
The effects of gender and genre on language learners' reading comprehension ability

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Abstract: Reading is one of the most important skills that foreign language learners should know, and is affected by various non linguistic factors. The purpose of this study was to investigate the effects of gender and genre on text comprehension. To this end, three texts from different genres were selected and administered to thirty male and female EFL learners who were at intermediate level. The selected genres were labels and signs, informal letter and newspaper. After administering the reading tests, the participants' mean scores were computed and the results showed that altogether females were better text comprehenders than males. To see the effect of gender on text comprehension a one way ANOVA was run and it was found that both male and female participants performed differently on various genres. Moreover, to investigate the effect of both gender and genre on participants' text comprehension a two-way ANOVA was employed and the result showed they did not have any significant effect on text comprehension. The participants performed better on familiar genres regardless of their gender. These results have some implications for teachers. First, they should not rely on just text difficulty for choosing texts for reading courses. Next, they should provide male students with more practice in reading comprehension.

Keywords: Reading Comprehension, Gender, Genre, Test Performance

1. Introduction

The predominance of English in academic publications and the importance attached to these publications and learners' need to read these texts, has brought about paramount importance for reading skill. Nowadays, reading is the most important skill that every language learner and most people need to know. People read texts for different purposes from getting information to pleasure. It helps students of English as a foreign or second language to become acquainted with the subject area of their field of study and also improve their knowledge of the language. Moreover, according to Kim and Anderson (2011), reading has a central role in completing all college level courses. But no matter how proficient they are in the language, university students often have difficulty understanding texts. Therefore, it can be supposed that some non linguistic factors affect the process of reading comprehension (Keshavarzi & Ashtarian, 2008). Hence, reading comprehension tests do not show readers' true ability in reading texts.

There are a number of factors that affect reading

comprehension one of which is schemata. Cohen et al. (1993) defined schema as packet of information stored in memory that represent general knowledge about objects, situations, events or actions. According to Rumelhart (1977 cited in Landry, 2002) schemata is the "building blocks of cognition" that are used in the process of understanding sensory data, in repossessing information from memory, in organizing aims and sub-goals, in allocating resources, and in leading the flow of the processing system. Other factors affecting text comprehension include: text genre, topic familiarity, readers' gender and age and so on. Most of the researches have tried to investigate the effect of these factors on comprehension in isolation, without considering their interaction with readers' gender (Atai & Soleimany, 2009; Brantmeier, 2003; Keshavarzi & Ashtarian, 2008; Hong Li, 2012; Xiao-hui, Jun & Wei- Hua, 2007; Yali & Jiliang, 2007). Besides, the studies that had investigated the effect of genre on text comprehension or its interactional effect with gender on comprehension are few in number.

Hence, due to important effect of gender and genre on text comprehension, and rare number of research in this area the present study tried to explore the effect of text genre and

gender as well as the effect of both gender and genre on Iranian learners of English as a foreign language reading comprehension.

2. Review of Related Literature

Two important variables that can affect the process of reading comprehension are reader and text variable. Two reader variables that affect reading comprehension process are reader's background knowledge or schemata and gender.

2.1. Comprehension

As Johnson (1981) argues "the effects of the language complexity and the culturally determined back-ground of a text on reading comprehension have always been recognized as elements of concern in the selection of reading materials for foreign language learners and in the evaluation of their reading comprehension".

According to Brantmeier (2003) Many L2 reading investigations have investigated reading strategies, but the fact that students may process a text similarly or differently does not necessarily mean that their interpretations of the text are identical.

That is to say although the students may interact with the text in similar ways, they may comprehend it differently, or the interaction may be different while comprehension is at the same level. One leading element in definition of comprehension provided in literature is the strong connection of the new information to the old, pre-existing information (Bernhardt, 1991; Hammadou, 1991). Wolf (1993) claimed that there is not one true comprehension, but a range of comprehension.

"Traditionally, L2 reading researchers utilize one or two measures of comprehension that consist of free recall, summaries, multiple choice, true/false, close-deletion items, open-ended questions, and sentence completions" (Brantmeier 2003: 4). He continues it is important to note that different comprehension assessment tasks may not be testing the same ability.

As Johnson (1981) points out, research done on reading comprehension with NS has shown that organization of ideas in the passage had a greater impact on reading comprehension than the amount of language complexity. Schlesinger (1968, cited in Johnson, 1981) found that the length and structure of English sentences had no effect on comprehension of readers who tended to use lexical meanings to understand the sentences.

2.2. Passage Content

According to some scholars, Schema Theory can be a possible solution to the myth of the impact of the content of texts on gender differences in comprehension ability of first language or second language reading texts. According to schema theory, our system contains "an enormous number of schemata [the plural form of schema]" (Rumelhart and Ortony, 1977: 128). Each schema contains many

components, or "slots", which are hierarchically linked, representing the relationships among the components relative to the schema in question (Anderson & Pearson, 1984; Carrell, 1991). When the text is too difficult to understand and full of new information, unknown to the learner, the reader makes inferences on the basis of the selected schema in order to fill in the missing parts and succeed in comprehending the text.

Research on the relationship between schema and comprehension of texts has been primarily done in the area of first language acquisition. Generally, studies done on first language reading revealed that the learners' background knowledge has an integral role on degree of comprehension of a specific text (Koda, 2005; Johnston, 1984; Recht & Leslie, 1988).

After some studies have been done in the realm of first language acquisition (FLA), some researchers were interested to examine the influence of the same concept, i.e. schema, on reading comprehension of second language/foreign language (L2/FL) students. A major part of these studies have corroborated the findings from the first language (L1) research. That is to say the cultural information hidden in a text had a positive impact on reader's comprehension whether by recall, objective questions (Malik, 1990; Droop and Verhoeven, 1998; Johnson, 1981).

After conducting this large amount of research in this area, L2/FL scholars specializing in reading as well as L2 instructors were persuaded that a lack of decent background knowledge or schema on the topic the learners are reading on can be a major source of reading difficulty for L2 students (Bernhardt, 1984; Carrell, 1991; Hudson, 1988; Levin and Haus, 1985; Peretz & Shoham, 1990).

There has been a substantial attention to learners' background knowledge in recent theories of second language acquisition (SLA) among which Schema theory is the most important one and has been used in many different studies. The significance and importance of schematic knowledge is now widely recognized around the world in second/foreign language teaching and learning. The three types of schemata include content, formal, and cultural which are closely related to learners' reading comprehension in acquiring or learning an L2.

Li et al. (2007) identified three types of schemata: linguistic schemata, formal schemata and content schemata.

- a. *Linguistic schemata* refer to readers' current level of proficiency in vocabularies and grammar. It is the foundation of other schemata and plays an essential role in understanding. Without such a schemata, decoding the text is difficult. The more the linguistic schemata the reader has, the faster he can get the information from the text.
- b. *Formal Schemata* refer to the knowledge of rhetorical patterns and the organizational forms in which the information in the text is written. It includes knowledge of different text types and genres. Information about different text types and genres facilitate reading comprehension. Compared two other types of

schemata, formal schemata is not much important in reading schemata.

- c. *Content Schemata* is the reader's background information of the topic of the text and familiarity of the topic from previous experience. They comprise topic familiarity, cultural knowledge and previous experience with a field. To some extent, content schemata can compensate for the lack of language schemata, and thus help learners understand the texts by predicting, choosing information and removing ambiguities.

Schema theory was first introduced by Frederic Bartlett in 1932 during working on constructive memory (Psychology Ltd, 2002). He considered schemas as part of a top-down processing. Furthermore, Bartlett (1977, cited in Landry, 2002) considered schemas to be structures of knowledge which are stored in the long-term memory. Moreover, Rumelhart (1977) has illustrated schemata as building blocks of cognition that are used in the process of understanding sensory data, in repossessing information from memory, in organizing aims and sub-goals, in allocating resources, and in leading the flow of the processing system. Rumelhart (1977) has also stated that in case of having an incomplete schemata and not being able to provide an understanding of the incoming data from the text we will have problems processing and understanding the text.

2.3. Gender and Performance on Different Genre

The most important reader variable that affects reading comprehension is gender. There are clear differences between men and women's use of language. These differences can be attributed to women domination in using language (Lackoff, 1975) or can be viewed as a product of gender (Tannen, 1984).

Research has shown that at all levels of education (from school to university) male students talk more than females, and receive more class time than females (Nilsen et al. 1977; Thorne et al. 1983; Tannen, 1990, 1996). But, as far as reading is concerned, it seems that female students are more successful than males. In the opinion of Wardhaugh (1993), facing more failure and difficulty in reading than girls, does not mean that boys are inherently not equipped to learn to read, and there may be socio-cultural reasons for their poor performance compared to girls.

The gender difference can also lie in different strategy use. Males and females usually use different strategies to learn and use language. This difference is also evidence in reading comprehension. Oxford (1994) stated that males are analytic while females are global in their language learning. Moreover, male follow rules, but females adhere to cultural differences. Although both males and females use the same number of strategies, females apply them more qualitatively.

In addition, gender difference can affect reading motivation. Males and females can have different views and attitudes towards reading. The more motivated a person is, the more he is likely to be successful in reading. A person,

who has positive attitudes to reading, enjoys reading and tends to make progress in his reading (Baker & Wigfield, 1999).

Another variable that can affect reading comprehension is text genre. Many linguists distinguished text type and genre. According to Lin (2006), text types are text prototypes which are defined according to their social purposes. He identified six text types of narratives, recounts, information reports, instructions, explanations and expository texts. Contrary to text type, genre refers to more specific text, for instance newspaper, reports or recipes. Texts of each genre may be only of just one text type such as a bus schedule which is just an information report. In addition a single genre text such as a sermon which often includes stretches of narratives or recounts can be a blend of different text types.

Research done by Paltridge (1996) and Fountas and Pinell (2001) revealed that students' performance on reading comprehension tests could be affected by text genre. According to Paltridge (2001, cited in Atai & Soleimany, 2009), genre has an essential role in language testing because students need an understanding of both the sociocultural context and setting of a genre and the relationship between themselves and the audience of the texts.

Besides, research has been shown that genre has a significant effect on using prediction by readers in constructing meaning of a text. Some genres encourage the use of prediction more than others. (Alferbach, 1990; Olsen et al., 1984).

Shahbala and Alamdar Youli (2012) investigated the effect of genre on university students reading comprehension. Employing a fuzzy logic, they concluded that narrative genre was easier than the descriptive and argumentative genres. In addition it was found that the same participants had different understanding across genres and different participants had different degrees of understanding in the same genre.

The present study tries to find out whether differences in text genre affect male and female students' reading comprehension. Thus, the following research questions are addressed in this study:

- 1) *Is there any difference in Iranian male EFL learners' comprehension of the three different genres?*
- 2) *Is there any difference in Iranian female EFL learners' comprehension of the three different genres?*
- 3) *Is there any difference in Iranian female and male EFL learners' comprehension of the three different genres?*

3. Methodology

3.1. Participants

The participants of this study were thirty (17 male; 13 female) intermediate EFL learners of English, studying at different language institutes in Tehran and Karaj. Their age ranged between 16 to 25 years old. They mostly had attended the English institute for at least 2 years.

3.2. Material

To conduct this study three intermediate reading tests were chosen from *Test your reading*, Dean, M., 2002, Pearson Education. These three passages were chosen based on three different genres. They include a passage on labels and signs, a passage on informal letters, and a passage on newspapers.

3.3. Data Collection Procedure

The purpose of this study was to investigate differences in reading comprehension performance of male and female students in relation to genre familiarity of different texts. In this study we are dealing with 2 levels of gender (males and females) and 3 levels of genre types (labels and signs, informal letter, newspaper). The dependent variable was the comprehension scores from the reading questions at the end of each passage.

4. Results

Table 1 shows the scores of males and females' on three different types on genres. As it is shown, both males and females had higher scores on labels and sign genre. Moreover, although females' scores were not very different in different genres, generally they were better text comprehenders than males.

Table 1. Descriptive statistics for males and females understanding of different genres

Gender		N	Mean	Std. deviation
Male	Lab & sig	17	14.73	2.49
	Infl letter	17	11.34	4.42
	Newspaper	17	12.70	3.84
Female	Lab & sig	13	15.89	3.36
	Infl letter	13	14.45	2.88
	Newspaper	13	4.83	3.12

In order to answer the first research question on the difference in male learners understandings of three different genres a one way ANOVA was run the results of which are displayed in table 2.

Table 2. ANOVA for males' comprehension of three types of genre

	Sum of Squares	df	Mean Square	F
Between Groups	161.67	2	80.83	5.97
Within groups	608.44	45	13.52	

As table 2 shows there was a difference in male readers' comprehension of three different types of genres. In other words, they performed differently in three different types of genres (df = 2, 4; F = 5.97)

To compare the females' scores on different types of genres and answering the second research question, a one way ANOVA was run. Table 3 shows the results of one way ANOVA.

Table 3. ANOVA for females' comprehension of three types of genre

	Sum of Squares	df	Mean Square	F
Between Groups	1.344	2	.672	9.34
Within groups	323.70	33	9.80	

Table 4. Two-way ANOVA for gains in comprehension related to gender and genre

Source of variance	Sum of Squares	df	Mean Square	F	sig.
Gender	44.37	1	44.37	3.71	.05
Genre	82.03	2	41.01	3.43	.03
gender * genre	58.07	2	29.04	2.43	.09

As shown in table 3, there is not any significant difference between female students' performance on three different types of genres. In other words, they performed similarly on three different types of genres (df = 2, 33; F = .93).

To answer the third research question on the difference between male and female students' performance on three different types of genres a two way ANOVA was employed, the results of which are shown in table 4.

With regard to the first factor (gender), the results show that males and females have different levels of comprehension and based on the differences in means, females outperform males on reading comprehension tests (F = 3.71, P = .05).

As far as the second factor, genre, is concerned, table 4 shows that text genre is very important and has a critical role in reading comprehension (F = 3, 43, P = .03).

And finally, table 4 shows that the interaction between gender and genre is not significant and it does not have an important role in comprehending texts (F = 2.42, P = .09). Thus, it can be concluded that both males and females make greater gains on the label and signs genre regardless of their gender.

5. Discussion

Reading is an important skill that has a vital role in language learning. However it is affected by many nonlinguistic factors. Many studies investigated the effect of some factors such as text type, background knowledge and gender on text comprehension. The aim of this study was to explore the effect of both genre and gender on this skill.

The findings of the present study showed that males and females perform differently on reading comprehension tests. The scores showed that regardless of text genre, females are better readers than males. The current study is in conformity with Keshavarzi and Ashtarian (2008) who reached the same result by conducting reading comprehension tests on three different text types on male and female students and concluded that females are better comprehenders of English tests. This finding is also in line with (Bratmeier, 2002) in which female EFL learners, outperformed males in reading comprehension tests.

Another finding of this study is that both males and females gained higher scores on label and signs genre followed by newspaper. The reason for this finding could be due to the fact that participants have more exposure to labels

and signs and also they read newspaper regularly. Here, subject familiarity act as an intervening factor. Given that when test takers are familiar with the subject and topic of the text, as well as the structures used in the text, they can perform better. This result support the finding of the study carried out by Brantmeier (2003) which concluded that subject matter familiarity has a facilitating effect on reading comprehension at the intermediate level.

Another finding of this study which is in line with Keshavarz and Ashtarian (2008), is that in both studies the interaction between gender and genre or text type did not have any significant effect on reading comprehension and both males and females performed better on a given genre regardless of their gender.

6. Conclusion and Pedagogical Implications

The findings of this study have some implications for language teachers. First of all, when choosing a text for testing reading comprehension ability text difficulty should not be the only factor involved, but subject familiarity should also be taken into account. Another implication of the present study is that given the superiority of females in reading comprehension compared to males, when dealing with male students, teachers should provide them with more practice with reading comprehension.

Due to the findings of this study that students performed better on one genre, teachers are advised to integrate different kinds of genres in reading courses. They should focus more on genres that students are less exposed to. Moreover, they should integrate various genres without taking into account students' gender. Because as this study revealed, the interaction of gender and genre did not have any significant effect on comprehending texts.

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