

# The Impact of Training Metacognitive Strategies on Reading Comprehension among ESL Learner's

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## Abstract

The present study investigates the impact of training metacognitive strategies in reading comprehension and has been conducted among students from University Putra Malaysia. Forty eight subjects majoring in English including both males and females participated in the study. They have been chosen from first level of reading and divided into two groups, namely, experimental and control group. To carry out the process, initially, a standard test of reading comprehension was given to both experimental and control groups in order to compare their reading abilities. Results indicated that there was no significant difference in their reading abilities and therefore the classification of the students was reasonable. Subsequently, twelve-week training on metacognitive strategies was given to the experimental group, and after the training sessions their performance was measured through reading comprehension tests, metacognitive strategy questionnaire, and semi-structural interview. The results showed that participants' ability in the two strategies of monitoring and assessment increased after receiving explicit instruction of metacognitive strategy. However, only the experimental group had positive view toward these strategies and believe that the effective learning of these strategies can enhance their reading ability. The findings in this study make contribution to the body of knowledge and not only provide a clear insight of the effectiveness of metacognitive strategies in the process of reading, but also support the belief that explicit instruction of metacognitive strategies will enhance learners reading ability.

**Keywords:** metacognitive strategies, reading comprehension, explicit instruction.

## INTRODUCTION

One of the vital factors in the process of learning English language is reading comprehension.

Researchers have indicated that the process of comprehension is quite complex and students often struggle in constructing the meaning and comprehension of text (Grabe & Stoller, 2002). Moreover, difficulties in comprehension is a central attention for researchers, and it has been suggested that, one of the essential factors that can possibly enhance readers' comprehension is metacognitive reading strategies. (Salataki & Akyel, 2002). Metacognitive reading strategies is related to an individual's mental process and the behaviors that control the reader's effort of deriving the meaning and understanding of the context Afflerbach, Pearson, and Paris (2008). They are of interest in terms of their effectiveness in comprehension process and indicating the way how readers can interact with the text. Also, Mokharti and Reichard (2002) mentioned that the awareness of metacognitive reading strategies can assist the readers in comprehending text properly and promote to develop their English learning as a foreign or second language.

O'Malley & Chamot (1990) pointed out that the success of learners in comprehending a text, is very much dependent on their level of awareness about learning strategies. Anderson (2002) claimed that learners are metacognitively aware, because they know how to figure out things when they are faced with difficulties. To this end, the metacognitive awareness would aid the learners in using the appropriate strategies in order to solve the problem. Anderson (1999) and Cohen (1998) on the other hand, emphasized on strategy instruction and mentioned that the main focus in a reading classroom should be directed towards training the learners on the use of strategy awareness. With regard to this, it is worth noting that an effective way to enhance learners reading comprehension is to teach metacognitive strategy.

While the importance of strategy awareness frequently reported in the previous studies, some of the researchers note that importance of strategy awareness in classroom instruction has been deemphasized. Norizul and Abdul Rashid (2001), for instance, claimed that providing the instruction on the methods of utilizing reading strategies is not a normal practice in Malaysian schools. Moreover, solely using classroom practices do not often give an insight to the learners on methods of employing the skills and strategies to interact with text and construct the meaning of the text, and how to be critical and analyze a text to achieve comprehension. In line with to such notions, Durkin's (1981) observation, for instance, illustrated that most teachers utilize the question and answer sessions but rarely provide explicit instruction about the use of comprehension strategies while reading. Obviously, this does not train the learners to interact effectively with the teacher and the text. Whereas, by using metacognition, instructors can assist individuals to analyze and organize their thinking, reading, and learning process. However, it is assumed that many teachers are not aware of the effectiveness of metacognitive aspects in learning, and consequently expect the learners to improve their learning simply based on the curriculum provided. In addition, the study carried out by McKeachie (1988) revealed that, explicit learning of the strategies are rarely taught by instructors at university. Students only learn how to apply these strategies

while they are in high school. When they gain admission into higher levels of education without learning strategies, the mastery of English and other disciplines become challenging.

In Malaysia, **Sijil Pelajaran Malaysia (SPM)** examination is used as a benchmark for students to continue their studies in different Institutions of Higher Learning (IHL). At this level, students are endorsed with a number of options, for instance, enrolment to the university, Form Six class, Matriculation College, Teacher Training Institute, Polytechnic or Community College. In all the listed options, having sufficient English proficiency is emphasized. The Ministry of Education (2006) stated that, in Teacher Training Institutes, English must be taught in order to enhance the English language ability of the students in different context and make it more facilitative in their studies. Meanwhile, the Ministry of Education emphasizes that by learning English, learners can develop their knowledge through using the internet and they will become familiar with the reference materials which have been written in English. Therefore, the role of English at this level is considered an important factor because students in different field of studies are dealing with English terminologies. Also, in order to prepare students for English proficiency, examinations such as TOEFL and MUET, the instructors at Matriculation colleges, do not only literally teach English, but assist the students on the use of English language more effectively and efficiently in both social and academic contexts (Ministry of Education Malaysia, 2006).

With all training programs mentioned above the question remained unanswered that why majority of Malaysian, who have been widely exposed to English as a second language, are incompetent users of English and mostly they are struggling to comprehend a text in English. The study conducted by Zuridah's (2008), for instance, investigates the language proficiency of 405 students from six public universities in 2006. The results indicated that only 1.4% of the students are good language users, while 54.6% of the students are poor in language. From the results, a logical subjective conclusion can be made that majority of Malaysian ESL learners require significant assistance to improve their English proficiency. In fact, the learners should be introduced to the use of strategies in order to enhance their learning abilities. In addition, Shafie and Nayan (2011) mentioned that many of the students at university levels are having difficulties in comprehending texts written in English appropriately. Only surface level of reading can be achieved because they are not only unfamiliar with reading skills and strategies but also they have lack of critical thinking skills ability, which is rather evident in their examination results. However, the study presented in this paper is focused on evaluating whether providing explicit instruction of metacognitive strategies engages readers to adopt these strategies in order to enhance their text comprehension. The findings may provide some useful information about the effectiveness of explicit instruction of metacognitive strategies in ESL context.

## REVIEW OF LITERATURE

Numerous studies have been carried out by different researchers in the area of metacognition in relation to the different skills, and their outcome has given a new perspective and insight to other researchers in order to expand their point of view of metacognitive strategies. McLoughlin, *et al.* (2000) showed that in order to enhance learners' awareness instructors should teach the learners metacognitive skills through modelling. By learning metacognitive skills the learners could be able to monitor their problem solving abilities. Likewise, Salataci and Akyel (2002) demonstrated the importance of using training instruction for metacognitive strategies among Turkish learners. The authors attempted to evaluate whether training metacognitive strategies explicitly, affects the comprehension performance of EFL learners. The study involved 20 EFL learners who were chosen from a university in Turkey. In addition to pre-test and post-test in Turkish and English, the authors utilized the processes of observation, interviews and think-aloud procedures among eight students. Participants were taught metacognitive strategies which involves, how to monitor their reading and, how to activate their background knowledge in four weeks, with each week consisting of three hours. The findings revealed that before and after the training there were differences in reading strategies. After the training program, both Turkish and English less often used local strategies such as "using a dictionary and focusing on grammar or word meaning," and after training procedure the use of global strategies such as "predicting, skimming for main ideas, and summarizing," were increased. Therefore, the findings indicated that explicit training of metacognitive strategies positively influences the use of global strategies among EFL learners.

Erskine (2010) examined metacognitive strategies, on first year university students. By using Metacognitive Skill Instruction, the students were trained on different techniques of utilizing metacognitive skills and strategies. Furthermore, in order to assess the students' performance in employing metacognitive strategy, the inventory of metacognitive awareness was used, at the end of the semester. The result indicates the significant difference between pre-test and post-test.

Cubukcu (2008) has investigated the effective of metacognitive strategy instruction among a hundred and thirty, third year university students. The aim of the study was to clarify whether students comprehension improves by receiving the instruction on methods of utilizing metacognitive strategy. Students provided training program for five weeks. Their achievement in reading comprehension and vocabulary were examined to explore the effectiveness of the instruction. The result indicated that the experimental group that benefited from

metacognitive strategy instruction outperformed the control group.

The successful use of training metacognitive strategy instruction was emphasized by Wichadee (2011), who conducted a study among forty EFL university students in Thailand. The students were given training sessions on metacognitive strategies over fourteen weeks. Students' performances on questionnaire of metacognitive and reading test were measured at the beginning and at the end of the semester. The results attained in the study showed that there was an increase in students' reading score and use of metacognitive strategies, after receiving the instructions.

Amin et al. reported on the effectiveness of explicit instruction of reading skills based on the study carried out on ESL students in secondary level. The authors employed Cognitive Academic Language Learning Approach as the strategy instruction. Hence, to identify students' listening comprehension abilities, a test of listening comprehension was utilized. Their results confirmed the effectiveness of explicit instruction whereby the experimental group achieved more comprehension skill and sub-skills after receiving explicit instruction.

Furthermore, the study conducted by Fan (2009) on EFL student at university level in Taiwan, investigated the effective methods of implementing metacognitive strategies. The participants comprised of one hundred forty three students, in their first year at the university. The results showed the distinction between experimental and control group improvement. Fan suggested that future work should consider curriculum development by evaluating metacognitive strategy in the EAP reading context.

Moreover, Fung, et al. (2003) showed that training of metacognitive strategies affect comprehension performance of first and second language of ESL students. The study involved twelve ESL Chinese students who were in seventh-grade. The participants were taught explicitly on how to monitor their reading process, summarize, question, clarify, and draw inferences. The training procedure was performed in both languages (English and Chinese), between fifteen to twenty days, with each session completed in thirty-five minutes. Participants' performance in think-aloud protocol after the training program indicated that in both languages, using metacognitive strategies in the expository passage increased and their ability in both languages to draw inferences was improved.

The study on training of metacognitive awareness was carried out by Auerbach and Paxton (1997), and they have used multi measurement such as interviewing reading in pre course and post course, questionnaires for testing reading comprehension and strategy awareness, reading intervention, and think-aloud protocol. They concluded that after one-semester of awareness training, students' metacognitive awareness increased. This result shows the positive effect of the training metacognitive awareness.

The importance of metacognitive strategies in Malaysian context in the different area of language learning has been thoroughly investigated in numerous studies. Hamzeh and Abdullah (2009) examined metacognitive strategies in two skills of reading and writing among college students. Four hundred Malaysian ESL learners participated in the study. They have been selected non-randomly and divided into two groups of successful and less successful learners. The results of ANOVA analysis indicated that students who trained metacognitive strategies during a six-month training program applied these strategies in their reading and writing activities and perform better than those who did not receive instruction.

Mokhtar *et al.* (2011) evaluated the relationship between metacognitive regulation and vocabulary knowledge acquisition among Malaysian ESL learners. Regulation of metacognition contains making decision about three sub-strategies of planning, monitoring, and evaluation in order to acquire vocabulary in English. Three hundred and sixty students in the age bracket of eighteen to twenty one participated in their study. The result of their study showed the significant correlation between regulation of metacognition and passive vocabulary knowledge.

In sum, obviously the way we learn could influence our understanding and awareness of how we learn. Reviewing the literature indicated that based on the educationalist recommendations having a conscious attention to the process of learning could impact how they acquire knowledge. In the process of learning, instructors attempt not only to engage learners but also encourage them to be active in this process. Training metacognitive skills provide a key to learners to perceive their own learning instead of being a passive recipient and how they are responsible for the way they learn. Therefore, the crucial role of metacognition in successful learning clarifies how students must be taught, use metacognitive control, and apply their cognitive resource in a better way.

The inferences that can be drawn from the reviewed literatures in terms of studies related to reading strategies is that, the intervention of metacognitive strategies has advantages for both ESL/EFL learners. One of the keys to develop reading comprehension ability of learners whose first language is not English, is to learn what strategies are, when and how to apply them, and more importantly how to evaluate their use of these strategies. Moreover, Carrell (1987) delineated that the role of metacognitive in the process of reading in second language is not clear yet and there is little known about it, and she calls for further investigation. Researchers believe that students reading comprehension ability can be enhanced if they receive and practice effective instruction. They become skilful if they are provided with effective instructions and learn how to monitor and

evaluate their comprehension performance (Cubukcu, 2008). Therefore, the author decided to teach students metacognitive strategies to find how their comprehension performance will be influenced after receiving explicit instructions. In this respect the aim of this study is to clarify the effectiveness of metacognitive strategies. Firstly, the study attempts to find out whether explicit instruction of using metacognitive strategies enhance students reading performance. Secondly, we highlight the range of metacognitive strategies employed by students before and after receiving instruction. Finally, the findings in this study not only clarifies the effectiveness of training these strategies in reading comprehension, but also can confirm the previous studies in the area of language learning.

The above mentioned has proven that training metacognitive strategy is significant and many researchers emphasized that, in order to assist the students to improve their reading skills, providing an explicit instruction on metacognitive strategy is necessary. With regards to this, Cubukcu (2008) pointed out that, by giving instructions on the method of monitoring and checking the comprehension, learners become expert in reading and are able to construct the meaning of the whole text. Meanwhile, Parry (1996: 665), claimed that 'what works well with people from one group may be a failure with those from another'. Also, (Pritchard, 1990; Davis & Bistodeau, 1993) have indicated that individuals may employ various reading strategies in different language and cultures.

In conclusion, it is worth noting that, not only learners in different communities may provide different results, but also the use of metacognitive strategies between different people and different academic major could be different. Therefore, this study is an important addition to the existing literatures and there is a possibility that the attained results will provide a clear insight on the influence of training metacognitive strategy in the process of reading comprehension. Also, the study corroborates the previous literatures that are already established in the context of language learning development.

## RESEARCH QUESTIONS

1. Do explicit instructions of using metacognitive strategies enhance students reading performance?
2. What are the ranges of metacognitive strategies used by students after training sessions?

## METHODOLOGY

### Participants

In order to identify the impact of explicit instruction on metacognitive strategy in reading comprehension, a quasi-experimental design, pre-test and post-test were employed. The selection of the participants was based on purposeful sampling. The term purposeful sampling means that the individuals are selected based on the purpose they have in their mind (Creswell, 2000). Purposeful sampling can be implemented through different techniques. The technique adopted in this study, is criterion-based sampling, which according to Miles and Huberman (1994), is a useful technique to obtain the quality assurance. In this study the criteria for selecting a subject is that subject must be from first level of reading. It is assumed that students at this level, typically unfamiliar with strategies, particularly metacognitive strategies. Employing the criterion-based sampling is the best for this study because reflects the situation being studied. Therefore, in the large population, forty eight Malaysian undergraduate students who are in the first level of reading were selected for the experiment in this study.

The participants were divided into experimental (twenty four subjects) and control group (twenty four subjects). Both groups were selected from a reading class, but only the experimental group received metacognitive strategies instruction. Whereas, the control group only received the routine reading instruction which was the basic instruction of reading but not including the strategy of training. In order to have active involvement of participants, the pragmatic consideration such as agreement of all parties involved (participants and teacher) which generated credible finding was taken into consideration. The data was collected after twelve week training of metacognitive instruction.

## THE INSTRUCTION OF METACOGNITIVE STRATEGIES

The experimental group received instruction on metacognitive strategies during a period of twelve weeks, whereby the participants have been taught three days a week, each day one hour. Students were taught three knowledge-based cognitive, namely, declarative knowledge (learning what are the strategies), situational knowledge (learning in which context strategy can be applied), and procedural knowledge (learning how to employ the strategy). The strategy-based design, provided to the students was based on the method proposed by Wade, et al. (1990). It comprises of: trying to highlight or underline the main point and focus of specific information, paraphrasing, identifying keywords, using diagrams, concentrating on reading (mental integration), using the background knowledge, problem solving, monitoring the reading, re-reading, self-testing, and adjusting the rate of reading.

## INSTRUMENTS AND ANALYSIS

The three instruments employed in this study are described as follows: **Reading tests:** standard tests of reading comprehension including a number of multiple-choice items taken from Longman Introductory Course for TOEFL was used as pre-tests, in order to gauge whether the reading abilities of the students are at the same level. To begin with, all subjects were required to take reading tests. The purpose of the tests was to measure students' reading ability and to confirm that the reading abilities of the two classes are at the identical level.

**Metacognitive strategy questionnaire:** the questionnaire used in this study employed five Likert scales measurement (Never/ Rarely/ Sometimes/ Often/ and Always) to measure metacognitive strategies which is adapted from Beyer (1987). It seeks information about three broad categories of metacognitive strategies used by subjects' namely: planning, monitoring, and assessment in the process of language learning through some statements. The questionnaire was piloted among 64 students from the same population but different class. The reliability of metacognitive strategy questionnaire turned out to be .85 (Table 1). Therefore, these tests are suitable for this study.

Table 1: Reliability of metacognitive strategy questionnaire

Cronbac h's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.853	.855	34

All subjects were required to answer the questionnaires in pre-test and post-test. The researcher was available to answers some questions by the participants about wording of the items. The participants were given approximately 40 minutes to complete the questionnaire.

**Semi-structure interview:** semi-structured interviews with students was organized to elicit the students' perspective about metacognitive strategies, its effectiveness, and how these strategies facilitate the reading process. It was conducted after students instruction was completed and the participants have filled up the questionnaire. Throughout each interview, the students were allowed to communicate in their native language, in order to make them feel comfortable and not limited by their English proficiency. Furthermore, participants requested to provide their honest responses. To run the interview one PhD student who shares a similar mother tongue with the participants, was invited as an interviewer. Moreover, in order to warrant the homogeneity of the procedure they were briefed on the procedures for conducting the interview. Interviews lasted between 15 to 20 minutes per student. All the interview process was recorded for the further analysis. According to Macaro (2000), the excellent way of complementing a questionnaire which is very productive is to interview language learners in terms of how they use strategies.

## RESULTS AND ANALYSIS

The data was collected in two phases before and after training sessions. First, in order to evaluate whether all the subjects possess equal reading skills, a reading test was conducted before starting the training.

### The results of reading comprehension score in pre-test between experimental and control group

Table 2: Mean score of experimental and control group in pre-test

Group	N	Mean	Std. Deviation	T-value	Sig.
<b>Experimental group</b>					
Pre-test	24	10.27	3.66	3.28	0.51
<b>Control group</b>					
Pre-test	24	9.66	3.45		

As illustrated in Tables 2 there are no significant differences between mean scores of experimental group (10.27) and control group (9.66). This means that, the reading levels of the participants in both groups are the same and the classification of two groups is reasonable.

Table 3: Mean score of experimental and control group in pre-test

Group	N	Mean	Std. Deviation	T-value	Sig.
<b>Experimental group</b>					
Pre-test	24	10.27	3.66	11.21	0.000
Post-test	24	14.02	3.47		
Difference		3.75			
<b>Control group</b>					
Pre-test	24	9.66	3.45	2.72	0.030
Post-Test	24	9.42	3.38		
Difference		0.24			

In order to highlight the effectiveness of the instruction on participants' reading performance, we

analyzed the participants' performance in reading comprehension tests in both pre and post-test. Table 3 indicates that in experimental group the overall mean score of the post-test (14.02) was much higher than the pre-test (10.27). Moreover, the significant difference between the two tests is shown in the analysis of the t-test (at the level of .001). However, in the control group the overall mean score of the post-test (9.42) is not higher than the pre-test (9.66). The analysis of the t-test also confirms that there is no significance difference between the two tests at a level of .001.

**The results of metacognitive strategies used for experimental and control group by employing questionnaire**

Table 4: Mean and Standard Deviation for metacognitive strategies used by experimental group and control group in pre-test and post-test

Metacognitive strategies	Pre-test		Post-test	
	Mean	Std. Deviation	Mean	Std. Deviation
Experimental group (Planning)	6.30	1.236	6.02	1.186
Control group (Planning)	5.97	1.159	5.80	1.128
Experimental group (Monitoring)	5.23	1.775	13.80	2.524
Control group (Monitoring)	5.08	1.112	5.76	1.214
Experimental group (Assessment)	2.67	1.398	7.00	1.640
Control group (Assessment)	4.86	1.102	5.08	1.118

From Table 4, the overall mean score of planning strategies use of the students in experimental group before (6.30) and after (6.02) instructions was not improved. But the overall mean score of monitoring (5.23, 13.80) and assessment (2.67, 7.00) strategies was improved after receiving the metacognitive strategy instruction. Monitoring strategies were included: keeping the goal in mind, spotting errors, knowing when a sub goal is achieved, knowing how to recover from errors, keeping one's place in a sequence, selecting next appropriate operations, deciding when to go on, and assessment strategies were included: judging accuracy and adequacy of the results, assessing goal achievement, assessing handling of errors, evaluating appropriateness of procedures used. On the other hand, in control group no differences of employing strategies of planning (5.97, 5.80), monitoring (5.08, 5.76), and assessment (4.86, 5.08) is found. Planning strategies were contained of: stating a goal, selecting operation, predicting results desired, identifying potential errors, identifying ways to recover from errors

In order to explore the influence of explicit instruction of metacognitive strategies, participants overall use of metacognitive strategies in both pre and post-test was analyzed. The results which are illustrated in Table: 5 show that there is a difference between students' performance in the experimental group by employing two strategies, namely, monitoring and assessment. Moreover, participants employ more strategies after training sessions.

Table 5: T-test for metacognitive strategies used by experimental group and control group in pre-test and post-test

	N	Mean	Std. Deviation	T-value	Sig.
<b>Experimental group (Planning)</b>					
Pre-test	24	6.30	1.236		0.286
Post-test		6.02	1.186		
<b>Control group (Planning)</b>					
Pre-test	24	5.97	1.159		0.194
Post-test		5.80	1.128		
<b>Experimental group (Monitoring)</b>					
Pre-test	24	5.23	1.775		0.000
Post-test		13.80	2.524		
<b>Control group (Monitoring)</b>					
Pre-test	24	5.08	1.112		0.020
Post-test		5.76	1.214		
<b>Experimental group (Assessment)</b>					
Pre-test	24	2.67	1.398		0.000
Post-test		7.00	1.640		
<b>Control group (Assessment)</b>					
Pre-test	24	4.86	1.102		0.147
Post-test		5.08	1.118		

### **The results of semi-structural interview**

The researcher carried out an interview immediately after the participants have completed the questionnaire. Throughout each interview, the students were allowed to communicate in their native language so as to make them feel comfortable and not limited by their English proficiency. Each participant was compensated and was asked to provide their honest responses. To run the interview one PhD student who share a similar mother tongue with the participants, was invited as an interviewer. Moreover, in order to warrant the homogeneity of the procedure, participants were briefed on the procedures of conducting the interview. Interviews last between 15 to 20 minutes per student and were tape-recorded. All interview processes were transcribed for further analysis.

Participants were questioned about their perspective regarding teaching metacognitive strategies. The analysis was made through comparison between the experimental and the control groups. The result indicated that the experimental group have positive view regarding effectiveness of the instruction of metacognitive strategies. The students agreed that, learning and practicing metacognitive strategies can enhance their reading ability, with the exception of only one student who remarked that, *maybe* teaching these strategies could enhance reading ability. This may be attributed to the fact that learning some strategies are difficult. In contrast, majority of the control group were not familiar with these strategies and their effectiveness. The findings of this study prove that perhaps one of the reasons that students have lack of knowledge about the effectiveness of these strategies is due to their unfamiliarity with the strategies. When they become familiar with the influence of these strategies in the process of reading, their perspective will be changed and they become eager to learn how these strategies facilitate their reading abilities.

### **DISCUSSION**

Based on the findings in this study the author observed two important points, namely, the effectiveness of teaching metacognitive strategies, and increasing use of these strategies after twelve training sessions. The findings revealed that due to the students score in reading comprehension tests, a conclusion can be made that the subjects' comprehension abilities can be enhanced by receiving explicit instruction of these strategies. The results of statistical analysis indicated that the experimental group that received the explicit instruction, outperformed the control group, and employed monitoring and assessment strategies more frequently after training sessions. Having metacognitive knowledge for selecting and using relevant strategies means that learners are not only thinking but are also consciously deciding about the process of learning. Therefore, the explicit instruction of metacognitive strategies seems to have contributed to the students' ability in reading comprehension. As pointed by Lovett (2008), in order to improve the student's ability in learning, we can introduce to them new skills through teaching metacognitive strategies, and require them to apply and practice these skills effectively.

Moreover, the result of this study correlated with some of the previous studies (Cubukcu, 2008; O'Malley, 1987) and substantiates the principle of learning in which student's self-awareness and comprehension ability can be enhanced by learning metacognitive strategies (Khun, 2000). Increasing the use of strategies after receiving the instruction shows the value and usefulness of these strategies. Perhaps, a consistent training on these strategies could make the students be accustomed to using the strategies automatically when they comprehend a text. Furthermore, the information gained during interview regarding students perspective about learning metacognitive strategies shows that, students who become familiar with these strategies have positive perspective about the effectiveness of them. Therefore, in educational setting significant emphasis must be placed on readers' positive view toward reading.

Furthermore, the findings of this study propose a number of classroom implications. It indicated that learning metacognitive strategies, students thought and actions for using these strategies play a crucial role in learning. By using metacognitive strategies students achieve a higher success, therefore, we need to make the students aware of this fact. To achieve this aim, we can share the findings of this research and similar ones with students to persuade them to use these strategies as much as they can. By teaching metacognitive strategies explicitly we can assist the students to not only improve their target language but also to achieve their goals in learning how to comprehend a text. As pointed out by Chamot *et al* (1999) the purpose behind teaching the students these strategies is to help them to control their learning consciously and become independent and efficient learners. Moreover, the author stated that "Students who think and work strategically are more motivated to learn and have a higher sense of self-efficacy or confidence in their own learning ability" (p.1). This means that when students are familiar with using strategies, they become more successful in academic qualifications than those who are not familiar. Another point that teachers need to be aware of, is to know how much training, mentoring and instruction is needed for the practitioners to enhance their learning ability. Finally, teachers need to be aware of the factors that may affect metacognitive strategies and organize their lesson plan accordingly. As highlighted by Green and Oxford (1995) state "The more that teacher know about such factors, the more readily the teacher can come to grips with the nature of individual differences in the classroom. Such knowledge is "the power to plan lessons so that students with many different characteristics, including varied

strategies, can receive what they need” (p. 292).

In addition, the result obtained from this study comprises a number of limitations. Firstly, since it has been conducted among Malaysian ESL students, we cannot generalize the result study to other ESL contexts in another country. Secondly, it is obvious that several challenges may involve with a true experiment, particularly when the investigation conducted in academic level. In this study the external validity was controlled by the researcher, but because the instructor of the experimental and control group were different, the internal validity is under question.

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