# THE CORRELATION BETWEEN METACOGNITIVE READING STRATEGIES AND READING COMPREHENSION OF ENGLISH DEPARTMENT STUDENTS

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## ABSTRACT.

The objectives are to find the type and frequency Global, Problem Solving, and Support reading strategies the students use during reading, to find the correlations between each three reading strategies and reading comprehension. The instruments used are a survey on metacognitive reading strategies adapted from MARSI and SILL and a reading comprehension test. The findings revealed that PROB strategies were used the most, followed by GLOB strategies, and SUPP strategies. The correlations showed that (1) a positive, moderate (at .66) correlation between GLOB and reading comprehension, (2) a positive, strong correlation (at .72) between PROB and reading comprehension, and (3) a positive, weak correlation (at .26) between SUPP and reading comprehension.

**Keywords:** metacognitive, reading comprehension, correlation, global reading strategies, problem-solving reading strategies, support reading strategies.

#### Introduction

The students in Widya Mandala Catholic University in Surabaya, must undergo reading subject as the obligatory requirement of graduation. Every student must take a reading subject since their 2<sup>nd</sup> semester until their 4<sup>th</sup> semester. As they are advancing to the next semester, the level and the sheer amount of reading texts are gradually increasing and demanding. Very often, students are made frustrated as they try to assemble their knowledge in order to comprehend reading texts. Moreover, the challenge is also laid on the success of doing the follow-up reading activities, such as reading comprehension or discussion questions. Hence, at certain points, students eventually fail to fulfill passing scores requirement and lose their reading interest.

Consequently, learners having poor reading skill would stumble upon the fulfillment toward variety of demands of college courses (i.e. presentations, assignments, and passing grades). As for broader range of

Magister Scientiae - ISSN: 0852-078X Edisi No. 42 - Oktober 2017 impact, reading may become a hindrance to their personal development process, particularly in career opportunities in the future. For this reason, due to the significance of reading in every aspect of our everyday life, it is essential to find ways how to help students to improve their reading skills.

Cogmen and Saracaloglu (2009 as quoted in Chen & Chen, 2013) assert that simple strategies in reading, such as underlining, taking notes, or highlighting the text can help learners understand the content. Additional reading strategies which can be used are also mentioned by Carrel (1998 as quoted in Rraku, 2013) who points out that reading strategies may involve skimming, scanning, predicting, guessing, making inferences, etc.

Generated by the aforementioned acknowledgment of the relationship between reading strategies and reading comprehension, the researchers are interested to conduct a more confined research to answer the following questions:

- 1) What metacognitive reading strategies (Global, Problem Solving, and Support reading strategies) do the students use in the reading process?
- 2) What is the correlation between Global Reading Strategies and reading comprehension?
- 3) What is the correlation between Problem-Solving Reading Strategies and reading comprehension?
- 4) What is the correlation between Support Reading Strategies and reading comprehension?

# Reading

The process of reading comprises an interaction between the reader and the text. Most likely, while reading a reader would think several aspects: the meaning that the text wants to convey, how the text relates to the reader's schemata, and what the reader expects to come next in the text (Anderson, 2000). Reading process comprises decoding vocabulary, combining background knowledge with information in the text, and monitoring comprehension by means of utilizing helpful resources (Willingham, 2006). According to Gremmo (1985, as cited from Istanto, 2013), reading process comprises of three domains: (1) the linguistic organization of the written language, (2) reading strategies, and (3) the students. The linguistic organization involves different levels of extended discourse, such as morpho-syntax, rhetorical structure, and communicative. During the reading process, students might employ reading strategies. Reading does not only deal with understanding meaning, but also students' schemata, cultural knowledge, and professional situation.

## The Metacognitive Awareness Reading Strategies Inventory (MARSI)

In 2002, Mokhtari and Reichard designed a self-report survey named as The Metacognitive Awareness Reading Strategies Inventory

(MARSI). It aims to measure the frequency and metacognitive awareness of reading strategies used by adult readers within academic context. Three types of strategies are conveyed in this survey, namely Global Reading Strategies (GLOB), Problem-Solving Strategies (PROB), and Support Reading Strategies (SUP). GLOB represents general and intentional reading strategies which are oriented toward whole analysis of a reading text. On the other hand, PROB represents readers' localized, focused-problem solving when reading difficult texts. SUP represents support mechanism students evoke to help them understand more when reading. In practice, such support strategies used by students are using reference of materials and asking others.

# **Strategy Inventory for Language Learning (SILL)**

The most reliable and commonly adopted survey used by researchers within academic settings in order to investigate language students' learning strategies is Strategy Inventory for Language Learning (SILL) by Oxford (1989). The survey is practically designed to investigate language learning strategies used by ESL/EFL learners. The items listed in the SILL are meticulously designed to gain a broad understanding of language learning strategies, going from the overall to specific strategies learners used. The survey consists of 50 question items compromising six broad categories, namely *memory* strategies, *cognitive* strategies, *compensatory* strategies, *metacognitive* strategies, *affective* strategies, and *social* strategies.

## Three levels of reading comprehension skills

Experts in reading believe that reading comprehension comprises a number of interrelated skills. According to Logan et al (1972 as cited in Hussein, 2012), reading comprehension skills can be classified into three levels, namely literal level, inferential level, and critical level. Very common the literal comprehension is understood as the direct level or a receptive level because of its nature which deal with a mere intake of information. This level requires readers' attention to dates, facts, names, places, and other things which all explicitly stated and easy to comprehend. The inferential level is beyond literal level (Potts 1976, as cited in Mohamad, 1999). This level deals with readers' interpretation of word meanings. The critical level requires readers to make use or combine of the skills which belong to the literal and inferential levels. Herber (1970 as cited in Hussein, 2012) emphasizes that readers make use of literal information, that is what author explicitly states in the texts, and the interpretative, that is what the author implicitly state, and applies them in some pragmatic exercises.

## Research Method

This research is classified as a quantitative correlational research. The instruments used were a reading comprehension test and a metacognitive reading strategy survey. Most of the items on the metacognitive reading strategies survey in this study were adopted from MARSI, while the rest were adopted from SILL. Meanwhile, the researcher developed a reading comprehension test which comprises three different levels of reading comprehension skill to measure students' reading comprehension.

Findings and Discussions
Frequency Distribution of Students' use of Metacognitive Reading
Strategies

Type of Strategies	Indication	Frequency	Range of Means
Global Reading Strategies (GLOB)	High	7	3.71 – 4.86
	Moderate	17	2.71 – 3.43
	Low	7	2.00 – 2.29
Problem-Solving Reading Strategies (PROB)	High	13	3.50 – 4.38
	Moderate	15	2.50 - 3.38
	Low	3	2.13 – 2.38
Support Reading Strategies (SUPP)	High	7	3.60 - 3.80
	Moderate	18	2.60 - 3.40
	Low	6	2.20 - 2.40
Overall strategies	High	7	3.50 - 3.85
	Moderate	21	2.50 - 3.45
	Low	3	2.20 - 2.40

Among 20 strategies, Problem-Solving Strategies are placed as the first three favorable strategies by students. When text becomes difficult, I

re-read it to increase my understanding was reported as the most popular strategy used by the students (M=3.90), closely followed by I read slowly and carefully to make sure I understand what I am reading (M=3.84).

On the contrary, there were also some strategies reported as the least common strategy used by the students. Support Reading Strategy which is *When text becomes difficult, I read aloud to help me understand what I read* (M=1.84) was one of the least favorable strategies used by the students.

The minimum score of students' reading comprehension test scores is 14, whereas the maximum score is 89. The mean is 58. This result indicates that the students' reading comprehension is moderately low.

# Correlation Analysis of Reading Strategies and Reading Comprehension of the Research Subjects

Reading Strategies	Pearson Correlation	Indication
Global Reading Strategies (GLOB)	0.66**	Moderate
Problem-Solving Strategies (PROB)	0.72**	Strong
Support Reading Strategies (SUPP)	0.26**	Weak
Overall Reading Strategies	0.79**	Strong

<sup>\*</sup>Correlation is significant at  $\rho$ <0.01 (2 tailed)

The correlation between GLOB and reading comprehension shows coefficient at 0.66 at  $\rho$ <0.01 (2 tailed). This correlation indicates that there is relationship between Global Reading Strategies and reading comprehension. The positive number indicated that the direction of the correlation was positive. The magnitude of the correlation was categorized as moderate since it was in the range of .30 - .69 (Creswell, 2008).

The correlation between PROB and reading comprehension shows coefficient at 0.72 at  $\rho$ <0.01 (2 tailed). The positive number indicated that the direction of the correlation was positive. The magnitude was categorized as strong since it is between the range of  $\pm$  .70 -1.00 (Creswell, 2008).

The correlation between SUPP and reading comprehension shows seemingly much lower than the other correlation of global and problem-solving strategies. The coefficient correlation is at 0.26 at  $\rho$ <0.01 (2 tailed). The positive number indicated that the direction of the correlation was

positive. The magnitude was categorized as weak since it is between the range of .00 to - .29 (Creswell, 2008).

The correlation between overall reading strategies and reading comprehension shows coefficient at 0.79 at  $\rho$ <0.01 (2 tailed). The positive number indicated that the direction of the correlation was positive. The magnitude was categorized as strong since it is between the range of  $\pm$  .70 -1.00 (Creswell, 2008). The correlation was also considered statistically significant since it was lower than .355, which was the critical value of Pearson correlation coefficient for degree of freedom of 29 (N-2) at the standard significance level of .05.

Overall, the strongest correlation was found in the correlation between Problem-Solving strategies, followed by Global and Support Reading Strategies correlation. Furthermore, it is worth-noticing that the correlation between the three types of reading strategies and reading comprehension was positive with variation of magnitude: strong for Problem-Solving Strategies, moderate for Global Reading Strategies, and weak for Support Reading Strategies.

#### Conclusion

The correlation results revealed that there were significant and positive correlation between metacognitive reading strategies which comprise GLOB, PROB, and SUPP reading strategies and reading comprehension. This shows that students who used more reading strategies in their reading got higher scores in their reading comprehension, while students who used less reading strategies got lower scores in their reading comprehension.

While reading, the students were reported to use all three reading strategies according to their own preferences. The high usage of Problem-Solving Strategies indicates that students apply both cognitive and metacognitive strategies deliberately when comprehending the reading problems. In fact, based on research results, students who utilized most Problem-Solving Strategies and Global Reading Strategies were successful learners than students who utilized less the two strategies respectively.

All in all, good performance in reading comprehension is always significant as its role of input to EFL students when learning in L2 context. The use of metacognitive reading strategies are paramount to yield optimal language learning outcomes. Since the correlation results of this study showed significant and positive results, it is suggested that all three metacognitive reading strategies should be introduced and taught by teachers to students in order to help them comprehend reading texts better.

The prime preference for PROB reading strategies, followed by GLOB reading strategies, and SUPP reading strategies, as shown in this research, is consistent with previous studies that examined Hungarian university students' reading strategies by means of MARSI to (Monos,

2005), study of Sri Lankan university students' reading strategies (Dhanapala, 2010), and study of meta coginitive reading strategies by native speakers of Arabic (Alsheikh and Mokhtari, 2011).

On the contrary, the findings of this research was against the study conducted by Rastahkiz & Safari (2014) and study by Sheorey and Mokhtari (2001), who found that most use of reading strategies was Support Reading Strategies, followed by Problem-Solving Strategies, and Global Reading Strategies.

# Suggestions

This research provides English teachers, curriculum planners, and instructors with validated information on metacognitive reading strategies currently used by university students. The findings might also give information to teachers and instructors to understand which metacognitive reading strategies are most or less favorable by the students. It also might give consideration to teachers and curriculum planners to think upon their current teaching approach particularly in teaching reading. In addition, it is also expected that teachers' awareness of the needs of the students, particularly in comprehending academic reading text, is also increased.

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