

## METACOGNITIVE READING STRATEGY TRAINING FOR HIGH SCHOOL STUDENTS

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### Abstract

Penelitian ini bertujuan untuk mengetahui apakah terdapat pengaruh dari *Metacognitive Reading Strategy Training* (MRST) terhadap pemahaman membaca siswa. Penelitian ini merupakan kajian kuantitatif yang menggunakan *one group pre-test post-test design*. Sampel penelitian ini terdiri 25 siswa SMA yang dipilih secara *purposive*. Instrumen yang digunakan adalah tes pemahaman membaca. *Paired-sample t-test* digunakan untuk menganalisis pengaruh terhadap pemahaman membaca siswa. Hasil analisis menunjukkan bahwa terdapat pengaruh yang signifikan dari pemahaman membaca siswa sebelum dan sesudah MRST, dengan nilai *t-ratio* 13.498 yang berarti lebih tinggi dibandingkan dengan *t-table* 2.056. Temuan tersebut menjelaskan bahwa MRST efektif dalam meningkatkan kemampuan pemahaman membaca siswa.

This research was aimed to find out whether there is an effect of Metacognitive Reading Strategy Training (MRST) on the students' reading comprehension. This research was carried out using a quantitative study with one group pre-test post-test design. The subjects numbering of 25 high school students were taken purposively. The instrument used was the reading comprehension test. This study used paired-sample t-test to analyze the effects of students' reading comprehension. The result of the analyses indicated that there was a significant effect of students' reading comprehension before and after metacognitive reading strategy training, within t-ratio 13.498 which means that it was higher than t-table 2.056. This finding indicates that the MRST was effective in improving the students' reading comprehension ability.

**Keywords:** metacognition, MRST, reading comprehension.

## **INTRODUCTION**

Reading comprehension is one of the main important elements for students' English language learning. Reading comprehension can be defined as the ability to take information and derive sentence and discourse interpretation. It is the process through which the recognized words are transformed into a meaningful idea (Hoover and Gough, 1990: 131). It is a complex process that requires the activation of numerous cognitive skills (Kintsch, 1998: 3-4). The importance of the reading skill in academic contexts is no doubt, children who read for enjoyment every day not only perform better in reading tests than those who do not, but also develop a broader vocabulary, increased general knowledge and a better understanding of other cultures, but most of the students in Indonesia are less motivation in reading.

McNamara (2007: xi) mentions that comprehension refers to the ability to go beyond the words, to understand the ideas and the relationships between ideas conveyed in a text. Students may understand each word separately, but linking them together into meaningful ideas often does not happen as it should. They can decode the words, but have not developed sufficient skills to comprehend the underlying, deeper meaning of the sentences, the paragraphs, and the entire text. It can be one reason why Indonesian students get difficulties in reading the English text. For Indonesian students, the problems are not only about comprehending the English text, but also getting difficulties in the language itself. At the same time, while attempting to comprehend the text, students engage with their attitudes, motivation, background knowledge, and even personal interests (Masduqi, 2014:

385). On the contrary, students who were surveyed in Arizona high school described reading as rewarding and satisfying and they read primarily for fun and pleasure (Hale and Crowe, 2001: 54). In Arizona, where English as a first language, the students do not have any difficulties with the language, what they have to consider when they are going to read just about their favorite types of books.

International Association for Evaluation of Educational Achievement (IAEEA) in 1996 informed that the reading ability, both in English and Bahasa Indonesia, of students aged 9-14 years in Indonesia was ranked 41<sup>st</sup> out of 49 countries surveyed. In 1998 World Bank data also informed that the reading habits of children in Indonesia were at the lowest level (51.7). This level is below those of the Philippines (52.6), Thailand (65.1), and Singapore (74.0). In 1998-2001 IAEEA survey results from 35 countries, informed the students' reading ability in Indonesia was ranked at the last.

Metacognition is very important for reading comprehension. Many studies also show that there is a positive relationship between students' metacognitive awareness of reading processes and their ability to read, instructional methods that generate high levels of student involvement and require substantial cognitive and metacognitive activity during reading can have positive effects on reading comprehension. (William and Atkins, 2009: 39). Baker and Brown (1984) cited by McKeown and Back (2009: 7-8) have investigated that there is a relationship between metacognitive ability and effective reading. They reveal that there are

two dimensions of metacognitive ability; knowledge of cognition or metacognitive awareness and regulation of cognition which as stated includes the reader's knowledge about his or her own cognitive resources, and the compatibility between the reader and the reading situation.

Several studies (See e.g. Ay, Sila, 2009: 7; Mokhtari and Reichard, 2002: 249; Lian and Seepho, 2012: 941; and Magogwe, 2013: 21-29) have been done to investigate the effects of training of metacognitive reading strategy towards students' reading comprehension. The findings showed that the MRST (Metacognitive Reading Strategy Training) was effective in enhancing the students' academic reading comprehension, and the students generally had positive attitudes toward it.

Overall, studies above were done to examine the effects of MRST for enhancing students' reading comprehension. Nevertheless, all those studies applied the training implicitly and they were only focused in universities or tertiary levels. They have not yet discovered it with an explicit training, particularly in the senior high school. Therefore, this research was done to fill in that blank space. It was conducted in order to find out whether there is an effect of Metacognitive Reading Strategy Training (MRST) on the students' reading comprehension.

Based on the previous explanations, this research deals with teaching of metacognitive reading strategy to senior high school students. This study focused

on giving metacognitive reading strategy explicitly by training to see whether or not there is an influence over the students' reading comprehension ability

## METHOD

To achieve the goals, this research was carried out using a quantitative study with one group pre-test post-test design. The subjects numbering of 25 high school students were taken purposively. The instrument used in this study was the motivation questionnaire. The instrument used was the reading comprehension test. This study used paired-sample t-test to answer the significant effects of students' reading comprehension.

## RESULT AND DISCUSSION

### RESULT

The pre and post-tests were administered in order to know the students' reading comprehension. Here is the result of the students' reading comprehension before and after MRST.

Table 1. The Mean of the Students' Reading Comprehension Pre and Post-Test

Variable		Students' Number	$\sum X$	Mean	Min Score	Max Score	Possible Max Score
Reading Comprehension pre-test	R-1	25	1545	62	40	85	100
	R-2	25	1488	60	40	80	100
	Inter-Rater	25	1516	61	40	83	100
Reading Comprehension post-test	R-1	25	2063	83	65	98	100
	R-2	25	2098	84	68	98	100
	Inter-Rater	25	2080	83	66	98	100

The table above shows that the means of the students' reading comprehension pre-test were 62 for rater 1, 60 for rater 2 and 61 for inter-rater, the means were above the midpoint of 50, indicating that the ability of the students' reading

comprehension was not really bad, but seeing the percentage of the students who got score below the mean or score interval 40-60 was 44%, meant that almost half of the participants' reading comprehension was not really good. The table above also shows that the mean of students' reading comprehension post-test were 83 for rater 1, 84 for rater 2 and 83 for inter-rater. The means of reading comprehension post-test were much higher than means of reading comprehension pre-test, the difference was 18, indicating that the ability of the students' reading comprehension was significantly higher after the training.

The increase of the students' score was analyzed based on the result of pre-test and post-test. The result of the analysis is shown on the following table.

Table 2. The Increase of the Students' Reading Comprehension

	Pre-Test Mean	Post-Test Mean	The Increase	Percentage (%)
Rater 1	62	83	21	34
Rater 2	60	84	24	40
Inter Rater	61	83	22	36

The table above shows that the increase of the mean scores in the experimental class based on the inter-rater calculation is 22 or 36%. Thus, it indicates that after the training, the students have got better reading comprehension.

To prove whether the proposed alternative hypothesis ( $H_i$ ) is accepted or rejected, the repeated measures t-test was used by calculating the data in SPSS version 17 for windows. T-test is used in order to see the significant difference of two tests.

Table 3. Hypothesis Test of Students' Reading Comprehension

Variable	Mean	Gain	t-ratio	t-table (df=24)		Conclusion
				0.05	0.01	
Pre-test	61	22	13.498	2.06	2.80	Significant
Post-test	83					

It can be seen from the table above that the comparison of the mean scores of the pre- and post reading comprehension tests shows a gain of 22. The t-ratio is 13.498 while the critical value for t-table (df=25) is 2.056 at the level of significance 0.05. Thus, t-ratio (13.498) is bigger than t-table (2.056). This finding indicates that the Metacognitive Reading Strategy Training (MRST) was effective in improving the students reading comprehension, in other word the proposed alternative hypothesis (Hi) is accepted.

## DISCUSSION

The findings of the research indicated that Metacognitive Reading Strategy Training improves senior high school students' reading comprehension. Therefore the hypothesis related to the research question was supported. This shows correlation with the previous researches conducted on this topic (See e.g. Mokhtari and Reichard, 2002; Lian and Seepho, 2012; and Magogwe, 2013). The finding revealed that after the Metacognitive Reading Strategy Training, the students got higher reading comprehension test score than before the training, the pre-test scores of reading comprehension test were significantly different from the post-test scores. The increase of mean score based on the inter-rater calculation is 22 or 36%.

The result of this research was in the contrary to Moonsamy's findings (2012) that there was no significant difference in the students' reading comprehension which was conducted in school, grade 6. As mentioned in chapter one that students from different faculties, different genders or different age will have different levels of metacognitive awareness, older people will have higher metacognitive awareness compared to younger people. The difference in the result could be caused by the different age of the subject of the research. In this research, senior high school students grade 11 whose age were range between 16 to 17 years old assumed that they had already better awareness of the strategies compare to the students of elementary school grade 6 whose age were range between 11 to 12 years old. It is supported by Pressley, et al in Waters and Schneider (2010: 3) who said that only as children mature that they broaden their strategy use across different materials and develop their strategy, changes in metacognition, with an increasing awareness of strategy use and its impact on performance.

A questionnaire to find out the students reading strategy was given to the students before the training, and it was found that 44% of students' reading strategy is metacognitive strategy. This indicates that metacognitive reading strategy had already been used by almost half of the participants. From 25 participants, there were 11 participants who used metacognitive strategy, but in the pre-test, 72% or 8 participants got scores below 65. Only AGA, AGF and DMY who got score above 70. And the highest score, 83, was obtained by MJF who used cognitive strategy. However in the post-test, the highest score 98 was obtained by DMY who used metacognitive strategy. This finding indicated that the participants who

already used metacognitive learning strategy did not know how to use the strategy maximally.

A paired-sample t-test was conducted to compare the participants' perception toward the metacognitive reading strategy before and after the training. There were significant differences in participants' perception before (M=24, SD=4.96) and after (M=39, SD=3.26) condition;  $t(24) = 16.754$ ,  $p = 0.000$ . These results suggest that the training really has an effect on the participants' reading comprehension.

## **CONCLUSIONS AND SUGGESTIONS**

### **CONCLUSIONS**

Having considered the findings and discussion of this study, it is concluded that explicit teaching of metacognitive awareness can help students in some ways to become more conscious and responsive students. Students are able to set their own purpose before reading, able to choose the right tools to correct the problem which will make them more confidence in reading process. It is perceived that strategies are important for language learning because they are tools for active, self-directed involvement, which is essential for developing communication competence and learners who have developed appropriate learning strategies have greater self-confidence and learn more effectively.

Metacognitive strategies can be taught to help students mentally process the information they read and to recognize what they can do to build future success.

Metacognition can be used when students first preview the book, to clarify their purpose for reading, and to set reading goals. As students read, metacognition strategies can help them recognize what they do or do not understand. In short, metacognitive reading strategy training will help students to be independent reader who are be able to choose their own reading strategy which can help them comprehend the text better and make them more confidence during the reading process.

### **SUGGESTIONS**

Based on the result of this research, here are some suggestions proposed by this study. This study was quite limited in the number of participants. To make the study more generalizable, it will be much better to use the larger group of the students. There was only an immediate post-test of the data collected in the study. The post-test did not take place very long after the training with the program. Without a delayed post-test, it is quite difficult to know whether they used the strategy based on what they have got in the training or because they still remember the answer. Therefore, future studies need more time to determine the effects of the training, delay the post-test for maybe one month. At last, teachers cannot expect students to read more if they do not have high reading motivation. A focus on improved motivation will lead to improved reading comprehension. This is an aspect of learning that cannot be ignored.

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