Postgraduate English Students' Metacognitive Awareness of Reading Strategies and Their Reading Comprehension: A Comparative Study

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Abstract

A fundamental necessity at postgraduate level is a developed strategic reading skill that permits digesting tremendous amounts of technical academic content. The need is more paramount for EFL contexts and postgraduate students majoring in English Language Teaching (ELT) and English Literature (EL) most of whom will ultimately search a career in teaching. The aim of the present ex-post facto study was to compare reading comprehension, overall metacognitive awareness of reading strategies (RSs) and awareness of Global, Problem-solving, and Support reading strategies of these prospective English teachers. To this end, a convenient sample of 60 ELT and 40 EL postgraduates were recruited from a pool of 130 students. The research data were collected using a reading comprehension test and the Metacognitive Awareness of Reading Strategy Inventory (MARSI) (Mokhtari & Reichard, 2002). The Independent Samples t-test analyses of the research data revealed that both groups were average in their reading comprehension and metacognitive awareness of reading strategies. MANOVA analysis of the MARSI components also indicated that although ELT postgraduates were significantly more aware of Global, Problem-solving, and Support RSs, both groups were at medium level. The findings highlight the need for strategic-based instruction in reading courses and offer a number of implications.

Keywords: MARSI, Metacognitive Awareness-Raising, Reading Comprehension, and Reading Strategies

Introduction

As a result of full-fledged research in a wide range of areas, dominant theories of first language acquisition and second language learning (SLL) have reached consensus over the significant role of positive evidence (Krashen, 1985), output (Swain, 1985), interactional opportunities (Long, 1996), and modifications of input (VanPatten, 1990), on the one hand, and negative evidence provided (Lyster, 1998; Ellis, Loewen, & Erlam, 2006; Loewen & Philp, 2006), on the other, in accelerating the rate of learning and the level of mastery over language forms. All of these requirements are normally present in ESL contexts where L2 learning proceeds naturally through exposure to genuine communicative opportunities that engage learners in comprehension and production concomitantly. In EFL contexts, however, exposure to written input seems to be the preponderant factor and, thereby, it seems quite reasonable to attribute a more paramount role to reading comprehension and reading skills which, according to Lewis (2002), underlie academic studies and professional development because today most text books and journals are printed in English.

Reading comprehension is no more viewed as a merely passive skill of deciphering meaning from written input but an interactive and strategic process of decoding, deciphering, identifying, articulating, pronouncing, understanding, and responding (Kuhn, 2000; Nunan, 2003) that has to be taught intensively and bottom-up during early stages of language learning. Intensive reading (IR) can offer opportunities for language-focused learning by directing learners' attention to features of the text or for fluency development by highlighting strategies that can help learners deal adequately with written input and prepare them for more meaning-focused and content-based academic materials. It goes without saying that the viability of affording these educational opportunities depends heavily on expert English teachers who have mastered language skills and are adroit at teaching them not only to secondary students but also to undergraduate and graduate students who have to practice and utilize reading comprehension extensively and reflectively for professional and academic purposes (Alexander & Jetton, 2000). Several studies in EFL contexts suggest reading comprehension as an overriding factor leading to achievement (Jamshidian & Khamijani Farahani, 2010; Dehghani, Jafarisani, Pakmehr, & Malekzadeh, 2011).

It is assumed that at postgraduate academic EFL learning where the ultimate goal, as postulated by Zare (2007), is professional success and development, learners engage in intensive reading of the course content as well as in extensive reading of the vast body of academic sources that are available first hand in English (Yang, 2010). Erler and Finkbeiner (2007) equated the ability to read well with learning, and the link between reading and learning might have stimulated Levine, Ferenz, and Reves (2000) to consider EFL College or university students' ability to read academic texts as one of the most important skills. In comparing speaking and reading, Eskey (2005) claimed that many EFL students may rarely need to speak English in their daily lives but the overriding need to read to access information in English is quite pervasive (Nation & Newton, 2009).

To satisfy this need, EFL postgraduates have to learn how to manage the reading by applying appropriate reading strategies to make sense of what is read and by reflecting on the overt and covert meanings expressed to analyse and evaluate the content and subsume it in one's own repertoire. This dual task delineates the interplay between affective and cognitive facets of reading comprehension. Cognitively, readers need to concentrate their attention on the input to notice substantial linguistic and organizational features to grasp a full picture of what is intended in the shortest time (Anderson, 1991; Chamot & O'Mally, 1994). Affectively, however, motivation to read has to be generated, maintained, and reflected on (Dorney, 2005) in order to extend learners' tolerance of ambiguity and help them overcome blocks to comprehension.

Research findings allude to conscious or subconscious application of a number of metacognitive reading strategies as a viable mechanism that can serve both cognitive and affective purposes and aid reading comprehension. Basically, reading strategies comprise comprehension-enhancing actions like skimming, scanning, contextual guessing, utilizing background knowledge, and recognizing text structure. Such strategies stem from metacognition which, as defined by Tracey and Morrow (2006), is the capacity to reflect on and control one's own thinking processes. As suggested by Anderson, Hiebert, Scott, and Wilkinson (1985), growing metacognitive control entails *monitoring and noticing* comprehension failures and inconsistencies within the text, and applying *corrective strategies to cope* with those failures. Metacognition concerns knowledge about cognition and the regulation of cognition and has a declarative and a procedural facet (Brown, 1985). The former denotes the declarative knowledge readers develop about their own cognitive abilities and can be obtained either individually through introspection and self-study or through strategic investment and awareness-raising activities designed by teachers and educators. This knowledge, however, has to be proceduralized through practice when learners employ them to actually resolve various comprehension problems during practice phase of an intensive course or through extensive reading.

A number of different devices have been designed to measure learners' strategic awareness including Oxford's Strategy Inventory for Language Learning (SILL) (1985). More focused devices have also been further developed to probe various types of strategies. In their seminal work, Mokhtari and Reichard (2002) offered Metacognitive Awareness of Reading Strategy Inventory (MARSI) as a new framework for measuring learners' use of various reading strategies. MARSI comprises three sets of factors the first of which is Global Reading Strategies (GRSs) that comprises 13 items and represents strategies that aid a global analysis of the written text. The second factor, Problem-Solving Strategies (PSSs), on the other hand, includes 8 strategies that help learners resolve comprehension problems when the text becomes difficult to process. Support Reading Strategies (SRSs), however, are functional in nature and rely on the use of outside reference materials. As such, they are closely related to the readers' metacognition which, according to Kuhn and Dean (2004), enables the leaner to retrieve and deploy a certain strategy in the

context of a particular problem in a similar but new setting and make the students self-dependent.

An impressive body of empirical research has addressed learners' reading strategy use in relation to learner variables such as gender (Politzer, 1983; Oxford & Nyikos, 1989; Oxford, 1993; Green & Oxford, 1995; Goh & Foong, 1997; Poole, 2005; Griva, Alevriadou, & Geladari, 2009; Phakiti, 2003, 2009), academic discipline (Hong-Nam & Leavell, 2011; Ofodu, & Adedipe, 2011, Seifoori, 2014), and reading beliefs (Ilustre, 2011). The findings have revealed that language learners' use of reading strategies and their reading comprehension are closely correlated (Sheorey & Mokhtari, 2001; Munsakorn 2012) and that male and female learners act differently in EFL reading performance and strategy use (Goh & Foong, 1997; Griva, Alevriadou, & Geladari, 2009).

In addition, research findings have underscored the role of skipping unknown words, contextual guessing, tolerating ambiguity, reading for meaning, and making inferences in promoting learners' comprehension (Oxford, 1990; Amiryousefi, Dastjerdi, & Tavakoli, 2012) under non-test and testing conditions (Dole, Brown, & Trathen, 1996). Experts in SL research and pedagogy have now reached consensus over the vitality of adequate strategic awareness and a myriad of studies have addressed learners' strategy knowledge and awareness (Chamot, 1987, in Wenden & Rubin, 1987; O'Malley & Chamot, 1990; Oxford, 1989, 1990) and the application of strategies (Brown, 1987; Livingston, 1997; Cromley, 2005; Coskun, 2010).

In the context of Iran, Karami and Hashemian (2012) compared metacognitive reading strategy use and RC of 20 young (age = 15-20 years) and 20 adult (age = 35-40) Iranian elementary female EFL learners. Statistical analyses of data from a RC test and a 27-item reading strategies questionnaire indicated not significant difference between the young and adult Iranian female L2 learners' comprehension level and their use of reading strategies. Yet, the RC and reading strategy use were found positively correlated only in the young group.

Such correlational studies were also extended to the graduate level by Seifoori (2014) who explored the use of general metacognitive strategies, measured by the metacognitive component of Oxford's Strategy Inventory for Langue Learning (SILL), by eight groups of Iranian ESP freshmen (N = 240) in relation to gender and discipline. She reported discipline and gender variation with science students outperforming those of humanities. Likewise, Youssefi and Seifoori (2014) compared Iranian graduate ELT (26), EL (26), and English Translation students' (25) use of metacognitive reading strategies and their reading comprehension; they found the strategy scores positively correlated with the participants' reading comprehension in all groups, and that ELT students outperformed EL and ET participants in RC and MARSI. In another study, Soltani, Hadidi, and Seifoori (2015) explore Iranian TEFL graduate students' metacognitive awareness of reading strategy use in relation to the gender and reflectivity/impulsivity styles and found reflective ELT undergraduates more metacognitively strategic than the impulsive ones.

Nevertheless, no study has ever compared the extent to which postgraduate Iranian ELT and EL students have achieved appropriate levels of RC or the pre-requisite strategic versatility required for comprehending written language. This is an overriding concern for two reasons. Firstly, EFL and EL postgraduates have to cover a wide range of technical content which is heavily reliant on their dexterity in coping with general English texts, in the first place. Hence, it is fundamental for them to have reached acceptable levels of reading comprehension at the onset of their academic life. Qualified postgraduate applicants use reading strategies either intuitively and supplement them with a rich body of lexical vocabulary knowledge, familiarity with the topic, or a natural tendency to concentrate on what is being read. To a large group of Iranian postgraduate students, however, this level of strategic adroitness remains farfetched. While still studying at university, they find it agonizingly arduous to keep pace with the flow of course content and organizing their perceptions of the content in the form of term papers or reports mostly due to lapses in English language skills and an unripe mastery of reading strategies.

Secondly, even the faint possibility of these applicants' searching a career in teaching legitimizes any formidable undertaking to identify their points of weakness and strength and to address the needs in order to promote educational outcomes. Such needs-analyses are now constructively viable because intentional or unintentional flout of educational standards has escalated the possibility of entering postgraduate studies without having obtained basic qualifications. State-of-the-art English teaching methodology suggests identification of entry behaviour and designing some remedial measures to alleviate any probable defects and weaknesses.

With respect to falling educational standards, hence, the present study set out to compare ELT and EL postgraduate students' RC and metacognitive awareness of reading strategies. Based on the research purposes, the following research questions were formulated:

1. Do ELT and EL postgraduate students differ significantly in their reading comprehension of general texts?
2. Do ELT and EL postgraduate students differ significantly in their metacognitive awareness of reading strategies?
3. Is there any significant difference in ELT and EL postgraduate students' awareness of MARSI components?

Methodology

Research Design

The present ex-post facto study is reporting on merely one part of an on-going quasi-experimental research project which is examining the effect of metacognitive awareness-raising on ELT and EL postgraduate students' general reading comprehension, content retention, and perceived use of metacognitive reading strategies. The current study is based on the data obtained from the participants' pre-test scores and aims to compare the participants' level of RC and metacognitive awareness of reading strategies.

Participants

A total sample of 100 ELT (N = 60) and EL (N = 40) postgraduate students were recruited based on convenient sampling from a pool of 130 postgraduate students studying during the academic years of 2014-2016 at Islamic Azad University, Tabriz Branch. The ELT participants were taking the two-credit course of "Principles of Teaching Language Skills (PTLS)" and the EL participants were taking the two-credit course of "Contemporary Drama (CD)". The groups, attending two PTLS and two CD classes, were randomly assigned as the control and experimental groups for whom the instruction was the same apart from the metacognitive awareness-raising program. The experimental and control groups received instruction based on the same sets of syllabus-based materials and by an ELT assistant professor with 17 years of experience and an English Literature assistant professor with 20 years of teaching experience. In all four groups, males were disproportionate to females who formed the dominant majority. Most of the participants spoke Azeri Turkish as their first language, Persian as their second language, and had learned English as a third Language.

Instruments

To collect the research data, we employed two instruments: a general reading comprehension test selected from the reading sections of different TOEFL tests and the MARSI (Mokhtari & Reichard, 2002).

Comprehension of written language is an interactive process which entails application of a wide range of reading strategies that allow combining information from the text and the reader's repertoire to transform written input to thoughts and ideas (Chastain, 1988; Nunan, 2003). To measure the participants' reading comprehension of general texts, which is regarded as a pre-requisite to content-based comprehension, we employed a test comprising texts from the reading comprehension sub-tests of various standardized TOEFL tests. It comprised five short reading passages each followed by six multiple choice comprehension questions and making a total of 30 items. The test takers needed to use different reading strategies in order to correctly answer the questions in 45 minutes. The purpose of this test was to tap the participants' reading comprehension of general English texts.

The second instrument deployed was the MARSI which is a 30-item and 5-point Likert-type scale rating adolescent and adult second language learners' perceived use of reading strategies while reading in academic contexts from 1, when the respondent never does a strategy, to 5 when they report that they always do it. MARSI comprises three sets of factors including Global Reading Strategies (GRSs), Problem-Solving Strategies (PSSs), and Support Reading Strategies (SRSs). The first factor includes 13 items and represents strategies that aid a global analysis of the written text; the PSSs include 8 strategies that help learners resolve comprehension problems when the text becomes difficult to process; and SRSs are more closely related to the readers' metacognition and serve a functional purpose; they involve the use of outside reference materials.

According to Mokhtari and Reichard (2002), through successive Factor Analyses and Gronbach's alpha reliabilities, the three factors showed reliabilities between .86 and .91, which are acceptably high. They proposed that "MARSI can be administered individually as well as to groups of adolescent and adult students with grade level equivalents ranging from fifth grade through college" (p. 254), well accommodating Iranian postgraduate English majors. Therefore, it was employed in this study since postgraduate English students can well be regarded as equivalents to the specified norm group.

Procedure

The purpose of this ex-post facto study was to compare postgraduate ELT and EL students' reading comprehension; the participants were not homogeneous in terms of major; some of them had received a Bachelor's degree in majors like agriculture or chemistry that were totally different from English. Hence, we decided to comparatively delineate their level of general reading comprehension and their perceived use of Global, Problem-solving, and Support reading strategies. These variables were selected owing to the significant role they play in the success of postgraduate ELT and EL students who have to digest a large body of English sources.

To serve the purpose, first, the modified reading comprehension test was administered to the four groups during the second teaching session. Then, the MARSI was distributed among the participants who were required to provide identifying information like name and major; the directions were read aloud and the examples were presented, the response options were discussed to ensure complete understanding. The participants were reminded that they can work at their own pace, ask any probable questions they might have, and were required to circle the response that applied to them.

After the questionnaires were collected, individuals' scores were added up in all column to obtain a total score reflecting their overall metacognitive awareness of reading strategies. Then, individual scores in the three subscales were added to obtain a total score that was further divided by the number of items in each section to render a mean response for each strategy subscale. Both sets of scores were interpreted based on the provided guidelines (Mokhtari & Reichards, 2002). The research data were further analysed statistically through Independent Samples t-test and Multiple Analysis of Variance (MANOVA) to answer the research questions.

Results

ELT and EL Postgraduates' Reading Comprehension and Metacognitive Awareness

In order to answer the first and the second research questions which dealt with any significant difference between ELT and EL postgraduates' reading comprehension and metacognitive awareness of reading strategies, I first checked the Normality of the gathered data through Kolmogorov-Smirnov (KS) and Shapiro-Wilk (SW) tests, the results of which indicated that the research data were normally distributed, d for

RC, (p = .055 > .05), and for MARSI, p = .248 > .05. Then, the Descriptive Statistics of the groups were calculated, as shown in Table 1.

Table 1. Descriptive Statistics of ELT and EL Postgraduates' RC and MARSI

	Groups	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
RC	ELT	60	16.13	2.84	.36
	EL	27	14.85	2.78	.53
MARSI	ELT	60	94.11	9.36	1.20
	EL	27	90.11	10.03	1.93

As revealed in Table 1, the ELT postgraduates (M = 16.13) stood above the EL counterparts (M = 14.85, 90.11) in reading comprehension and in MARSI (ELT: M = 94.11, EL: M = 90.11). Hence, to test the significance of the observed differences, we compared the means through Independent Samples t-test, the results of which are displayed in Table 2.

Table 2. Independent Samples t-tests of ELT and EL Postgraduates' RC and MARSI

		Levene's Test		**t-test for Equality of Means**						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Differ-ence	Std. Error Differ-ence	95% Confidence Interval of the Difference Lower	Upper
RC	**Equal V. Assumed**	.34	.55	1.95	85	.054	1.28	.65	-.02	2.58
	Equal V. not assumed			1.97	51.1	.054	1.28	.64	-.02	2.58

As can be seen from Table 2, the significant value in Levene's Test for equality of variances was .55. It means that the statistics of the first row should be read. Since t (85) = 1.95, p = .054>.05, it was revealed that the difference between ELT and EL students' reading comprehension scores did not reach significance level. Hence, the answer to the first research question is negative. ELT and EL postgraduate students do not differ significantly in their reading comprehension skill.

The same procedure was followed to compare the participants' MARSI scores. The results are presented in Table 3.

Table 3. Independent Samples t-test Analysis of the ELT and EL Postgraduates' MARSI Scores

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Differ -ence	Std. Error Differ -ence	95% Confidence Interval of the Difference	
									Lower	Upper
MARSI	**Equal Vs. assumed**	.01	.89	1.80	85	.075	4.00	2.21	-.40	8.41
	Equal Vs. not assumed			1.75	47.18	.085	4.00	2.27	-.57	8.58

As can be seen from Table 3, the significance value in Levens' Test for MARSI was (p = .89 < .05) indicating equal variance of the statistics; thus, the first row of statistics should be interpreted. There was no significant difference in the ELT and EL participants' overall MARSI scores of t (85) = 1.80, p = .075>.05; in other words, the answer to the second research question is negative: ELT and EL postgraduate students do not differ significantly in their overall metacognitive awareness of reading strategies.

ELT and EL Postgraduates' Awareness of MARSI Components

The third research question addressed differences in the ELT and EL participants' awareness of GRSs, PSRSs, and SRSs. We answered this question through MANOVA. Yet, we first conducted preliminary assumption testing to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity with no serious violations noted. Then the MANOVA analysis proceeded with the groups' Descriptive Statistics, as shown in Table 4.

Table 4. Descriptive Statistics of ELT and EL Postgraduates' GRSs, PSRSs, and SRSs

	Groups	**Mean**	**Std. Deviation**	**N**
GS	ELT	2.71	.49	60
	EL	2.62	.44	40
	Total	2.68	.47	100
PSS	ELT	3.06	.48	60
	EL	2.65	.46	40
	Total	2.90	.51	100
SS	ELT	2.62	.59	60
	EL	2.36	.68	40
	Total	2.51	.64	100

The ELT postgraduates, as shown in Table 4, reported higher levels of awareness of GSs (ELT = 2.71, EL = 2.62), of PSSs (ELT = 3.06, EL = 2.65), and of SSs (ELT = 2.62, EL = 2.36). Further, we check the assumption of homogeneity of variance-covariance matrices, as presented in Table 5.

Table 5. Box's Test of Equality of Covariance Matrices

Box's M	9.432
F	1.517
df1	6
df2	47039.93
Sig.	.168

Based on the analysis, the $p > .001$, denoting that the assumption of Homogeneity of Covariance Matrices has not been violated. Next, Levene's Test of Equality of Error Variances was run, as presented in Table 6.

Table 6. Levene's Test of Equality of Error Variances

	F	df1	df2	Sig.
GS	.758	1	98	.386
PSS	.013	1	98	.909
SS	.139	1	98	.710

The results indicate that all p values are larger than .05 indicating that the assumption of Equality of Error Variances has not been violated either. Finally, Multivariate Tests and Tests of Between Subjects Effects were run to answer the third research question.

Table 7. Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
	Pillai's Trace	1.050	35.71	6.00	194.00	.000	.525
	Wilks' Lambda	.017	216.89	6.00	192.00	.000	.871
Groups	Hotelling's Trace	55.48	878.55	6.00	190.00	.000	.965
	Roy's Largest Root	55.41	1791.75	3.00	97.00	.000	.982

Table 8. Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Model	GSs	719.677[a]	2	359.83	1607.08	.000	.970
	PSSs	846.727[b]	2	423.36	1848.19	.000	.974
	SSs	635.440[c]	2	317.72	785.08	.000	.941
Groups	GSs	719.677	2	359.83	1607.08	.000	.970
	PSSs	846.727	2	423.36	1848.19	.000	.974
	SSs	635.440	2	317.72	785.08	.000	.941
Error	GSs	21.943	98	.22			
	PSSs	22.449	98	.22			
	SSs	39.660	98	.40			
Total	GSs	741.620	100				
	PSSs	869.175	100				
	SSs	675.100	100				

As displayed in the Tables 7 and 8, there was a significant difference between ELT and EL postgraduates on the combined dependent variables, $F(6, 194) = 35.71$, $p = .000$. When the results for the dependent variables were considered separately, the differences reached statistical significance, using a Bonferroni adjusted alpha level of .017, in the use of GSs, $F(2.22) = 1607.08$, $p = .000$, partial eta squared = .97, in the use of PSSs, $F(2.22) = 1848.19$, $p = .000$, partial eta squared = .97, and in the use of SSs, $F(2.40) = 758.08$, $p = .000$, partial eta squared = .94. Therefore, the third research question is answered positively: there are significant differences between ELT and EL postgraduate students' use of GSs, PSSs, and SSs. An inspection of the mean scores indicated that although both groups can be considered at the medium level of strategic awareness and application, ELT postgraduates' reported slightly more frequent use of GSs ($M = 2.71$, $SD = .49$), PSSs ($M = 3.06$, $SD = .48$), and SSs ($M = 2.62$, $SD = .59$) than the EL counterparts' use of GSs ($M = 2.62$, $SD = .44$), PSSs. ($M = 2.65$, $SD = .46$), and GSs ($M = 2.36$, $SD = .68$).

Discussion

The findings emerging from this study highlight the average performance of the participants in reading comprehension and in metacognitive awareness of reading strategies, as addressed in the first and the second research questions, at Islamic Azad University, Tabriz Branch. Moreover, although both groups were found to be at medium levels of awareness for the three sets of GRSs, PSRs, and SRSs, ELT postgraduates outperformed the EL countergroup.

The findings regarding their general reading comprehension led support to those of Seifoori (2014) who reported discipline variation in the ESP participants' in RC with students majoring Science being superior to those studying humanities. The results were, however, in contrast with those of Youssefi and Seifoori (2014) who reported superior levels of metacognitive awareness and reading comprehension for Iranian ELT undergraduate students compared to their EL and English Translation

counterparts for all of whom the two research variables were found correlated. Other studies of EFL learners' RC and metacognitive awareness were more correlational in nature and cannot be compared to the findings from the current enquiry.

Despite fluctuations in the views towards the very nature of reading comprehension, the importance of this receptive skill has long been acknowledged (Rivers, 1981) probably owing to the stability of the developed skill and its highly frequent application in ordinary and academic life. According to (Grabe, 1991) reading is an essential skill and probably the most important skill for second language learners to master in academic contexts. In a more accurate conceptualization of the reading process, Anderson (2003) postulated this receptive skill as the interaction among the reader, the text, the ability to comprehend at a reasonable rate, and strategic reading, or the readers' capacity to employ a wide range of reading strategies. It seems that at postgraduate, the difference between ELT and EL groups might disappear possibly owing to further extensive reading practice or deliberate attempt to prepare for postgraduate studies which offers more interaction among the reader, the text, and intuitive strategic reading.

With regard to the performance of the participants on the MARSI, the findings might be interpreted in terms of Mokhtari and Reichard's (2002) classification. They proposed three levels of usage for the respondents to MARSI scoring rubric: high, medium, and low users with a mean or group mean of 3.5, 2.5 to 3.4, and 2.4 or lower, respectively. According to this classification, both ELT and EL postgraduates were medium users of GSs (ELT = 2.7, EL = 2.6), PSSs (ELT = 3.1, EL = 2.6), and SSs (ELT = 2.6, EL = 2.3) with significant differences in between them.

Of course, the term medium user might be interpreted cautiously with respect to the proficiency level of the participants and the workload they have to take at this level. In the last two decades, many studies (e.g., Phakiti, 2003) have highlighted the role of metacognitive strategies students use when they read. For learners, particularly at postgraduate level, it is necessary to obtain strategic knowledge to achieve autonomous functioning (Eskey, 2005). He also suggests that readers' metacognitive knowledge encompasses knowledge of and control over their own thinking and text processing. Knowledge of metacognition in reading includes one's awareness of the purpose and the goal of reading as well as the knowledge of learning strategies that contributes to comprehension (Eskey, 2005). Metacognitive strategy knowledge seems essential if readers are to effectively regulate their strategy use while reading (Phakiti, 2003).

Postgraduate ELT and EL students need to deal with a wide range of written materials during years of their university studies. ELT students need strategic awareness for two reasons. First of all, pursuing a Master's Degree in ELT, they are required to digest a large body of teaching and supplementary materials on essential concepts like principles of language teaching methodology, teaching language skills, testing and evaluation, research methodology, and many other courses that are exclusively offered in English. They have to digest the teaching materials on a weekly basis which, in some cases, turns out as a challenge. Secondly, apart from managing the course content, ELT postgraduates, and many of EL ones, in Iran teaching English is an evitable or inevitable career choice. An underdeveloped reading skill thus would create an endless ripple of deficient reading. Postgraduate

EL students also need to develop similar levels of mastery over reading comprehension that allows them to overcome lapses in their understanding while reading poetry, prose, or drama.

Moreover, we have specifically witnessed a gradual, constant, and excessive relaxation of student admission regulations and lowering of educational standards. As a result, many students who are admitted to universities and higher education institutes suffer from deficiencies in their knowledge resources. This, in turn, has brought about an uncontrolled rise in the number of students at postgraduate level and in each class, most of whom enter university without having developed required skills and strategies. One typical activity that approximately all of these learners need to undertake regularly is reading comprehension of source materials and the content that is totally unfamiliar to them. Accurate comprehension of the course content requires the applicants to have an awareness of print, a rich language knowledge that aids decoding of written texts, as well as sharp metacognitive skills required for monitoring one's performance and understanding what has been read (Lewis, 2002). It is the last aspect of postgraduate reading that distinguishes it from general reading activities characteristic of general English learners and undergraduate university students, and necessitates attempts to raise postgraduates' levels of metacognitive awareness to the high level through strategic investment and learner development programs that can be incorporated formally or informally into various course contents. The beneficial effects of such programs have already been reported on reading comprehension of students (Aghaie & Zhang, 2012), of Iranian university students at lower and higher levels of proficiency (Zarei, 2002), of Iranian English-major university students (Jafari & Ketabi, 2012), and of female pre-university students majoring in Natural Sciences (Mehrpour, Sadighi, & Bagheri, 2012).

Conclusion

The gradual shift of methodological emphasis in language pedagogy away from independent skill development to integrated skill development and a parallel swing towards learner autonomy has inspired English teachers to target on learner development techniques that conform to clearly stated sets of course objectives. Strategic training is now pursued as the core endeavour in the development of all language skills including reading which is the most frequent task that many learners, experts, and even professionals need to undertake in their academic career. Although many learners develop a functional reading skill in their first language, experience has shown that the same skills might not be easily transferable to a second or foreign language owing to underdeveloped prerequisite skills that make the reading an agonizing experience to many ESL and EFL learners. Gradual loss of encouragement in learning English is the least consequence of this weakness and at the top of the research agenda to solve the problems is first acknowledging the challenge and taking vibrant initiatives to face it by exploring viable proposals one of which can be needs analysis and subsequent learner development programs that aim to empower learners to spot their problems and learn how to tackle them.

The findings from this study unravelled, on a local scale, the participants' average level of awareness of metacognitive reading strategies (Mokhtari &

Reichard, 2002) and RC. On similar occasions, researchers underscore the teachability of metacognition and recommend explicit instruction of metacognition (Cross & Paris, 1988) and explicit instruction in cognitive and metacognitive strategies (Haller, 1988; Hennessey, 1999). All these scholars advocate metacognitive strategy instruction because it can raise learners' awareness of the purpose of the skill and help them to use relevant strategies to activate, monitor, regulate, and make sense out of the text. It also creates an awareness of the function and utility of reading skill in a specific context. Such proposals are applicable to Iranian ELT and EL postgraduate students who need help in learning how to cope adequately with the demands of increasing workload at postgraduate level.

Acknowledgements

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