## Role of Metacognitive Awareness of Reading Strategies in L2 Reading Comprehension Ability

Sumaira Qanwal Shahzad Karim Naushaba Haq

## Abstract

The present research is an attempt to investigate the relationship between metacognitive awareness of reading strategies and reading comprehension ability. The study has implications in the context of developing L2 reading comprehension ability. The data were collected from 40 ESL learners studying in BA (Hons) program at the department of English, The Islamia University of Bahawalpur, Pakistan. MARSI (Metacognitive Awareness of Reading Strategies Inventory) was used as one of the data collection tools with slight modifications. The other instrument used to collect data was a reading comprehension test. The data were analysed through quantitative means by using SPSS (Statistical Package for Social Sciences). Pearson Productmoment Correlational test was applied to measure the relationship between the variables. The results revealed that a highly significant positive correlation exists between metacognitive awareness of reading strategies and reading comprehension ability of the ESL learners.

**Keywords:** Metacognitive awareness, reading strategies, reading comprehension ability, reading proficiency.

## 1. Introduction

Reading skills are the most important receptive skills in academic context. The identification and classification of reading strategies, reading process, use of reading strategies, and the role of reading strategies in improving reading skills are some of the frequently addressed issues in the research related to reading skills. However recently, research in the area of reading has taken one step ahead. It has begun to focus on the role of metacognition in reading comprehension and reading proficiency. While previous research studies focused on the use of strategies; the researchers now have turned their attention to examining readers' awareness of strategies during the reading process - their metacognitive awareness (Singhal, 2001). The present study tries to identify the extent to which metacognitive awareness of reading strategies can help promote reading comprehension skills. The research assumes that if learners are conscious of the strategies they use while reading, they can better comprehend the available reading text. In this context, the researchers have endeavoured to investigate the relationship between metacognitive awareness of reading strategies and reading comprehension proficiency by analysing the phenomenon in their own region - Bahawalpur, Pakistan. The investigation was focused on knowing whether metacognitive awareness plays any role in developing ESL learners' proficiency in reading comprehension. Hence, the following research questions were formulated:

#### **1.1 Research Questions**

- 1. What is the level of the ESL learners' metacognitive awareness of reading strategies?
- 2. To what extent are they proficient in reading comprehension?

171

3. Is there any correlation between the learners' metacognitive awareness of reading strategies and their proficiency in reading comprehension?

## 2. Literature Review

Before discussing previous studies on the role of metacognition in reading comprehension, it is important to define the term 'metacognition' in general and to understand what 'metacognitive awareness of reading' means in particular.

#### 2.1 Metacognition

Metacognition may simply be defined as 'thinking about thinking' as it involves awareness and regulation of one's thinking processes. Harris and Hodges (1995) propose that metacognition is how one thinks about one's own thoughts. Keeping this definition in view, metacognitive strategies can be defined as those strategies that require students to think about their own thinking as they engage in academic tasks. As we know that learning is a process oriented phenomenon, we may refer to Baird's (1990, p. 184) definition that metacognition means "the knowledge, awareness and control of one's own learning".

From the above given definitions it is inferred that metacognition includes the knowledge of one's own cognitive and affective processes and states; and that it also includes the ability to consciously monitor and regulate those processes and states. In the same vein, metacognitive development can be described as "the move to greater knowledge, awareness and control of one's learning" (Cubukcu, 2008, p. 85).

As far as L2 reading is concerned, metacognition has been defined by Zhang (2010) as an explicit process in which readers are consciously engaged in using reading strategies. Shedding light on the role of metacognition in reading context, Israel (2007) affirms that metacognitively skilled readers not only construct meaning but also monitor and evaluate texts that they read. Similarly, in Gunning's (1996) opinion, such readers exhibit understanding of what they read for they are conscious of their own mental processes.

Having understood what metacognition means, let us now analyse its components in order to have a clear idea about the nature of metacognitive awareness and how it can be developed.

#### 2.2 Components of Metacognition

Flavell (1979) elaborates the concept of metacognition or metacognitive awareness in terms of three types of knowledge as its components: knowledge of person variables, task variables and strategy variables. Person variables include knowledge about human learning process in general and an individual's leaning process in particular. For example, one might be aware that one can learn more effectively in the quiet library rather than at home which may cause more distractions. Task variables include knowledge about the nature of task and the required skills to accomplish that task. For example, one might know that familiar topics are easy to understand than unfamiliar ones. Likewise we may know that explicit sentences assist us in reading tasks that require reduction of texts to their gist. Strategy variable includes knowledge about cognitive and metacognitive strategies, and when and where to use such strategies. A similar view is presented by Singhal (2001) who states that metacognitive knowledge or awareness is knowledge about ourselves, the tasks we face, and the strategies we employ.

Let us now examine the previous studies on the role of metacognition and its related strategies in reading comprehension.

#### 2.3 Role of Metacognition in Reading

Many experts, who attempted to analyse and explore reading strategies by researching expert readers, have realized the key role of metacognition in both L1 and L2 reading comprehension. Their studies demonstrate that successful comprehension does not occur automatically. Rather, it depends on directed cognitive effort referred to as metacognitive processing which consists of knowledge about the regulation of cognitive processing. The researchers proposed that good readers willfully select, recall, and use strategies to regulate and enhance their comprehension of a text.

The example studies supporting the aforementioned observations in L1 context were conducted by Baker and Brown (1984) and Garner (1987) who analysed reading comprehension ability of native English speakers, and discovered that good readers possess better monitoring ability, are more metacognitively aware, and can use more strategies while reading.

Later some other researchers conducted similar studies on non-native speakers of English. For example, Pressley and Afflerbach (1995) used verbal protocol analysis to explore reading behaviours of good L2 readers of English. Their research findings disclosed that expert or highly skilled L2 readers use specific metacognitive strategies before, during, and after reading to facilitate their comprehension of the target text. The researchers observed that good readers' reading behaviours help them in constructing meaning while reading. These readers display automaticity in applying various metacognitive reading strategies, while the less able readers cannot automatically apply these strategies. The similar kind of positive results were reported in the other studies by Alexander and Jetton (2000) and Ilustre (2011).

In short, previous literature prominently presents metacognitive awareness of reading strategies as one of the defining criteria of successful reading. Keeping this in view, it is important to understand the nature and classification of metacognitive strategies.

#### 2.4 Metacognitive Strategies or Regulatory Skills

Metacognition generally consists of knowledge and regulatory skills. The L2 researchers have identified some metacognitive regulatory skills that are associated specifically with reading skills. For example, Wade, Trathen, and Schraw (1990) conducted a research on 67 college students. These volunteers were given a 15-page passage to read. After reading, a recall test was to follow. During reading, a retrospective report of the learning strategies was demanded from the students at eight separate points. The data disclosed 14 strategies called "tactics". The researchers separated these strategies into three general categories. The first one was called 'text-noting tactics' which included underlining, highlighting, copying key words, phrases or sentences, circling, paraphrasing in notes, outlining and diagramming; second type was called 'mental learning tactics' which included rote learning of specific information, mental integration, relating information to background knowledge, imaging, visualizing, self-questioning and self-testing; the third type called 'reading tactics' included reading, skimming and re-reading the selected text.

On the other hand, Mokhtari and Sheorey (2002) came up with somewhat different classification. They divided metacognitive reading strategies into three categories: global reading strategies, problem solving strategies and support strategies. Global reading strategies (GLOB) are the techniques to monitor and manage reading, e.g. having a purpose in mind, previewing a text like its length and organization, and using typographical aids like tables and figures. Problem solving strategies (PROB) involve procedures which learners use when problems develop in understanding textual information, e.g. "adjusting speed of reading when the text becomes difficult or easy, guessing the meaning of unknown words, and rereading a text to improve comprehension" (p. 4). "Support strategies are basic support mechanisms intended to aid the reader in comprehending the text such as using a dictionary, taking notes, underlining, or highlighting textual information" (p. 4).

The researchers in the present study have used the later classification of strategies (i.e. Mokhtari & Sheorey, 2002) for examining the extent to which metacognitive awareness is found in the sample group of students and if it has any relation with their reading comprehension ability. The study is significant in the sense that it has tried to test the observations made by the previous researchers regarding the importance of metacognitive awareness in L2 reading proficiency in a different context, i.e. Pakistan which is a multilingual country. Additionally, the paper aims to substantiate the previous knowledge by calculating the significance of relationship between sub-factors of metacognition (Global, problem solving and support strategies) and L2 reading comprehension through statistical results of the correlational tests applied on the collected data.

## 3. Methodology

#### 3.1 Participants

The selected sample consisted of 40 L2 learners of English enrolled in BA Hons. (English) program in the department of English, The Islamia University of Bahawalpur, Pakistan. All the participants had formally studied English during their previous 13 years of education in Pakistan. The rationale for selecting the graduate level was that the learners at this level of study had a vast experience of reading during their previous 13 years of education which could help the researchers know about their reading habits through a self-report questionnaire and finally correlate it with their reading proficiency. The participants were selected randomly from semester 3, 5 and 7 respectively. Twelve (12) participants were selected from semester 3; thirteen (13) from semester 5 and fifteen (15) from semester 7. During the selection of the participants, no special consideration was given to the number of selected male and female students as gender did not have any role in the research plan of the present study.

## **3.2 Data Collection Instruments**

#### 3.2.1 Questionnaire

As the first task was to measure learners' metacognitive awareness of reading strategies, a questionnaire was considered as a suitable tool for this purpose. The available inventory which was found suitable for this purpose was 'Metacognitive Awareness of Reading Strategies Inventory' (MARSI) initially developed by Mokhtari and Reichard (2002), and later modified by Mokhtari and Sheorey (2002) in the form of a survey of reading strategies (SORS). MARSI was initially designed with the intention to assess adolescent and adult learners' awareness and use of reading strategies while reading academic materials such as text books, library books etc. The basic underlying purpose to devise such an instrument was to measure "the degree to which a

student is or is not aware of the various processes involved in reading." (Mokhtari & Sheorey, 2002, p. 251).Hence, MARSI, felt to be meeting the requirements of the present research design, was finalized by the researchers as a data collection instrument with slight modifications. The MARSI originally consisted of 30 items each of which used a 5-point likert scale ranging from 'Never' to 'Always'. The items meant to measure the participants' use of three broad categories of metacognitive reading strategies, i.e. global reading strategies, problem solving strategies and support strategies. However, as stated earlier, the MARSI was slightly modified by the researchers for the present research. The modified instrument consisted of 33 items, as items 2, 31, 32 and 33 were added to the original version; and item 26 was omitted because it was considered unnecessary or redundant. All of the items were meant to assess either the global reading strategies, or the problem solving strategies, or the support strategies as was the case with the original MARSI. The modified questionnaire contained 16 items of global reading strategies, 8 items of problem solving strategies and 9 items of support strategies.

#### 3.2.2 Reading comprehension test

The second instrument used for data collection was a reading comprehension test. This test focused to evaluate all aspects of the students' reading comprehension. The test was especially modelled in the design of six levels of human thinking as discussed in Bloom's (1956) cognitive domain of educational objectives. The test was based upon an extract or passage written in English language. It comprised of 5 paragraphs each of a medium length (approx. 90 words). The participants were supposed to read the extract within 20 minutes after which they had to answer the questions given at the end of the extract. The test included 14 questions. The first seven questions (Section 1) inquired about the details related with the specific paragraphs to measure learners' knowledge and comprehension ability. The last seven questions (Section 2) meant to assess the learners' overall understanding of the given text, aiming exclusively to judge their critical reading ability, i.e. application, analysis, synthesis and evaluation of the given text.

## 4. Analysis and Findings

Out of a total of 40 participants, only 35 participants completed both the instruments properly. Three of the participants filled in only the questionnaires, and only partially attempted the critical reading test. One of the participants did not bother to attempt critical reading test at all. On the contrary, another participant fully attempted the critical reading test, but did not fill in the questionnaire. So, the data provided by 35 participants was put to analysis which was done in accordance with the sequence of the presented research questions.

#### 4.1 Measuring Metacognitive Awareness of Reading Strategies

The questionnaire was analyzed in order to measure learners' awareness of metacognitive reading strategies. The metacognitive awareness was categorized as very high, high, medium, low and very low in response to the participants' choices on the 5-point likert scale (Never, Rarely, Sometimes, Often, Always) provided against each variable. A very high level of metacognitive awareness was identified for mean score 4.0 or higher; high level of awareness was regarded for mean score 3.5 or higher but lower than 4.0; medium level of awareness was recognized for mean score 2.5 to 3.4; low level of metacognitive awareness was regarded for mean score 1.9 or lower. The key for interpretation is being presented in tabulated form below:

Mean Score	Level of Metacognitive	Awareness
1.0-1.9	Very low (Very p	oor)
2.0-2.4	Low (Below Aver	age)
2.5-3.4	Medium (Averag	ge)
3.5-3.9	High (Good)	
4.0-5.0	Very high (Excell	ent)

Table 4.1: Key to measure the level of metacognitive awareness of reading strategies

Firstly, the Mean scores for three separate categories were calculated to investigate the participants' most or least frequent use of different metacognitive reading strategies, followed by the measurement of participants' overall metacognitive awareness. The statistic calculations are presented in the tables given below.

#### 4.1.1 Global reading strategies

The statistical evaluation of the questionnaire in terms of global reading strategies (item 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 25, 27, 29, 31, 32 and 33) is given below:

Item. No.	Item Description	Ν	Mean	Std. Deviation
1	Having a purpose in mind	35	4.51	.702
2	Deciding a time-limit	35	2.86	1.192
3	Previewing the text	35	3.97	1.175
4	Matching content with purpose	35	4.11	1.255
5	Skimming for length and organization	35	3.60	1.063
6	Using prior knowledge for understanding	35	4.23	.843
7	Identifying what to read closely or to ignore	35	3.83	1.294
8	Using tables, figures and pictures	35	3.86	1.089
9	Using context clues	35	4.49	.612
10	Using typographical aids	35	3.80	1.052
25	Checking understanding on conflicting information	35	3.97	1.071
29	Critically analyzing and evaluating information	35	3.91	.981
27	Asking self-questions about text	35	3.60	1.193
31	Self-evaluating the overall understanding	35	4.43	.698
32	Checking the perceived goal/purpose	35	4.37	.843
33	Planning to apply textual information to other tasks	35	3.86	.879
	Total global reading strategies (average)	35	3.9625	.36292

Table 4.2: Descriptive statistics for global reading strategies

Six of the total 16 variables of global reading strategies (item no. 1, 4, 6, 9, 31 and 32) have very high mean scores (M = or higher than 4), 9 variables (items 3, 5, 7, 8, 10, 25, 27, 29 and 33) have high mean scores (M = 3.5-3.9) and 1 variable denoted by item 2 has medium mean score (M = 2.5-3.4). The mean score for overall global reading strategies is found to be 3.96, i.e. high.

#### 4.1.2 Problem solving strategies

The following table describes statistics for the problem solving strategies:

Item No.	Item Description	Ν	Mean	Std. Deviation
13	Reading slowly and carefully	35	4.54	.657
14	Getting back on track	35	4.66	.838
17	Adjusting reading speed accordingly	35	3.57	1.220
19	Paying closer attention on difficulty	35	4.46	.817
20	Stopping time and again to think about text	35	3.77	1.114
22	Guessing the meaning of unfamiliar words	35	4.43	.884
23	Visualizing information to remember	35	3.94	.938
26	Rereading to increase understanding	35	4.74	.561
	Total problem solving strategies	35	4.2643	.44014

The results demonstrate that out of total eight problem solving strategies depicted through items 13, 14, 17, 19, 20, 22, 23 and 26 of the questionnaire, the participants' mean score for 5 items (13, 14, 19, 22 and 26) is found to be very high (M = or higher than 4) while a high score (M = or > 3.5 but < 4) is calculated for the remaining 3 items (17, 20 and 23). The mean score for total problem solving strategies is 4.26 which is very high according to the interpretation key.

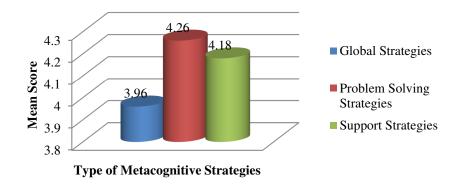
## **4.1.3 Support strategies**

The statistical analysis of participants' response to nine variables of support strategies has also disclosed a very high level of participants' awareness. This can be identified as follows:

Item No.	Item Description	Ν	Mean	Std. Deviation
11	Reading aloud on difficulty	35	3.91	1.292
12	Summarizing to reflect on important information	35	4.34	.873
15	Underlining or circling information	35	4.54	.852
16	Taking notes while reading	35	4.17	.954
18	Using reference materials	35	4.26	.950
21	Paraphrasing ideas for better understanding	35	4.20	1.079
24	Finding relationships among ideas	35	4.03	.822
28	Checking if the guesses are right or wrong	35	4.26	.886
30	Discussing with others to check understanding	35	3.91	.981
	Total support strategies	35	4.1810	.40069

 Table 4.4:Descriptive statistics for support strategies

According to the results, the mean scores for items 12, 15, 16, 21 and 24 are 4.34, 4.54, 4.17, 4.20 and 4.03 respectively which depict participants' very high level of awareness in these variables of metacognitive strategies. Items 18 and 28 have got the same mean score, i.e. 4.26 recognized to be very high. Similarly, the mean score for items 11 and 30 is also found to be the same as 3.91 for each, and is regarded as high. The total mean score for support strategies is 4.18 which overall exhibits a very high level of awareness. Figure 1 offers the graphical presentation of calculated awareness of three types of metacognitive reading strategies in terms of comparison:



#### Figure 4.1:Comparative graph for global, problem solving and support strategies

From the above presented bars and their associated data, it is observed that problem-solving strategies have received the maximum score (M = 4.26), whereas the score for global reading strategies is minimum which implies that problem solving strategies were more frequently adopted by the participants as compared to both global reading strategies and support strategies.

#### 4.1.4 Overall awareness of metacognitive reading strategies

After calculating the participants' scores for different categories of metacognitive reading strategies, their overall awareness of metacognitive reading strategies was measured. The results are shown below:

#### Table 4.5: Descriptive statistics for overall metacognitive awareness of reading strategies

Variable Description	Ν	Mean	Std. Deviation
Total Metacognitive Strategy Awareness (Average)	35	4.0952	.31061

Table 4.5 reveals that the participants' score for overall awareness of metacognitive reading strategies is very high, i.e. 4.09. Hence, the learners are highly aware of reading strategies.

#### 4.2 Analysis of Reading Comprehension Test

After its due marking by the researchers, the results of the critical reading test were calculated in the form of percentages and their corresponding grades. The following key was used for the interpretation of the participants' marks in reading comprehension test:

Sr. No.	% Marks	Grade	Remarks
1	90% or above	A+	Marvelous/Exceptional
2	80%-89%	А	Excellent
3	70%-79%	B+	Very Good
4	60%-69%	В	Good
5	50%-59%	С	Fair
6	40%-49%	D	Satisfactory
7	Below 40%	F	Poor

 Table 4.6:Key for interpretation of the results of critical reading test

Table 4.7: Overall results of the reading comprehension test

Sr. No	% Marks	Grade	Frequency	Frequency %
1	90% & above	A+	17	49%
2	80%-89%	А	13	37%
3	70%-79%	B+	4	11%
4	60%-69%	В	1	3%
5	50%-59%	С	0	0%
6	40%-49%	D	0	0%
7	Below 40%	F	0	0%

The results reveal that 49% of the learners passed the critical reading test with A+ grade (Marvelous/Exceptional), 37% of them got A grade (Excellent), 11% secured B+ grade (Very Good) and the remaining 3% of the participants achieved B grade (Good). None of the participants got C (Fair), D (Satisfactory) or F grade (Poor). The top highest (49%) and the second highest percentage (37%) of the participants securing A+ and A grades respectively is demonstrative of the fact that students' overall critical reading proficiency is excellent. The percentage of learners' achieved grades in the said test can be depicted in the form of a pie chart given below:

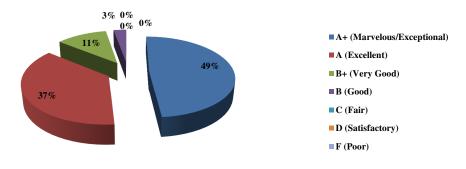


Figure 4.2: Participants' secured grades in reading comprehension test

In the light of the above given interpretation key, the following data were attained for overall results of the reading comprehension test:

It is evident from the above given data that the participants' showed a very high level of proficiency in text comprehension.

## 4.3 Investigation of Correlation

The Correlation coefficients for metacognitive strategy awareness and critical reading proficiency also disseminated the positive results. A significant positive relationship was observed between the participants' metacognitive awareness of reading strategies and their scores in reading proficiency. The value of 'r' for this correlation was calculated as '.370' whereas the 'p' value was '.029'.

# Table 4.8:Results of Pearson Product-moment correlation for metacognitive awareness and reading proficiency

		Metacognitive Strategy	Proficiency in Critical
		Awareness	Reading
Metacognitive	Pearson Correlation	1	.370*
Strategies	Sig. (2-tailed)		.029
	N	35	35
Proficiency in	Pearson Correlation	.370*	1
<b>Critical Reading</b>	Sig. (2-tailed)	.029	
_	Ν	35	35
* Correlat	ion is significant at the 0.	.05 level (2-tailed).	

The plotted chart representing this correlation is provided below:

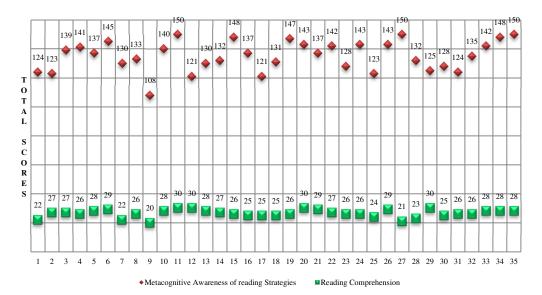


Figure 4.3: Scatter plot for correlation between metacognitive awareness and reading comprehension

The vertical flow of scattered points in one category is mostly seen to be similar to that of the associated points in the other category, depicting a positive correlation. The vertical position of related points for the two categories on the above scatter plot highlights the similarity in the extent and degree of their existence in the target population.

Table 4.9 displays numerical values of Pearson product-moment correlations extracted for factor variables of metacognitive reading strategies.

		1	2	3	4
	Variables				
		Global Reading Strategies	Problem Solving Strategies	Support Strategies	Proficiency in Reading comprehension
1	Global Reading Strategies Sig. (2-tailed)				
2	Problem Solving Strategies	.377*			
	Sig. (2-tailed)	(.025)			
3	Support Strategies	.578**	.249		
	Sig. (2-tailed)	(.000)	(.149)		
4	Proficiency in Reading	.301	.376*	.200	
	Comprehension	(.078)	(.026)	(.250)	
	Sig. (2-tailed)				

Table 4.9: Results of Pearson Product moment correlation for factor variables

The statistics depicted through table 9 reveal that a strong positive statistical relationship exists between global reading strategies and problem solving strategies (r = .377, p = .025), and a very strong relationship is found between global reading strategies and support strategies (r = .578, p = .000). On the contrary, no correlation is found between problem solving strategies and support strategies (r = .249, p = .149). Finally, problem solving strategies have exhibited a significant correlation with reading comprehension proficiency (r = .376, p = .026). On the contrary, global reading strategies and support strategies have denied any significant correlation with proficiency in text comprehension. The scatter plots for these correlations are shown in the figure below:

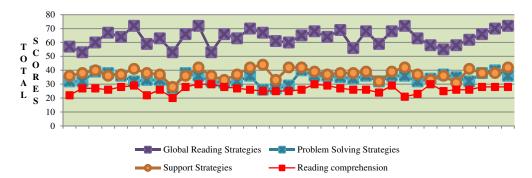


Figure 4.4:Scatter plot for correlations among factor variables

## 5. Discussion

The ESL learners of English department at The Islamia University of Bahawalpur are highly proficient in reading comprehension. The majority of the students have got either exceptional or excellent ability in reading comprehension. Some of them possess 'very good' reading comprehension skills, while a few of them are 'good' at comprehending the written texts. None of the students has shown to be only fair, satisfactory or poor in text comprehension. It implies that the level of all of the students' reading comprehension skills is above average, as no score is found below the average scale. This exhibits almost an ideal type of linguistic scenario with respect to ESL learners' proficiency in reading comprehension. Although, it stands in controversy to the claims put forward by a number of other researchers in response to their studies contextualized inside or outside Pakistan. For example, Grabe (1991), who believes that reading is the most important skill for L2 learning, claims that in Asian countries students obtaining the higher level studies lack sufficient reading skills. The present study has disclosed that this claim does not stand valid at least in the context of the L2 learners of The Islamia University of Bahawalpur. This might be in theconsequence of students' high level of metacognitive awareness and their perceived use of reading strategies.

A significant positive correlation ( $r = .370^*$ ) between students' metacognitive awareness of reading strategies and their proficiency in text comprehension implies that the more metacognitively aware the learners are, the more proficient in reading comprehension they will be; and vice versa.

The findings of the present study stand in line with those of the previous studies (e.g. Pressley & Afflerbach, 1995; Alexander & Jetton, 2000, & Ilustre, 2011) which exhibited a key role of metacognition in L2 reading comprehension.

Considering the results of the present study, it can be suggested that ESL learners' high level of metacognitive awareness and use of reading strategies accounts for their excellent performance in text comprehension. The analyzed frequencies of variables in the obtained data reveal that the more the learners' metacognitive awareness and use of reading strategies are, the higher their reading proficiency is.

In the light of the present research, it is important to note that no correlation is found between students' use of global reading strategies and their reading comprehension ability, nor does it exist between support strategies and reading comprehension ability; a significant positive correlation exists between students' awareness of problem solving strategies and their reading comprehension ability. This suggests that awareness of problem solving strategies is more important in enhancing reading comprehension proficiency than that of global reading strategies and support strategies. This claim is supported by noticing that the participants of the present study have scored the highest in problem solving strategies, which are seen to have been core pointfor their extraordinary performance in reading comprehension test.

#### 6. Conclusion

The study concludes that the ESL learners at the Islamia University of Bahawalpur are highly aware of the strategies they use while reading English texts. They are consciously aware of the techniques they employ in monitoring and regulating their reading process. Moreover, these students are highly proficient in comprehending English text. They can skillfully understand the content, apply the information to real life situation, synthesise the text into new patterns, analyse the organization and evaluate the author's stance. The study has found a highly significant positive correlation between the learners' metacognitive awareness of reading strategies and their proficiency in text comprehension. It means that the learners' metacognitive awareness is responsible for their proficiency in reading process, score higher in text comprehension. On the contrary, the learners, who are less aware of the reading strategies, score lower in reading comprehension test.

#### References

- Alexander, P. A., & Jetton, T. L. (2000). Learning from text: A multidimensional and developmental perspective. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (pp. 285–310). Mahwah, NJ: Erlbaum.
- Baird, J. R. (1990). Metacognition, purposeful inquiry and conceptual change. In E. Hegarty-Hazel (Ed.), *The student laboratory and the science curriculum* (pp.183-200). London: Routledge.
- Baker, L. & Brown, A. L. (1984). Metacognitive skills and reading. In P. D. Pearson, R. Barr, M. L. Kamil, & P. Mosenthal (Eds.), *Handbook of reading research* (pp. 353-394). New York: Longman.
- Bloom, B. (1956). A taxonomy of educational objectives. Handbook 1: Cognitive domain. New York: McKay.
- Cubukcu, F. (2008). Enhancing vocabulary development and reading comprehension through metacognitive strategies. *Issues in Educational Research*, 18(1), 1-11.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitivedevelopmental inquiry. *American Psychologist*, 34, 906 - 911.
- Garner, R. (1987). Metacognition and reading comprehension. Norwood, NJ: Ablex.
- Grabe, W. (1991).Current developments in second language reading research. *TESOL quarterly*, 25 (3), 375-406.
- Gunning, T. (1996). Creating reading instruction for all children. Boston: Allyn and Bacon.

- 184
- Harris, T., & Hodges, R. (1995). The literacy dictionary: The vocabulary of reading and writing. Newark, DE: International Reading Association.
- Ilustre, C. A. P. (2011). Beliefs about reading, metacognitive reading strategies and text comprehension among college students in a private university. *Philippine ESL Journal*, 7, 28-47.
- Israel, S. E. (2007). Using metacognitive assessments to create individualized reading instruction. Newark, Del.: International Reading Association.
- Mokhtari, K., & Reichard, C. A. (2002). Assessing students' metacognitive awareness of reading strategies. *Journal of Educational Psychology*, 94(2), 249–259.
- Mokhtari, K., & Sheorey, R. (2002). Measuring ESL students' awareness of reading strategies. *Journal of Developmental Education*, 25(3), 2-10.
- Pressley, M., & Afflerbach, P. (1995). Verbal protocols of reading: The nature of constructively responsive reading. Hillsdale, NJ: Erlbaum.
- Singhal, M. (2001).Reading proficiency, reading strategies, metacognitive awareness and L2 readers. *The Reading Matrix*, 1(1), 1-23.
- Wade, W., Trathen, W., &Schraw, G. (1990). An analysis of spontaneous study strategies. *Reading Research Quarterly*, 25, 147–166.
- Zhang, J. L. (2010). A dynamic metacognitive systems account of Chinese university students' knowledge about EFL reading. TESOL Quarterly, 44(2), 320-353.