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Iranian Journal of Language Teaching Research

Urmia University

Negotiated Strategic Awareness-raising at Postgraduate Level: Contributions to Reading Comprehension and Content Retention

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ABSTRACT

A formidable challenge facing many Iranian postgraduate English students is critically negotiating their course content which entails a well-developed strategic competence. This quasi-experimental study examined the effect of negotiated strategic awareness-raising (NSA-raising) on English Language Teaching (ELT) and English Literature (EL) postgraduate students' general reading comprehension (GRC) and content retention (CR). To serve the purpose, a sample of 39 ELT and 32 EL students was selected through convenience sampling from a pool of 130 postgraduates at Islamic Azad University of Tabriz based on their pre-test scores. The sample was then randomly assigned to two control groups, with no strategic orientation, and two experimental groups receiving content-integrated NSA-raising during a ten-session treatment and based on identical teaching materials for each pair of ELT and EL groups. ANOVA and Kruskal-Wallis analyses of the research data obtained from a standardized reading test tapping the participants' GRC and syllabus-based achievement tests, along with quarterly administered progress tests, measuring their CR showed significantly higher levels of achievement in both experimental groups. The findings underscore the effectiveness of content-integrated NSA-raising for postgraduate English students.

Keywords: content retention**;** negotiated awareness-raising**;** reading comprehension**;** reading strategy use

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ARTICLE HISTORY

Received: 13 Nov. 2017 **Revised version received:** 17 July 2019

Accepted: 18 June 2020 **Available online:** 1 July 2020

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Introduction

Despite ongoing controversy surrounding the nature of language learning, meticulous scrutiny of the interplay between learner-internal processing mechanisms and learner-external contextual variables since the 1980s has uncovered the social nature of the learning process. Learning is now viewed as a socially-oriented cognitive development process along the regulation continuum from object and other-regulation to self-regulation (Lantolf, 2006); it represents, as suggested by Lantolf and Thorne (2007), a joint activity that begins intermentally via higher-level mental operations involved in literacy that constitutes consciousness at the Zone of Proximal Development (ZPD) and then proceeds with the use of language as a mediating tool to assist learners to achieve self-regulation and critical consciousness (Freire, 1970) via negotiation or social talk. Ortega (2009) advocates the role of this social talk owing to the sustainable support it provides and the facilitative role it plays in assisting learners to reach stability in learning.

Awareness, according to the proponents of critical pedagogy, is the first step towards critical consciousness which has been regarded as the ultimate goal of education. Freire (1970) envisaged consciousness as a three-stage process encompassing intransitive, semi-transitive, and critical levels. The lowest level of intransitive consciousness, when applied to language learners, is witnessed in those who view their existing learning habits as unchangeable behavioural patterns which are ineffective and hope for some miraculous changes to happen. At the semi-intransitive level of consciousness, learners become aware of the obstacles but consider them as normal or accidental problems involved in any act of learning that can be resolved one at a time. It is only at the highest level of critical consciousness that learners become capable of detecting invisible traces that connect these deficiencies to the social and instructional systems in which such problems are quite rampant and consider themselves as responsible for overcoming them. At this level, they become self-regulated and willing to practice dialogue and interactively amend their own studying and learning habits.

At postgraduate level, candidates are assumed to have reached self-regulation in their receptive and productive literacy skills as a prerequisite for further academic development and expansion of critical consciousness that progresses mostly through reading comprehension which is a complex skill on its own. The intricacy emanates from the multiplicity of layers of the input data, on the one hand, and the social and dynamic nature of cognitive processing mechanisms that can be more or less controlled to penetrate various layers and decipher varying ranges of meaning depending on the readers' versatility and their perseverance to cope with the upcoming challenge. Under normal conditions, such strategic versatility in comprehension is achieved through exposure to premodified and interactively modified input at undergraduate levels (Ellis, 2015) when learners are engaged in interactive negotiation of meaning via teacher-led critical language awareness (Wallace, 1996). This is in line with the sociocultural conception of learning as a process of moving from other-regulation to self-regulation (Ortega, 2009). This functional shift enables students not only to comprehend the content but also to reflect on and critically evaluate overt and covert nuances of meaning.

The need for strategic awareness is more crucial for English language Teaching (ELT) and English Literature (EL) postgraduate students who have to go beyond linguistic content and target at more profound understanding via strategic, critical, and self-regulated reading comprehension to accommodate educational demands.

Iranian ELT and EL postgraduates are regarded as proficient learners who need to have developed a rich knowledge of English, reading strategies and metacognitive skills that permit analyzing, synthesizing, and evaluating the content and viably, as suggested by Lewis (2002), drawing implications for more practical spheres like teaching. Nevertheless, in the last few years, student admission regulations have been so excessively relaxed and drastically lowered that many

students who get admission to postgraduate courses suffer from lapses in their general English knowledge and their strategic competence. For years, gross negligence of this initial weakness in freshmen's organizational and strategic competences has exacerbated the perennial problem which now calls for immediate scrutiny for two reasons.

Firstly, English postgraduates' need for strategic versatility is utterly compelling because they have to digest a large body of technical content the profound understanding of which lay the solid foundation of their technical knowledge that will be utilized in their upcoming professional career. Secondly, many of these students will intentionally or inevitably end up in teaching English at private institutes owing to the insatiable demand for learning English and more restricted career opportunities in English Literature. It seems quite reasonable, thus, to attribute a more paramount role to various reading-related strategies that can help them adequately cope with the content they have to cover.

One way to mitigate the problem and help these postgraduates to sharpen their strategic, analytic, and critical reading is, according to Tracey and Morrow (2006), declaratively learning and practically proceduralizing a set of metacognitive reading strategies either through introspection and self-study or through strategic investment and negotiated strategic awareness-raising (NSA-raising) activities designed by teachers and educators. The significance of having a broad strategic repertoire that permits strategic adjustment to overcome blocks to understanding through monitoring has also been emphasized (Sheorey & Mokhtari, 2001). The Metacognitive Awareness of Reading Strategy Inventory (MARSI) was thus designed (Mokhtari & Reichard, 2002), and further adopted in length (Mokhtari, Dimitrov & Reichard, 2018) to measure this strategic repertoire. It encompasses three sets of strategies that are assumed to enable learners to tackle particular context-bound problems and to extend this performance to other similar but new situations.

Achievement of critical consciousness at postgraduate levels, however, depends greatly on the educational shift of what Freire (1970) called the banking to problem-posing education; the former considers learners as recipients of information whereas the latter aims at developing autonomous individuals capable of posing questions, analyzing problematic situations and evaluating various options to manage their learning. An inevitable element of problem-posing instruction seems to be metacognitive awareness-raising specially when language is integrated with content through content and language integrated learning (CLIL) (Coyle, Hood, & Marsh, 2010) particularly at postgraduate levels. Lasagabaster and Doiz (2016) undertook such a longitudinal examination of self-perceived improvements and instructional preferences of CLIL students' perceptions of such processes. They found that the participants' preferred group work and CLIL classes over three years of participation in CLIL at the Basque Autonomous Community, Spain. By the same token, Content and Metacognition Integrated Learning (CMIL) might be posited as an alternative form of instruction to address Iranian postgraduate learners' radical need for more autonomy-friendly techniques that aim to help those who lack metacognitive strategic knowledge upgrade their strategic and metacognitive versatility (Tavakoli, 2014).

Hence, the current enquiry set out to examine the impact of content integrated NSA-raising on postgraduate ELT and EL students' general reading comprehension (GRC) and content retention (CR). The following research questions were posed to serve the purpose:

1. Does NSA-raising have any significant influence on ELT and EL postgraduate students' GRC?
2. Does NSA-raising have any significant influence on ELT and EL postgraduate students' CR?

Review of Literature

The process of learning a second language can be described as strategic and pervasive research on language learning strategy, as suggested by Zhang, Thomas and Qin (2019), underscore the paramount importance of various types of strategies as autonomy boosters. More specifically, the re-emergence of scholarly research in reading and in the role of metacognitive processing while reading, in the last two decades (Mokhtari et al., 2018), provides evidence for the paramount role of strategies in teaching and learning how to read.

A wide range of correlational studies have explored reading comprehension and application of reading strategies in isolation and in relation to academic discipline. Sheorey and Mokhtari (2001) compared non-native English learners and Native American students' perception of their reading strategy use in reading academic texts. They found that learners with higher levels of cognitive awareness in both groups showed higher levels of reading comprehension. Reading comprehension has been found to be correlated with gender with significantly more frequent application of cognitive strategies (Oxford, Lavine, Felkins, Hollaway, & Saleh, 1996) and of metacognitive strategies (Sheorey, 1999) for females.

Employing interviews, analyses of oral reading and retellings, Kragler and Martin (2009) investigated six low, average and above-average first-grade students' reading comprehension, use of strategies and their metacognitive knowledge. The results underscored the role of talking about text, rather than explicit strategy training, in developing the students' reading comprehension proposing that such talks can serve to increasingly boost learners' consciousness of strategy use. However, Kragler, Martin and Schreier (2015) reported the capacity of young students to deliberately apply problem-solving strategies they had learned to nonfiction texts and emphasized that this strategic versatility would keep growing as long as strategic training continues.

In the context of Iran, Zarei (2002) investigated 74 Iranian university students' developmental conception of reading and metacognition processes and the effects of these processes on their reading performance across language proficiency. The results showed that compared to the conventional instruction in which no attention was paid to the students' 'construction of knowledge, metacognitive instruction could lead to a more comprehensive knowledge of the reading skill both at lower and higher levels.

Nine years later, Karbalaei (2011) conducted a comparative study to explore strategy teaching in terms of its effects on second and foreign language learners who were randomly selected from high, moderate, and low level college students studying in India and Iran. The results indicated that the treatment was effective on multiple-choice reading comprehension tests with no significant gender variation or interaction between proficiency and reading comprehension. A year later, Aghaie and Zhang (2012) examined how explicit presentation of reading strategies could affect Iranian EFL university students' reading comprehension and reported a significant effect. Jafari and Ketabi (2012) reported the same results with Iranian English-major university students. Mehrpour, Sadighi, and Bagheri (2012), however, emphasized the variable nature of strategy training which could effectively promote the use of some strategies with no parallel significant enhancement in the participants' comprehension.

In addition, Rahimi and Katal (2013) enquired the impact of metacognitive teaching on Iranian EFL learners' metacognitive awareness of listening strategies, listening comprehension, and oral language proficiency; they reported positive effects on the metacognitive awareness and speaking but not on listening comprehension.

More recently, Zarei (2018) correlated reading comprehension with both metacognitive strategies and reading self-efficacy of 119 Iranian undergraduate and postgraduate students majoring in English. The findings indicated that strategy use was significantly correlated with reading comprehension and self-efficacy. In the same year, Seifoori (2018) compared Iranian postgraduate English Teaching and English Literature students' metacognitive awareness of three sets of reading strategies and their reading comprehension. The findings revealed that the average levels of the participants in both areas were far from the standard expectations at postgraduate level and provided the impetus for the present enquiry.

In addition to reading comprehension, strategies have been found to impact pragmatic comprehension as well. In a recent study, Malmir and Derakhshan (2020) scrutinized the application of socio-pragmatic, lexico-grammatical and cognitive strategies by 40 Iranian male and female EFL learners in L2 pragmatic comprehension. The findings bore on the significant role of the three sets of strategies in comprehension of discourse and speech acts, use of appropriate linguistic forms and planning for comprehension in the light of contextual clues and schematic framework, respectively.

As evident from the review of empirical background, despite the pervasive concern with metacognitive strategy training in many ESL and EFL contexts, no study has addressed the possibility of integrating negotiated strategic awareness-raising into technical content teaching to explore the impacts on postgraduate ELT and EL students' GRC and CR. Therefore, the present study sought to bridge this gap.

Method

Participants

A sample of 71 ELT (N=39) and EL (N=32) postgraduates, within the age range of 24 to 38, was selected through convenience sampling from a pool of 130 postgraduate students at Tabriz Branch of Islamic Azad University to participate in this quasi-experimental study. They were taking two-credit courses of 'Principles of Teaching Language Skills (PTLS)' and 'Contemporary Drama (CD)', respectively. The participants were attending two ELT classes and two EL classes that were randomly assigned as the control ELT (CELT) and EL (CEL) groups and experimental ELT (EELT) and EL (EEL) groups for whom the instruction was the same apart from the NSA-raising treatment. In all four groups, males (N = 15) were disproportionate to females (N = 56) in number. Most of the participants spoke Azeri Turkish as their mother tongue, Persian as their second language, and had learned English as a third Language.

Instruments

Four instruments were employed to collect the research data: a GRC test selected from the reading sections of different TOEFL tests, four formative progress tests, two teacher-made final essay type syllabus-based tests developed by the assistant professors teaching the classes, and the MARSI (Mokhtari & Reichard, 2002).

A TOEFL-driven GRC test was employed to measure the first dependent variable. This test comprised short reading passages, selected from different TOEFL mock exams, each followed by six multiple choice comprehension items and making a total of 30 items. To answer the questions correctly, the test takers needed to use different reading strategies in 45 minutes. The purpose of this test was to tap the participants' comprehension of general English texts. The test was first

piloted with participants sharing the characteristics of the target group rendering a Cronbach's coefficient alpha reliability of .87.

The second dependent variable was retention of course content. For some reasons, this variable was operationalized as the participants' performances on four formative syllabus-driven progress tests assessing their understanding of the technical information presented incrementally in the four ELT and EL classes during the course. First of all, the participants in this study came from two disciplines; therefore, it was not feasible to administer a syllabus-based pre-test the results of which could be compared with their post-test performance on a uniform content-based test. Secondly, CR was proved to be more longitudinal in nature and called for a delayed evaluation of the teaching content. Moreover, based on the university regulations, postgraduate students achieve merely 30% of the final score based on process-oriented evaluation techniques and the remaining 70% is attained on the final exam. Hence, the instructors decided to operationalize CR as the participants' performance on quarterly-administered progress quizzes and the syllabus-based final exams.

The quizzes were in fact teacher-made progress exams that could not be validated. However, to increase the content validity, the instructors based the test content on the course content, asked two internationally licensed experts to review the tests and adhered to standardized administration by keeping the testing conditions and time constant in all classes. In addition, two syllabus-based essay-type tests were also administered as final exams. The participants' CR was quantified as the sum of their performance on these five exams.

It was assumed that the formative quizzes would provide the incentive for the students to study and tap their retention of the content presented during the course. CR in English courses is heavily reliant on the students' reading comprehension skill which, according to experts, comprises a number of reading strategies that enable the reader to detect and understand nuances of meaning despite restriction in linguistic resources (e.g., Nation & Newton, 2009). Hence, it is viable that any kind of CR be construed as closely dependent on the comprehension of the written input. The link may further be justified with respect to the significance of comprehension as an initial stage in concept formation and CR. Concepts might originate or take shape when various features of the input are noticed and linked to already existing notions, and thereby, changing input into intake which is available for further use in production (Ellis, 2015). Therefore, it was assumed, in the current enquiry, that since the four groups were initially homogeneous in their reading comprehension, probable significant variation in their retention of the course content could be attributed to the influence of the NSA-raising on the quality of their study.

The quizzes and the final exams were developed by EL and ELT assistant professors who were internationally licensed teacher trainers and had been teaching the same content for more than 10 years. The tests were further reviewed by two other experienced professors to ensure their content validity. Each quiz contained three questions each carrying one score, making a total of 3 for each quiz and 12 for all classroom quizzes that were administered during the second 20 minutes of the session. Overall, 156 ELT and 128 EL answer sheets were collected at the end of the course including 4 quizzes for 39 ELT students making a total of 156 answer sheets, and another four quizzes for 32 EL students making another total of 128 sheets. Twenty percent of the ELT (N = 35) and EL (N = 20) answer sheets were rescored by the same ELT and EL professors who had verified the content of the tests. The two sets of scores obtained were further analysed and the estimated inter-rater reliability was proved to be acceptably high (.76). Next, the sum of the participants' total scores on the classroom quizzes was further divided by 2 to render a score of 6 which was later added up to the final score of 14 to make a total of 20.

MARSI, the third instrument employed, was a 5-point Likert-scale comprising 30 items measuring adolescent and adult second language learners' perceived use of Global Reading Strategies (GRSs)

(items 1, 3, 4, 7, 10, 14, 17, 19, 22, 23, 25, 26, 29), Problem-Solving Reading Strategies (PRSs) (items 8, 11, 13, 16, 18, 21, 27, 30) and Support Reading Strategies (SRSs) (items 2, 5, 6, 9, 12, 15, 20, 24, 28). GRSs aid an overall analysis of the written input. PRSs include strategies that help learners tackle textual difficulties, and SRSs tap readers' metacognition, (Kuhn & Dean, 2004). Individual scores are inserted by the respondents and added up in each part to obtain a total score for each individual that is interpreted based on a set of guidelines to reflect the respondents' perceived use of metacognitive awareness of reading strategies.

The validity of the scale had already been established by Mokhtari and Reichard (2002, p. 252) through principal-axis factor analysis using three factors and an oblique Harris-Kaiser rotation. They also calculated Cronbach's alpha for each subscale and grade level which fell within the .89 to .93 range. The total sample's reliability was also found to be .93. This scale was initially piloted in a group of 30 Iranian English university students sharing the characteristics of the target participants. The internal consistency of the questionnaire calculated through Cronbach's alpha was found to be .87, indicating the high reliability of the device.

Procedure

The research procedure began by measuring the four participating groups' metacognitive awareness and their reading comprehension. Hence, the MARSI and the general RC test were administered to tap the participants' GRC and metacognitive awareness of reading strategies. The two ELT and two EL groups were further randomly assigned to experimental and control groups. Because the participants were majoring in two different disciplines, it was impossible to employ the same teaching materials and each followed their pre-planned course syllabi, which was focused on the *PTLS* in the ELT groups and on *CD* in the EL groups.

The focus in the PTLS and CD courses was on the participants' analytic understanding of the materials and their ability to evaluate the findings at a more general scope. For instance, in the ELT groups, the first lesson was focused on parts and goals of a listening and speaking course (Nation & Newton, 2009) which emphasized the importance of including meaning-focused input and output, deliberate language learning and fluency development in teaching language skills. While covering the content, a number of questions were posed that called for the application of target reading strategies presented. The same procedure was employed in the EL classes based on the literary content of the course.

In the control groups, the first session was devoted to the introduction of the course and course objectives based on the relevant course syllabus, delineating the course requirements, answering the participants' questions, and activating their schematic knowledge of the course content. In the experimental groups, however, the first session was divided into two main phases. During the first 45 minutes, the course was introduced based on the same set of procedures as the control groups. The second phase, however, was allotted to negotiated presentation of reading strategies. Initially, the participants were asked questions about how they managed their reading when facing comprehension problems. Then, their views on three sets of reading GRSs, PRSs and SRSs were asked and the role of these was negotiated along with the categorization of the strategy types. The function of each set was highlighted and, as assignment, they were asked to order them based on the frequency of their use of the strategies while reading and to mark the least frequently employed ones. They were reminded that the following sessions would start with a discussion of the strategies.

From the third session on, 20 minutes of each session was allocated to negotiated introduction of three of the strategies starting with GSs the first session and moving on to PRSs and SRSs the

second and the third session. In each session, three of the specified strategies were reviewed interactively with reference to the participants' prior reading experiences. For instance, in the first session the participants were asked about the text difficulty and problems they encountered while reading it. Then, the instructor highlighted the *need to have a purpose in mind*, *think about their background information on the topic* and *preview the text*. The participants' comments regarding their probable use of similar strategies or alternative techniques of resolving reading problems were heard and discussed. Then, they were required to apply the given strategies on the materials they had previewed for the same session and explain how the strategies could facilitate the reading process.

In the control groups, however, the same amount of time was initially spent on engaging the participants in stating their understanding of the content and discussing the main concepts in relation to previous materials with no reference to reading strategies. They were also given time to discuss their interpretations and raise questions. All the participants were required to write reports summarizing their understanding of the content on a weekly basis.

Throughout the course, the ELT participants were required to challenge the ideas expressed in the materials, link them to their own experiences, and evaluate applicability of them in a typical English classroom in the local context. EL postgraduates, however, were engaged in literary analysis of the dramas they were covering and were assigned tasks compatible with course objectives. They were required to interpret the assigned dramas from different perspectives with a focus on various features like theme, characterization, plot, and point of view. They were also required to compare and contrast the same features in different dramas covered. Both groups were further recommended to employ the same strategies in order to get a faster and deeper comprehension of the materials and get prepared for critical evaluation of the content in the upcoming sessions. This procedure went on for ten treatment sessions in both experimental groups. Every four sessions, a content-based essay type quiz was administered to all groups to elicit the participants' analytic and evaluative understanding of the course content.

Results

Prior to any analysis, the normality of the research data was checked through Kolmogorov-Smirnov and Shapiro-Wilk tests.

Table 1
Tests of Normality for the Research Samples' Reading Comprehension (RC) and Metacognitive Awareness of Reading Strategy Inventory (MARSI) Pre-test Scores

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
GRC	.147	71	.051	.971	71	.093
MARSI	.102	71	.065	.959	71	.020
GRC2	.109	71	.036	.981	71	.345
CR	.129	71	.005	.933	71	.001

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

The results of the normality test revealed that scores were normally distributed for the general reading comprehension (GRC) pre-test, $p = .051 > .05$, the MARSI scores $p = .065 > .05$, and the RC scores, $p = .345 > .001$. However, the data were not normally distributed for the participants' CR scores, $p = .005 < .05$. Next, the descriptive statistics of the four groups' RC and MARSI pre-test scores were calculated. Table 2 presents the results.

Table 2
Descriptive Statistics of the Four Groups' MARSI and RC Pre-test Scores

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
RC	CELT	18	16.77	3.15	.74	15.20	18.34	12.00	22.00
	EELT	21	15.52	2.80	.61	14.24	16.80	10.00	20.00
	CEL	19	16.84	2.21	.50	15.77	17.91	14.00	22.00
	EEL	13	15.76	1.83	.50	14.66	16.87	13.00	19.00
	Total	71	16.23	2.62	.31	15.61	16.85	10.00	22.00
MARSI	CELT	18	102.50	4.34	1.02	100.34	104.65	94.00	109.00
	EELT	21	96.90	10.20	2.22	92.26	101.54	70.00	109.00
	CEL	19	99.73	7.91	1.81	95.92	103.55	84.00	119.00
	EEL	13	93.53	9.55	2.64	87.76	99.31	82.00	112.00
	Total	71	98.46	8.71	1.03	96.40	100.52	70.00	119.00

As revealed in the Table, slight differences were observed in the groups' pre-test scores. To further check the significance of the differences, the means were compared via one-way between-groups analysis of variance (ANOVA), the results of which are presented in Table 3.

Table 3
ANOVA for the RC and MARS Pre-test Scores

		Sum of Squares	df	Mean Square	F	Sig.
RC	Between Groups	25.74	3	8.58	1.26	.294
	Within Groups	455.18	67	6.79		
	Total	480.93	70			
MARSI	Between Groups	690.43	3	230.14	3.33	.025
	Within Groups	4625.22	67	69.03		
	Total	5315.66	70			

Table 3 indicates no statistically significant difference between the groups' GRC: $F(3,455) = 1.26$, $p = .01$, hence, confirming the groups' initial homogeneity in their general RC. The groups, however, differed significantly in terms of their MARSI scores: $F(3,4625) = 3.33$, $p = .01$, and the Tuckey test was run to precisely locate the difference. Table 4 illustrates the findings.

Table 4
Multiple Comparisons of the Groups' MARSI Pre-*test Scores*

Tukey HSD Dependent Variable	(I) Training	(J) Training	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
MARSI	CELT	EELT	5.59	2.66	.165	-1.43	12.62
		CEL	2.76	2.73	.744	-4.43	9.96
		EEL	8.96*	3.02	.021	.99	16.92
	EELT	CELT	-5.59	2.66	.165	-12.62	1.43
		CEL	-2.83	2.63	.705	-9.76	4.09
		EEL	3.36	2.93	.661	-4.35	11.09
	CEL	CELT	-2.76	2.73	.744	-9.96	4.43
		EELT	2.83	2.63	.705	-4.09	9.76
		EEL	6.19	2.99	.173	-1.68	14.07
	EEL	CELT	-8.96*	3.02	.021	-16.92	-.99
		EELT	-3.36	2.93	.661	-11.09	4.35
		CEL	-6.19	2.99	.173	-14.07	1.68

*. The mean difference is significant at the 0.05 level.

As it is shown in the Table, the difference between the EEL (M = 93.53) and the CELT (M = 102.50) reached significance level. Generally, strategy awareness and use are part of individual differences and it is quite logical to observe such variations among English students. Moreover, this initial difference might be substantiated with regard to the fact that some of ELT students pursue their postgraduate studies after years of teaching and get to know about strategies either as part of various teacher training courses they do or as part of lesson planning. EL students, on the other hand, are less likely to enter the teaching career or to have formed the same strategic awareness.

The Effect of NSA-raising on General RC

The first research question addressed the impact of the negotiated strategic awareness-raising (NSA-raising) on the participants' general RC. The first step was to calculate the descriptive statistics of the groups' post-test scores, as depicted in Table 5.

Table 5
Descriptive Statistics of the Groups' RC Post-test Scores

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
RC	CELT	18	18.44	3.09	.73	18.23	21.31	16.00	26.00
	EELT	21	20.90	3.06	.66	17.36	20.15	14.00	25.00
	CEL	19	15.89	1.59	.36	15.12	16.66	13.00	19.00
	EEL	13	20.30	2.01	.55	19.08	21.52	17.00	23.00
	Total	71	18.53	3.04	.36	17.81	19.25	13.00	26.00

Differences were observed in the participants' RC post-test scores with the experimental ELT (EELT) (M = 20.90) and EL (EEL) (M = 20.30) groups outperforming the control ELT (CELT) (M= 18.44) and EL (CEL) (M = 15.89) groups. Since the scores were not normally distributed, a Kruskal-Wallis test was conducted to verify the first null hypothesis; Table 6 presents the results.

Table 6
ANOVA for the Groups' RC Post-test Scores

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	285.15	3	95.05	28.32	.001
Within Groups	224.81	67	3.35		
Total	509.97	70			

The results, as illustrated in Table 6, showed a statistically significant difference at the p< .05 level in RC scores for the four groups, F (3, 67) = 28.32, p = .001, verifying the significance of the difference among the groups and the effect size, calculated using eta squared (.55), showed that the difference in mean scores between the groups was large (Cohen, 1988). Hence, the Tukey post-hoc test was run to find out the difference more precisely. The results are presented in Table 7.

Table 7
Multiple Comparisons of the Groups' RC Post-test Scores

(I) Training	(J) Training	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CELT	EELT	-2.46*	.58	.000	-4.01	-.91
	CEL	2.54*	.60	.000	.96	4.13
	EEL	-1.86*	.66	.033	-3.61	-.10
EELT	CELT	2.46*	.58	.000	.91	4.01
	CEL	5.01*	.57	.000	3.48	6.53
	EEL	.59	.64	.792	-1.10	2.30
CEL	CELT	-2.54*	.60	.000	-4.13	-.96
	EELT	-5.01*	.57	.000	-6.53	-3.48
	EEL	-4.41*	.65	.000	-6.15	-2.67
EEL	CELT	1.86*	.66	.033	.10	3.61
	EELT	-.59	.64	.792	-2.30	1.10
	CEL	4.41*	.65	.000	2.67	6.15

*. The mean difference is significant at the 0.05 level.

Post-hoc comparisons using the Tukey HSD test revealed no significant difference in the EELT group (M = 20.90, SD = 1.61) mean score compared to that of the EEL group (M = 20.30, SD = 1.59), p > .05. Moreover, both experimental groups significantly outperformed the control groups (ELT: M = 18.44, SD = 2.07) and (EL: M = 15.89, SD = 2.01), p < .05. It was also found that the CELT group did significantly better than the CEL group on the general RC test, p < .05. This superior performance might be associated to their initial superiority in MARSI. That is, as was already shown in Table 2, the average metacognitive awareness (M = 102.50) of the CELT group was significantly higher than the other groups and may explain their superiority in general RC compared to the CEL group (M = 99.73). The difference might also be explained in terms of the attitudes of EL students who were more interested in literary texts and might not have taken the GRC test seriously enough. Therefore, the answer to the first research question was positive..

The Effect of NSA-raising on CR

It was already indicated in Table 1 that the CR post-test scores were not normally distributed. This is quite understandable since this distribution represents the results of achievement tests the

scores of which might not be normally distributed. The descriptive statistics of the groups' CR post-test scores were first calculated and are presented in Table 8.

Table 8
ELT and EL Groups' RC Post-test Scores

Descriptives								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CELT	18	15.41	2.55	.60	14.14	16.68	10.00	19.50
EELT	21	17.34	1.75	.38	16.54	18.14	13.00	19.50
CEL	19	15.15	2.16	.49	14.11	16.20	12.00	19.50
EEL	13	17.38	2.21	.61	16.04	18.72	12.00	19.50
Total	71	16.27	2.37	.28	15.71	16.83	10.00	19.50

As it is evident in Table 8, some differences were observed particularly among the experimental groups and the control counterparts with EEL group achieving the highest mean score (M = 17.38) followed by EELT group (M= 17.34), CELT group (M = 15.41) and CEL group (M = 15.15), respectively. Since the homogeneity of the variances for the CR scores was not verified, $p < .05$, the Kruskal-Wallis test was run to compare the groups' CR scores, as indicated in Table 9.

Table 9
Kruskal-Wallis Test of Groups' Reading Comprehension (RC) Post-test Scores

Test Statistics[a,b]	
	CBR
Chi-Square	14.73
df	3
Asymp. Sig.	.002
a. Kruskal Wallis Test	
b. Grouping Variable: Training	

As illustrated in Table 4, the Kruskal-Wallis test revealed a statistically significant difference in CR scores across the four groups, χ^2 (3, n = 70) = 14.73, p = .002. Yet, to locate the difference, each pair of experimental and control groups were compared via Mann-Whitney U test, as suggested by Pallant (2010).

Table 10
Mann-Whitney U Test of the ELT Groups' Reading Comprehension (RC) Post-test Scores

Ranks				
	Groups	N	Mean Rank	Sum of Ranks
CBR	CELT	18	15.36	276.50
	EELT	21	23.98	503.50
	Total	39		

Test Statistics[b]	
	CBR
Mann-Whitney U	105.500
Wilcoxon W	276.500
Z	-2.364
Asymp. Sig. (2-tailed)	.018
Exact Sig. [2*(1-tailed Sig.)]	.017[a]
a. Not corrected for ties.	
b. Grouping Variable: Groups	

The results of the Mann-Whitney U Test revealed a significant difference in the CR post-test mean ranks of the CELT (*Md* = 15.36, *n* =18) and that of the EELT groups (*Md* = 23.98, *n* = 21), *U* = 105.500, z = –2.364, *p* = .018, *r* = -.37.

The same procedure was followed to compare the CEL and EEL groups' CR scores and the results are presented in Table 11.

Table 11
Mann-Whitney U Test of the ELT Groups' Reading Comprehension (RC) Post-test Scores

	Ranks			
	ELGROUPS	N	Mean Rank	Sum of Ranks
CBR	CEL	19	12.87	244.50
	EEL	13	21.81	283.50
	Total	32		

Test Statistics[b]	
	CBR
Mann-Whitney U	54.500
Wilcoxon W	244.500
Z	-2.660
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.007[a]
a. Not corrected for ties.	
b. Grouping Variable: ELGROUPS	

The results indicated a significant difference in the CR post-test scores of the CEL (*Md* = 12.87, *n* =19) and the EEL groups (*Md* = 13.98, *n* = 21.81), *U* = 54.500, z = –2.660, *p* = .008, *r* = -.47.

Discussion

The findings reported here evidenced the effectiveness of NSA-raising in promoting postgraduate ELT and EL participants' GRC and CR. The findings accentuate the significant role of NSA-raising. Although no previous quasi-experimental study has been undertaken to compare the effectiveness of NSA-raising on ELT and EL postgraduates' GRC and CR, the findings of the present study might be compared with the findings emerging from other forms of strategic training attempts. They lend support to previous findings that confirmed effectiveness of meta-pragmatic awareness-raising in making complaints (Cruze, 2015), metacognitive awareness of reading strategies on reading comprehension (Jafari & Ketabi, 2012; Seifoori, 2014).

The findings, however, can be contrasted with those of Kragler and Martin (2009) who interviewed learners to assess their strategy use and metacognitive awareness. They suggested that text-based negotiations could raise learners' strategic awareness, and thereby, their reading comprehension more effectively than explicit strategy training.

The facilitative role of NSA-raising might be corroborated in terms of critical pedagogy the ultimate goal of which, as postulated by Freire (1970), is to save students by transforming them from being objects of education to subjects of their own autonomy. This is possible through transforming what he calls banking education into problem posing education (Freire, 1970). In the former, teachers deposit knowledge in dehumanized students who are supposed to receive,

memorize, and repeat the information without questioning its very nature or using it as a basis for approaching, analyzing and resolving current problems. The latter, however, links literacy to immediately relevant issues that are of personal and social concern and stimulates the quest for critical consciousness and intervention in reality. The first step in achieving this consciousness seems to be awareness-raising.

In fact, postgraduate students' right to become metacognitively aware will be violated if consciousness-raising is not taken seriously. Violation and discrimination can be interpreted at a macro level of ethnical and social injustice which emanates from dominant political tendencies or at a micro level of personal and educational inequity which originates from inefficiency of educational systems and instructional programs that fail to address the learners' rudimentary needs, and thereby, violate their very right to know and learn effectively.

A viable way to withdraw or ameliorate this threat might be to integrate strategic awareness-raising into the course content to compensate for lapses in postgraduate students' strategic competence. The point of departure in all training sessions was the participants' personal experiences and interpretations. This was compatible with the focus in critical pedagogy on active engagement of the learners in the learning process and the need for teaching to emerge from experience of learning (Freire, 1970). Classroom experiences were seized as opportunities to encourage students to actively review their past experiences, identify their persistent problems, and raise their strategic awareness as the first step to developing critical consciousness. The interactive development of this cognitive bedrock seems to have enabled the participants not only to evaluate the validity of the input they received but also to retain the course content they had covered meaningfully.

The effectiveness of the NSA-raising program was also reinforced by the incentive provided for the participants not to submit to the writers' viewpoints but to challenge them based on the strategies they had learned and applied interactively through negotiation of the grounds on which the ideas could be criticized. ELT students were also expected to draw implications applicable to the context in which they were to teach. This involved critical analysis and evaluation of the materials and the existing educational variables through interactive negotiation. During such interactions, the teacher performed the role of an authority in the subject who was ready to learn from the participants' experiences and share with them what they could learn through interaction (Freire, 1998) to become a co-agent whose authority directed the classroom procedure and stimulated reflection and responsibility on the part of the learners. Addition of this social and interactive orientation seems to have shifted the participants' naïve or intransitive consciousness to critical consciousness.

The same negotiated critical language awareness and reading of the content, as underscored by Wallace (1996), can corroborate the findings. The materials were purely technical and well beyond the participants' current familiarity and understanding. The texts did not represent products to be linguistically tackled; rather, the focus was on critical strategic reading in the sense of asking the readers to take a psychic distance to show impartiality and critical detachment from partly known concepts so that they could apply the set of presented strategies to obtain a more profound understanding of the conceptual content. The process of interpreting the texts strategically recurred again and again throughout the course and seems to have promoted the participants' GRC and CR.

Additionally, the significant superiority of the control ELT group over the control EL group in GRC might be attributed to the participants' test performance. The EL students who were focused on literary texts might have failed to establish the relevance of the general texts to their needs and goals. This could have led to their underestimating the whole test. The ELT participants who were unaccustomed to literary texts, however, could have related to the test

more meaningfully. What reinforces this interpretation is the non-significant difference in both groups' performance on the content-based test.

Conclusion

The superior performance of the experimental groups in GRC and CR indicated their success in seizing the assets of metacognitive strategies to sharpen their ability to guess and infer about ambiguous parts of the content and to bridge the chasms. Thus, using Eskey's interpretation (2005), it can be concluded that the metacognitive knowledge that was established interactively and the metacognitive experience that was exercised by the participants during the NSA-raising intervention seem to have promoted the participants' ability to manage their thinking while processing texts. Secondly, the findings allude to the social nature of learning in general and cognitive development at postgraduate level where course delivery should be carried out interactively via personalized learning experiences that aim at developing critical consciousness.

The findings and the conclusion accentuate the interactive and strategic nature of reading particularly at postgraduate level and the learners' need to be strategically aware, as already evidenced in research findings (Atai & Hashemi, 2018). Hence, the findings offer a number of implications for English teachers and professors who are recommended to cultivate a more strategic approach in their teaching. This can be achieved in general English courses through proportionate strategic awareness-raising activities that are incorporated into the normal course content. Moreover, teacher trainers are recommended to add a strategic element to teacher training programs in order to familiarize prospective and practicing teachers with the key role of learner strategies and ways of introducing them in the classroom. In addition, syllabus designers and material writers can facilitate the process of strategic learning by adding relevant activities and tasks to various sections of coursebooks and providing opportunities for learners to practice them in order to optimize the effect of instruction and perpetuate its effectiveness over time.

Such a strategic orientation should start early on in the process of learning to help students internalize strategic knowledge, proceduralize it into their reading performance and generalize it to out-of-class situations to gain autonomy. At post-graduate, professors are recommended to review course objectives and analyse postgraduate students' needs to find out probable mismatches and design similar needs-based programs particularly in reading-oriented courses to give breadth and depth to their students' learning.

The study suffered from a number of limitations and delimitations like small sample size and the relatively subjective nature of the syllabus-based tests employed to tap the participants' CR. More longitudinal studies with larger samples are required to explore learners' perception of the activities undertaken and their preferences for various features of such programs. Thus, interested researchers are suggested to replicate the study with larger samples and viably by considering the effect of individual differences like age, learning style and attitudes to obtain a broader picture and complement the findings from the current study.

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Acknowledgements

The author would like to thank This Branch, Islamic Azad University for the financial support of this research, which is based on a research project contract.

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