English Major Students' Awareness of Metacognitive Reading Strategies: Gender and Academic Level in Focus

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Abstract

Metacognitive reading strategies play a significant role in reading comprehension and educational success. Being noticeably absent from many Iranian classrooms and largely unknown to many language learners and teachers, metacognitive reading strategies have fallen into oblivion in English language teaching, research, learning, and assessment. Therefore, the present study was an attempt to measure the metacognitive reading strategy (MRS) awareness among Iranian university students majoring in English Translation Studies. It also aimed at determining whether gender and learners' different academic levels would make any difference in using various types of MRS. Furthermore, it investigated the relationship between Iranian English as a Foreign Language (EFL) learners' awareness of MRS and their reading comprehension performance. A sample of 45 EFL university students majoring in English Translation at Chabahar Maritime University participated in this study. They were asked to complete the Survey of Reading Strategies (SORS) questionnaire and to take a TOEFL Junior Standard Reading Comprehension Test. The results were analyzed through descriptive statistics, paired-samples t-test, independent-sample t-test, and ANOVA. The results revealed that although the overall strategy use among these students was low (M =2.42), support reading strategies were used the most and problem-solving strategies were the least frequently used ones. Additionally, no significant difference was found between males and females as well as different academic levels in the use of MRS. No significant relationship was also found between students' overall use of metacognitive reading strategies and their reading comprehension achievement. The study concludes with a number of pedagogical implications and lists several guidelines for future research.

Keywords: Gender, reading comprehension, reading strategies, metacognition, metacognitive reading strategies, academic level

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INTRODUCTION

Reading, as a receptive skill, plays a vital role in second language learning, which per se is probably the most important skill in higher education, requiring comprehending both the direct and the implied ideas. According to Eskey (2005), even though many EFL learners are not communicating in English, they are required to access or analyze information in this language through written form. Ferena and Reves (2000) asserted that this skill is absolutely essential when it comes to EFL learners since they need to read various academic texts in English. In other words, knowledge and information are basic elements of education, and to accomplish success in education, everyone needs to have good reading comprehension skills.

Reading is not only putting the letters together to form words, phrases, and sentences; it also includes comprehending and analyzing the relationships hidden in the text. In reading comprehension, the readers have to interact with the text to make it more meaningful, and they have to use the previous knowledge stored in their mind (Cook, 2008). Improving reading comprehension is gained over time with the help of teachers through instructing reading strategies such as questioning, summarizing, thinking aloud, etc. (Block & Israel, 2005). Pani (2004) defined reading strategies as the mental operations involved when readers approach a text effectively to make sense of what they read. Good readers apply more strategies more frequently and more efficiently than poor readers do. It is believed that the instruction of reading strategies can help students become active readers, control their own reading comprehension, and build an improved processing system through which they will be able to excel in academic contexts. With regard to the classification of strategies in reading, Brown (2007) described ten strategies as follows: 1) Determining the purpose of reading, 2) using graphic rules and patterns, 3) using various silent reading techniques, 4) skimming the main ideas, 5) scanning the specific information, 6) semantic mapping, 7) guessing, 8) analyzing the vocabularies, 9) identifying the literal and implied meaning, and 10) processing the relationships within the texts, capitalizing on discourse markers.

Moreover, simply reading a high volume of texts would not enable learners to develop their reading comprehension skill. In fact, if the readers are meta-cognitively aware of the reading strategies, decoding the written

text would be easier for them, and they would reach a high level of comprehension without wasting too much time and energy (Pressley, Wharton-McDonald, Mistretta-Hampston & Echevarria, 1998). Basically, metacognition refers to thinking about thinking. It is "ones' knowledge concerning ones' own cognitive processes and outcome or anything related to them", e.g., the learning-relevant properties of information or data (Flavell, 1976, p. 232). Kuhn (2000) defined metacognitive strategy as "Enhancing (a) metacognitive awareness of what one believes and how one knows and (b) meta strategic control in the application of the strategies that process new information" (p. 179).

Proficient readers use one or more metacognitive strategies to comprehend text, and the use of such strategies has developed over time as the reader learns which ones are best suited to aid in comprehension (Pressley et al., 1998).The findings of some studies in the past few decades (Jacob & Paris, 1987; Kane, Lear & Dube, 2014; Mokhtari, Sheorey & Reichard, 2008; Nur Aflah, 2017; Siri & Teo, 2012; Zhang & Seepho, 2013) indicated that most of the EFL learners were unable to achieve their full reading potentials, and this problem is due to lack of using their metacognition. The readers intentionally resort to these strategies to evaluate their reading process (Mokhtari & Sheorey, 2002). Wang, Spencer, Minjie and Xing (2009) also argued that metacognitive reading strategies can foster the learning activities of learners and have various benefits for their reading comprehension. There is a general agreement over using metacognitive reading strategies to comprehend the texts more effectively, and hence over the past few decades many researchers have given a lot of attention to this matter (Zhang, 2008).

In general, raising students' awareness of reading strategies is of great importance, and it should be included in English courses since most learners still struggle hard to deal with their difficulties in comprehending texts. They might even use wrong strategies while processing the texts particularly in the contexts where the students study English as a foreign language (Wood, Motz & Willoughby, 1998). Several studies have indicated that active readers have higher metacognitive awareness, and they intend to apply more reading strategies while they read academic texts as compared to less advanced readers (Al-Sobhani, 2013; Hong-Nam & Page, 2014; Mytcowicz, Goss & Steinberg, 2014; Tavakoli, 2014; Yuksel & Yuksel, 2012; Wang et

al., 2009).

There have recently been an impressive number of studies concerning students' awareness of metacognitive reading strategies worldwide (Ahangari & Mohseni, 2016; Alhaqbani & Riazi, 2012; Becirovic, Brdarevic-Ciljo & Sinanovic, 2017; Bećirović, Brdarević-Čeljo & Dubravac, 2018; Jafari & Shokrpour, 2012; Malcolm, 2009; Mokhtari & Sheorey, 2002; Pascual, 2019a, 2019b; Pouralvar, 2018; Rostami Abusaeedi & Khabir, 2017; Sheorey & Baboczky, 2008; Sheikh, Soomro & Hussain, 2019; Singh, 2019; Zhang & Wu, 2009); however, fewer studies have been conducted by the Iranian researchers to find out if gender and level of education would make any difference in the use of these strategies by EFL learners (Karbalaee Kamran, 2013; Kashef, Damavand & Viyani, 2012; Taki & Soleimani, 2012). However, the results of the studies on the relationship between awareness of metacognitive reading strategies and reading comprehension and the effects of the former on the latter are not comprehensive. While several studies have indicated a positive relationship between these two variables (Ahangari & Mohseni, 2016; Al-Khateeb, 2011; Alsheikh, 2009; Brantmeier & Dragiyski, 2009; Carrell, 1995; Chamot, 2005; Dhanapala, 2010; Karbalaei, 2010; Mokhtari & Reichard, 2002; Pascual, 2019a, 2019b; Pouralvar, 2018; Singh, 2019; Sheorey & Baboczky, 2008; Sheikh et al., 2019; Wenden, 2001; Zhang & Seepho, 2013; Zhang & Wu, 2009), others have found that these are not related at all (Alhaqbani & Riazi, 2012; Mónos, 2005; Sheorey & Mokhtari, 2001; Soleimani & Hajghani, 2013).

On the other hand, there are two other issues over which there is no agreement. While Tavakoli (2014), Poole (2005), Sheorey and Mokhtari (2001), Zare (2013), Tahriri and Divsar (2011), and Abu-snoubar (2017) found no difference between boys and girls in their use of metacognitive reading strategies, Jimenez et al. (2009), Madhumathi and Ghosh (2012), Phakiti (2003), and Kudier et al. (2012) found that females used metacognitive reading strategies more than males. Furthermore, in some previous studies (Cabral & Tavares, 2002; Garner, 1987; Sheikh et al., 2019; Yang, 2002; Zhang, 2001), the relationship between levels of reading proficiency and active strategy use has been documented for university EFL students. However, Al-Mekhlafi (2018) found that there was no difference between different academic levels and strategy use. Accordingly, this lack of

knowledge encouraged the researchers to find out the relationship between reading comprehension and awareness of MRS, the possible differences between males and females, or between students at different university levels in their employment of metacognitive reading strategies.

LITERATURE REVIEW

In recent years, several studies (Alami, 2016; Ilustre, 2011; Magogwe, 2013) have investigated the awareness of readers with respect to metacognitive reading strategies during the process of comprehension. Several other studies (Al-Sobhani, 2013; Hong-Nam & Page, 2014; Mytcowicz et al., 2014; Tavakoli, 2014; Yuksel & Yuksel, 2012) have also showed that proficient readers in second language learning are skilled in utilizing various metacognitive reading strategies creatively. In contrast, less proficient readers with less awareness of incorporating suitable strategies might rely more on traditional techniques of reading comprehension or applying limited reading strategies.

Metacognitive reading strategies can generally be classified into three groups: Planning, monitoring, and evaluating strategies. Zare-ee (2008) contended that in planning, learners know how to use appropriate strategies in different texts and how to employ effective resources to enhance performance and comprehension. Monitoring refers to the learners' ability to engage in periodic self-testing while learning, which will improve through training and practice. Monitoring occurs during reading, and its main purpose is to analyze the information while doing an activity or a project to ensure the progresses as well as the efficiency of that certain task (Israel, 2007). As Leutwyler (2009) stated, evaluation is related to planning in which the knowledge of metacognition and skills of regulation of the individuals will be evaluated. The learners utilize the evaluation strategies in order to check their own learning process.

Wang et al. (2009) argued that MRS awareness fosters learners' comprehension as well as their learning activities. They conducted a study in a Chinese university on EFL learners regarding their MRS awareness, and the results indicated that students who were aware meta-cognitively had more self-confidence for acquiring a foreign language as compared to other students. According to Mytcowicz et al. (2014), in academic settings,

particularly for effective reading comprehension process, being aware of reading strategies is very important. As a matter of fact, a direct and positive relationship between MRS awareness and the performance of learners has been found in previous studies indicating that students with high MRS awareness have higher comprehension and obtain better scores in reading proficiency tests (Al-Sobhani, 2013; Hong-Nam & Page, 2014; Tavakoli, 2014; Yuksel & Yuksel, 2012).

Moreover, Alami (2016) explored the MRS awareness of Omani students at a College of Technology. The students proved to be medium level users of MRS who mostly used problem-solving strategies and occasionally global strategies. Regarding gender differences, all three groups of strategies were used equally by boys, but girls employed problem-solving strategies more often. In another study conducted by Ilustre (2011), it was revealed that the use of MRS is a predictor of reading comprehension test scores and that there is a positive association between using problem-solving strategies and students' reading comprehension ability. Estacio (2013) also investigated that learners who employ MRS get higher scores in reading tests as compared to other students. The findings of a study conducted by Magogwe (2013) on MRS awareness and its role in reading comprehension indicated that ESL students of University of Botswana used metacognitive strategies more which led to their higher reading proficiency.

Regarding the difference in the use of MRS due to learners' gender and level of education, different studies have indicated that these two factors have a significant relationship with the extent of reading strategy utilization, but with different findings. Saidi (2012) concluded that generally females use reading strategies more than males in L2 reading and perform better in language acquisition, too. In a different study carried out by Asgarabadi, Rouhi and Jafarigohar (2015), focusing on the effect of gender factor on reading strategy use regarding descriptive and narrative macro-genres, no significant difference was found between males and females in their use of the reading strategies.

Tavakoli (2014) explored the effect of gender on the use of metacognitive reading strategies of Iranian EFL students. It was shown that Iranian EFL students were moderate users of the metacognitive reading strategies. However, there were no significant differences between males and females in using metacognitive reading strategies. Kashef et al. (2012)

carried out a study to investigate the effect of strategy-based instruction in ESP courses related to reading comprehension. The obtained means for both males and females were almost equal, and the overall results did not show any statistically significant difference between boys and girls. Ghezlou, Kordi and Nasrabady (2014) conducted a research to examine the differences between males and females with regards to reading strategy utilization of EFL Iranian students. After completing the questionnaire and doing the analysis, no significant difference was found in their MRS use. Sheorey (2006) delved into the area of gender and reading strategies. His data analyses showed that females used strategies more and they opted more for the two categories of SORS.

In a number of studies, a correlation between reading strategy use and better reading comprehension was found. Rastegar, Khabir and Mehrabi Kermani, (2017), for instance, studied the relationship between EFL learners' MRS use and their reading comprehension achievement. The findings revealed that there was a significant positive relationship between MRS used by the learners and their reading comprehension. Yong-Hyo and Park (2010) reported a study on the relationship between using reading comprehension and reading strategy use of ESL/EFL learners. This meta-analysis showed there was a significant positive correlation between reading comprehension ability and reading strategy use of the ESL/EFL students. Wang (2009) conducted a study in Taiwan, where 110 students took part in the study. She aimed to find out whether there was a relationship between metacognitive awareness and reading comprehension. The findings showed a strong correlation between these two variables. Gou (2008) also found a significant correlation between awareness of metacognitive reading strategies and students' reading comprehension in his study of 278 Chinese college students.

PURPOSE OF THE STUDY

The current study aimed to find out the extent to which Iranian English majors were aware of MRS, to investigate the relationship between reading comprehension and the use of MRS, to check the differences in the use of MRS between boys and girls, and to discover the possible differences between students of different academic levels in using these strategies.

Accordingly, the following research questions were developed.

1. To what extent are Translation Studies students aware of the metacognitive reading strategies?
2. Is there any significant difference between male and female students in their use of metacognitive reading strategies?
3. Is there any significant difference between students of different academic levels and their use of metacognitive reading strategies?
4. Is there any relationship between metacognitive reading strategies used by Iranian EFL university students and their reading comprehension ability?

METHOD

Design of the Study

The current study enjoys a descriptive survey design since no treatment is used for data collection, and it does not predict the future performance of the students in reading. The data were gathered through the responses given by the participants to a questionnaire on the frequency of strategies used by Iranian EFL learners and their performance on a proficiency test. The researchers also made a comparison between two other variables, namely, gender and educational levels. Thus, this study can be considered as comparative too. It can also be considered as a correlational study since the researchers investigated the relationship between metacognitive reading strategies and the EFL students' reading comprehension ability.

Participants

The participants of this study consisted of a total number of 45 participants who were of different proficiency levels in English from Chabahar Maritime University, Iran. The proficiency level was not considered in this study. The age of the participants ranged between 18 and 27. According to Table 1, the sample was comprised of 18 males (38%) and 27 females (62%). Most participants were first-year students (42%), 31% were second year students, and 27% of participants were third year students at the time of the study. The first group, freshmen, consisted of 19 students; in the second group

which included the third semester students there were 14 participants who had passed 2 reading courses each of which 4 credits. The third group with 12 participants had passed three reading courses each one 4 credits.

Table 1: Background Information of the Participants

Group	Males	Females	Total
Freshmen	6	13	19
Sophomore	6	8	14
Junior	6	6	12

Instrumentation

This study utilized two instruments in order to gather data for answering the four research questions: 1) Survey of Reading Strategy Questionnaire (SORS), and 2) a TOEFL Junior Standard Reading Comprehension Test. The questionnaire which was employed in the present study was developed by Tavakoli (2014). He combined the questions of the two questionnaires designed by Mokhtari and Reichard (2002) and Mokhtari and Sheorey, (2002). This questionnaire was mainly developed to measure the overall EFL learners' awareness of metacognitive reading strategies in an academic setting. The students were required to respond to the 30 items of the 5-point Likert-type questionnaire, which accompanied each item (see Appendix A). One meant that the student never or almost never used a strategy; 2 meant the student only occasionally used a strategy; 3 meant the student sometimes used a strategy; 4 meant the student usually used a strategy; 5 meant the student always or almost always used a particular strategy. The questionnaire included three categories, namely, global reading strategies (13 items), support strategies (9 items), and problem-solving strategies (8 items).

Distributing it among a sample of students who were in grades 6 to 12, Mokhtari and Reichard (2002), obtained a reliability of.89 for the questionnaire. Furthermore, the internal consistency reliability coefficient for each category through using the Cronbach's Alpha was as follows: (.92 for the global strategies, .87 for the support strategies, and .79 for the problem-solving strategies). The reliability of the instrument obtained by Tavakoli (2014) was .84. Still, the questionnaire was distributed among 20

students of the last year, and the reliability of the instrument was .83.

The second instrument was a TOEFL Junior Standard Reading Comprehension Test which is developed by Educational Testing Service (ETS). The reading comprehension section is basically developed to determine the subjects' language proficiency level. In simpler words, it measures a student's ability to understand main ideas, comprehend important details, make inferences, infer the attitude or point of view of a character in a fictional story, understand figurative language, and determine the meaning of unfamiliar vocabulary words from contexts. The researchers used this test because one of the general proficiency tests which has been accepted by top universities worldwide is TOEFL test. In order to make sure of the reliability, it was distributed among 15 students before the main study, and the reliability of the reading part of the TOEFL Test was calculated (.89).

Data Collection Procedure

The study was implemented in three weeks in English Language Department in the first semester of the 2018-2019 academic year in Chabahar Maritime University, Iran. To conduct the first part of the study, one of the researchers attended the three classes explaining the aims of the research to the students and ensuring them that there would not be any wrong or right answers to any of the items in the questionnaire. Then the SORS questionnaires were distributed among freshmen students in one session and sophomore and juniors on two other sessions. Each participant was required to provide some information such as their students' ID number, gender, and educational level. A time limit was not set, but the average time needed was between 10 to 15 minutes. The researcher then read all the statements aloud in the students' first language, i.e. Persian, and allowed the students to ask questions if they could not understand any item to ensure that the students comprehended the items.

With an interval of one week, the second part of the study was conducted. It consisted of a TOEFL Junior Standard Reading Comprehension Test comprising 20 multiple-choice items taken from three passages. The test was given to all the participants of each class in one week. Following the test instructions, each student had 30 minutes to respond to the items.

Through the Statistic Package for Social Science (SPSS), the scores of each individual were added up in order to obtain a total score for each category of the survey and the entire questionnaire. Thereafter, interpreting the scores was done using the interpretation model provided by Mokhtari and Sheorey (2002). The researchers described the overall awareness of the students in using metacognitive reading strategies with respect to each academic level and gender. Afterwards, based on the students' scores, a comparison between males and females in their metacognitive reading strategy awareness was made. Additionally, the different levels of education were compared with regard to their level of strategy use. Finally, the students' test scores were analyzed to estimate the correlation between students' awareness of metacognitive reading strategies and their reading comprehension performance.

Data Analysis

The researchers analyzed the collected data using SPSS version 22. First, descriptive statistics were run to determine means (M), frequency (F), and percentage (P) in order to answer the first research question. Besides, by computing the means and standard deviations (SD), it was possible to identify which category of strategies students reported using most frequently. Second, an independent-samples t-test was used to analyze the results in order to answer the second research question. Then, a one-way analysis of variance (ANOVA) was used to compare the means of more than two groups in order to answer the third research question. At last, when addressing the fourth question, the researchers used Pearson Product-moment Correlation Coefficient to determine the strength of the relationship among students' MRS awareness and their reading comprehension scores. Since all of these tests and statistical procedures have some requirements, the data were checked for normality. The number of students was 45 (less than 50 cases), and this required the use of the Shapiro-Wilk test. The results revealed that the data related to the questionnaire and reading test enjoyed normal distribution (.63 and .33 respectively), and it was safe to use these tests.

RESULTS

In this section, the results of the research are presented according to the research questions posed at the beginning of the study. First, the descriptive statistics are discussed. They are followed by test of normality. Finally, the results of t-test or ANOVA are explained.

Research Question One

The overall mean of students' awareness of MRS was 2.42, with the maximum of 3.57, and the minimum of 1.47. Among the three sub-categories of reading strategies, the highest mean was found in support strategies with a total mean of 2.56, as shown in Table 2. The problem-solving category with the mean of 2.10 was the lowest among the three categories. With regard to the performance of the participants on the SORS, the findings were interpreted in terms of Mokhtari and Reichard's (2002) classification. They proposed three levels of usage: high, medium, and low users with a mean or group mean of 3.5 and higher as high, 2.5 to 3.49 as medium, and 2.49 or lower as low.

Table 2: Overall awareness of MRS along with its three sub-categories

Reading Awareness	Strategies	N	Min	Max	Mean	SD
Total		45	1.47	3.57	2.42	.42
Global Strategies		45	1.62	3.62	2.51	.54
Problem-solving		45	1.13	3.63	2.10	.51
Support Strategies		45	1.33	3.89	2.56	.62

Based on the above classification, the studied Iranian English learners were low users of metacognitive strategies as they used the strategies less than 2.49. Totally, they used global and support strategies moderately, and problem-solving strategies were used in low level. In global strategies, three items were used most, namely "checking whether text content fits target or not", "making a decision for what to read" and "using text characteristics such as tables, figures, and pictures". The strategy that was used with a

higher frequency in support strategies was "asking oneself questions", and the most preferred strategy in problem-solving was "predicting the meaning of unknown words or phrases". Generally speaking, the category of support reading strategies was the preferred one.

Research Question Two

There was only a small difference between boy (M = 2.43) and girl (M = 2.41) students. They did not differ very much even in its sub-scales (2.55 and 2.49 in global strategies; 2.01 and 2.16 in problem-solving; and 2.62 and 2.53 in support strategies). Next, an independent-samples t-test was run to compare the males and females with regards to their total use of metacognitive reading strategies.

Table 3: Independent sample t-test regarding the difference between male and female students

| | | Levene's Test for Equality of Variances | t-test for Equality of Means | | | | | | |
| | | Sig. | t | DF | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
								Lower	Upper
Total Reading Strategy Awareness of Students	Equal variances assumed	.639	.11	43	.91	.0147	.1333	-.2541	.2835
	Equal variances not assumed		.10	28.19	.91	.0147	.1410	-.2740	.3035
Global Strategy Awareness of Students	Equal variances assumed	.093	.34	43	.73	.0582	.1702	-.28505	.4014
	Equal variances not assumed		.31	26.11	.75	.0582	.1843	-.3206	.4370

Problem-Solving Strategy Awareness of Students	Equal variances assumed	.516	-.90	43	.36	-.1449	.1596	-.4668	.1769
	Equal variances not assumed		-.85	27.87	.40	-.1449	.1694	-.4921	.2022
Support Strategy Awareness of Students	Equal variances assumed	.053	.45	43	.65	.0884	.1940	-.3028	.4798
	Equal variances not assumed		.41	25.33	.680	.0884	.2121	-.3481	.5250

Results indicated that there was no statistically significant difference between males and females in their use of metacognitive reading strategies. Additionally, both groups were not different statistically in the use of the three sub-categories (global strategies, problem-solving, and support strategies), but generally, males used global strategies and support reading strategies more than females.

Research Question Three

The aim of this question was to examine different levels of education to see whether students of these levels (freshmen, sophomore, and junior) differed in using metacognitive reading strategies. In other words, it aimed to see if the students were instructed in using these strategies or they continued their traditional way of reading. A one-way ANOVA was run in order to compare the means. Furthermore, the means of all the three sub-categories (global, support, and problem-solving) were computed for each level of education to find out the differences among the students regarding their use of strategies. As can be seen in Table 4, the means of three levels for global strategies (freshmen = 2.52, sophomore = 2.53, junior = 2.48) and problem-solving (freshmen = 2.10, sophomore = 1.98, junior = 2.25), and support strategies (freshmen = 2.43, sophomore = 2.67, junior = 2.64) were different. Although the results in Table 4 indicate that all levels exhibited different means with low usage, junior students with the mean of 2.47 seemed to employ the

strategies more than the other two levels.

Table 4: Total reading strategies awareness of students

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Freshman	19	2.3862	.37297	.08556	2.2064	2.5660
Sophomore	14	2.4304	.39789	.10634	2.2007	2.6601
Junior	12	2.4722	.56153	.16210	2.1154	2.8290
Total	45	2.4229	.42869	.06390	2.2941	2.5517

As shown in Table 5, it was revealed that the difference between students' overall employment of reading strategies did not reach significant level. Hence, the three groups did not differ significantly in utilization of reading strategies. Therefore, the second hypothesis which suggested that there were not any significant differences among freshmen, sophomore, and junior students in using MRS was also confirmed.

Table 5: ANOVA results for strategy use across levels of education

	Sum of Squares	DF	Mean Square	F	Sig.
Between Groups	.056	2	.028	.145	.865
Within Groups	8.030	42	.191		
Total	8.086	44			

Research Question Four

The aim of the question was to investigate if there was any relationship between students' awareness of metacognitive reading strategies and their reading comprehension performance. To answer this question, a Pearson

Product-Moment Correlation Coefficient was performed. The analysis of the data in Table 6 indicates that Pearson correlation coefficient between overall metacognitive reading strategies awareness and reading comprehension achievement is 0.198. The results revealed that there was a weak relationship between metacognitive reading strategies awareness and students' reading comprehension, but it was not statistically significant (P-value = .19 > .05). Thus, reading performance of Iranian EFL learners in the TOEFL test was not correlated with their overall use of metacognitive reading strategies.

Table 6: Correlation between metacognitive strategies awareness and reading comprehension

		Students' Scores in Reading	Total Reading Strategies Awareness of Students
Students' Scores in Reading Comprehension	Pearson Correlation	1	.198
	Sig. (2-tailed)		.192
	N	45	45
Total Reading Strategies Awareness of Students	Pearson Correlation	.198	1
	Sig. (2-tailed)	.192	
	N	45	45

As displayed in Table 6, there was a weak relationship between the degree of employing reading strategies and students' reading comprehension, but it was not a significant difference. Therefore, the third hypothesis which stated that "there was not any significant relationship between students' use of reading strategies and their reading comprehension" was confirmed. In other words, the degree of metacognitive awareness of reading strategies used by Iranian EFL learners did not correlate with their comprehension in reading.

DISCUSSION

The results revealed that Iranian English majors were low-users of metacognitive reading strategies. One reason for this might be that the students were not taught well on these strategies by the teachers. So, it can be concluded that the English-major students in Chabahar Maritime University still used traditional methods of comprehending academic texts which is obvious by their preference for using supporting strategies such as "taking notes" or "thinking in their native language and using translation". The fact that the problem-solving strategies which are associated with skilled reading, skillful thinking, self-monitoring and strong comprehension were the least preferred strategies might justify this finding too (Mokhtari & Reichard, 2002). The choice of global strategies as the second most favored category might be interpreted as indicating that the students had the ability to plan and manage their reading comprehension process to some extent.

The results of the present study are in contradiction with the studies conducted by Mokhtari and Reichard (2002); Abu-snoubar (2017); Alami (2016); and Bećirović et al., (2018) in which they showed that the average use of reading strategies among EFL students was moderate and high, respectively, and students used problem-solving strategies with a higher frequency followed by global strategies and support strategies. This might reflect the fact that leaners in that study enjoyed a higher level of English proficiency because more advanced leaners use metacognitive strategies more. The reason for this is that Chabahar Maritime University is located in the southeastern part of Iran, which is very far from almost all the other cities, hence not many top students choose to study at this university. The nearest big city to Chabahar is 600 kilometers far. The low level of the applicants in general English causes other problems too since the instructors have to teach reading courses of the first terms intensively so that the students improve in their vocabulary and grammar too. Besides, the findings of another study by Alhaqbani and Riazi (2012) demonstrated that the participants were moderately aware of reading strategies and the most frequently used strategies were problem-solving, followed by global strategies and then support strategies. The difference between these studies is that Alhaqbani and Riazi (2012) studied Arabic language, which might be different in nature and understanding. However, the study by Jafari and

Shokrpour (2012) revealed that the total average use of metacognitive reading strategies fell under a high usage level, and the first preference was support strategies followed by global and problem-solving strategies. The fact that both this study and the current study showed the preference of students for support strategies might stem from the fact that both studies investigated lower-intermediate learners.

The study found no significant difference between boys and girls in their use of the strategies. Both boys and girls studied in the same field, were instructed by the same teachers, and had read almost the same books. This might be the real reason why they had used strategies in similar ways and to the same extent. Furthermore, both groups might have spent equal time on studying English and that is why the difference was not statistically significant. The current findings support Solak and Atlay's (2014), and Rostami Abusaeedi and Khabir's (2017) findings, claiming that gender cannot make any significant difference between EFL students' in their use of reading strategies. The current study's findings also confirmed those reported by Tahriri and Divsar's (2011) study, where similar uses of reading strategies in reading comprehension by both males and females as well as freshmen, sophomore, and junior students were reported. However, the results of this study contradict the findings of Lee (2012), Poole (2009), Razi (2008), Sheorey (2006), Phakiti (2003), Jimenez et al. (2009), Madhumathi and Ghosh (2012), Phakiti (2003), Kudier et al. (2012), and Bećirović et al. (2018), where they found that females' overall strategy use was significantly higher than that of their male counterparts.

It seems that no dramatic change appeared as the students entered the higher level of education with respect to the metacognitive reading strategy use. This is in line with the study conducted by Al-Mekhlafi (2018). Students are likely to have had less practice in increasing their awareness and the teachers might have not emphasized on using different types of strategies as they should. Not being informed or instructed well, students of all levels suffered from deficiencies in strategy use knowledge; that is likely why they continued to use the same strategy they were mostly familiar with, i.e. the traditional approach. Moreover, lack of encouragement by teachers for further extensive reading from all source materials could have led them to analyze the written academic text in similar old ways leading to their low performances. At last, the texts chosen for assessing their comprehension

might not have been challenging enough to appropriately find significant differences between freshmen, sophomore and junior students. The findings do not agree with the findings by Cogmen and Saracaloglu's (2009) study and the research done by Sheikh et al. (2019), in which they found that the years of instruction had an impact on strategy use, and the results of their study indicated that there was a significant difference between different academic year students in their use of MRS. Actually, they reported that the fourth-year students used MRS most frequently, i.e. more than junior, sophomore, and freshmen students.

The study came to the conclusion that there was no relationship between reading and strategies awareness. This is opposite the study conducted by Pascual (2019a) and Wang et al. (2009) who found that there was a positive relationship between reading comprehension and metacognitive strategies and even they affect the reading comprehension. This is likely due to the fact that the learners' reading strategy awareness had not been raised during the reading courses. Furthermore, lack of the practicing and instructions or explanations on using appropriate strategies which lead to academic achievement in reading are probably the main reasons for the weak but not significant relationship. In line with this finding, Hoang (2016) concluded that there was no significant relationship between Vietnamese students' overall metacognitive reading strategy utilization and reading comprehension. The findings of another study done by Sadeghi and Zamanian (2015) implied that there seemed to be no linear relationship between metacognitive awareness strategies employment by students and their reading comprehension. In addition, the study conducted by Alsamadani (2009) indicated no significant association between Saudi EFL students' comprehension ability and their reading strategy use.

CONCLUSION AND IMPLICATIONS

The findings emerging from this study highlighted the low awareness of the Iranian EFL students of metacognitive reading strategies. In addition, although the results showed no statistically significant differences with respect to gender and academic level, males and junior students outperformed the other participants, i.e. girls, freshmen and sophomores. Despite the positive correlation, no significant relationship was found.

Generally speaking, Iranian EFL learners were not strategic readers since the findings revealed low strategy usage. To consider a reason behind such results, the books worked on for reading courses might not have been strategy-based. In other words, these books might not have allocated enough attention and exercises to metacognitive reading strategies. Still, under the pressure of exam, they might have forgotten about the techniques taught and resorted to their traditional way of reading which seemed safe. On top of that, the teachers might have overlooked these strategies and have not taught them directly.

Considering psychological viewpoints, males and females of this study performed similarly in reading comprehension because both males and females were at the same level of psychological maturation, and this led to lack of significant differences between them. Moreover, it seems that all students (freshmen, sophomore, and junior) might have employed similar reading techniques and strategies which led to similar reading performance and the main reason behind the same performance was that the average use of reading strategies among all participants was low regardless of the educational level. This might be the reason why no significant relationship was found between students' awareness of MRS and their reading comprehension.

As the teachers play an important role in the enhancement of students' awareness of metacognitive reading strategies, Iranian EFL teachers are therefore recommended to teach these metacognitive reading strategies in their classes, if possible, by training the students in knowing them, by determining the students' own preferences, and through applying them in various contexts and reading tasks. More specifically, metacognitive reading strategies should be taught in the classroom by providing instructions on effective reading strategies, and working on the least-known and least-used strategies. It is actually one of the main goals of any educational system for the EFL teachers to teach and emphasize the use of different MRS which contribute to the improvement of students' reading ability and independent learning. By relying on strategy-based instruction and adding various exercises while teaching reading comprehension, not only would teachers be able to evaluate students' use of reading strategies, but also students' awareness of MRS will increase, and they might be encouraged to use the strategies that they rarely used before. In general, to help students in using

MRS and increasing their motivation, teachers need to familiarize their students with the concept of strategies and their different types, know the students' preferences and weaknesses through using questionnaires, and accordingly provide enough feedback and direct and sufficient instruction on efficient strategies. Above all, curriculum planners can also provide various types of exercises on metacognitive reading strategies in their textbooks by considering the different strategies specially those which were found to be in low usage in this study such as problem-solving strategies.

The study suffers from several limitations and delimitations which can be addressed in future studies. The biggest limitation was the number of the participants. The senior students did not participate in the second stage of the study, so 25 of the intended participants were deleted. Researchers are strongly suggested to include larger number of students. Secondly, this study relied solely on self-report of the students, and it measured the awareness of the students of the MRS through their own ideas. Future research can design tests in which these strategies must be utilized to see if they really employ those strategies, or collect data through think-aloud protocols to check if they really use these strategies. Thirdly, the study used questionnaire as the sole data collection method in regard to strategies, others are recommended to use interviews and observations to enrich their data.

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