

**LEARNERS' ATTITUDES TOWARDS TEACHING
METACOGNITIVE STRATEGIES IN READING THROUGH COGNITIVE
ACADEMIC LANGUAGE LEARNING APPROACH**

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ABSTRACT

Various studies on training metacognitive strategies to enhance reading comprehension have been conducted around the world since 1990s. However, learners' attitudes towards applying a specific model of metacognitive strategy instruction in reading, which contributes clearly to the success of teaching metacognitive strategies, have not been paid enough attention, especially in Vietnam. This study is an attempt to fulfill this gap. This work aims to investigate the learners' attitudes towards training metacognitive strategies through the model of Cognitive Academic Language Learning Approach (CALLA) in reading. To reach this aim, a mixed methods design study was carried out on 52 English non-majored participants at the University of People's Security. The research tools employed involve an attitudinal questionnaire and group interviews. The findings of this study reveal that the employment of CALLA model in teaching metacognitive strategies received from neutral to positive attitudes from most students, though the instruction itself exposed some shortcomings that need to be dealt with. In addition, some statistical differences were found in the cognitions of high and low language proficiency groups.

Key words: metacognitive strategies; reading, attitudes; Cognitive Academic Language Learning Approach (CALLA).

1. INTRODUCTION

The correlation between metacognition as well as metacognitive strategies and reading comprehension has been framed since the first introduction of Myers and Paris in 1978 in the study on the metacognitive knowledge and awareness of children (as cited in Israel, 2007). Following this novel opening, there was more and more research on how teaching

metacognition and metacognitive strategies were incorporated in the curriculum of reading training in order to boost their reading competence during the 1970s and 1980s. Thanks to that, the transition of metacognition in cognitive psychology to educational psychology to reading educational has been progressively marked. The influential role of metacognitive strategies in education has been emphasized by many distinguished scholars. For example, O'Malley and Chamot (1990) state that "Students without metacognitive approaches are essentially learners without direction or opportunity to review their progress, accomplishments, and future directions" (p. 561).

Despite the theory about the positive relationship between reading and metacognitive strategies, studies conducted in Vietnam are so limited. It is such a big challenge for the author to find out source of studies related to the application of metacognitive strategies in teaching reading comprehension in Vietnam. There exist some public papers in metacognition in teaching Math or other science subjects with clear explanations. In some studies in teaching English, writers mostly focus on the favors of learners of metacognitive strategy usage without metacognitive strategy training. Consequently, there is a gap in learners' attitudes towards training metacognitive strategies in Vietnam context.

1.1. Objectives of the study

This study aims at exploring learners' attitudes towards metacognitive strategy instruction via Cognitive Academic Language Learning Approach. Beyond that, a comparison between attitudes of learners at different language proficiency levels can be inspected. Thanks to that, the improvement in reading training can be made for better learners' strategy application of metacognitive strategies.

1.2. Research questions

1. What are learners' attitudes towards teaching metacognitive strategies in reading lessons?
2. Are there any differences between the attitudes of learners at high-level and low-level language proficiency levels?

2. LITERATURE REVIEW

2.1. Metacognitive strategies in reading comprehension

Reading ability is a main aspect of literacy and is usually associated with academic success. The core target of reading process is to comprehend or understand texts required. According to Grabe (2009), reading is considered an interactive cognitive process in which readers' interaction is associated with texts and author's perspectives related to them. Thus, in order to comprehend reading texts successfully, readers should employ a variety of skills or strategies at both cognitive and metacognitive level. At the higher level, the metacognitive requires groups of strategies regarding planning before reading, monitoring while reading and evaluating reading experience (Carrel, Gajdusek, & Wise, 1998; Paris & Myers, 1981). The important role that metacognition takes in reading comprehension in both L1 and L2 was confirmed by Grabe (2009); Pressley and Afflerbach (1995). However, the application of metacognitive strategies in reading of learners are different because of the diversity of their notion of strategy instruction.

For such a long history of application in reading comprehension, the theory and practice of the deployment of metacognitive strategies in reading has collected varied evidence. In the milestone study of Pressley and Afflerbach (1995), they figured out that the expert and highly skilled readers employ a specific group of metacognitive strategies in the stages of before, during and after reading, which supports their comprehension as well as builds up the links between readers and the texts. The need to raise learners' metacognitive knowledge of reading and reading strategies has been noted by Sheorey & Mokhtari (2001).

2.2. Training metacognitive strategies in reading comprehension

With respect to training, there are two ways to train a strategy related to raising learners' awareness. Strategy instruction could be delivered directly and indirectly to learners as by explicit and implicit instruction. There remain some arguments about which approach is better at supporting the strategy acquisition of the learners. Implicit instruction was firstly introduced to students to help students realize and apply the strategies they need in specific situations. However, the awareness of learners was a real challenge to the instructors. It urges that explicit instruction should be demonstrated with clear steps to raise students' notice. In fact, significant achievements of

learners instructed directly has been presented clearly in various studies (Ellis, Delton, & Bon, 2014).

Cognitive Academic Language Learning Approach (CALLA) is supposed to be a great representative model of explicit instruction. To compare with other models for strategy instruction, CALLA is famous for the focus on the needs and the thoughts of students in this all 5-phase model (O'Malley & Chamot, 1990). It contributes to the development of learners' independence on applying learning strategies. The model of CALLA was updated including 6 steps by Chamot (2005), i.e. preparation, presentation, practice, self-evaluation, expansion and assessment.

2.3. Learners' attitudes towards training metacognitive strategies in reading comprehension

Attitude takes important roles on language learning process due to different components involved. Firstly, affections present the students' state of liking an object as well as its influence on their learning process. Not only students but teachers would benefit from it for further modification in teaching activities (McKenzie, 2010). Secondly, in terms of cognitions related to learners' beliefs about the knowledge they acquire and their comprehension process. When learners have good beliefs on what they get from the lesson, they will be motivated in their learning for better performance. Finally, regarding behaviors, Kara (2009) claimed that favorable attitudes of learners can be used to predict for their favorable behaviors. Positive thinking and active engagement are also established for better results. Furthermore, the application of new knowledge in real life easily happens.

In terms of approaches to investigating learners' attitudes, McKenzie (2010) stated that there are two approaches raised by the behaviorist and the mentalist. The behaviorist defined that attitudes are out of outer behaviors which can easily observed and measured. Hence, the results can only be inferred from their behaviors and actions. Two vital emotional elements called feelings and beliefs are not investigated (Baker, 1992). In contrast, according to the mentalists, attitudes of learners cannot be divided, which includes affective, cognitive, and conative or behavioral components. Affective factors deal with feelings. The cognitive gives information about learners' belief knowledge and perceptions. The last factor, the conative or behavioral works on learners' condition to act, behavioral intentions and interest. Comparing the components of two approaches, the mentalists require a more comprehensive and clearer frame for examining learners'

attitudes. Thus, in this study, attitudes should be analyzed under three core factors, i.e. affections, cognitions and behaviors of McKenzie (2010) and Zimbardo & Ebbesen (1977). Zimbardo and Ebbesen (1977) defined the affective component as “a person's evaluation of, liking of, or emotional response to some object or person”, the cognitive component involves “a person's beliefs about, or factual knowledge of, the object or person” (as cited in Liu, 2009, p. 102). Direct behaviors of a person towards the object or person are behavioral component of attitudes.

Although enormous studies related to the effectiveness of metacognitive strategy training can be found, just some studies including Widachee (2011) and Tavakoli & Koosha (2016) in the setting of Asia countries directly investigated the attitudes of learners after training. The official number of studies investigating the training of metacognitive strategies in reading in Vietnam is limited. Thus, there is a gap in the understanding of the attitudes of learners in Vietnam, especially through CALLA model, which is hopefully fulfilled in this paper.



Figure 1. Conceptual framework of the study

3. METHODOLOGY

3.1. Participants

There are 52 participants (4 females and 48 males) involved in this investigation. By convenient sampling, the learners chosen in this study were in two intact classes which the researcher was in-charge of. They were non-English major sophomores of a university. Their language competence was evaluated based on the results of a placement test at the beginning of English courses. The placement test was chosen from a standardized test for measuring the students' language proficiency level. A group of 27 students of the class with the highest results was identified as the group with

high language proficiency. The second group of 25 students with the lowest results was named low language proficiency.

3.2. Research design

This study employed mix methods design with quantitative data from an attitudinal questionnaire and qualitative data from interviews.

3.3. Instruments

The fundamental tools of this study involved an attitudinal questionnaire and interviews.

Attitudinal questionnaire

The questionnaire was written in both English and Vietnamese. However, to ensure the learners' full comprehension of all elements mentioned, only the Vietnamese version was sent for data collection. For clearer demonstration, the table of the questionnaire construct was presented in Table 1.

Table 1. Construct of the questionnaire

Main themes	Sub-sections	items	Format	
A. Demographic information	gender	A.1	Multiple choice	
	age	A.2	Open-ended	
	English learning experience	A.3		
B. General opinions towards teaching and learning reading	importance of learning reading	B.1	Likert scale	
	necessity of teaching reading	B.2		
	overall feeling about reading instruction	B.3		
C. Attitudes towards incorporating metacognitive strategies in reading	Affections	liking	C.1.1	Likert scale
		confidence	C.1.2- C.1.3	
		satisfaction	C.1.4	
		others	C.1*	Open-ended
	Cognitions	benefits	C.2.1-	Likert

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Main themes		Sub-sections	items	Format
			C.2.11	scale
		others	C.2*a	Open-ended
		drawbacks	C.2.12- C.2.15	Likert scale
		others	C.2*b	Open-ended
	Behaviors	paying attention	C.3.1	Likert scale
		engaging	C.3.2	
		applying	C.3.3- C.3.4	
		learning more	C.3.5	
		others	C.3*	Open-ended
	D. Suggestions		suggestions for further improvement	D.1

With the aim of assessing the validity of the questionnaire, firstly, the researcher asked for help from her colleagues with checking whether the items in the questionnaire adequately described the concept or construct to be judged and comparing English and Vietnamese version to ensure full and clear understandings from the respondents. To prepare for the actual operation of this instrument, copies of the piloted questionnaire were delivered to the students in the pilot group of 27 participants. The Cronbach alpha value for the whole items was high (.841). Each of the three main themes of learners' attitudes i.e. affections (.818), cognitions (.882), behaviors (.822) are higher than 0.7, the value required for reliability satisfactory suggested by Dörnyei and Taguchi (2010).

Group interview

The second instrument employed was group interviews which were conducted to acquire the students' opinions on this strategy instruction. Based on reading proficiency entrance test, six subjects including three with the lowest scores (S1, S2, S3) and three with the highest scores (S4, S5, S6), were chosen to give responses. Three questions were posed as follows:

1. What do you think about the instruction of metacognitive strategies?
2. Do you think you will become a skilled reader after you are trained with metacognitive strategies? Why or why not?
3. What should teachers do to make the instruction more effective?

3.4. Procedure

Following the procedure planned, the metacognitive strategy training was first conducted in two classes selected in twelve 50-minute reading sessions in a General English course. The CALLA Model with 6 scaffolding steps was employed to instruct the metacognitive strategies explicitly. This model presents the gradual transition from the mode of teacher-centered to student-centered. The list of metacognitive strategies trained was based on the categories of Israel (2007) and Phakiti (2006) with three groups: planning, monitoring and evaluating items. After the instruction in the last session, an attitudinal questionnaire designed would be distributed to all the participants with a sufficient amount of time for completion. For a deeper investigation, group interviews were conducted with three representatives from two target groups. The data collected from the survey would be analyzed by statistical tests of authorized SPSS 24. Moreover, the content of group interviews was analyzed via thematic analysis.

4. FINDINGS AND DISCUSSION

Findings

4.1. Learners' attitudes towards incorporating metacognitive strategies in reading comprehension

4.1.1. General opinions about learning and teaching reading comprehension

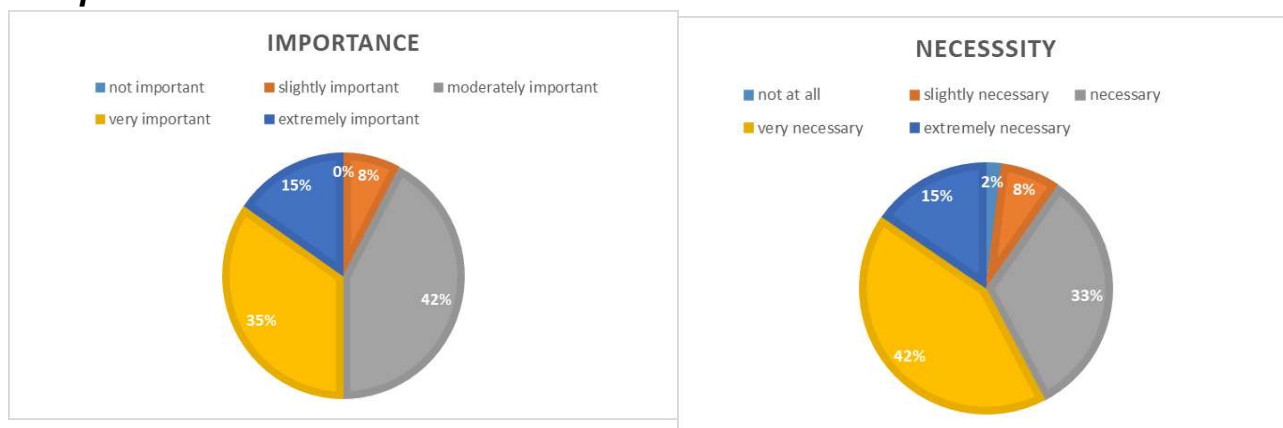


Figure 2. *The importance of reading and necessity of teaching reading strategies*

Related to the vitality of reading in language learning and the necessity of teaching reading strategies for learners, two pie charts in Figure 2 show the general opinions of the learners. Accordingly, most learners felt it was

important to learn reading with 92% from the level moderate to extremely important. Similarly, 90% agreed that it is necessary to teach strategies in reading. There may be a correlation between the learners' awareness of the roles of reading skills and the need to teach them in language learning. However, a few percent of participants rejected the instruction, which should be investigated in the findings of the study.

4.1.2. Learners' feelings towards the incorporation of metacognitive strategies into reading comprehension

The specific elements building the attitudes of learners including affections, cognitions and behaviors are respectively demonstrated in Figure 3, Figure 4, Figure 5 and Figure 6. The first factor in relation to the students' feelings or affections is depicted in Figure 3.

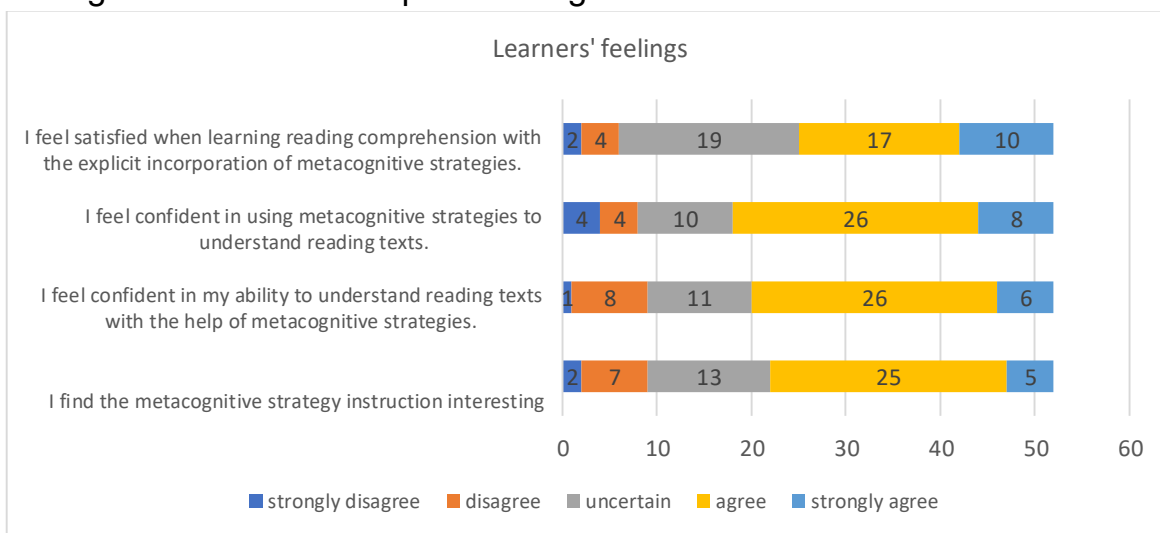


Figure 3. Learners' feelings towards the instruction

As shown in Figure 3, most students participating in the investigation agreed with all the statements. The most uncertain opinion given is related to satisfaction with 19 among 52. In addition, up to 4 learners strongly disagreed with the confident feeling in their application of metacognitive strategies. All the contradictions shown should be investigated more.

4.1.3. The learners' opinions about the benefits and drawbacks of teaching metacognitive strategies in reading

In relation to the second factor of attitudes, cognitions or learners' beliefs towards the benefits and drawbacks they got after the instruction would be assessed via Figure 4 and Figure 5.

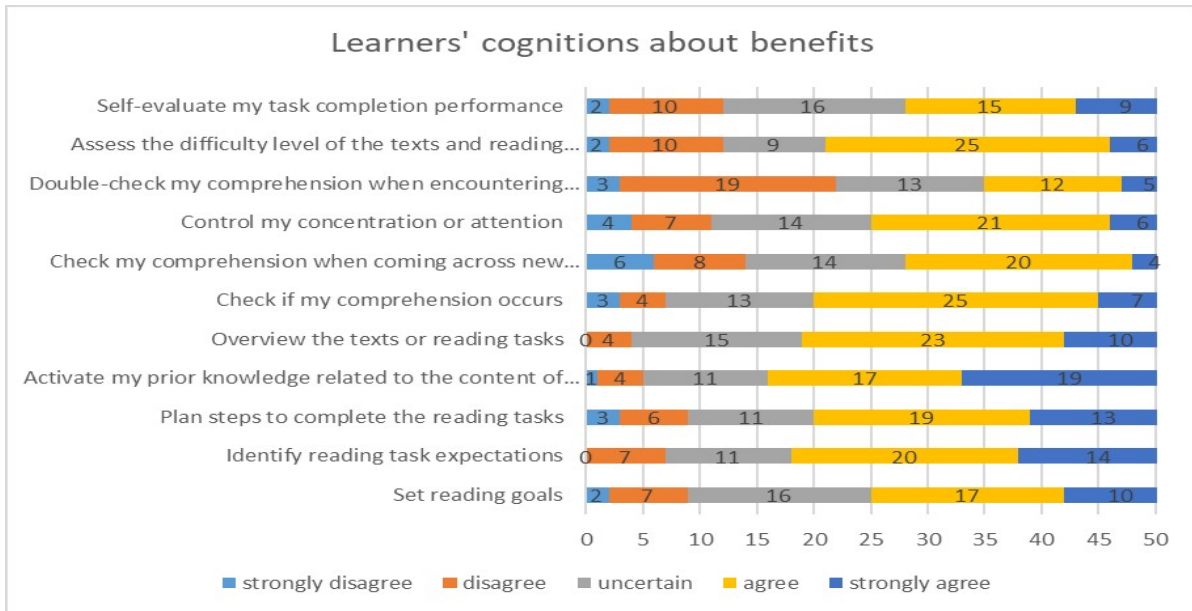


Figure 4. Learners' cognitions about the benefits of the instruction

According to Figure 4, most of the benefits were accepted by more than half of the respondents. Among those, the most approved benefits were activating prior knowledge with more than 69% and identifying reading task expectations with 65.4%. However, 35 learners got difficulties with double-checking when encountering ambiguous information. In addition, up to 6 strongly disagreed with the benefit of checking comprehension when coming across new information.

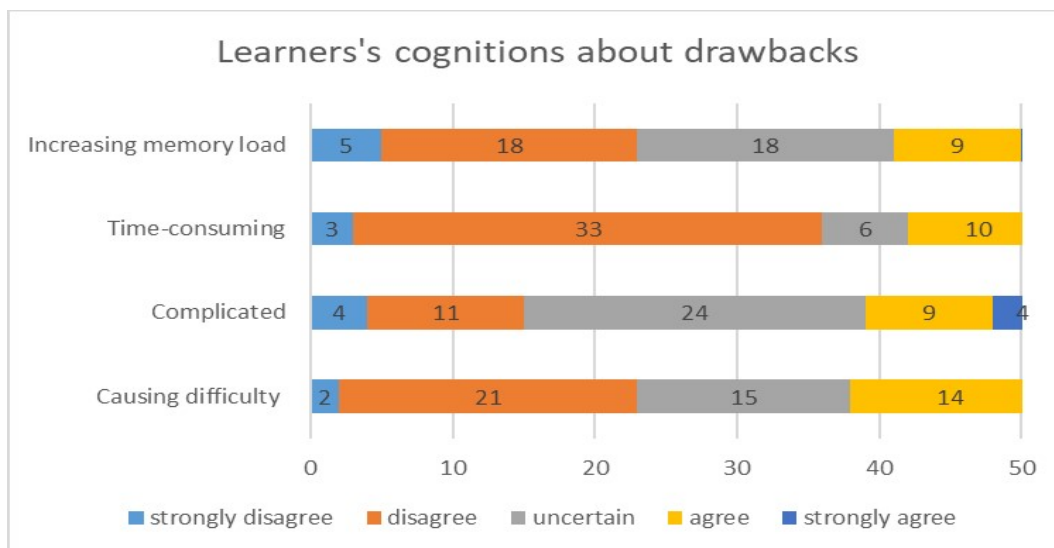


Figure 5. Learners' cognitions about the drawbacks of the instruction

In Figure 5, in correlation with the understanding of the benefits, most learners did not think the instruction was time-consuming, they even refused

other drawbacks. The most accepted disadvantage was the instruction caused some difficulties. Generally looking, the learners did not consider them much with only a fifth of the students agreeing.

4.1.4. The learners’ reactions to the incorporation of metacognitive strategies in reading

Along with affections and cognitions, the element of behaviors was analyzed in terms of students’ reactions towards the instruction in Figure 6.

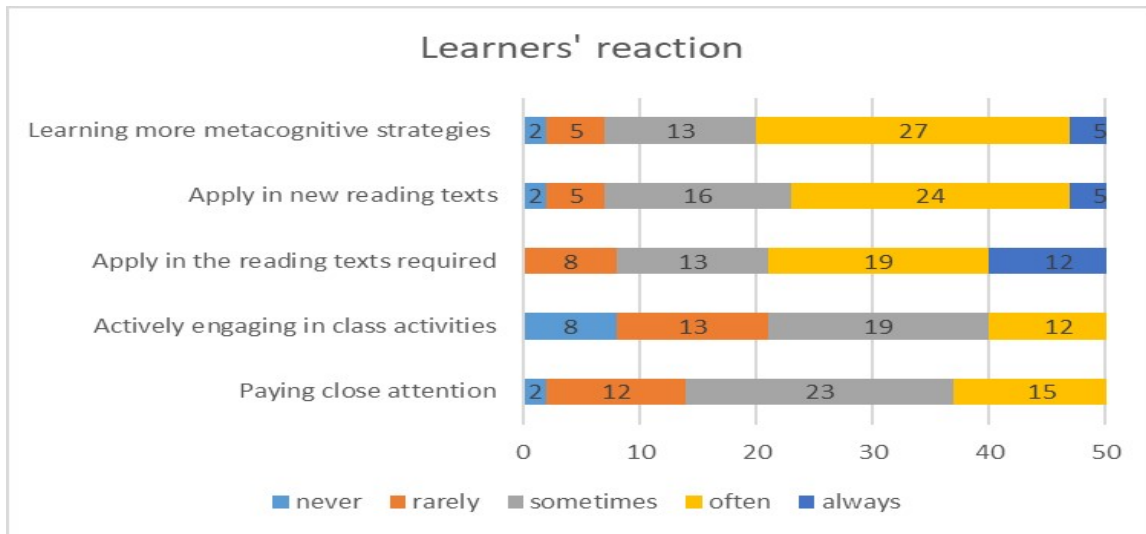


Figure 6. Learners’ behaviors towards the instruction

As described in Figure 6, most learners wanted to study more metacognitive strategies and hoped to apply strategies in further texts. However, nearly half of the students were not actively engaged in the activities in their class. There may be some difficulties related to task completion organization which does not appeal much.

4.2. The difference in the attitudes of high and low language proficiency learners

The comparison between the attitudes of two groups of students categorized by their language proficiency was one of the objectives of the study. The findings presented included their general opinions and their attitudes in form of the factors of affections, cognition and behaviors.

4.2.1. General opinions about learning and teaching reading comprehension

Table 2. The difference in the general opinions of learners at low and high language proficiency

Item			Mean	Max	Min	Standard Deviation
B.1	Importance	Low-level	3.17	5	2	.785
		high-level	3.84	5	2	.768
B.2	Necessity	Low-level	3.19	5	1	.930
		high-level	4.04	5	2	.727
B.3	Overall feelings	Low-level	3.63	5	2	.886
		high-level	4.02	5	3	.724

Regarding the general awareness of learners, it was apparent that their opinions about the importance of reading and necessity of teaching reading strategies as well as overall opinions were not much similar with the high value of mean differences respectively 0.67, 0.85 and 0.39.

4.2.2. The difference in learners' attitudes between groups

With the aim of analyzing the difference in the attitudes of learners in low and high level of language proficiency, an Independent sample T-test was conducted. The results of the attitudinal questionnaire are shown in Table 3.

Table 3. Independent Sample T-test of different groups of learners

	Low-level (n=25)		High level (n=27)		t(52)	p	95%CI	
	M	SD	M	SD			LL	UL
Affections	3.08	1.04	3.95	.68	-5.23	.000	-1.272	-.573
Cognitions	2.93	.98	3.61	.69	-3.52	.001	-.787	-.220
Behaviors	3.13	.99	3.73	.65	-4.62	.000	-.708	-.282

Regarding three aspects of students' attitudes including affections, cognitions and behaviors, the significant differences between two groups were confirmed by the *p*-values below .005. Among three components, the mean difference of Affections was the most noticeable. The controversial issues were also presented in the opinions of the students questioned.

The specific explanations from the opinions of interviewees gave more evidence for the findings of the learners' differences in terms of their

understanding of the instruction, the advantages they might get and recommendations for further applications in Table 4.

Table 4. *The results of group interviews*

Questions	High language proficiency	Low language proficiency
1. What do you think about the instruction of metacognitive strategies?	+ useful, very interesting, effective, new (S4, S5, S6) + clear steps (S4, S5, S6)	+ good (S1) + difficult to understand (S3) + boring, lots of exercises (S2, S3)
2. Do you think you will become a more skillful reader after you are trained with metacognitive strategies? Why or why not?	+ yes (S4), sure (S5, S6) + more careful, better, faster, more confident (S4, S6) + scores increased (S4, S5, S6)	+ not sure, depend on learners (S2, S3) - some strategies are abstract, difficult to apply + Yes- help to plan in reading (S1)
3. What should teachers do to make the instruction more effective?	+ provide more materials for applying (S4, S5) + encourage more group activities (S5, S6) + suitable time spending for each strategy as well as step in the instructions (S4)	+ find suitable reading texts for low-level (S2, S3) + design more games to encourage learners to engage (S1, S2, S3)

According to the content recorded, there were some dissimilarities in the students' opinions about the instruction. For instance, most learners with high-level language skills mentioned the positive aspects of the instruction including usefulness, interest, effectiveness as well as novelty. In contrast, the opinions of the group at low-level showed some controversy. While S1 considered the instruction good, S2 had difficulties in understanding it. S2 and S3 even thought it was boring with loads of tasks to complete.

Moreover, the thinking of two groups about their progress after the instruction was not much the same. While the assurance was found in the high-level participants with their better performance at carefulness, reading speed, confidence and even reading scores maybe, the others' opinions were in two directions. S1 with positively thought he could because it helped him to plan reading steps in task completion. S2 and S3 though were not

sure about the success of strategy applications due to individuals' abilities. As for them, some strategies were a little abstract in real employment.

Therefore, the suggestions for further training were varied from the perspectives of learners at different levels. The recommendations made from high language proficiency mainly focused on the application of strategies learned with materials and group activities. On the contrary, the students in the low-level group suggested more engagement for the instructions with suitable texts and games. Moreover, the time distribution and steps in instructing each strategy should also be considered.

Discussion

Research question 1

In the first research question, the attitudes of learners towards the metacognitive strategy instruction incorporated in reading were evaluated based on three criteria, i.e. affections, cognitions and behaviors. It was reflected in the statistics that most learners were aware of the importance of reading in their English learning. The equivalent percentage of respondents confirming the statement above agreed on the instruction of reading strategies to support reading learning. The participants' positive feelings were mostly given towards the instruction they experienced, which lends support to previous studies of Wichadee (2011) and Tavakoli & Koosha (2016). However, some controversial issues in feedback were found in relation to interest and the awareness of necessity of some participants.

Firstly, from the results of the factor of affections, it is clear that although the agreement on the confidence in strategy application was confirmed, the interest and satisfaction the participants got from the instruction were not guaranteed. While a large percentage of learners felt more confident in understanding texts with the support of metacognitive strategies as well as using strategies trained, which can be due to the reasonable training duration for the participants to get familiar with strategies taught. In fact, not all the learners felt satisfied with the reading instruction. Some even stated that the instruction was boring and not appropriate with their learning with lots of tasks. Similarly, negative opinions above can be found in the study of Wichadee (2011) from the group of low proficiency. Therefore, to provide a profound base for deeper investigation, the analysis of the second factor, cognitions should be noticed.

As for cognitions, the understanding of learners about two main aspects, benefits and drawbacks were reflected clearly according to the data collected. In relation to the benefits of the instruction, most students agreed

at average level. They were used to applying the strategies trained, which lends support to the findings in Tavakoli & Koosha (2016). Specifically, the favorite benefit noted was activating prior knowledge with strong agreement, which means that this strategy is simple and very practical for most learners to get familiar with metacognitive strategies. The strategy of planning steps for reading which most students recommended has various advantageous implications for reading self-training. However, the learners were uncertain to get benefits from the strategies in while-reading stage such as double-checking comprehension with ambiguous information or checking with new information coming across. They were likely to have some problems with the strategies related to controlling comprehension. Most benefits received strong disagreement from the participants. It means there are some learners who need help to understand and get benefits from the strategies instructed. It was also reflected in the opinions of some interviewees that some strategies were abstract for employment. As a result, some controversial issues here would contribute to the suggestions of teaching metacognitive strategies related to strategy selection.

Besides that, in relation to the disadvantages, the learners were uncertain about the disadvantage of the instruction. The most approved issue was related to the difficult feelings at first of the instruction. It can be resulted from the instructor and materials. In the qualitative data, the learners at low-level had some problems with understanding some less common strategies. Hence, it was suggested from their opinions that the instructor should give reading texts with familiar topics and more engaging activities.

In the third factor of behaviors, the learners largely agreed on applying texts required, applying new texts and expecting to learn more. The most expected reactions were wanting to learn more metacognitive strategies and applying those strategies to understand texts. However, some students did not engage much in the instruction as well as pay close attention, which was reflected in the contradiction of interviewees' opinions.

However, the findings also show some negative feedback from the respondents, which can be analyzed deeply in the second research question related to the different attitudes of learners regarding their language proficiency.

Research question 2

Firstly, in relation to the students' general opinions, the interest and their awareness of necessity to teach reading strategies were different in terms of language proficiency. Additionally, in relation to three aspects of attitudes,

the learners' attitudes at different levels were investigated in terms of affections, cognitions and behaviors. All mean differences at three factors were significant according to the results from Independent Sample T-tests. It means that the learners' attitudes were different based on reading proficiency. It revealed that they both were aware of the importance of learning reading and teaching reading strategies to support learning. The high-level group had more positive feelings towards the instruction, which is consistent with the findings of Wichadee (2011), Zhang (2009) and Schunk & Zimmerman (1998). The students with high-level language skills found the instruction useful, effective in improving their reading process. The difficulties the low-level group facing could be found in the qualitative data in the questionnaire included that the instruction is inappropriate, boring and abstract for applying. In contrast, the high-level felt more confident with learning strategies. Despite the amount of time taken to follow the instruction, the high-level learners found it worth learning.

The findings of the study reflected two main points. Firstly, the learners generally have positive attitudes towards the metacognitive strategy instruction incorporated in reading lessons through CALLA model. However, the participants have some problems with the less common strategies related to controlling comprehension. Secondly, there are some differences in terms of affections, cognitions and behaviors between low-level and high-level groups of learners in response to the metacognitive strategy instruction.

5. CONCLUSION AND IMPLICATIONS

The implications based on the findings of the present study should be provided for both teachers and learners. In relation to teachers, it is recommended that metacognitive strategy instruction should be considered and modified regarding strategies, materials and activities to ensure more appropriateness with target learners. Strategies need teaching over a sufficient duration for the training to be effective and should be presented over a number of contexts with a variety of texts to make sure that the learners will be able to use the strategy automatically. Moreover, teachers should have more insightful investigations into learners' preferences and difficulties they are encountering. Regarding learners, they should get familiar with planning and self-evaluating steps in applying metacognitive strategies trained, which promotes metacognitive strategy application.

The attitudes of learners should be considered a vital source for further improvement of teaching practice of teachers as well as practitioners

especially regarding metacognitive strategy training. There should have more varied and deeper investigations with respect to metacognitive strategy training which support and consolidate the effectiveness of metacognitive strategies in reading instruction.

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