

Original Paper

Diversity in Utilization of Reading Strategies: A Cross Gender Study on Iranian EFL Learners

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Abstract

Current study aims to examine whether any statistically significant difference existed between Iranian male and female English as a foreign language (EFL) learners' reading strategy utilization. The data was collected employing three instruments of Survey of Reading Strategy (SORS), a reading test, and a questionnaire on demographic information. Several analyses of independent samples t-test were executed to answer the research questions. The findings revealed no statistically significant difference between male and female participants on their overall reading strategy use. No gender impact was sought in use of global and support subscales of reading strategies; however, female participants were found to outperform their male counterparts in use of problem solving subscale of reading strategies. Implications were provided for EFL teacher and researchers to upgrade their insight into nuance differences between male and female readers' interaction with a text.

Keywords

gender, reading comprehension, reading strategy, EFL context, Iranian learners, English language learning

1. Introduction

Learning a foreign language is a multidimensional phenomenon in which various variables of age, gender, culture, setting, society, intelligence, learning style, and affective factors not only take part but also interact with one another. In past half-century, gender impact on language has turned to a remarkable; however, debatable research issue. The assumption of gender bias in verbal ability has received ample attention (Halpern, 1986, Hyde, 1990; Hyde & Linn, 1988; Maccoby & Jacklin, 1974), and the impact of gender on language learning strategy (LLS) use has been investigated vastly. A majority of these studies have found a significant difference between male and female EFL learners in their LLS use, with females owning the superiority (Green and Oxford, 1995; Liu, 1994; Oxford & Nyikos, 1989; Politzer, 1983; Tajedin, 2001) however, some studies have not reported a gender

difference in LLS use (Griffiths ,2003; Hashim & Sahil ,1994; Kaylani, 1996; Young & Oxford, 1997) or have reported males' superiority (Tran, 1988).

When learning strategies are associated with each of language skills, they provide us with specific skill related strategies, like reading strategies, writing strategies, speaking strategies, and listening strategies. According to Rigney (as cited in Barnett, 1988) research in second language reading suggests that learners use a variety of strategies to assist them with the acquisition, storage, and retrieval of information. The use of reading strategies can positively influence reading in a foreign language, with respect to Chastain's (1988) belief that "reading strategies enable learners to read at a much higher level of proficiency"(p. 224). In past two decades several studies have securitized the relationship between EFL learners' reading achievement and their use of reading strategies. This is due to the role of reading strategy use in helping readers achieve a better comprehension when reading a passage (Macaro, 2003; Paris, Wasik, & Turner, 1991; Pressley and Harris, 2006). Reading strategy use can help readers deal with the problems which rise while reading a passage in a foreign language, and consequently, they can improve individuals' reading comprehension.

Although the associations between reading strategy use and reading comprehension were investigated largely in past studies, the impact of gender on reading strategy use of EFL learners is an issue which has not been studied largely yet. Among existing studies on gender and reading strategy use, contradictory results have been reported. Findings of several studies revealed gender difference in reading strategy use with female readers' superiority (Ehrman & Oxford, 1989; Poole, 2005; Sheorey, 2006; Sheorey & Baboczky, 2008), in contrast to the studies which indicate no gender difference (Hung, 2001; Kou, 2002; Sheorey & Mokhtari, 2001). Scarcely research and paradoxical results of the existing studies, calls for further research on gender impact on EFL reading strategy use.

1.1 Gender and Language

The studies on the issue of gender and language, flourished with second wave of feminism in 1960s and 1970s articulating questions about the nature and importance of gender in language and gender difference in use of language (Weatberall, 2002). The studies on the gender bias in language and gender effect on language use had different foci in past half-century, varying from studies on brain structure and functions of genders (Shaywitz, Shaywitz, Pugh, Constable, Skudlarski, Fulbright, Bronen, Fletcher, Shankweller, Katz, and Gore, 1995; Shield, 1975, Tavis, 1993) to research on gender difference in verbal ability (Halpern, 1986; Hyde, 1990; Hyde & Linn, 1988; Maccoby & Jacklin, 1974), probing gender in discourse (Lees, 1997; Hawes & Thomas, 1995; Weedon, 1987), and investigations on gender identity (Aries, 1996; Cutler & Scott, 1990; Duran & Carveth, 1990).

Despite the considerable body of research on the role of gender in language, yet controversies do resist in whether to assume a gender superior to the other in possessing language learning ability. Such controversies might be attributed to the paradoxical results which are revealed from studies in this field. In the case of verbal ability, the assumption of females' superiority has been turned to a basic "fact" in

psychology (Kimura, 1992); however, Graham (1997) argues "that innate differences are non-existent or at best insignificant... the higher incidence of successful linguists among girls must therefore be attributed to such factors as socialization, attitudes and stereotyping" (p. 99). This is in line with findings of the meta-analysis conducted by Hyde and Linn (1988), and also Maccoby and Jacklin (1974).

1.2 Gender impact on Utilization of LLS

According to Cohen (2003), LLS are the conscious or semi-conscious thoughts and behaviors used by learners with the explicit goal of improving their knowledge and understanding of a target language. As numerous learning strategies exist, a variety of modes of strategy classifications have been emerged; however, a comprehensive classification was offered by Oxford (1990) named Strategy Inventory for Language Learning (SILL), in which factor analysis is used to group strategies into six categories: cognitive, meta-cognitive, memory-related, compensatory, affective, social strategies.

The interest in examining the role of gender in LLS use emerged with the study of Politzer (1983), who examined 90 ESL American university students. Politzer (1983) found that female ESL learners had a higher tendency than their male counterparts to use social strategies outside of class. Findings of a study by Tran (1988) on Vietnamese students, revealed female students to use fewer LLSs than their male counterparts. Oxford and Nyikos (1989) in a study on 1200 university students found that females participants used LLSs more often than did male participants in three of the five LLS categories. Hashim and Sahil (1994) found no gender difference in LLS use with the exception of affective category in which women performed significantly better. Results of a study by Green and Oxford (1995) on 374 students at the University of Puerto Rico showed that females used strategies significantly more often than males.

Kaylani (1996), in a study on 255 high school students in Jordan, found significant differences between male and female students' in their use of memory, cognitive, compensation, and affective strategies, favoring females. Wharton (2000) found men to have higher frequency in LLS use among 678 university students in Singapore. Tajedin (2001) who investigated 764 Iranian EFL learners LLS use, reported a higher LLS use of female EFL learners over their male counterparts. Moreover, he reported meta-cognitive category of LLS to be used the most frequently and affective category of LLS to be used the least frequently by Iranian EFL learners. Griffiths (2003) found no gender difference in LLS use of 349 EFL learners (114 male and 234 female) in New Zealand. Liu (2004) in a Chinese EFL learning context found that female student had higher frequency of LLS use comparing to male ones.

1.3 Meta-Cognition and Its Role in Learning

Meta-cognition is the awareness of cognition, or simply thinking about thinking. Flavell (1979) who introduced the issue of meta-cognition, defined it as "knowledge and cognition about cognitive phenomena" (p. 906). Flavell (1979) further mentions that meta-cognitive awareness consists of meta-cognitive knowledge and meta-cognitive regulation. The former refers to one's knowledge of

his/her cognitive process in relation to variables which influence the results of the cognitive process. They are person variable (beliefs that one has about him/herself or about others as a cognitive processor), task variable (understanding nature of the task), and strategy variable (understanding of strategies and their use which facilitates learning). The latter, meta-cognitive regulation refers to the management of cognitive process, which helps people achieve learning objectives. Such management entails planning, monitoring, evaluating, and manipulating the cognitive process to achieve optimal learning output. Regarding meta-cognition as thinking about or awareness of learning, it can play a significant role in learning process. It depicts a mental link between one and his/her learning, which if enhanced can provide a more fruitful learning outcome. Considering the case of reading, meta-cognitive awareness can help one, better understand the mechanisms involved and employed in reading, and provide the readers with awareness of the ways through which they can use strategies to maximize their text comprehension. Several studies have investigated the role of meta-cognitive awareness in reading comprehension and as Sheorey and Mokhtari (2001) state, the consensus is that strategic awareness and monitoring of the comprehension process, known as meta-cognition, are crucial dimensions of the qualified reading.

1.4 Gender Role in Reading Strategy Utilization

Impact of gender on reading strategy utilization or meta-cognitive awareness of reading strategies has not been examined largely yet. Ehrman and Oxford (1989) discovered female readers significantly outperforming male readers in general study strategies, strategies for authentic language use, strategies for searching for and communicating meaning and meta-cognitive or self-management strategies. In contrast, Young and Oxford's (1997) study on males and females' reading strategies revealed a similar level of reading strategy use for both male and female readers. Hung (2001) who studied gender differences in reading strategy use, found no gender difference in participants' overall reading strategy use. Sheorey & Mokhtari (2001) conducted a study with 150 native-English-speaking US and 152 ESL students at a North American university using Survey of Reading Strategy (SORS). The findings indicated no gender differences in overall use of reading strategies in ESL group. This is in line with findings of Kuo (2002), which indicate no gender difference in reading strategy use of junior high school students.

Another study by Poole (2005) with 328 participants (111 male and 217 female) on Chinese student, revealed that females used significantly more strategies than males overall and on all of the three SORS subscales. In addition, females used 18 of the 30 strategies significantly more than males. Sheorey (2006) used the SORS to study the reading strategy use of 599 Indian university students (323 female and 276 male) found that females had significantly higher overall reading strategies use comparing to males. Sheorey and Baboczky (2008) studied the strategy use of 545 Hungarian college students (134 male and 411 female). The results of their study indicated that females scored higher than males on 13 of 30 individual strategies, overall, and on all three SORS subscales. Finally, results of a study by Park (2010)

on 115 Korean EFL learners showed that females outperformed males in overall reading strategy use, but no gender difference was found in the use of any of three reading strategy subscales.

The impact of gender on language, language use, verbal ability, and language learning was the subject of several studies in past half-century. The assumption of females' superiority in language learning was neither proved nor rejected, and still receives controversial debates. Reading as a fundamental language skill plays an important role in progress of EFL learners. Employment of reading strategies is found to enhance EFL learners' reading skill in number of previous studies. Among the studies on reading strategy use, few of them investigated the impact of gender on reading strategy use, and they indicated contradictory results. To fill this gap, current study is an attempt to investigate whether any statistically significant difference exists between Iranian male and female EFL learners in their overall reading strategy use. Moreover, this study examines whether any statistically significant difference exists between Iranian male and female EFL learners in their use of reading strategy subscales, namely Global, Support, and Problem Solving. To this end, five research questions are presented.

- 1) Is there any statistically significant difference between Iranian male and female EFL learners in their overall reading strategy use?
- 2) Is there any statistically significant difference between Iranian male and female EFL learners in their use of global reading strategies?
- 3) Is there any statistically significant difference between Iranian male and female EFL learners in their use of support reading strategies?
- 4) Is there any statistically significant difference between Iranian male and female EFL learners in their use of problem solving reading strategies?
- 5) Is there any statistically significant difference between Iranian male and female EFL learners in their use of any of reading strategies?

2. Method

2.1 Participants

Participants of the current study were 114 EFL learners of Iran Language Institute (ILI), affiliated with Iran's Ministry of Education. The sample comprised 60 female participants (52.6%), and 54 male participants (47.4%), who were all in Intermediate level (attending term Inter 1) at the time of the research. Therefore, the participants formed a homogenous sample, regarding their English language proficiency. English language courses at ILI are consisted of eighteen terms at six levels, and all participants were attending term seven (Inter 1) at the time of this study. Participants of current study were high school students, university students, or graduates and postgraduates with degrees in various disciplines--humanities, engineering, pure sciences, medicine, and art. Their previous out of school language learning experience ranged from one to seven years.

2.2 Instruments

Three instruments used in this study were: 1) a reading test, and 2) Survey of Reading Strategy (SORS), and 3) a questionnaire on participant's demographic information

Reading Comprehension Test

To measure the participants' reading comprehension, and also to prepare them to express their reading strategy use afterwards, a reading test was administered. Regarding proficiency level of the participants, reading part of a version of Preliminary English Test (PET) developed by University of Cambridge ESOL Examinations, available at Khalifa and Weir (2009), was selected. The reading part of PET included 35 items, organized in five parts in multiple-choice cloze, matching, and true-false forms of questions. The reading test had to be answered in 45 minutes. Each correct answer scored one, and the participants' total score on reading test could range from 0-35, which later converted to range from 0-100.

Survey of Reading Strategy (SORS)

In order to measure participants' perceived use of reading strategies, SORS by Mokhtari and Sheorey (2002) was used. SORS is designed to "measure adolescent and adult English as a Second Language (ESL) learner's meta-cognitive awareness and perceived use of reading strategies (broadly defined here as mental plans, techniques, and actions taken while reading academic or school-related materials)"(p. 2). SORS includes 30 items, categorized into three subscales of global reading strategies (13 items), problem solving reading strategies (8 items), and support reading strategies (9 items). Participants of the study could reflect their perceived use of reading strategies mentioned in each of 30 items of SORS, by marking on a five-point Likert scale available after each statement, ranging from "I never or almost never do this" to "I always or almost always do this" (Mokhtari & Sheorey, 2002, p. 4). The scoring criterion was as follows:

I never or almost never do this: 1 mark

I do this only occasionally: 2 marks

I sometimes do this: 3 marks

I usually do this: 4 marks

I always or almost always do this: 5 marks

Mokhtari and Sheorey (2002) suggested an interpretation key to explain the scores obtained in SORS. Three levels of reading strategy usage are: High (mean of 3.5 or higher), Moderate (mean of 2.5 to 3.4), and low (mean of 2.4 or lower). As SORS was "field-tested on a population of ESL students, its internal reliability was found to be .89, indicating a reasonable degree of consistency in measuring awareness and perceived use of reading strategies among non-native students of English"(Mokhtari & Sheorey, 2002, p. 4).

A questionnaire on participant's demographic information

This questionnaire which was developed by the researcher included queries on participants' gender, age,

degree, discipline, and their out of school English language learning duration.

2.3 Procedure

Firstly, SORS was translated to the participants' mother tongue (Persian) to eliminate any misunderstanding of the items. On the part of choosing a reading test, the nominated reading test which was a version of a past PET was subjected to readability analyses. As Farhady, Jafarpur, and Birjandi (1994) mention, to assure that a passage which is selected to be included in a test be at the level of the students, readability formulas can be used. They further offer a useful procedure to do so.

First, the average readability of a random sample of reading comprehension passages of participants' coursebook must be calculated through one of the readability formulas. Then, readability of each of the passages intended to be included in the test must be calculated through the same readability formula. Further, reading comprehension passages with readability levels of \pm standard deviation of the average readability of course book passages would be most likely appropriate to be included in the test. In the current study, Fog Index was used to calculate readability level of reading test and coursebook reading comprehension passages.

The readability levels of reading comprehension passages of participants' coursebook of ILI Intermediate were calculated. Average readability level of these passages, was found to be 8.81 with SD of 1.47. Therefore acceptable readability level for any reading comprehension passage to be included in the reading test ranged from 7.33 to 10.29.

Readability levels of passages of the reading test, which was reading part of a version of PET, were found to be 9.99, 10.07, and 7.64. As Fog Index Level of all PET reading passages fall within the acceptable readability range of 7.33 to 10.29, the reading part of a version of PET was selected to be considered as the RCT to measure participants' proficiency in reading.

To measure the reliability of the Persian SORS, and the reading test they were piloted. The participants of the pilot study were a representative sample of the main study participants, consisting of thirty four ILI students (18 girls, and 16 boys) of intermediate level. Taking the reading test into consideration, Kuder-Richardson Coefficient 21, was found to be .871. The Cronbach alpha internal consistency reliability of the Persian SORS was .829.

The reliability coefficients of both instruments were considered high according to Farhady et al. (1994) and Vogt (2007). In the main study, the instruments were distributed by the researcher in 19 intact classes among 268 students who were present in that session. Excluding blank and incomplete answer sheets, 114 acceptable answer sheets were remained; among which 54 ones (47.4%) belonged to male participants and 60 ones (52.6%) belonged to females.

2.4 Data Analysis

This study had a descriptive nature and survey method was used to collect data. Descriptive statistics were employed to present mean, standard deviation, and normal distribution for participants' reading test scores, and also their overall, Global, Support, and problem solving reading strategy use scores. In

order to provide the answer to research question one to five, statistical analysis of t-test was employed. The Statistical Package for the Social Science (SPSS, version 19.0) was used to analyze the data.

3. Results

Table 1 and Table 2, presents descriptive statistics on male (N=54), and female (N=60) participants' scores on the reading test and also on reading strategy use respectively. On the part of reading test, female participants had a better performance on average (M=66.48) comparing to their male counterparts (M= 61.95). As illustrated in Table 2, considering the reading strategy usage levels suggested by Mokhtari and Sheorey (2002), female participants acquired high use of overall reading strategies (M= 3.53), and problem solving reading strategies (M=3.91); however, male participants obtained high use of reading strategy only in the case of problem solving strategies (M=3.71).

Table 1. Reading test scores of two groups

	Gender	N	Mean	S.D.
Reading Test Score	Female	60	66.48	16.40
	Male	54	61.95	16.85

Table 2. Reading strategy use of two groups

Reading strategies	Gender	Mean	S.D.	Level
Global	Female	3.43	.49	Moderate
	Male	3.44	.55	Moderate
Support	Female	3.30	.43	Moderate
	Male	3.29	.39	Moderate
Problem solving	Female	3.91	.34	High
	Male	3.71	.42	High
Overall	Female	3.53	.41	High
	Male	3.46	.46	Moderate

Note: High reading strategy usage: $M \geq 3.5$; Moderate reading strategy usage: $2.4 < M < 3.4$; Low reading strategy usage: $M \leq 2.5$

Finding of the independent samples t-test to investigate research question one is presented in Table 3. Considering Leven's test [$F(1,112) = 1.16, p = .23$ (2-tailed)], variances between two groups were not significant. With the assumption of equality of the variances, no statistically significant difference was observed between male and female EFL learners in their overall reading strategy use [$t(112) = .79, p = .42$ (2-tailed)]. Therefore, null hypothesis one was failed to be rejected.

Table 3. Independent samples t-test for the means of two groups on overall reading strategy use

Leven's Test for Equality of Variances				t-test for Equality of Means			
		F	Sig.	t	df.	Sig. (2-tailed)	Mean Difference
Overall reading strategy	Equal variances assumed	1.16	.23	.79	112	.42	1.72
							Eta ²

As depicted in Table 4. In order to test null hypotheses two, three, and four, three independent samples t-test were run.

On the part of global reading strategy use, Leven's test for equality of variances showed that the variances between male and female group were not significant [$F(1,112) = 1.07, p = .30$ (2-tailed)]. With the assumption of equality of the variances, no statistically significant difference was observed between male and female EFL learners in their global reading strategy use [$t(112) = -.079, p = .93$ (2-tailed)]. Therefore, null hypothesis two was failed to be rejected. In terms of Support reading strategy use, as presented in Table 4. Leven's test for equality of variances showed that the variances between male and female group were not significant [$F(1,112) = .58, p = .44$ (2-tailed)]. With the assumption of equality of the variances, no statistically significant difference was observed between male and female EFL learners in their support reading strategy use [$t(112) = -.079, p = .93$ (2-tailed)]. Therefore, null hypothesis three is failed to be rejected.

Regarding problem solving reading strategy use, as illustrated in Table 4. Leven's test for equality of variances revealed that the variances between male and female groups were not significant [$F(1,112) = 1.82, p = .18$ (2-tailed)]. With the assumption of equality of the variances, a statistically significant difference is sought between male and female EFL learners in their problem solving reading strategy use [$t(112) = 2.38, p = .019$ (2-tailed)], and null hypothesis four is rejected. It is indicated that female participants outperformed their male counterparts in problem solving reading strategy use with a mean difference of 1.66. The η^2 value of .048, presents a slightly moderate effect size, considering the guideline suggested by Cohen (1988) for interpreting η^2 value ($\eta^2 = .01$: small effect; $\eta^2 = .06$: moderate effect; $\eta^2 = .14$: large effect). Regarding the magnitude of η^2 : .048, it can be inferred that only 4% of the variance in problem solving reading strategy use is explained by gender.

Table 4. Independent samples t-test for the means of two groups on use of reading strategy subscales

Leven's Test for Equality of Variances			t-test for Equality of Means						
			F	Sig.	t	df.	Sig. (2-tailed)	Mean Difference	Eta ²
Global RS	Equal assumed	variances	1.07	.30	-.079	112	.93	-.090	0.00
Support RS	Equal assumed	variances	.58	.44	.203	112	.83	.155	0.00
Problem solving RS	Equal assumed	variances	1.82	.18	2.38	112	.019*	1.66	.048

* Significant at $p < .05$

Research question five tries to provide a thorough view of male and female EFL learners reading strategy use by running an independent samples t-test for each of the reading strategy items on SORS. Leven's test for equality of variances for each of the reading strategies showed that the variances

between male and female group were not significant. Assuming the equal variances, only the statistics on independent sample t-test are presented in the Table 5. The *p*-values which were marked showed that statistically significant differences were found between male and female participants in their use of that particular strategy. In seven items of reading strategy, male and female participants were found to have statistically different reading strategy use. Among them, in only one item (S8: Glob: I review the text first by noting its length and organization.) males had the superiority [$t(112) = -2.23, p = .02$ (2-tailed)]. In six items, female participants outperformed their male counterparts in reading strategy use. Having a closer look, female participants significantly surpassed their male counterparts in the use of three problem solving reading strategies, (S16: I stop from time to time and think [$t(112) = 2.43, p = .02$]; S25: When text becomes difficult, I re-read it [$t(112) = 4.88, p = .00$]; S28: I guess the meaning of unknown words or phrases [$t(112) = 2.65, p = .00$]). Moreover, female readers significantly outperformed male readers in two support strategies (S6: When text becomes difficult, I read aloud [$t(112) = 1.97, p = .05$]; S22: I go back and forth in the text to find relationships [$t(112) = 2.09, p = .03$]). Finally, females had a significantly higher reading strategy use than males in one global subscale (S24: I try to guess what the content of the text is about [$t(112) = 2.08, p = .03$]).

Table 5. Independent samples t-test for means of two groups on each reading strategy use

Sub scale	Strategy	Female		Male		t	p-value	Mean Diff.	Eta ²
		M.	S.D.	M.	S.D.				
S1:G	I have a purpose to read	3.46	.83	3.62	1.13	-.87	.38	-.16	.00
S2:S	I take notes	2.16	1.06	2.48	.96	-1.6	.10	-.31	.02
S3:G	I think about text	3.55	.92	3.74	.91	-1.1	.27	-.19	.01
S4:G	I take an overall view	3.65	1.08	3.55	1.26	.42	.66	.09	.00
S5:S	I read aloud	3.21	1.45	2.72	1.18	1.97	.05*	.49	.03
S6:G	I think of reading aim	3.00	1.10	3.22	1.11	-1.0	.28	-.22	.01
S7:P	I read slowly & carefully	3.96	.75	4.00	.91	-.21	.83	-.03	.00
S8:G	I notice text organization.	2.80	1.17	3.25	.99	-2.2	.02*	-.45	.04
S9:P	I regain concentration	4.26	.79	4.14	.91	.73	.46	.11	.00
S10:S	I underline or circle info.	3.76	1.12	3.68	1.25	.36	.71	.08	.00
S11:P	I adjust my reading speed	3.46	1.19	3.68	1.25	-1.0	.30	-.21	.00
S12:G	I decide what to read closely.	3.00	1.04	3.01	1.10	-.09	.92	-.01	.00
S13:S	I use reference materials.	4.05	1.04	3.94	1.10	.52	.60	.10	.00
S14:P	I pay closer attention if text gets difficult.	4.35	.75	4.09	.83	1.73	.08	.25	.02
S15:G	I use tables, pictures	3.58	1.13	3.81	1.02	-1.1	.25	-.23	.01
S16:P	I often stop and think	3.88	.92	3.40	1.15	2.43	.01*	.47	.05
S17:G	I use context clues to	3.71	.8	3.50	.94	1.27	.20	.21	.01
S18:S	I paraphrase.	3.38	1.05	3.29	1.09	.43	.66	.08	.00
S19:P	I try to visualize info.	3.20	1.08	3.50	.98	-1.5	.12	-.30	.02
S20:G	I use typographical cues	3.81	.99	3.55	1.16	1.29	.20	.26	.01
S21:G	I critically analyze info.	2.96	.90	2.98	1.20	-.07	.94	-.01	.00
S22:S	I go back & forth in text	3.85	.87	3.46	1.09	2.09	.03*	.38	.03
S23:G	I check my understanding	4.03	.80	3.81	.87	1.39	.16	.21	.01
S24:G	I try to guess the content	4.10	.79	3.72	1.12	2.08	.03*	.37	.03
S25:P	When text gets difficult, I	4.55	.64	3.74	1.08	4.88	.00*	.80	.17

	re-read.								
S26:S	I ask myself questions...	2.56	1.16	2.75	1.30	-.83	.40	-.19	.00
S27:G	I check my guesses.	2.96	1.13	2.92	1.17	.18	.85	.04	.00
S28:P	I guess the meaning of unknown words.	3.68	1.09	3.11	1.20	2.65	.00*	.57	.05
S29:S	I translate from English into my native language.	3.35	1.02	3.66	1.11	-1.5	.11	-.31	.02
S30:S	I think in both English and my mother tongue.	3.41	.99	3.61	.87	-1.1	.27	-.19	.01

* Significant at $P < .05$ (2-tailed)

Note: Descriptions of strategies have been altered or shortened by the researcher to fit the table.

S1, S2... S30: Strategies; **G:** Global, **S:** Support, **P:** Problem solving; **M:** Mean

4. Discussion

Considering the findings of current study on research question one, it is revealed that there is no gender difference in Iranian EFL learners overall reading strategy use. This is in line with findings of several studies (Hung, 2001; Kou, 2002; Sheorey & Mokhtari, 2001; Young & Oxford, 1997); however, contrasts the results explored in other research (Ehrman & Oxford 1989; Park, 2010; Poole, 2005; Sheorey, 2006; Sheorey & Baboczky, 2008). The results of research question two and three which indicated no statistically significant difference between male and female participants in global and support strategies respectively were in line with findings of Park (2010), but contrasts the findings of Poole (2005), and Sheorey and Baboczky (2008), who have reported females to use global and support reading strategies significantly more than males. The result of research question four which revealed female readers significantly outperforming their male counterparts is in line with findings of Poole (2005), and Sheorey and Baboczky (2008), but contradicts findings of Park (2010).

As the finding of research question one, is supported by the results of some of the previous studies, and simultaneously contests findings of a number of other past studies, it makes the interpretations difficult and complicated. It seems that contextual, social, educational and cultural factors and interactions of these variables played a remarkable role in building EFL learners' educational character. Moreover, as not many studies were conducted on the impact of gender on use of reading strategies, the results of current study could be compared only to small number of past studies. Particularly, when it comes to investigation of reading strategy subscales, the results of current study (on research question two, three, and four) could be compared to results of only three studies. Therefore, studies on the impact of gender on reading strategy use are suggested to depict a wider view of this issue and enable the researchers to compare various studies and conduct meta-analysis. Research question five which investigated each reading strategy for gender difference showed that in seven items of reading strategy, male and female participants were found to have statistically different reading strategy use. Important point is that three out of seven items of gender difference in strategy use (42%), pertained to female superiority in problem solving subscale use. Further, it is revealed that females had a significantly higher tendency to

guess the unknown comparing to males (S24: I guess the content, with slightly small effect $Eta^2=.03$; and S28: I guess meaning of unknown words, with a moderate effect, $Eta^2=.05$). The female readers also reported a more dynamic interaction with the text (S5: read aloud, with slightly small effect $Eta^2=.03$; S25: re-read, with a large effect $Eta^2=.17$; S22: go back and forth to find relationships of ideas, with a slightly small effect $Eta^2=.03$; S16: stop and think about the text, with a moderate effect $Eta^2=.05$). In contrast, male readers were found to pay close attention to physical characteristics of the text comparing to female readers (S8: I review the text first by noting its characteristics like length and organization, with a somewhat moderate effect, $Eta^2=.04$). The findings on research question five, which explored gender impact on the use of each reading strategy provide us with a more meticulous perception of the ways that female and male readers interact with a text.

5. Conclusion

Current study attempted to investigate whether a statistically significant difference existed between Iranian male and female EFL learners in their use of reading strategies in general and also based on reading strategy subscales of global, support, and problem solving. Moreover, each reading strategy item is subjected to statistical analyses to test whether gender difference existed in the utilization of each reading strategy. The findings revealed no statistically significant gender impact on overall reading strategy use, and also on use of global, and support subscales; however, on the part of problem solving reading strategies female participants significantly outperformed their male counterparts. On the whole, current study implies that gender was not of a large impact on reading strategy use of Iranian EFL learners. This implication can help EFL teachers gain a more realistic understanding of how their male and female students access a passage, and actually utilize the reading strategies. Moreover, detailed analyses on each strategy use presented teacher and researchers with an upgraded insight into nuance differences between male and female readers' interaction with a text. Regarding that the finding of research question one to four of this study, are in line with results of some of the previous studies, and simultaneously contradict findings of a number of other past studies, it is inferred that contextual, social, educational and cultural factors and interactions of these variables may play a remarkable role in building EFL learners' educational character. Therefore, studies on the impact of gender on reading strategy use, especially with larger samples, could be suggested and expected to provide fruitful results. Having several studies of this issue in Iranian settings, would allow comparison of the results of several Iranian based studies to findings of a number of foreign based studies and analyze the similarities and differences. Then, more robust and scrupulous interpretations can be offered to help researchers explore the sources of similarities or contradictions in research result, and also enable them to conduct meta-analysis.

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