Text Difficulty Effect on Metacognitive Reading Strategy Use among EFL Learners

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ABSTRACT

Reading is one of the most integral academic skills in learning a foreign language. According to Anderson (2003), it is the interaction of four factors: the reader, the text, fluent reading and strategic reading. A large number of studies have indeed recognized the importance of the metacognitive reading strategies (MRSs) and text difficulty in reading comprehension. However, the effect of text difficulty on the learners' MRSs use has not been paid due attention in the literature. Accordingly, this study, employing a within-subject design, investigated the effects of text difficulty on MRSs use. Sixty Iranian intermediate EFL learners from two private institutes were asked to answer the Metacognitive Awareness of Reading Strategies Inventory questionnaire (Mokhtari & Reichard, 2002) at three different times, focusing on pre-intermediate (KET), intermediate (PET), and upper intermediate (FCE) texts. To get a better picture of the EFL learners' MRSs, an oral interview was also carried out on 10 participants. The results of the statistical analyses showed that text difficulty had significant effect on metacognitive reading strategy use with problem-solving strategies being affected most. The interview data revealed that the participants in this study benefited from various MRSs such as planning, summarizing and translating especially when the text was difficult. The implications of the study concern foreign language teaching, teacher training and curriculum design with regard to the selection of appropriate reading materials and methodology for EFL learners. Moreover, EFL instructors need to consider the difficulty level of reading materials so as to trigger the learners' metacognitive reading strategy use.

Keywords: metacognitive reading strategy; text difficulty; Key English Test; Preliminary English Test; First Certificate in English

INTRODUCTION

There is general consensus among scholars in the field of language teaching and learning that reading is one of the most essential academic skills in learning a foreign language (Anderson, 2003; Grabe & Stoller, 2002). In this regard, scholars have tried to make use of a host of techniques and procedures to enhance effective L2 reading. Accordingly, the ideas of learner-centered instructions and learner autonomy (Little, 2004) as well as investigations on good language learner (Johnson, 2008) have placed much more emphasis on language learning strategies good learners utilize during the learning process to facilitate second language learning. In fact, a large number of authors have acknowledged that being strategic helps learners to plan, organize and assess their learning, and become more autonomous (Little, 2004). Amongst the strategies, reading strategies are of great interest in the field of reading

research which provides invaluable insights into the nature of reading comprehension (Stevenson, Schoonen, & Glopper, 2003).

According to Anderson (2003), reading is the interaction of four factors: the reader, the text, fluent reading and strategic reading. The first factor, the reader, is concerned with the myriad of cognitive and metacognitive strategies readers utilize during the reading process. Our understanding of reading strategies has been affected by research on what expert readers do. During the last three decades, indeed, considerable attention has been given to "understanding what proficient, skilled readers typically do while reading, including identifying the strategies they use and how and under what conditions they use those strategies" (Sheorey & Mokhtari, 2001, p. 432). According to these researchers, many studies have recognized the role of metacognitive awareness in reading comprehension, whether one is reading in the native language or a foreign language. Accordingly, many metacognitive skills involved in reading have been identified (Mokhtari & Reichard, 2002).

Vandergrift (2005) postulates that metacognitive strategies are utilized by learners to monitor, regulate, and direct their language learning. They include planning and evaluation, problem-solving, personal knowledge, and directed knowledge. These strategies, according to Phakiti (2003, p. 30), are "…deliberate mental behaviors for directing and controlling the cognitive strategy processing for successful performance. They are conceived as higher order executive processing that provides a cognitive management function in language use and other cognitive activities." Good readers know that comprehension is most likely to occur from reading activity. The students' metacognitive awareness of reading strategies can be assessed through the use of the metacognitive awareness of reading strategies inventory (MARSI) (Mokhtari & Reichard, 2002) designed to measure adolescent and adult students' awareness and use of reading strategies while reading academic or school-related materials. "It is intended to measure the perceived use of the type and frequency of strategies by post-secondary students while reading academic materials in English typically encountered in secondary school and college" (Sheorey & Mokhtari, 2001, p. 436). According to Sheorey and Mokhtari (2001), metacognitive reading strategies (MRSs) include three categories of global, problem-solving, and support strategies.

Research on MRSs can be generally divided into four major groups targeting MRSs awareness (e.g. Cubukcu, 2007; Lau, 2006; Li, 2010; Othman & Jaidi, 2012; Sheorey & Mokhtari, 2001), assessing metacognitive reading strategies (e.g. Mokhtari & Reichard, 2002; Brantmeier & Dragiyski, 2009), the effects of MRS use on reading comprehension (e.g. Phakiti, 2003; Zhang & Seepho, 2013) and the MRS instruction (e.g. Cubukcu, 2008; Dreyer & Nel, 2003; Houtween & van der Grif, 2007).

Sheorey and Mokhtari (2001) investigated differences in the use of reading strategies of native and non-native English speakers when reading academic materials. Results of the study indicated that both groups were aware of almost all of the strategies included in the study; both groups also reported the same order of importance to categories of reading strategies in the study, and high-reading-ability students in both groups showed higher reported usage for cognitive and metacognitive reading strategies. Along the same line, Othman and Jaidi (2012) examined the use of metacognitive strategies in EFL students' reading. The findings revealed that the EFL learners often used metacognitive reading strategies such as making marks, checking, seeking help, and writing a summary.

In the area of EFL reading test performance, Phakiti (2003) investigated the relationship between the effects of cognitive and metacognitive strategies in EFL reading test performance. The results showed that there was a positive relationship between metacognitive strategy use and reading test performance and highly successful test takers reported significantly higher metacognitive strategy use. The findings also revealed that the use of cognitive and metacognitive strategies improved the students' reading performance. In

another study carried out by Zhang and Seepho (2013), the metacognitive strategies of English major students in academic reading at a university in China were investigated. The results showed that there was a significant positive correlation between metacognitive strategy use and English reading achievement.

Regarding MRS instruction, Dreyer and Nel (2003) conducted a research in an ESL context to find out whether the students who had followed strategic reading instruction performed better on their English reading comprehension tests and whether they differed in their reading strategy use. The results showed that students who had received strategic reading instruction received significantly higher marks on three reading comprehension tests than the students in the control group did. This was true for both good and poor readers. Cubukcu (2008) also, reported the effects of training advanced EFL learners with metacognitive reading strategies. It was found that there were remarkable differences between experimental and control groups as the evidence for the effectiveness of teaching metacognitive reading strategies. She found that the students in the experimental group began thinking using metacognitive strategies to enhance their reading comprehension to "become not only better readers, but also autonomous and strategic learners" (p.9).

The second factor affecting reading comprehension is the text and the issue of text difficulty, as Fulcher (1997) puts forward, is an important but a neglected topic in applied linguistics. It is, in fact, one of important factors that might lead to successful reading. Richards, Platt and Platt (1992, p. 306), define text difficulty in terms of readability as "…how easily written materials can be read and understood. This depends on several factors including the average length of sentences, the number of new words contained, and the grammatical complexity of the language used in a passage." Similarly, Barrot (2013) considers lexical and textual features as the main components of the text affecting reading comprehension.

One important issue on text difficulty is its effect on readers' ability to evaluate comprehension. Weaver and Bryant (1995) postulated the optimum effort hypothesis, suggesting that students were better able to predict comprehension when text materials matched their reading level as opposed to being too easy or too difficult. In other words, it is hypothesized that readers' ability to predict comprehension largely depends on their reading level relative to the difficulty of texts. Specifically, readers should be able to predict their comprehension most accurately when the difficulty level of the text matches their functional reading level. However, the present study can cast doubt on this idea by postulating that readers may benefit from texts above their reading abilities through activating MRSs.

Research on text difficulty has centered on its structure, assessment and/or its effect on reading comprehension. There has been a plethora of research with regard to the assessment and structure of text difficulty (e.g. Fulcher, 1997; Fry, 2002; McNamara, et al., 2010; Stenner et al., 2007, among many others). Fulcher's (1997) study, for example, entailed a comprehensive analysis of a corpus of texts, and explained factors which make the texts difficult, or less accessible such as poor linguistic structure, contextual structure, conceptual structure, and unclear operationalization of the reader-writer relationship. The methodology used was designed to develop an insight into the differences between estimating text difficulty between quantitative measures and more qualitative measures such as judgment of experts in the field of reading.

The effect of text difficulty on reading comprehension has also been investigated (Hiebert, 2005; Hudson, Lane, & Pullen, 2005; Lin, Zabrucky, & Moore, 2002; Spear-Swerling, 2006). Lin, Zabrucky and Moore (2002), for example, investigated the effect of text difficulty on readers' ability to evaluate comprehension. They came to the conclusion that a match between reading ability and text difficulty level did not warrant the best calibration accuracy. In another study, Hiebert (2005) investigated the effects of text

difficulty on second graders' fluency development and found that the features of texts made a difference on the application of the repeated reading techniques.

Many of the studies cited earlier, indeed, have recognized the important role that metacognitive awareness plays in reading comprehension and consider text difficulty as an important factor in reading comprehension. Despite relatively rich literature on MRSs and the issue of text difficulty as a principal factor in reading comprehension, possible effects of text difficulty on MRSs use have not been paid due attention in the literature. Considering the fact that in EFL educational context, reading comprehension is one of the most important skills to be acquired by learners, this study might have great pedagogical implications for language teachers, learners and syllabus designers. As Fulcher (1997: 497) rightfully postulated, "establishing text difficulty is relevant to the teacher and syllabus designer who wish to select appropriate materials for learners at a variety of ability levels." The results of this study might also play a role in raising the metacognitive awareness of learners and contribute to their strategic investment and autonomy. Hence, to fill the gap in the literature, the present study was conducted to answer the following questions:

1. Which metacognitive reading strategies were more affected by text difficulty?
2. At which level(s) did such differences occur most?

METHOD

PARTICIPANTS

The participants of this study (see Table 1) were 60 Iranian adult intermediate EFL learners selected from among 85 EFL students at two private teaching institutes in Iran. They were both male and female and their ages ranged from 18 to 38. To ensure the homogeneity of the participants, based on their performance on the reading subsection of the Preliminary English Test (PET), those who achieved scores between one standard deviation above and below the mean were chosen for the study. PET was used because it could provide better accounts of the intermediate EFL learners' reading proficiency as compared with KET (elementary level) and FCE (upper-intermediate level) tests. Moreover, PET scores between ±1 SD were chosen as they provided a greater precision (i.e., less variability) in our estimates where the scores fell nearer to the mean in the normal distribution and provided better indication of the reading proficiency of the participants.

TABLE 1. Distribution of Subjects in terms of Gender

Gender	Frequency	Percent
Male	43	71.6
Female	17	28.4
Total	**60**	**100**

DESIGN

This study employed a within-subject design; the independent variable was text difficulty at three levels (pre-intermediate, intermediate and upper- intermediate) and the dependent variable was the participants' scores on the Metacognitive Awareness of Reading Strategies Inventory. A comparison of the performance of the same group across different text types were examined through Repeated Measures ANOVA.

MATERIALS

METACOGNITIVE AWARENESS OF READING STRATEGIES INVENTORY

A 30-item questionnaire based on a 5-point Likert scale developed by Mokhtari and Reichard (2002) was selected to assess participants' metacognitive awareness of reading strategies which include three categories of global, problem-solving, and support strategies. The global strategies refer to the reader's monitoring of whether the written material is successfully comprehended, coupled with active reading strategies to enhance and repair comprehension. They are generalized or global reading strategies aimed at setting the stage for the reading act (e.g., setting a purpose for reading, previewing text content, predicting what the text is about, etc.). Problem-solving strategies provide a structure for learning when learners are working directly with the text, especially when the task cannot be accomplished through a series of steps. They are localized, focused problem solving or repair strategies used when problems develop in understanding textual information; for example, checking one's understanding upon encountering conflicting information, re-reading for better understanding, etc. Support strategies are basic support mechanisms that are employed by learners in order to maintain the full consciousness of the text content during reading and to help for a better comprehension; use of reference materials like dictionaries and other support systems, for example. The reliability index based on Cronbach's alpha for the questionnaire is 0.93, indicating a reasonably dependable measure of metacognitive awareness of reading strategies. (Mokhtari & Reichard, 2002).

READING COMREHENSION PASSAGES

To provide reading passages for pre intermediate, intermediate and upper intermediate groups, three reading texts from the standardized tests, namely KET, PET and FCE, were selected, respectively. One passage from each test was selected and its difficulty level was calculated through Flesch Readability Ease (FRE) which measures sentence length and the number of syllables per 100-word passages (Courtis & Hassan, 2002). It is available in Microsoft Office Word. The reading passages at different levels (pre-intermediate, intermediate and upper intermediate) were selected from Cambridge ESOL available at Khalifa and Weir (2009). According to the Cambridge ESOL, the Key English Test (KET) is a basic level qualification set at Level A2- elementary level of difficulty of the Common European Framework of Reference (CEFR). The Cambridge ESOL Preliminary English Test (PET) is the second level of the ESOL which is at Level B1- pre- intermediate level of the CEFR. PET recognizes the ability to cope with everyday written and spoken communications. The First Certificate in English (FCE) is the third level of the Cambridge exams in at Level B2- upper intermediate of the CEFR. FCE is designed for learners whose command of English is adequate for many practical everyday purposes, including business and study. There were five reading passages for KET and PET while FCE contained eight multiple choice questions. The FRE score obtained for the KET, PET and FCE were 75.3, 69.4 and 60.9, respectively. The FRE score indicates on a scale of 0 to 100 the difficulty of comprehending a document. A score of 100 indicates an extremely simple document, while a score of 0 would describe a very complex document.The scores obtained in the study demonstrated a range of difficulty from easier to more difficult texts, as it was the concern of the study.

READING COMPREHENSION TEST (PET)

To get some insights regarding participants' reading comprehension ability, the reading comprehension section of a PET test was implemented. The objective of evaluating the

learners' reading skill in the beginning of the study was to establish homogeneity among the participants in terms of their reading proficiency. The Reading component contains five parts, a total of 35 items consisting of matching, true/ false and multiple choice item types. The reliability index reported from Cambridge English Exams 2010 for the reading part of the PET was .88.

ORAL INTERVIEW

The interview comprised some general questions regarding the MRSs learners utilized while reading the texts and problems the students encountered during reading the text. More specifically, the researchers conducted a face-to-face interview with 10 participants who described their metacognitive reading strategies in terms of planning, monitoring and evaluating their reading by answering 10 open-ended questions developed by the researchers as a guideline. The interview was conducted in the learners' mother tongue, Persian, transcribed and coded for analysis. The data were categorized into the type of metacognitive strategies they used and the problems the participants faced in their reading. The content validity of the questions was judged by 3 experts through Brown's (1980) definition of MRSs which include: (a) clarifying the purposes of reading; (b) identifying the important aspects of a message; (c) monitoring ongoing activities to determine whether comprehension has occurred; (d) engaging in self-questioning to determine whether goals were being achieved; and (e) taking corrective action when failures in comprehension were detected.

PROCEDURE

In order to increase the participants' motivation to answer the reading test appropriately and fill the questionnaires more responsibly, the researchers promised that they would inform the participants of the results, and this was done three days after the administration. Based on their performance on the reading subsection of the PET test, the participants of the study were selected. The study was carried out in three different sessions. In the first session, the participants were required to read the KET passage and take the KET reading test; they, then, were asked to answer the questionnaire. The same procedure was followed for other tests (PET & FCE) in the other two sessions. Specifically, in each session, the participants were required to answer the questionnaire items based on the procedures they perceived to have employed in answering the comprehension questions. The time interval between sessions was 4 days. The data was fed into SPSS, version 20. Repeated measures ANOVA was implemented on the survey data from participants who completed the survey instrument at all 3 time points (N=60). The assumptions for repeated measures ANOVA were met, and since the sphericity assumption was violated, the Greenhouse-Geisser degrees of freedom were reported. Post-hoc analysis was conducted using pair-wise comparisons, adjusting for multiple comparisons with Bonferroni corrections - SPSS, version 20. The significance level was set at $p < 0.05$. Moreover, an interview was conducted with 10 students. The purpose was to obtain more information about the types of metacognitive strategies used by the participants as a complementary procedure to the questionnaire. To enhance interviewees' retention, before starting the interview, each student was given a short reading comprehension text taken from KET, PET and FCE. After reading the text, the participants were asked questions about the metacognitive reading strategies they had used and the problems they had encountered during reading. For their convenience and to enhance their self-confidence, the questions were asked in their native language, Persian. All data were transcribed by the researcher immediately after each interview. They were coded according to the type of MRSs employed.

RESULTS

RESULTS OF THE QUESTIONAIRE

The repeated- measure ANOVA was employed to analyze the data in this study. Descriptive data for MRSs use at different text levels are presented in Table2. Mauchly's test indicated that the assumption of sphericity had been violated, $\chi 2$ (60) = 17.6, $p < 0.05$; therefore, a corrected value (Greenhouse-Geisser correction) of F was used. As shown in Table 2 and 3, the 60 EFL learners' total use of MRSs among the first time point (KET) , *M* = 82.95, *SD* = 6.83 , the second time point (PET), *M* = 102.77, *SD* = 5.01 and the third time point (FCE), *M*= 119, SD= 4.18, was significantly different , *F* (2, 94) = 679.4, *p* =.000, eta squared= .92. It was also found that the differences in the means were statistically significant for the problem solving strategies, *F* (2,116) = 399.15, p =.000, eta squared=.87; for support strategies, *F* (2,116) = 158.90, *p* =.000, eta squared=.72; and for global strategies, *F* (2,112) = 280.45, *p*= .000, eta squared=.82.

TABLE 2. Descriptive Statistics for Metacognitive Reading Strategy Use

	Time1 (KET)		Time2 (PET)		Time3 (FCE)	
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**
Problem (n=60)	35.96	3.33	43.71	2.77	50.30	2.59
Global (n=60)	21.40	3.32	28.08	2.34	33.21	2.37
Support (n=60)	25.58	3.37	30.96	3.37	35.45	2.20
Total (=60)	82.95	6.83	102.77	5.01	118.97	4.18

TABLE 3. Summary of Repeated Measures ANOVA

Within group	**Sum of squares**	**df**	**Mean Square**	**F**	**Sig.**
Problem	6176.94	2	3575.91	399.14	.000
Global	4213.04	2	2234.90	280.45	.000
Support	2928.63	2	14.93	158.90	.000
Total	39046.00	2	24647	679.47	.000

p<.05

To answer questions 1 and 2, Bonferroni post-hoc tests (Table 4) were run. They revealed a significant difference within group at all three different levels, *p*=.000. Especially, the mean difference between KET and FCE for both the total MRS (*MD*=36.01, *SD*= 1.09) and its three subcomponents were significant. It is worth mentioning that problem-solving strategies were affected most by text difficulty (*MD*= 14.33, *SD*=.52). It indicates that as comprehending text became difficult, readers consciously resorted more to problem-solving strategies to try to make sense of the text.

TABLE 4. Bonferroni Comparisons for Differences in Metacognitive Use within 3 Times

Comparisons	**Mean difference**	**SD**	**Sig.**
Problem			
KET vs. PET	-7.75*	.58	.000
KET vs. FCE	14.33*	.52	.000
PET vs. FCE	6.58 *	.40	.000
Global			.000
KET vs. PET	-6.68 *	.54	.000
KET vs. FCE	-11.81*	.51	.000
PET vs. FCE	-5.13 *	.43	

Support			
KET vs. PET	-5.38*	.56	.000
KET vs. FCE	-9.87*	.58	.000
PET vs. FCE	-4.48*	.51	.000
Total			
KET vs. PET	-19.81*	1.09	.000
KET vs. FCE	- 36.01*	1.09	.000
PET vs. FCE	16.20 *	.68	.000

RESULTS OF THE INTERVIEW

The first interview question probed the type of planning activities students might utilize before reading the text. The majority of participants stated that background knowledge was important in helping them to read better. Moreover, some believed that planning was the key in successful reading. By planning, they meant looking at the title, heading or picture to activate their schemata with regard to the reading passage. Some, for example, made use of the illustrations provided in the text to get some ideas regarding the text. Questions 2, 3, 4, and 5, were concerned with reading strategies: whether the respondents searched for the main ideas or supporting ideas in the text, whether they could see the differences between them, whether they adjusted their reading speed and whether they used skimming to get the gist of the passage. A large number of the participants (80%) reported they searched for the main ideas in the text as well as the supporting ideas. Moreover, they declared that they adjusted their reading speed according to the difficulty of the text. The other MRSs that they used included, using context clues (90%), focusing on key words or information (80%), translating (80%), checking understanding (70%), predicting text meaning (70%), thinking about reading (70%), guessing meaning of unknown words (70%), asking oneself questions (60%), and paraphrasing for better understanding (60%). One of the students reported: "While I am reading, I try to understand the meaning of unknown words that seem essential to the meaning of the text." Yet another student said: "When I read, I make connections between information that I already know and the new information."When the texts were more difficult, the majority of the respondents translated the texts into their mother tongue, Persian. One, for example, said "I translate some parts of the passage into Persian, but not often. I translate into Persian when the sentences or the text confuse me".

It is important to note that translation may be considered as a cognitive or metacognitive strategy. According to Phakiti (2003), when translation is used to make sure what the readers have understood is accurate, translation is metacognitive rather than cognitive. The sixth question was about the topic sentence. The respondents (80%) stated that they often considered the topic sentence and this gave them good accounts of the whole passage. One respondent said: "While I am reading, my knowledge about the topic helps me a lot in comprehending the text." The seventh question was concerned with the type of problems they mostly encountered in reading the texts. For most, the unfamiliar words (90%), complex sentences and unfamiliar topics (80%) were the most important problems they face during reading. The eighth question dealt with the strategies or activities respondents employed when they had problems in reading. A large number of respondents used translation (80%), guessing strategies (80%), consulting dictionaries (80%), using key words (80%), summarizing strategies (70%), and thinking-aloud (40%). One of the students stated: "when there are complicated grammatical structures, it can sometimes create reading problems to me. I try to focus on my reading and ask myself some questions to understand it better".

Another student said: "It's very difficult for me to understand too long texts; they confuse me and decrease my attention. So I read it several times to understand it better". The

last two questions focused on the strategies respondents applied after reading—one concerned with the summarizing strategies and the other more specifically with self-comprehension checks. For them (70%), summarizing the text provided a good indication that they had understood the text. This was done orally or in writing through various strategies such as retelling what they had read, including just important information, omitting less important details and using key words from the text. Self-comprehension checks were some self-questioning strategies the respondents employed to evaluate their understanding of the text. For most of them (80%), this strategy was very helpful especially in noticing textual clues that most of the time were passed on. These findings provide evidence that readers are able to vary their metacognitive reading strategies in accordance with how difficult the texts are. That is, readers when encountered with difficult tasks or texts utilize various MRSs, especially the problem-solving strategies.

DISCUSSION

This study was motivated by the assumption that the variability in MRSs use can be attributed to the text difficulty. The research questions, accordingly, probed the overall effect of text difficulty on MRS use. In general, the findings suggest that text difficulty affects MRS significantly. In other words, as the difficulty of the text increases, the readers resort to more MRSs. The difference was especially more conspicuous when learners' MRS use on easier (KET) and more difficult texts (FCE) was compared. Moreover, it was found that text difficulty had more significant effect on problem-solving strategies compared with the two other MRSs.

The result of this study corroborates the findings of Lin, Zabrucky and Moore (2002) who found that readers utilized more strategies when texts proved difficult for them. It also supports Brantmeier (2002) who believed that the subjects performed different tasks and strategies while reading texts that varied in type, length, content, and difficulty level. However, this study differs from Huang, Cher and Lin (2009)'s findings who stated that students in both high and low groups tended to use a fixed set of reading strategies to which they had long been accustomed regardless of the text's difficulty. Besides, like Lin, Zabrucky and Moore (2002), the findings do not support Weaver and Bryant (1995) who believed that students were better able to predict comprehension when text materials matched their reading level as opposed to being too easy or too difficult. This study suggests that the readers may benefit from texts above their reading abilities through activating MRSs. One possible explanation is the idea of mediation discussed in the sociocultural theories of learning (Ellis, 2008). They suggest metacognitive mediation and cognitive mediation as the mechanism of language learner's learning and development. Accordingly, the three MRSs could mediate between reading and cognition. Another possible interpretation for the higher use of metacognitive reading strategies, especially the problem- solving strategies with more difficult texts is to do with the nature of such metacognitive strategies; the readers probably use the strategies only when it is incumbent on them and the interaction between the task and the learner requires them to do so (Zhang & Seepho, 2013). Seemingly, when comprehending gets difficult, readers consciously resort to such problem solving strategies to try to make sense of the text. In other words, as difficult texts, compared with easy texts, are more linguistically and cognitively demanding, the subjects utilize a large number of monitoring strategies to control and adjust their comprehension processes.

Reading comprehension requires that the reader evaluate the text, preview the text, make predictions, make decisions during reading, review for deeper meaning, find inconsistencies, evaluate his or her own understanding while reading, use prior knowledge, and monitor understanding (Houtveen & van de Grift, 2007; Lau, 2006). According to

Houtveen and van de Grift (2007), good readers comprehend better and do many things before even starting to read, including thinking about why they are reading the text, drawing upon previous knowledge, scanning the structural elements of the text, and making predictions about what the text will be like. The findings indicate that when the text is difficult enough to provide enough challenge to the reader, it can trigger such higher executive functions in reading process. It seems that readers evaluate their performance with regard to their success or failure on the reading task, with more positive evaluations occurring when they completed a difficult task than an easy task. "Thanks to the awareness of the difficulties they encounter, they can adjust their reading such as speeding up, slowing down, or stopping to read another text to get some background information about the text at hand" (Pressley & Gaskins, 2006, p. 101). To enhance such metacognitive reading awareness, text difficulty plays a significant role. In accordance with the sociocultural theories of learning (Ellis, 2008), it seems that difficult texts and tasks challenge the learners' zone of proximal development. Functioning as scaffolds, MRSs enable the learners to develop understandings beyond their immediate ability. In other words, learners receive assistance from MRSs to succeed in more complex and difficult texts that would otherwise be too difficult. However, it is crucial that the strategy one chooses matches the demands of the problem (Blanchard-Fields, 2007).

The results of the interview accord closely with those of Shirani Bidabadi and Yamat (2013) who reported the high frequency of meta-cognitive strategies among EFL learners. The obtained data revealed that participants in this study actively benefited from various MRSs in order to understand their English reading passages. They also provide evidence that readers are able to vary their metacognitive reading strategies in accordance with how difficult the texts are. That is, readers when encountered with difficult tasks or texts utilize various MRSs, especially the problem-solving strategies. Preponderance of problem-solving strategies use for more difficult texts in the study, in fact, indicates that these readers were conscious of their reading process and were able to draw upon them in order to overcome reading problems. The findings also support those of Othman and Jaidi (2012) that readers' use of strategies relies on some factors such as their knowledge of the text, its vocabulary and sentence structures. Moreover, the tendency for the greater use of metacognitive strategies in more difficult texts might support the idea that they "can mediate among different processing skills and knowledge sources available to a reader" (Weir, 2005, p. 93). When the task requires individuals to have prior plan and to evaluate their understanding of the text (Phakiti, 2003), metacognitive strategies are called upon.

CONCLUSION

This study demonstrated that text difficulty had significant effects on MRSs, especially the problem solving strategies. The results of this study may have implications for foreign language teachers, teacher trainers and curriculum designers in selecting reading materials as rightfully emphasized by Fulcher (1997) that adjusting reading materials to learners is indispensable in the selection of such materials to teach reading. Hence, it is incumbent upon language teachers and syllabus designers to ensure a match between the two in order for learning to take place more effectively. EFL instructors need to ensure the difficulty level of reading materials is above learners' language ability to trigger the learners' MRSs. It also implies that more should be done to encourage schools and teachers to use MRSs. Future research should focus on determining the most appropriate methods for implementing MRSs in reading courses. To promote reading comprehension, teachers should describe MRSs to students: what each strategy comprises, in which conditions such strategies should be

implemented, how to use particular strategies, and then model the use of the strategies in the presence of the students.

Although the study has shed some light on the relationship between MRSs and text difficulty, it has its own limitations, which can be addressed in the future. First, the sample size was small which may reduce the generalizability of the findings. Second, assessing MRSs imposed some challenges to the researchers. Due to some limitations, in particular, the limited time available and unfamiliarity of the students with retrospective methods, the study utilized more familiar and practical techniques such as MARSI questionnaire and an oral interview.

For future research, some other methods such as verbal reports, think aloud, observational methods, and instructional tasks could be implemented for assessing MRSs. In addition, to provide different levels of text difficulty, considering the proficiency of the participants, three consecutive levels of Cambridge ESOL examination, namely KET, PET and FCE were implemented. For future research other levels such as Certificate in Advanced English (CAE) or Certificate of Proficiency in English (CPE) can also be taken into account. Furthermore, research including students at different developmental levels is also recommended. Finally, some research on the relationship between learning styles of the learners and the metacognitive strategy use can be initiated.

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