

Investigating the ESL Students' Use of Metacognitive Reading Strategy on Their Reading Comprehension

Motaharinik Seyed Mohammadali¹, PhD Scholar

Shahryari Negin², PhD Scholar

Department of Linguistics (K.I.K.S),
University of Mysore, Mysore, India.

Abstract: *Metacognitive awareness is known as one of the efficient ability that students can use in their reading tasks to overcome their comprehension problem. This study was planned to investigate the Indian ESL college students' use of metacognitive reading strategies in their reading comprehension task. In this purpose, the Survey of Reading Strategies (SORS) questionnaire was employed to evaluate the students' application of metacognitive reading strategies and the kinds of metacognitive reading strategies which they mostly prefer. After collecting the data, correlation statistical analysis was used to survey if there is any significant correlation between use of Metacognitive reading strategy and reading achievement. The outcomes show, ESL students of this study sometimes use metacognitive reading strategy while facing reading tasks. In addition, the participants considerably were aware and used Problem-solving strategies ($M= 3.21$) in comparison to Global reading strategies ($M=2.89$) which was used at the least. The findings supported the significant correlation between use of Metacognitive reading strategy and reading comprehension ($Sig= 0.008$). That means, learners will achieve better reading comprehension by using and getting aware of metacognitive reading strategies.*

Keywords: *Metacognitive reading strategy, ESL, Reading comprehension*

Intorduction:

Among all of the four language skills, reading is the most prominent proficiency that the language learners have to achieve, because while a person intends to learn a language he should deals with different materials such as books, magazines, newspaper and texts to get familiar with the structure and concept of different combinations of words in the target language. As there is a fact that declares for being a good writer first you have to be a good reader. However, Reading is considered to be one of the essential skills for learners as it is an important gateway for gaining and learning more knowledge. Bernhardt (2000) believed that reading is considered as one of the main important of language learning. Reading contains several actions like understanding the main idea, recognizing the main and important information, comprehending and learning, evaluating the passage in the academic circumstance.

Readers' awareness, controlling, managing and regulating of these strategies are known as metacognitive knowledge or awareness (Anderson 2002). Metacognitive awareness is recognized as the main element for an effective reading. Those learners, who benefit from this ability, considerably have better reading performance and use more strategies effectively while facing reading task and can employ the strategies which are taught in their reading comprehension (Carrell 1989). New developments in the domain of reading comprehension have triggered an escalating emphasis on the function of metacognitive knowledge of one's cognitive and motivational techniques while facing reading task (Alexander & Jetton, 2000; Pressley, 2000). Generally metacognitive structure can describes the reading process more precisely as it is dependent to some ability which is more than cognitive. Larkin, (2009) believed that teaching metacognition knowledge has a great effect on children reading.

There are various definitions of metacognition; John Flavell (1979) described the metacognition as "knowledge and cognition about cognitive phenomena". Based on Hartman, (1998) metacognition is fundamental since it has impacts on execution of learning, critical thinking and basic considering. Metacognitive learning focuses upon the techniques used and the assignments we went up against. (Garner, 1987). Consistent with Niemi (2002) and Shimamura (2000), metacognition is viewed as the information of one's cognitive methods the efficient utilization of this awareness to self-regulate these cognitive techniques. Metacognition had turned into a well known term in surveys on reading in light of the fact that it shows how readers arranged, observed, and emend their comprehension (Jacob & Paris, 1987).

Metacognitive procedures made learners to ponder their own particular thinking as they take part in academic learning tasks (Cubukcu, 2008) and running and regulating their cognitive technique handling for successful execution (Phakiti, 2003). Metacognition was totally recognized to be a higher request educated task that included an individual's ability to assess and control his learning. Subsequently, it had turned into a critical idea in theories of cognitive advancement and academic psychology (Jacobs & Paris, 1987).

Readers' metacognitive information envelops learning of and control over their own particular thinking and content preparing (Walczyk 2000). Metacognition in this manner includes consciousness of one's cognitive methodologies and the regulation of one's cognitive techniques. Moreover, metacognition incorporates surveying the necessities of the problem, making an answer arrangement, selecting a suitable solution way, checking advancement towards the objective, and adjusting the result when essential (Mayer & Wittrock 1996). Metacognitive information in this way eludes to the conscious cognition control of cognitive action, which may be sorted into two segments to be specific, knowledge about cognition and its regulation.

learning consists of strategies which are conscious cognitive design, deliberately chosen and formulated by a learner to execute particular activities or procedures as all in recognizable strategies to encourage the obtaining, space, recovery, and utilization of data, with its usage

being planned to impact comprehension and learning (Philip 2005). Metacognitive reading methods make motivated learners as students foresee, build conclusions, and inquire the content. Boulware-Gooden et al. (2007) found that different metacognitive strategies that concentrated on vocabulary obtaining, particularly expanded third-grade learner comprehension throughout reading.

Wilson and Smetana (2011) upheld utilizing Questioning as Thinking (QAT), that moved scholars far from discovering the reply "right there" to learners replying questions past the content which needed enacting earlier knowledge. By addressing and monitoring comprehension, learners in grades 4 through 12 enhanced their perception through the QAT approach.

Metacognition, the capacity to reflect upon one's learning and control one's reasoning (Flavell, 1979), is thought to help learners in recognizing significant parts of a task and accordingly impacts their capability to settle on strategic decisions. Metacognition is viewed as a fundamental part of learners' capability to screen their execution and adequately control their learning in crosswise over disciplinary ranges and learning in circumstances (Azevedo & Whitherspoon, 2009). Recent theories meanings of metacognition (e.g. Dunlosky & Metcalfe, 2009; Serra & Metcalfe, 2009) concur on the qualification between two parts: 1) metacognitive awareness of cognition, or metacognitive knowledge, alluding to learners' consciousness of their learning, of the undertaking, and their thinking/learning methods; and 2) metacognitive regulation, alluding to how learners use metacognitive mindfulness to screen and control their own particular thinking and learning.

In spite of various studies about the impact of using metacognitive strategies on reading comprehension, metacognitive reading strategy contains of different subcategories and the kinds of metacognitive reading strategies which students use more than others are still remained as a question. One of the main purposes of this study is to fill this gap which exists in the literature review of this title. In addition, there are scarce surveys about the using of metacognitive strategies on second language learners in India. So this study intends to find the relationship between the using of metacognitive reading strategies and second language learners' reading comprehension. In another words, this study also tries to figure out whether the students who use more metacognitive reading strategies in their reading get better result or not.

The mentioned points lead to make the following questions of this study:

1. How often do ESL students of this study use metacognitive reading strategy in their reading comprehension task?
2. Which kinds of metacognitive reading strategies do ESL students' mostly use in their reading comprehension task?

3. Is there any significant correlation between the ESL students' use of metacognitive reading strategy and their English reading comprehension achievement?

Methods

Participants:

The participants in this study are volunteer students who are selected from two English classes which contain 90 students totally. The students were the first year students of a college in Mysore city, India. After giving Oxford placement test, 43 students were picked up as homogenized students. The level of the students was recognized as Intermediate level. The average age of the students was 20 years old. The mother tongue of all of the participants was Kannada language which is a local language of Karnataka state in India.

Instruments:

In this study two instruments were employed to answer the questions of this survey. First of all, the students were given an IELTS reading comprehension test which contained 40 questions and they had 60 minutes to go through it. After giving them around one hour break again they came back to class and they were given metacognitive reading strategies inventory test. The questionnaire which was used to determine the L2 learners' metacognitive awareness is known as The Survey of Reading Strategies (SORS), this questionnaire is developed by Mokhtari and Sheory (2002) and includes 30 questions. This instrument reliability and validity has been already confirmed in various studies. The SORS scale has 3 main subcategories which includes: Global reading strategies (13 items), Problem solving strategies (8 items), and Support reading strategies (9 items).

Data collection:

This study was done in JSS College, in Mysore city, India. 43 students voluntarily participated in this study and also the purpose of this study was explained for them clearly. They went through IELTS reading comprehension test for 60 minutes and then after a break the Metacognitive questionnaire (SORS) was given to them with unlimited time. This questionnaire consists of 30 questions which the answers were designed according to five points Lickert scale that starts from 1 which means "never do this" to 5 which means "I always do this". Regarding to analyzing the achieved data, SPSS 18 software was used to calculate the statistical procedures. Moreover, descriptive analyzes were applied to discuss about the use of metacognitive reading strategy.

Result and Discussion:

To achieve the result of this study, the data was analyzed descriptively and statistically. The descriptive statistics was used to determine the kinds of metacognitive reading strategies and also its subcategories which ESL students mostly use in their reading task. As it is obvious from the

table 1, descriptive analysis shows how much students benefit from the metacognitive reading strategies in their reading task, and also which kinds of strategies they mostly use. By considering the table 1, it can be realized that, all the students used metacognitive reading strategies *sometimes*, as the mean score of total metacognitive reading strategies is 3.01 (Lickert scale started from always to never in 5 score). It seems that in Global reading strategies ESL students mostly use “predicting or guessing strategy” as this strategy has the highest mean (3.86) among other Global reading strategies. In addition, among Problem solving reading strategies, “Stay focus on task” (mean= 4.20) and “guessing meaning of unknown words” (mean=4.16) strategies are more fashion and utilizable by ESL students in this study. Regarding to Supportive strategies, students mostly use “Underlying information in text” strategy (mean=3.90) to comprehend the reading text better. By calculating the mean score of the three main Metacognitive reading strategies (Global, Problem solving and Supportive) and comparing them together, it can be found that Problem Solving reading strategy was used in higher level than other two strategies as it’s mean score is M=3.21 which is higher than Global reading strategy which is M= 2.89 and Supportive strategy which achieved 2.95 in its mean.

Table 1: Descriptive Statistics of ESL students’ use of Metacognitive reading strategies

Global Reading strategies			Problem solving strategies			Supportive strategies		
	Mean	Std.	Strategies	Mean	Std.	Strategies	Mean	Std.
Setting purpose	2.79	0.59	Reading slowly careful	2.86	0.55	Taking notes	2.74	0.62
Using prior knowledge	2.76	0.68	Stay focus on task	4.20	0.70	Reading aloud	2.67	0.56
Previewing text	2.95	0.53	Adjusting reading rate	2.81	0.58	Summarizing info	2.83	0.68
Checking text context	2.76	0.78	Paying close attention	2.90	0.64	Discussing reading	2.95	0.53
Skimming notes	2.72	0.62	Pausing and thinking	2.95	0.48	Underlining info	3.90	0.56
Determining what to read	2.76	0.57	Visualizing information	2.97	0.51	Using reference	2.83	0.43
Using text feature	2.81	0.58	Re-reading	2.83	0.57	Paraphrasing	2.86	0.63
Using context clues	2.86	0.55	Guessing meaning of unknown words	4.16	0.65	Going back and forth	2.90	0.52
Using typographical aids	2.72	0.62				Asking oneself Q	2.83	0.43
Critically evaluating	2.97	0.59						
Resolving conflicting info	2.81	0.45						
Predicting or guessing	3.86	0.60						
Confirming prediction	2.93	0.45						
<u>Total</u>	<u>2.89</u>			<u>3.21</u>			<u>2.95</u>	
Total mean of all strategies	<u>3.01</u>							

Correlation analysis was applied to answer the third question of this study which intended to find the relationship between using the Metacognitive reading strategies and reading comprehension achievement. As it's shown in table 2, there is a significant correlation (0.008) between reading comprehension achievement and Metacognitive reading strategy. So, it means that, in this study the ESL students' use of Metacognitive reading strategy led them to a better comprehension of their reading task. In addition, according to the findings of correlation analysis in table 2, there is a significant correlation between students' Reading comprehension and metacognitive reading strategy subscales, as the correlation between Reading comprehension and Global strategy is 0.002, Problem solving is 0.004 and for Supportive strategy it is 0.040. However, the findings of table 2 brought to the light that, the subscale strategies of metacognitive reading have significant correlation with each other too. As it is obvious in table 2, correlation between Reading comprehension and two metacognitive subscales, Global and Problem solving, is significant at the level of 0.01, and it support the high relationship between ESL students reading comprehension achievement and their use of Metacognitive reading strategy.

Table 2: Correlation among variables

		Reading score	Metacognitive total score	Global total score	Problem total score	Supportive total score
Reading score	Pearson Correlation	1	.401**	.466**	.433**	.314*
	Sig. (2-tailed)		.008	.002	.004	.040
	N	43	43	43	43	43
Metacognitive total score	Pearson Correlation	.401**	1	.927**	.887**	.932**
	Sig. (2-tailed)	.008		.000	.000	.000
	N	43	43	43	43	43
Global total score	Pearson Correlation	.466**	.927**	1	.787**	.842**
	Sig. (2-tailed)	.002	.000		.000	.000
	N	43	43	43	43	43
Problem total score	Pearson Correlation	.433**	.887**	.787**	1	.787**
	Sig. (2-tailed)	.004	.000	.000		.000
	N	43	43	43	43	43
Supportive total score	Pearson Correlation	.314*	.932**	.842**	.787**	1
	Sig. (2-tailed)	.040	.000	.000	.000	
	N	43	43	43	43	43

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

In aspect of investigating the ratio of variance in Reading comprehension which is explainable by Metacognitive reading strategy, the outcome shows a significant correlation at the level of 0.01 (sig=0.008). The linear regression analysis of the variables reveals that 27.7% using of Metacognitive reading strategies and it's subcategories can predict the reading comprehension achievement (table 3).

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.527 ^a	0.277	0.201	0.491

a. Predictors: (Constant), Supportive total score, Problem total score, Global total score, Metacognitive total score

Also, the finding of table 4, emphasis on the significant correlation between all the metacognitive reading strategies and reading comprehension as the significant level is 0.013.

Table 4: ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.530	4	.882	3.649	.013 ^a
	Residual	9.190	38	.242		
	Total	12.719	42			

a. Predictors: (Constant), Supportive total score, Problem total score, Global total score, Metacognitive total score

b. Dependent Variable: Score Main

Conclusion:

This study was intended to figure out Indian ESL college students' metacognitive awareness of reading methods connected throughout educational reading. The outcomes demonstrated that they sometimes utilized metacognitive reading strategy (M=3, 01). In this way, it could be said that the members in this study were almost attentive to these strategies and they utilized them sometimes. The outcomes showing dominating utilization of problem-solving strategies in this survey was in the line with Mokhtari and Reichard (2004) that critical thinking or problem-solving methods were basically utilized by ESL readers since these techniques were basic for comprehension. Especially, the strategies like "Predicting or guessing text meaning", "Stay focus on reading", "Guessing meaning of unknown words" and "Underlining information in text" were some of the methods that the learners wanted to utilize when they experienced any understanding issues throughout reading task.

The outcomes of this study lead the conclusion that Indian ESL students at college level sometimes implement reading strategies in reading tasks. Especially, Problem-solving strategies were favored most frequently to overcome reading troubles, emulated by Supportive reading methods to characterize the setting for reading. In addition, Global reading strategies were used by participants at the least level.

Particularly, "stay focus on task"(PROB) and "guessing meaning of unknown words"(PROB) were realized as two prominent strategies that the learners used more than other strategies, in

addition, “skimming to note text characteristics”(GLOB) and “reading aloud” (SUPP) were recognized as the least used strategies. Hence, it could be concluded that despite the fact that the learners in this study were interested to utilize reading strategies frequently (sometimes) and hence they were "almost" familiar with these techniques, as far as strategy sorts, they supported problem-solving strategies and supportive reading ones.

According to the results of the present study, there was a significant relationship between using metacognitive reading strategies and reading comprehension among ESL college learners. Research indicates that metacognitive reading strategy awareness promotes both performance and understanding of one’s reading comprehension. Correlation between ESL students reading comprehension and the Metacognitive reading strategy is significant at the level of 0.01 that means these variables closely dependent to each other. In other words, whatever the students’ metacognitive awareness is higher, their reading comprehension performance is better and they have significant correlation to each other.

As scholars led studies about the metacognitive reading strategy awareness, they realized that metacognitive reading methodology is one of the principle significant variables to enhance learner's reading comprehension. It could be presumed that colleges or universities require to seriously enhance students' metacognitive reading strategies o make them self-evaluated and self-regulated learners.

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