THE CORRELATION BETWEEN SELF-REGULATED LEARNING STRATEGIES AND READING COMPREHENSION

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ABSTRACT: Self-regulation is one of the motivational factors influencing the students' learning process. It helps the students to accomplish the learning goals by formulating the thoughts and action to support the learning process. The aims of this study were to find out (1) the students Self-Regulated Learning (SRL) strategies at the eleventh graders of SMA Arinda Palembang, and (2) whether there was or not any significant correlation between SRL and reading comprehension of narrative text. The population and sample of this study was the students of eleventh grade of SMA Arinda Palembang. The total of sample was 46 students selected by using non-random sampling technique. Self-regulated learning (SRL) strategies questionnaire and reading comprehension test were administered as the instruments of study and they were distributed to the students to gather the data. In analyzing the data, correlation analysis was used. Based on the statistical analysis, it was found that the correlation coefficient or the *r-value* (0.631) was higher than *r-table* (0.245). Then, the level probability (p) significant (sig.2-tailed) was 0.000. it means that *p-value* (0.000) was lower than 0.05. it can be concluded that there was high significant correlation between the students' self-regulated learning strategies and reading comprehension in narrative text.

Keywords: *Self-regulated learning strategies, reading comprehension*

HUBUNGAN ANTARA SRATEGI KEMANDIRIAN BELAJAR DAN PEMAHAMAN MEMBACA

ABSTRAK: Kemandirian belajar merupakan satu dari sekian banyak factor yang mendukung proses belajar peserta didik**.** Hal ini membantu peserta didik untuk mencapai tujuan pembelajaran dengan cara menentukan pikiran, sikap, dan juga tindakan untuk mendukung proses tersebut. Tujuan dari penelitian ini adalah untuk mengetahui (1) strategi SRL siswa di kelas XI SMA Arinda Palembang, dan (2) apakah ada atau tidak ada hubungan yang signifikan antara Self Regulated Learning Strategies (SRL) dan pemahaman membaca teks naratif siswa kelas sebelas SMA Arinda Palembang. Populasi dan sampel penelitian ini adalah siswa kelas sebelas SMA Arinda Palembang. Jumlah sampel sebanyak 46 siswa yang dipilih dengan menggunakan teknik non-random sampling. Angket strategi self-regulated learning (SRL) dan tes pemahaman membaca sebagai instrumen pembelajaran dibagikan kepada siswa untuk mengumpulkan data. Dalam menganalisis data digunakan analisis korelasi. Berdasarkan analisis statistik diketahui bahwa koefisien korelasi atau nilai r (0,631) lebih tinggi dari r-tabel (0,245). kemudian, tingkat probabilitas (p) signifikan (sig.2-tailed) adalah 0,000. Artinya p-value (0,000) lebih rendah dari 0,05. Dapat disimpulkan bahwa terdapat hubungan yang signifikan antara strategi belajar mandiri siswa dengan pemahaman membaca teks naratif.

Kata kunci: *Strategi kemandirian belajar, pemahaman bacaan*

INTRODUCTION

Reading comprehension is a complex interaction among automatic and strategic cognitive processes that enables the reader to create a mental representation of the text (Van Den Broek & Espin, 2012). Some of the students feel bored to comprehend the text and construct meaning from texts.

In fact, comprehension depends not only on characteristics of the reader, such as prior knowledge and working memory, but also on language processes, such as basic reading skills, decoding, vocabulary, sensitivity to text structure, inference, and motivation. With regard to effective ways for improving reading comprehension, a set of recent studies have found that motivational variables are related to accomplishment and success of learners' academic life and especially reading comprehension (Khajavi & Abbasian, 2013). Therefore, recognizing ways which contribute to achieving learners' motivational variables seems helpful in improving reading comprehension.

Self-regulation is one of motivational factors. According to Zimmerman (2000), self-regulation is one's ability to formulate thought, feeling and actions that result in gaining one's goals utilizing some information that an individual has acquired from previous performances; this is a cyclical process. Self-regulated learners are good in performing the learning materials because they possess a set of learning and metacognitive strategies. Orienting students toward a process or product goal resulted in greater increases in reading comprehension and self-efficacy than general goals, and combining process goals with verbal feedback further increased reading comprehension and self-efficacy (Schunk & Rice, 1991).

Moreover, based on the observation done by writer in SMA Arinda Palembang in September 2018, the writer found several problems of the eleventh grade students in reading. The condition of reading skill of the eleventh students of SMA Arinda Palembang was that the students faced the problem of building and developing the meaning of the text. They still had not known and had been confused when faced with reading texts that were unfamiliar to those who made them feel bored and did not focus while reading, so that they had difficulty building and developing meaning from the reading text. This is influenced because they could not develop their own abilities and managed themselves.

By realizing the importance of self-regulated learning strategies towards their reading comprehension the writers would like to conduct a research with the title "Self-Regulated Learning Strategies and Reading Comprehension in Narrative Text at The Eleventh Graders of SMA Arinda Palembang", the writers would like to find out whether there was any correlation or not between Self-Regulated Learning (SRL) strategies and reading comprehension in narrative text of the eleventh students at SMA Arinda Palembang.

The objectives of the study were to find out (1) the students SRL strategies at the eleventh grades of SMA Arinda Palembang, and (2) whether there was or not any significant correlation between Self-Regulated Learning Strategies (SRL) and reading comprehension in narrative text of the eleventh graders of SMA Arinda Palembang.

The Concept of Self-Regulated Learning Strategies

Self-regulated learning (SRL) is a multifaceted construct that restricts the scope of self-regulation to the area of achievement. The students who successfully self-regulated their learning are actively engaged in the process of knowledge acquisition and engage in activities that enable them to strategically adapt their behavior, personal

processes, and environment to support meaning making and goal attainment (Schunk & Zimmerman, 2007). Self-regulated learning is a process that assists students in managing their thoughts, behaviors, and emotions in order to successfully navigate their learning experiences. This process occurs when a student's purposeful actions and processes are directed towards the acquisition of information or skills (Zumbrunn, 2011, p 4). In addition, Self-regulation might integrate environmental, motivational, and metacognitive processes which resulted in accelerating academic and achievement. Regulation refers to the fact that students think about themselves, their own abilities, and also how they deal with the assignment expected from them (Zimmerman, 2000). Another definition, SRL refers to how and why learners implicate themselves in the learning process in order for the learners to be independent in their academic affairs (Zimmerman, 2000). In other words, students learn how to direct their own learning process, and how to choose appropriate cognitive, metacognitive, and behavioral strategies which cause sufficient effort to achieve their already set goals. Furthermore, they also agree that students' effectiveness in the process of the self-regulated learning varies based on academic context, personal processes effort, and performance outcome. According to Boekaerts & Corno (2005), academic achievement is mediated by the use of SRL strategies such as organizing, goal-setting, planning, self-evaluating, information seeking, record keeping, self-reflecting, self-monitoring, and reviewing.

These three components are important to affect the students' academic achievement, namely:

(1) SRL encompasses those metacognitive strategies which students use to plan, monitor, and re-organize their cognition.
(2) The students could be management and controlling of their attempts to do curricular and academic assignments.
(3) The students could use to learn, remember and fully comprehend curricular concepts. Therefore, their cognitive strategies are increased.

According to Zimmerman (2002), SRL consists of three cyclical stages that the learners take part in academic activities, namely: (1) they use their information, beliefs, and knowledge so that they can have an assessment of the qualifications and tools required for academic activities, (2) they determine their goals based on their evaluation, and (3) through using strategies, students could be result in cognitive, affective, and behavioral outcomes in academic activities. Through the monitoring process of their learning activities and controlling their progress, students come up with an internal feedback which provides them with new information to reassess those activities and the approach they should take while participating in the activities.

In conclusion, self-regulated learning refers to how the students can strategically manage and adjust behaviors, personal processes and environments such as organizing, goal-setting, planning, self-evaluating, information seeking, record keeping; self-reflecting, self-monitoring, and review into achieve process goals learning.

According to Zimmerman (2002, p. 64-72), the characteristics of Self-Regulated Learning (SRL) strategies are as follows:

1. Self-regulated learners are familiar and know how to apply a series of cognitive strategies (rehearsal, elaboration, organization) which help them to attend to, transform, organize, elaborate, and recover information.
2. Self-regulated learners show motivational beliefs and adaptive emotions such as a sense of academic self-efficacy, the adoption learning goals, the development of positive emotion towards tasks (satisfaction, enthusiasm) and the capability to

control and modify them to the requirements of the preset task and the specific learning situation.

3. They plan and control the time and effort to be spent on tasks, and they know how to create and structure favorable environments, such as finding a suitable place to study and seeking help from teachers and classmates when they encounter problems.

4. To the extent allowed by the context, self-regulated learners show greater efforts to participate in controlling and regulating academic tasks, classroom climate, and structure.

5. Self-regulated learners are able to affect a series of volitional strategies aimed at avoiding external and internal distractions so that they maintain their concentration, effort and motivation in performing tasks.

METHODOLOGY

The method of this study was correlational research. According to Fraenkel and Wallen (2012, p. 91), correlational research is also sometimes referred to form of descriptive research because to describe an existing relationship two variables. In this study, the writer would like to find out the students relationship with self-regulated and reading comprehension in narrative text.

The population involved in this study was the eleventh grade students of SMA Arinda Palembang in the academic year of 2019/2020. The total number of students for each class was twenty five (25) students for XI IPA I and twenty two (22) for XI IPS 1. Total sampling was the sampling technique applied to select the sample of the study since the population size was small. The total of the sample was 46 students, taken from XI IPA 1 consisting of 24 students, and XI IPS 1 consisting of 22 students.

A ready-made questionnaire and a reading test were administered to collect the data regarding to student's self-regulated learning strategies and reading comprehension. The questionnaire was adopted from Pintrich (1991). This questionnaire was divided into three scales, namely: 1) cognitive strategies, comprising four subscales: a) rehearsal consisting of 4 items; b) elaboration consisting of 6 items; c) organization consisting of 4 items; and critical thinking consisting of 5 item; 2) metacognitive strategies comprising two subscales: a) planning and planning activities consisting of 12 items; 3) resource management strategies comprising four subscales: a) time and study environmental management consisting of 8 items; b) effort learning consisting of 4 items; c) peer learning consisting of 3 items; and d) help seeking consisting of 4 items. The total item of the questionnaire was 50.

The reading test was in the form of multiple choices consisting of 25 items. The students responded the test by choosing the correct answer from the options provided. The test items measured the aspects of reading comprehension in terms of identifying the main idea that consisted of 3 items, finding the detail information that consisted of 12 items, identifying the events that consisted of 7 items, and finding out the word meaning that consisted of 3 items.

The study used content validity to establish the validity of the test items. The test was matched with the curriculum of eleventh graders. Then, the instrument would be tried out to see the validity of the test item, corrected item total correlation was used in order to check the validity of the test items, person product moment calculation in SPSS program. The writers analyzed the validity of the test items by comparing *r*-value per items with *r*- table. If the r-value was lower than r-table, it means that the item was not valid and it would be deleted. From the result of the try-out test, the writers found the r-

table was 0.35 (df=21). The result of validity test confirmed that out of 40 items of the reading test given, it was revealed that only 25 items were valid to be used in the reading test instrument.

In addition, to measure the reliability of the test instrument, the writers used the Spilt-Half method to estimate the reliability of the test. The instrument is considered reliable when the coefficient of the Cronbach alpha is higher than (0.70). It was found that the reliability coefficient of reading test was 0.815. It meant that the reliability was categorized as high reliable. It confirmed that the reading test was reliable.

Techniques for analyzing the data were descriptive analysis and correlational analysis. Firstly, the writers would describe the students' self-regulated learning strategies and their reading comprehension in narrative text. Next, to find out the correlation between self-regulated learning strategies as a whole and their reading comprehension in narrative text, Pearson Product Moment would be used. The significance of the correlation is determined by comparing the data of coefficient *(r value)* in the level of significance 5% in the table of product moment *(r table)*. To interpret the result of the coefficient value of the correlation of two paired variables, the writers used the crude criterion for evaluating the magnitude of a correlation coefficient as follows: 0.80-1.00 (very high correlation); 0.60-0.79 (high or strong correlation); 0.40-0.59 (medium or sufficient correlation); 0.20-0.399 (weak or low correlation), and 0.00-0.199 (very weak correlation and almost no correlation) *(Riduwan, 2004, p. 136)*.

FINDINGS AND DISCUSSION

The Results of Reading Comprehension Test

The results of reading test of the eleventh grade students of SMA Arinda Palembang showed that none students were in poor category, 10 students (22%) were in average category, 28 students (61%) were in good category, and 8 students (17%) were in very good category.

The Students Level of Self-Regulated Learning

The writer described the students level of self-regulated learning strategies by classifying the categories, namely: very high, high, average, low and very low, that was converted. The self-regulated learning strategies categories would be classified on the basis the following score conversion: very high (85-100), high (68-84), average (52-67), low (36-51), and very low (20-35). The result of the percentage analysis showed that 3 students (7%) was in very high category, 25 students (54%) in high category, 18 students (39%) in average category, and none student who was categorized as low and very low in self-regulated learning.

The Students SRL Strategies

Based on the percentage analysis, it was found that in term of self-regulated learning strategies, 16 students (35%) had cognitive strategies, 19 students (41%) had metacognitive strategies, and 11 students (24%) had resources management strategies.

The Correlation between Self-Regulated Learning Strategies and Reading Comprehension

The correlation analysis was implemented to find out whether or not there was a significant correlation between students self-regulated learning strategies and students reading comprehension. Based on the result of Pearson Product Moment, it could be seen that there was a significant correlation between the students self-regulated learning strategies and their reading comprehension (see Table 1).

Table 1. Correlation analysis of self-regulated learning strategies and reading comprehension

Variable	Person Correlation Coefficient	Sig.(2-tailed)
Self-Regulated Learning	0.631	0.000
Reading Comprehension		

From the above table, it could be seen that the correlation coefficient or *r-value* (0.631) was higher than *r-table* (0.245). Then, the level of probability *(p)* significant with sig.2-tailed was 0.000. It meant that the significant value (2-tailed) was lower than alpha value (0.000<0.05). It indicated that there was significant correlation between the student self-regulated learning and their reading comprehension in narrative text. To be concluded, self-regulated learning strategies had high correlation toward the students' reading comprehension. Furthermore, the writers analyzed the correlation between the 3 components of SRL strategies toward the students reading comprehension in order to find out which one from the 3 components had a significant correlation toward reading comprehension.

Table 2. The correlation between cognitive strategies and reading comprehension

Variable	Person Correlation Coefficient	Sig.(2-Tailed)
Cognitive	0.497	0.000
Reading comprehension		

From Table 2 above, it was found that the obtained correlation coefficient (r obtained) was 0.497. It meant that there was no significant correlation between cognitive strategies and reading comprehension.

Table 3. The correlation between metacognitive strategies and reading comprehension

Variable	Person Correlation Coefficient	Sig.(2-Tailed)
Metacognitive	0.681	0.000
Reading comprehension		

From Table 3 above, it was found that the obtained correlation coefficient (r obtained) was 0.681. It meant that there was a significant correlation between metacognitive strategies and reading comprehension.

Table 4. The correlation between resource management strategies and reading comprehension

Variable	Person Correlation Coefficient	Sig.(2-Tailed)
Resource Management Strategies	0.478	0.001
Reading comprehension		

From Table 4 above, it was found that the obtained correlation coefficient (r obtained) was 0.478. It means that there was no significant correlation between Resource management strategies and reading comprehension.

From the calculation analyses above, we could interpret that from those three components of self-regulated learning strategies, the metacognitive strategies components had significant correlation toward the students' reading comprehension. The results of self-regulated learning strategies showed that cognitive strategies had positive effect to the students' reading comprehension. It could be seen in rehearsal strategies that most of students agreed. It indicated that the students were active to work memory in encoding process and attention. The students were doubtful to memorize the keywords to remind them of important concepts. In elaboration strategies, the items were agreed by almost students. It was assumed that the students could store the information into long term memory and integrate the new information with their prior knowledge. In item 6, the students chose doubtful when they relate to their ideas in this subject to those in other courses whenever possible. In organization strategies, almost students chose agree with each statement. It is indicated that the students could select the appropriate materials and also construct among the information. Students chose doubtful when they make simple charts, diagrams, or tables, to help them organize course material. In critical thinking strategies, almost of students chose doubtful. It is indicated that the students had low level of regulated learning strategies, especially critical thinking strategies. They could not solve the problems and make critical evaluation when they had the problems of reading. Students chose agree with the item 15 that they often find their selves questioning things when they read in this course to decide if they find them convincing. 57% of students chose agree that they try to play around with ideas of their own related to what they are learning in the course.

The results of metacognitive strategies were shown that the students had positive responses to metacognitive strategies that were planning and monitoring activities. It indicated that the students were active to make questions and figure it out when they become confused, apply some ways to read the materials, skim the reading materials by organization, and take notes in class when they were confused. Students chose doubtful when they find that they have been reading for this class, but they did not know what it was all about.

The results of resources management strategies that were time and study environmental management strategies, effort regulation strategies, peer learning strategies, and help seeking strategies were positive responses. It indicated that the students could manage their time study, such as scheduling and planning the students' study time and environments to help the students more concentrated on their study. In effort regulation strategies, almost of students showed their agreement with each item. It indicated that the students could control their effort and attention the face of distractions and uninteresting tasks. While for item 40, 35% of students disagreed that they often lazy or bored when they studied for reading class that they quit before they finish what

they planned to do. In peer learning strategies, the students' agreements to each statement of peer learning strategies were highest. It is indicated that the students could collaborate with their peers in doing the course assignments. In help seeking, the students responded to agree that each statement of help seeking strategies. It is indicated that the students could seek helps from on their own work, the instructor and another student to solve the trouble learning.

Based on the calculation of correlation analyses, the writer could interpret that from those three components of self-regulated learning strategies, the metacognitive strategies components had significant correlation toward the students' reading comprehension. The correlation coefficient was 0.681. Based on the results of students' level of self-regulated learning strategies, it could be seen that it had positive impact to the students reading comprehension. Based on the result of descriptive analysis of reading comprehension test, the minimum score was 60, while the maximum score was 94. The mean score of reading comprehension was 77with standard deviation 9.367.

From hypothesis testing, it was found that there is high correlation between students self-regulated learning strategies (X) and the reading comprehension in narrative text (Y). Based on the results of the product moment correlation analysis, the correlation coefficient between self-regulated learning strategies (X) and reading comprehension in narrative text (Y) was proven by the r-value (0.631) which was higher than the r-table (0.245). So there was a positive and significant correlation between self-regulated learning strategies and reading comprehension in narrative text at the eleventh grades of SMA Arinda Palembang. It was assumed that self-regulated learning strategies can influence the grades of reading narrative text. It showed that students self-regulated learning positively contributed to students reading comprehension.

CONCLUSIONS

Based on the finding and interpretation of the study, it could be summarized both of the problem of the study were answer. Based on the result person product moment correlation analysis, the result correlation analysis revealed that the correlation coefficient or the *r* (0.631) was higher than *r-table* (0.245). Then the level of probability *(p)* significant coefficient (sig.2-tailed) was 0.000. It means that *p-value* (0.000) was lower than 0.05. So, there was high significant correlation between students self-regulated learning strategies and reading comprehension of the eleventh grade students of SMA Arinda Palembang. Based on the calculation of correlation analyses, it could be interpreted that from those three components of self-regulated learning strategies, the metacognitive strategies components had significant correlation toward the students' reading comprehension. The correlation coefficient was 0.681.

The writers would like to give some suggestions to English teacher and students. By knowing these findings, the teacher could teach reading comprehension appropriated to the students' self-regulated learning (SRL) strategies to facilitate the students' reading activities and stimulate their cognitive, metacognitive, resources management more to accomplishment and set the goals of learners' academic life and especially reading comprehension. Moreover, the teacher is supposed to identify the students' SRL strategies that could apply the effective strategies in teaching reading comprehension to lead their SRL strategies, awareness of reading comprehension and efficiency of learning would be increased and help the teacher to develop the concept mapping strategy direction in teaching-learning process. By knowing the students self-regulated

learning (SRL) strategies, the students could expand their SRL strategies in order to increase their reading achievement enable the students to be effective learners. These strategies could be implemented in teaching reading comprehension to promote the students' cognitive, metacognitive and time management in order to help them read effectively and increase their reading performance as a resulted in leading better academic achievement.

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