students from grade 7 until 9 among those 22.400 students, multistage sampling was considered to be suitable for this case to obtain representative sample in next step after deciding the sum total of sample. Firstly, researcher chose about 4 or more schools among the 63 schools by using cluster sampling in Banjarmasin as random selected representative place to gather the sample. Secondly, in each schools researcher would ask for an approval from the authorized person to conduct random sampling survey in several class from grade 7 until 9. As every single students in each selected schools basically have the same

opportunity to be included and in this survey. After that random sampling is used to gather random representative sample to fulfill the expected total sample and in the end researcher gathered about 54 students from each schools and divided into 3 class which were 18 students for each grade.

Table 3.1. Table of Sample Distribution

Schools	Grade 7	Grade 8	Grade 9	Total
School 1	18	18	18	54
School 2	18	18	18	54
School 3	18	18	18	54
School 4	18	18	18	54
Total				216

\*the total number of 216 is the closest sum of 201 which comes from rounding off the total number for each representative grade which is 17,73 into 18 and multiplied into 3 grades for 4 schools.

#### **D. Research Instrument**

##### **1. Questionnaire**

According to Arikunto (2010, p.203) instrument is a tool or facility used to collect data so the work can be done faster and executed in appropriate quality. The instrument used in this research is Metacognitive Awareness of Reading Strategies Inventory (MARSİ) Questionnaire based on Mokhtari & Reichard's assessment tool research (2002) and it was also translated into Indonesian language so

students could process it easier. This instrument later used to collect data about students awareness and use of metacognitive reading strategies during their time in junior highschool year 2020/2021.

MARSI Questionnaire (Mokhtari & Reichard) calculates three classification of reading strategies which are consisting of:

1. Global Reading Strategies (GLOB)
2. Problem-Solving Strategies (PROB)
3. Support Reading Strategies (SUP)

This questionnaire is a five point Likert scale questionnaire ranging from 1 (I never or almost never use this strategy) to 5 (I always or almost always use this strategy).

**Metacognitive Awareness of Reading Strategies Inventory  
(MARS) Version 1.0**

Kouider Mokhtari and Carla Reichard © 2002

**DIRECTIONS:** Listed below are statements about what people do when they read academic or school-related materials such as textbooks, library books, etc. Five numbers follow each statement (1, 2, 3, 4, 5) and each number means the following:

- 1 means "I never or almost never do this."
- 2 means "I do this **only occasionally**."
- 3 means "I **sometimes** do this." (About 50% of the time.)
- 4 means "I **usually** do this."
- 5 means "I **always or almost always** do this."

After reading each statement, **circle the number** (1, 2, 3, 4, or 5) that applies to you using the scale provided. Please note that there are **no right or wrong answers** to the statements in this inventory.

TYPE	STRATEGIES	SCALE				
		1	2	3	4	5
GLOB	1. I have a purpose in mind when I read.	1	2	3	4	5
SUP	2. I take notes while reading to help me understand what I read.	1	2	3	4	5
GLOB	3. I think about what I know to help me understand what I read.	1	2	3	4	5
GLOB	4. I preview the text to see what it's about before reading it.	1	2	3	4	5
SUP	5. When text becomes difficult, I read aloud to help me understand what I read.	1	2	3	4	5
SUP	6. I summarize what I read to reflect on important information in the text.	1	2	3	4	5
GLOB	7. I think about whether the content of the text fits my reading purpose.	1	2	3	4	5
PROB	8. I read slowly but carefully to be sure I understand what I'm reading.	1	2	3	4	5
SUP	9. I discuss what I read with others to check my understanding.	1	2	3	4	5
GLOB	10. I skim the text first by noting characteristics like length and organization.	1	2	3	4	5
PROB	11. I try to get back on track when I lose concentration.	1	2	3	4	5
SUP	12. I underline or circle information in the text to help me remember it.	1	2	3	4	5
PROB	13. I adjust my reading speed according to what I'm reading.	1	2	3	4	5
GLOB	14. I decide what to read closely and what to ignore.	1	2	3	4	5
SUP	15. I use reference materials such as dictionaries to help me understand what I read.	1	2	3	4	5
PROB	16. When text becomes difficult, I pay closer attention to what I'm reading.	1	2	3	4	5
GLOB	17. I use tables, figures, and pictures in text to increase my understanding.	1	2	3	4	5
PROB	18. I stop from time to time and think about what I'm reading.	1	2	3	4	5
GLOB	19. I use context clues to help me better understand what I'm reading.	1	2	3	4	5
SUP	20. I paraphrase (restate ideas in my own words) to better understand what I read.	1	2	3	4	5
PROB	21. I try to picture or visualize information to help remember what I read.	1	2	3	4	5
GLOB	22. I use typographical aids like bold face and italics to identify key information.	1	2	3	4	5
GLOB	23. I critically analyze and evaluate the information presented in the text.	1	2	3	4	5
SUP	24. I go back and forth in the text to find relationships among ideas in it.	1	2	3	4	5
GLOB	25. I check my understanding when I come across conflicting information.	1	2	3	4	5
GLOB	26. I try to guess what the material is about when I read.	1	2	3	4	5
PROB	27. When text becomes difficult, I re-read to increase my understanding.	1	2	3	4	5
SUP	28. I ask myself questions I like to have answered in the text.	1	2	3	4	5
GLOB	29. I check to see if my guesses about the text are right or wrong.	1	2	3	4	5
PROB	30. I try to guess the meaning of unknown words or phrases.	1	2	3	4	5

**Reference:** Mokhtari, K., & Reichard, C. (2002). Assessing students' metacognitive awareness of reading strategies. *Journal of Educational Psychology*, 94 (2), 249-259.

## 2. Interview

Beside applying questionnaire as instrument for this study, researcher also deployed structured interview as second instrument to support and strengthen the demographic result from first report.

Interview is expected to be able to provide deeper insights and crosscheck students preferences from previous questionnaire applied. The 216 total sample who previously participated the questionnaire phase will be interviewed with standardized interviews containing the three classification of metacognitive reading strategies, to see students preferences. By the end of phase, the result from questionnaire and interview cross-checked as two result that able to answer the two research questions.

#### **E. Data Collection Procedure**

To measure students tendencies and preferences in reading strategies, MARSIS 2002 was used as questionnaire and structured interview in this study. This instrument consisting of 30 items of likert scale type questions, students expected to set their tendencies among the 30 items questions with ranging tendencies from 1 (Never or almost never) until 5 (Always or almost always). The result of this questionnaire later will be concluded through SPSS 16, although the formula to calculate this data manually has been provided in this chapter, the researcher found the result using SPSS 16 and manual calculation basically the is same and therefore the more structured form of result and listed table of SPSS 16 would be used.

After the phase of questionnaire was finished, the researcher move to the interview part. In this structured interview session, the 216 samples were asked individually towards all the type of strategies given to them in



previous phase, to determine their preferences strategies in coping reading materials regardless of their tendencies reading strategies they used onto majorities type of reading they face at the time they are studying English at schools. The researcher intention was to acquire insights more from students personal preferences of reading strategies in which later would serve not just as second supporting instrument but also a cross-check for the result of first instrument.

## **F. Data Analysis**

Once all the required data are gathered, the reseracher would examine and analyze the data in order to get the result as expected through the procedure of data collection. In this phase, researcher would apply descriptive statistic in order to display the demographic or trends within the gathered data, the steps are:

### **1. Identification of Data**

The researcher identify the gathered data to determine what strategies are most and least used by the students and also the classification.

### **2. Tabulation**

According to Ali (1993, p.186) Every answers based on questionnaire item that using Likert scale have gradation from very positive to very negative .

Table 3.2. Likert Scale of MARSII Questionnaire

No	Statement	Score & Scale
1	Always or almost always	5
2	Usually	4
3	Sometimes	3
4	Only Occasionally	2
5	Never or Almost Never	1

In order to identify answers based on Likert scale questionnaire, the calculation of answers will be processed through this formulation (Riduwan, 2009: 88):

$$\text{Index Value} = \frac{(F.1)+(F.2)+(F.3)+(F.4)+(F.5)}{5}$$

F1: frequency of answers who choose 1 (Never or Almost Never)

F2: frequency of answers who choose 2 (Only Occasionally)

F3: frequency of answers who choose 3 (Sometimes)

F4: frequency of answers who choose 4 (Usually)

F5: frequency of answers who choose 5 (Always or Almost Always).

After that, the next step is the finding of the maximum score, minimum score, interval length, and percentage score.

$$\text{Index maximum score} = \frac{\text{Highest Score} \times \text{Total Questionnaire}}{\text{Total Sample}}$$

$$\text{Index minimum score} = \frac{\text{lowest score} \times \text{total questionnaire}}{\text{total sample}}$$

$$\text{Interval Length} = (\text{highest score} - \text{lowest score}) : 5$$

Score Percentage = (total score : maximum score) x 100

Score Criteria:

0% - 20% = very low

21% - 40% = weak

41% - 60% = moderate

61% - 80% = strong

81% - 100% = very strong

To analyze the percentage of strategies used by students after the previous steps, each item in questionnaire would be calculated with this formulation:

$$P = \frac{F}{N} \times 100\%$$

P: Percentage value

F: total frequency who answers certain criteria in questionnaire

N: total of respondent

### 3. Description

Once all the gathered data has been analyzed and identified, the researcher would make description of percentage data that exists within the reasearch in order to get the demographic so the data are clear and readable.

### 4. Conclusion

In this final phase, the researcher would give conclusion of his research by providing two result of intruments.

