Online Reading Strategy Use and Gender Differences: The Case of Iranian EFL Learners

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Abstract: This study investigated the online reading strategies used by Iranian EFL students and the differences between male and female learners in terms of online reading strategy use. It also made an attempt to answer the question of whether skilled strategy users in the offline environment are skilled strategy users in the online environment. Participants in this study were 30 students (15 males and 15 females) selected from among 50 MA students at IAU University of Shahreza, Iran. The Survey of Reading Strategies (SORS) and Online Survey of Reading Strategies (OSORS) were adapted to the purposes of this study. The results indicated that participants used online reading strategies moderately. Problem-solving strategies and global reading strategies were used the most. The findings revealed while there were no overall significant differences between males and females in terms of online reading strategy use, they did differ significantly on a number of individual strategies. The findings also indicated that active strategy users in the offline environment were active strategy users in the online environment. The findings hold implications for EFL teachers, students, material developers, and for researchers.

Keywords: Reading skill; Online reading strategies; Learning strategies; English proficiency

1. Introduction

Reading is one of the main four skills that a learner needs to master in order to ensure success in learning. According to Anderson (2003), reading is the interaction of four things: the reader, the text, the fluent reading, and strategic reading. Today, texts, especially academic texts, can be found in either print or online environments. Nowadays, educational institutions such as universities and schools provide their students with more online classes; news corporations provide online newspapers; and publishers release more online books and journals. Therefore, a large amount of reading is carried out in the online environment. As a result, reading in the online environment is becoming more popular for most people, especially teachers and students.

Over the last three decades, the focus of a great deal of research studies has been on the role of strategies in the second language learning (Anderson, 1991; Cohen, 1990; Karbalaei, 2010; Mokhtari, & Reichard 2004; Malcolm, 2009; O'Malley, & Chamot, 1990; Oxford, 1990; Rubin, 1975). The findings of these studies indicate that language learners utilize strategies in an active way to fulfill their learning goals. In the context of reading, Garner (1987) defined reading strategies as "generally deliberate, planful activities undertaken by active learners, many times to remedy perceived cognitive failure" (p. 50). She claimed that these strategies help language learners in building meaning and facilitating reading comprehension. However, the strategies to use for reading online are not necessarily the same as those used for reading in print. Thus, this study set itself the goal of answering the following research questions:

1.What online reading strategies do the participants use when reading English texts online?

2.Are there any significant differences between male and female participants in terms of online reading strategy use?
3.Are active strategy users in the print environment active strategy users in the online environment?

2. Literature Review

Over the last three decades there has been a great focus on learners and learning rather than teachers and teaching. Much of the research conducted in this area has been influenced by developments in cognitive psychology (Williams, & Burden, 1997). The focus of most of such studies has been on the process of new information by learners, the strategies used by learners to understand, learn, or remember the new information, and the variables influencing learners' choice of strategies. O'Malley and Chamot (1990), Oxford (1990), Oxford and Cohen (1992), Cohen (2007), and many others studied strategies used by language learners during the process of foreign language learning. Wenden and Rubin (1987) defined learning strategies as "... any sets of operations, steps, plans, routines used by the learner to facilitate the obtaining, storage, retrieval, and use of information." (p. 19). Cohen (2007) holds that language learner strategies are "conscious or semi- conscious thoughts and behaviors employed by learners, often with the intention of enhancing their knowledge about and performance in a second language (L2)" (p. 57).

As for reading, there are three subcategories in the categorization of reading strategies. Global reading strategies are those strategies that language learners utilize to plan, regulate, and evaluate their reading (Pookcharoen, 2009). Setting a purpose for reading, activating prior knowledge, and verifying whether the content fits the purpose are examples of global reading strategies. Problem-solving strategies contain strategies or steps that language learners take to enhance and improve comprehension difficulties. Adjusting reading speed, paying closer attention to reading, and pausing to reflect on reading are examples of problem solving strategies. Support strategies are techniques or materials that second language readers use when problem-solving strategies are not sufficient in achieving comprehension. Taking notes, paraphrasing text information, and using a dictionary are examples of support reading strategies.

2.1 Gender and Second Language Reading Strategies

Unlike the research on language learning and second language learning studies, there have been few studies on the subject of gender and reading strategies. The findings of such studies do not show greater strategy use for either males or females. Phakiti (2003) in his study explored male and female differences in reading strategy utilization. He found that while there were no significant differences between males and females in terms of the cognitive strategies, males used significantly more metacognitive strategies than females did. Sheorey and Mokhtari (2001) examined the metacognitive, cognitive, and support strategies of second language readers. The findings revealed no significant overall differences between males and females. Finally, Young and Oxford (1993), interested in the strategies used while reading passages in both English and Spanish, found insignificant differences between males and females. Although the data gathered from such studies cast light on gender differences and strategy use, more and more research needs to be conducted to draw general conclusions about gender and strategy use.

2.2 Research on Online Reading Strategy Use

In comparison with the abundant research conducted in the area of reading strategies in the print environment, relatively few studies have investigated the online reading strategies in the online environment. Zaki, Hassan, and Razali (2008) investigated the difference between online and offline reading strategies used by second language readers. According to the results, global, support and problem-solving strategies lead to better reading comprehension.

The type of online reading strategies and their classifications in the online reading environment have been the focus of recent studies. Elshair (2002) conducted a qualitative study and used think-aloud while Anderson (2003) conducted a quantitative study and used questionnaires. Elshair (2002) pointed out that it was important to include both text-related and web-related strategies when reading online texts. To compare ESL and EFL students' different use of online reading strategies, Anderson (2003) created the Online Survey Of Reading Strategies (OSORS). This questionnaire was adapted from Survey Of Reading Strategies (SORS) (Sheorey & Mokhtari, 2001). He found no differences between the subjects in the study and in the use of global and support reading strategies between the two groups.

Chang (2005) investigated the effects of self-regulated and self-monitoring strategies to ease learning in web-based environment. According to the findings of this study, self-regulated strategies made the students more responsible for their learning and self-monitoring strategies had a positive effect on academic achievement among both more proficient and less proficient learners. Poole (2008-2009) investigated the relationship between the utilization of online reading strategies and the overall reading proficiency. The results demonstrated a significant relationship between strategy use and reading proficiency. Hsieh and Dwyer (2009) found that different reading strategies had different instructional structures and functions in facilitating student achievement of different types of learning objectives. Huang, Chen, and Lin (2009) examined EFL learners' online reading strategy use and the effects of online reading strategy use on comprehension. According to the findings, global strategies played the most significant role and led to better comprehension.

3. Methodology

3.1 Participants

The participants in this study were 30 students (15 males and 15 females) were selected from 50 MA students majoring in Teaching English as a Foreign Language (TEFL) and English Language Translation in IAU University of Shahreza, Iran. They were selected based on their Oxford Placement Test scores. Those students who scored above 75 were selected for the purposes of the study. They were all in their first or second year of study. From these 30 students, 16 students were chosen to answer the third research question.

3.2 Research Instruments

The Oxford Placement Test (OPT) was administered to ensure the selected participants were linguistically homogeneous. To collect information about the participants' offline and online strategy use an adapted version of the Survey Of Reading Strategies (SORS), developed by Mokhtari and Sheorey (2002), and an adapted version of the Online Survey Of Reading Strategies (OSORS) (Anderson, 2003) were used. Finally, an Internet Use Questionnaire (IUQ) was used to elicit general information about the participants' personal background and their ability and experience with reading on the Internet.

3.3 Data Collection

An OPT was administered to 50 MA students as mentioned above. Then, an IUQ was administered. Finally, for the purpose of the current research, 30 students were chosen from the participating students based on their OPT scores and their responses to the IUQ.

Participants were divided into two male and female groups, 15 each. For the sake of answering the third research question another group, called strategic readers group, was formed. The members of this group were selected from among those participants who indicated a high level of strategy use when answering the

questionnaire (OSORS). In order to answer the first and second questions of the study, the participants (male and female groups) were asked to read three online passages in the computer laboratory of the university (available online at http://onlinereading.mihanblog.com/post/author/437814). After reading the text, an Online Survey Of Reading Strategies (OSORS) was administered to identify the online reading strategies used by participants. In order to answer the third question, the participants of the strategic reader group read the print version of the above-mentioned passages and were asked to fill in the SORS to recognize the offline reading strategies. Finally, the results were compared.

3.4 Data Analysis

Descriptive statistics and t-tests were used for data analysis. The mean and the standard deviation of each SORS and OSORS item were calculated and interpreted using score interpretation suggested by Oxford and Burry-Stock (1995):
Mean of 3.5 or higher = High
Mean of 2.5 to 3.4 = Medium
Mean of 2.4 or lower = Low

To see whether the difference between male and female learners in terms of online reading strategy use was significant an independent-samples t-test was used. Moreover, to examine whether active strategy users in the print environment were active strategy users in the online environment a paired-samples t-test was applied.

4. Results

4.1 The Results for the First Research Question

The first research question aimed to identify the online reading strategies reported to be used by Iranian EFL students who participated in this study.

As depicted in Table 1 (see Appendix), the participants used each item with varying degrees of frequency. The means of OSORS items range from 1.63 to 4.13. According to the results, the mean for the overall strategy use was 3.08. The most frequently used strategies were *no. 16 Paying closer attention to reading* (M= 4.13) followed by *no. 32 Guessing meaning of unknown words* (M= 3.96) and *no.1 having a purpose in mind* (M= 3.86). The least frequently used strategies were *no.* 4 *Taking notes while reading* (M= 1.63), *no.* 3 *Live chatting with native speakers* (M= 1.90) and *no. 7 Reading aloud when text is hard* (M= 1.96).

Table 1 reveals that the learners utilized problem-solving strategies the most (M= 3.50), global reading strategies the second most (M= 3.19), and support reading strategies the least (M= 2.35). Based on Oxford and Burry-Stock's (1995) score interpretation explained before, 6 items from global reading subcategory (15.38%) and 6 items from problem-solving subcategory (15.38%) fell in the high usage group, while there was no item from support strategies subcategory in the high usage group. There were 12 items from global reading subcategory (31%), 4 items from problem-solving subcategory (10.25%), and 4 items from support reading subcategory (10.25%) in the medium usage group. Lastly, for the low usage group, there were 2 items from global reading subcategory (5.12%), 5 items from support reading subcategory (12.82%), and no item from problem-solving subcategory. Of all 39 strategies, 12 strategies (31%) were used at the high level, 20 strategies (51%) were used at medium level, while only 7 strategies (18%) were used at low level. Therefore, the majority of the strategies used by participants fell in the medium level, which indicates that they used these strategies on a relatively regular base.

4.2 The Results for the Second Research Question

The second research question was related to the differences between Iranian male and female EFL students' online reading strategy use and the significance of such differences. To determine statistically if there were significant differences between male and female readers in terms of overall strategy use, a t-test was administered.

Table 2. T-test for Males and Females' Overall Strategy Use

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
t	Equal variance assumed	.187	.668	-.550	28	.587	-3.06667	5.57927	14.49528	8.36195
	Equal variance not assumed			-.550	27.356	.587	-3.06667	5.57927	14.50742	8.37409

As indicated in the table above, the Significance (2-tailed) value is .587. The magnitude of the differences in the means (mean difference = -3.06, 95% C1: 14.49 to 8.36) was small (eta squared = .01). According to the results, there is no a significant difference in the mean scores for males and females. Thus, males and females did not significantly differ in their overall strategy use.

In order to determine whether the difference between males and females was significant in terms of individual strategy use, an independent-sample-t-test was conducted for each item.

Table 3 (see Appendix) shows that males and females only differed significantly on four individual strategies: one global strategy (*2. Live chatting with other learners*), two problem-solving strategies (13.*Adjusting reading speed*, and 19.*Pausing and thinking about reading*) and one support strategy (21.*Paraphrasing for better understanding*). On the strategies no. 2 (global), no. 19 (problem-solving), and no. 21 (support) females indicated higher strategy use, while males did on the strategy no. 13 (problem-solving).

4.3 The Results for the Third Research Question

The third research question aimed to answere whether strategic readers in the offline environment were strategic readers in the online environment. The data for analysis were gathered from two questionnaires: SORS and OSORS. A paired-samples-t-test was conducted to determine whether there was a statistically significant difference in the mean scores for strategic readers group in both environments. Table 4 provides paired samples statistics for strategic readers group.

Table 4. Paired Samples Statistics for Strategic Reader Group

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Zscore(Online)	-3.02400	16	1.00000000	25000000
	Zscore(Offline)	-1.01300	16	1.00000000	25000000

Table 4 provides the mean scores for each of the two sets of scores. There was an increase in strategic readers mean scores from offline environment (M= -1.01, SD= 1) to online environment (M= -3.02, SD= 1), t (15) = -5.104, p > .05 (two-tailed). Therefore, we can conclude that there was a significant increase in strategic readers test scores from offline environment to online environment.

Table 5. Paired-Samples T-test for Strategic Reader Group

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Zscore(Online) - Zscore(Offline)	-2.01097	1.57588899	39397225	-.839732	83973197	-5.104	15	1.000

In Table 5 , the significance level (2-tailed) is 1.00. The mean increase in both scores was -2.01 with a 95% confidence interval ranging from -.83 to .83. The eta squared statistic (.53) indicated a moderate effect size. Therefore, we can conclude that there is not a significant difference in the strategic readres' scores in offline environment and online environment.

5. Discussion and Conclusions

The first research question has to do with the online reading strategies that Iranian EFL students use when reading online. The findings revealed that the participants were moderate strategy users. Of the three subclasses included in the OSORS, problem-solving subclass was used with the highest frequency followed by global-reading strategies and support reading strategies. Therefore, problem-solving strategies are the most important strategies for the participants followed by global reading strategies.

These findings are consistent with the findings of other previous studies (Anderson, 2003; Mokhtari & Reichard, 2004; Pookcharoen et al., 2009) which indicated the highest frequency of use for problem-solving strategies. The results also support Motallebzadeh and Ghaemi's (2009) study which indicated that problem-solving strategies were used most frequently followed by global reading strategies and support reading strategies.

As for the overall strategy use, a medium frequency was observed. This reveals the participants' high degree of awareness while reading in English. These findings support the findings of Poole's (2008) study using relatively the same version of OSORS.

Interestingly, the students seldom took notes, although this strategy has been found to be beneficial in increasing comprehension. Even though readers in the print environment often take notes to better understand what is read, the participants in this study indicated a low mean for this strategy and found it mentally taxing. At the same time, the low means attached to the strategies of *translating from English into Persian, using reference materials*, *reading aloud when text is hard,* and *taking notes* can imply that students avoid using time-consuming strategies. Because utilizing such strategies requires using additional materials and opening extra web pages. Therefore, the factors of time and effort could be significant factors that affect the participants' strategy use. On the other hand, the low frequency attributed to the strategy *reading aloud when text is hard* could be because of the awkward feeling that the students may have when reading aloud. In addition, as Eskey (2005) maintained, reading words out loud is a characteristic of bottom-up unskilled readers.

Another interesting point is that neither of the strategies related to the live chatting with native (global) or non-native (global) speakers were highly used by the participants. This may be because of the fact that

students in Iran study English as a foreign language as well as the limited opportunities to interact with native speakers may explain the low mean of live chatting with native speakers.

It is noteworthy that strategies used more frequently or with a high frequency may not require using outside materials and taking relatively little time and efforts to execute than those requiring such elements. As an example, *participating in live chat*, besides being time-consuming, requires using extra devices and sometimes opening extra web pages. In addition, this strategy may not be an option for many students, except for those that their coursework included a course website containing features such as discussion boards, live chat, etc.

One possible conclusion is that the learners use the same types of strategies while reading online. Perhaps another conclusion is that in the context of Iran problem-solving strategies play a more important role in EFL reading instruction than global reading and support reading strategies. EFL teachers can have their students pay more attention to problem-solving reading strategies to help them improve their online reading ability. Furthermore, the findings of this study maintain that a relatively equal and important position should be considered for the teaching of different online reading strategies in the classroom.

The second research question explored the differences between male and female students in terms of online reading strategy application. The participants of both groups reported using more than half of the strategies with a high or medium frequency. One possible reason for such a frequency can be the relationship between reading proficiency and active strategy use that has been thoroughly studied and documented for second language readers (Anderson, 1991; Cabral & Tavares, 2002; Upton, 1997; Yang, 2002; Zhang, 2001).

As for the differences between males and females, a negligible difference was observed between them, though it was not statistically significant. All in all, no significant differences were found between males and females in terms of overall strategy use. The amount of instruction received by both sexes can account for such negligible differences. In other words, a similar level of strategy application may indicate a similar amount of instruction. Language proficiency and years of study are other factors that can affect the perceived strategy use.

The findings of this study provide further support for previous studies conducted on the topic in the print environment (Phakiti, 2003; Poole, 2005; Sheorey & Mokhtari, 2001) which indicated that males and females did not differ significantly on overall strategy use and on any of the three subscales. In the context of online reading, these findings are in line with Amer et al. (2010) findings. Furthermore, as Sheorey and Mokhtari (2001) claim, such results are in contrast with previous strategy research (Poole, 2009; Sheorey, 2006; Sheorey & Boboczky, 2008) in which females reported using more strategies than males. In fact, according to Oxford (1993), females are higher L2 Achievers not because of their innate gender differences but because of their higher level of strategy use. This claim was supported by Sheorey and Mokhtari's (2001) study in which more proficient L2 readers utilized more strategies than less proficient ones. Furthermore, Brantmeier (2001) found that passage content is pertained to reading success. In other words, the type of passage affects students' performance—i.e. males do better on science-oriented passages, while females score higher on humanities-related topics. Therefore, one conclusion that can be drawn is that, as Ehrlich (1997) claimed, it is possible that gender differences are more related to task demands and contextual motivation than biology.

The participants differed significantly on four individual strategies: one global strategy, two problem-solving strategies, and one support reading strategy. The results found in this study in the context of online reading are relatively consistent with Sheorey and Mokhtari's (2001) results, which indicate that male and female college ESL students only differed in one individual strategy. The findings are also in line with Poole's (2005) study which showed that both genders differed in two of the 30 individual strategies. They are also in line with Poole's (2009) study in which females scored higher than males on eight individual strategies. As mentioned before, proficiency and the years of study may explain such differences. It could be that females had studied English for longer amounts of time than males.

All in all, the findings revealed that there was a relatively similar pattern of strategy use among males and females. No statistically significant differences were found between both genders in terms of three OSORS subscales.

The third research question sought to investigate the strategic readers in the offline and online environment. The results of the paired sample t-test indicate that strategic readers in the offline environment were strategic in the online environment. One explanation for this result is the connection between reading strategy use and overall reading proficiency. In other words, highly proficient readers may be more active strategy users than less proficient readers, as they are in both offline and online environments.

An important finding pertaining to the results of this research question is that the participants utilized all 30 strategies listed on SORS in the online environment. This shows that strategic readers transfer many of the strategies that they use in the print environment to the online environment. In this regard, the reading strategy instruction received by the participants can play an important role in their transfer of such strategies to the online environment. By considering the fact that the great majority of reading in Iran takes place in the print environment this is not entirely surprising.

Another finding is that strategic readers in the offline environment are not struggling readers in the online environment. This finding is in contrast with Coiro's (2007) findings which indicated that lower-performing offline readers can be higher-performer online readers.

In conclusion, the results demonstrated that strategic readers in the offline environment were strategic readers in the online environment. Thus, good readers are active strategy users in both print and online contexts. Furthermore, the findings demonstrated that strategic readers transferred strategies used in the print environment to the online environment.

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Appendix

Table 1. Participants' Level of Strategy Use

Types Of Reading Strategies	Reading Strategies	M	SD	Level of Use
Global Reading Strategies	1. Having a purpose in mind	3.86	.86	High
	2. Live chatting with other learners	2.16	.79	Low
	3. Live chatting with native speakers	1.90	.96	Low
	5. Using prior knowledge	3.33	1.91	Medium
	6. Scrolling through text	3.56	1.16	High

	8. Analyzing if the content fits purpose	3.63	1.06	High
	10. Noting length and organization	2.66	1.03	Medium
	14. Deciding what to read closely and what to ignore	3.66	.96	High
	17. Clicking on links to other sites	3.03	1.06	Medium
	18. Using tables, figures, and pictures	2.73	1.18	Medium
	20. Using context clues	3.50	1.18	High
	23. Using typographical features (e.g., italics)	3.26	.90	Medium
	24. Evaluating and analyzing the information presented in the text	3.13	.81	Medium
	26. Checking my understanding	3.40	1.14	Medium
	27. Reading for academic purposes	3.23	1.05	Medium
	28. Guessing what the content is about	3.60	1.00	High
	31. Confirming predictions	3.16	1.02	Medium
	33. Scanning the text before reading	3.46	1.09	Medium
	34. Reading for fun	3.40	1.06	Medium
	37. Looking for both sides of an issue	3.26	.93	Medium
	Overall	3.19	1.05	Medium
Problem-solving Strategies	9. Reading slowly and carefully	3.66	1.07	High
	11. Trying to stay focused on reading	3.66	.96	High
	13. Adjusting reading speed	3.26	.82	Medium
	16. Paying closer attention to reading	4.13	.91	High
	19. Pausing and thinking about reading	2.76	.79	Medium
	22. Visualizing information read	2.93	.99	Medium
	29. Rereading for better understanding	3.86	1.04	High
	32. Guessing meaning of unknown words	3.96	.80	High
	35. Evaluating text before using it	3.26	1.08	Medium
	36. Distinguishing fact from opinion	3.53	.90	High
	Overall	3.50	.93	High
Support Reading Strategies	4. Taking notes while reading	1.63	.9	Low
	7. Reading aloud when text is hard	1.96	1.05	Low
	12. Printing out a hard copy of text	2.56	1.00	Medium
	15. Using reference materials	2.33	1.00	Low
	21. Paraphrasing for better understanding	2.56	.93	Medium
	25. Going back and forth in text	3.13	1.04	Medium
	30. Asking myself questions	2.60	1.25	Medium
	38. Translating from English into Persian	2.03	1.03	Low
	39. Thinking in both English and Persian	2.40	1.10	Low
	Overall	2.35	1.03	Low

Table 3. T-test for Males and Females' Individual Strategy Use

Name	Strategy	Male (n = 15)		Female (n = 15)		T	P-value
		M	SD	M	SD		
Glob	1. Having a purpose in mind	4.13	0.74	3.60	.98	1.67	0.10
	2. Live chatting with other learners	1.53	0.91	2.80	.67	-4.31	0.00018*
	3. Live chatting with natives	1.60	0.91	2.20	1.01	-1.70	0.09
	5. Using prior knowledge	3.46	1.18	3.20	1.20	0.45	0.65
	6. Scrolling through text	3.40	1.05	3.73	1.27	-0.77	0.44
	8. Analyzing if the content fits purpose	3.80	1.01	3.46	1.12	0.85	0.40
	10.Noting length and organization	2.53	1.06	2.80	1.01	-0.70	0.48
	14. Deciding what to read closely and what to ignore	3.60	0.89	3.73	1.03	-0.18	0.85
	17. Clicking on links to other sites	2.93	1.13	3.13	0.99	-0.34	0.73
	18. Using tables, figures, pictures	2.93	0.96	2.53	1.40	0.90	0.37
	20. Using context clues	3.33	0.97	3.66	1.39	-0.75	0.45
	23. Using typographical features	3.13	0.83	3.40	0.98	-0.80	0.43
	24. Evaluating and analyzing the information presented in the text	3.26	0.96	3.00	0.67	1.53	0.13
	26. Checking my understanding	3.13	1.06	3.66	1.23	-1.26	0.21
	27. Reading for academic purposes	3.06	1.16	3.40	0.94	-0.34	0.73
	28. Guessing what the content is about	3.66	1.17	3.53	0.83	0.35	0.72
	31. Confirming predictions	3.26	1.27	3.06	0.77	0.17	0.89
	33. Scanning the text before reading	3.13	1.33	3.80	0.86	-1.78	0.08
	34. Reading for fun	3.26	1.06	3.53	1.06	-1.03	0.31
	37. Looking for both sides of an issue	3.20	1.37	2.66	0.48	1.41	0.17
Prob	9. Reading slowly and carefully	3.46	0.74	3.86	1.40	-0.97	0.34
	11. Staying focused on reading	3.80	0.86	3.53	1.06	0.75	0.45
	13. Adjusting reading speed	3.73	0.88	2.80	0.77	3.07	0.005*
	16. Paying closer attention to reading	4.26	0.70	4.00	1.13	0.77	0.44
	19. Pausing and thinking about reading	2.33	0.81	3.20	0.77	-2.98	0.006*
	22. Visualizing information read	2.93	1.09.	2.93	0.88	.000	1.00
	29. Rereading for better understanding	4.13	1.35	3.60	0.73	1.84	0.07
	32. Guessing meaning of unknown words	4.00	0.65	3.93	0.96	0.22	0.82
	35. Evaluating text before using it	3.33	0.89	3.20	1.26	0.33	0.74
	36. Distinguishing fact from opinion	3.60	0.82	3.46	0.99	0.40	0.69
Supp	4. Taking notes while reading	1.60	0.91	1.66	0.89	-0.20	0.84
	7. Reading aloud when text is hard	1.66	0.89	2.26	1.20	-1.37	0.18
	12. Printing a hard copy of text	2.40	1.29	2.73	0.70	-0.87	0.39
	15.Using reference materials	2.26	1.09	2.40	0.91	-0.36	0.72
	21. Paraphrasing for better understanding	2.00	0.96	3.13	0.91	-3.50	0.002*

	25. Going back and forth in text	2.93	1.27		3.33	0.81	-1.02	0.31
	30. Asking myself questions	2.80	1.32		2.40	1.18	0.87	0.39
	38. Translating from English into Persian	2.33	1.09		1.73	0.96	0.88	0.38
	39. Thinking in both English and Persian	2.40	1.29		2.40	0.91	.000	1.00