# Bilingual versus Monolingual Learners' Reading Comprehension Ability Regarding their Interest in Reading Comprehension Topics 

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#### Abstract

This study investigated whether there are any significant differences between male and female learners in reading comprehension ability by regarding their interest to different topics regarding the subjects' linguality. To meet the mentioned aims, 193 EFL monolingual and bilingual learners from Markazi province were invited to participate in this study. Data analysis through utilization of ANOVA and $t$-test indicated the following results: 1. All subjects performed equally in comprehending male and female-based texts. 2. Male learners' scores in male-based texts outperformed the females scores. 3. Female learners' scores in female-based texts outperformed the males scores. 4. Bilingual female learners' scores in female-based texts outperformed the monolingual females' scores.


Key words: Reading comprehension, Bilingual, Monolingual and gender-based texts.

## 1. Introduction

Receptive skills are the way in which people extract meaning from the discourse they see or hear. When we read a story or a newspaper, listen to the news, or take part in conversion we employ our previous knowledge as we approach the process of comprehension, and we deploy a range of receptive skills; which ones we use will be determined by our reading or listening purpose. Sometimes erroneously called a passive skill because the reader does not produce message in the same sense as a speaker or writer, reading nevertheless requires active mental processing for communication to accrue. It means that understanding a piece of discourse involves much more than just knowing the language (Shahmohammadi, 2011)

According to Karbalaei (2010): readers are affected by their interest and background knowledge about what they read. From a constructivist perspective, learners actively construct their knowledge by means of making links between their prior knowledge and the text they read. Reading is the kind of process in which one needs to not only understand its direct meaning, but also comprehend its implied ideas. (Gill, 2008).

Anderson (2003) pointed out that reading is the interaction of four things including the reader, the text, the fluent reading or the ability or read at an appropriate rate with adequate comprehension.

### 1.1. Factors influencing reading comprehension

A reader's understanding of text is influenced by a broad range of factors, including his or her motivation, interest, vocabulary, general knowledge, knowledge of the particular subject, word identification skills, reasoning ability, use of effective strategies to identify main ideas and
supporting detail, and an appreciation of text structure (Torgese, 2000). Reading with understanding involves the smooth co-ordination of higher order cognitive processes (thinking, reasoning, analyzing, connecting, reflecting) and lower order processes (word recognition, decoding) (Pressley, 1998). Some children are poor comprehenders because they lack fluency in lower order reading processes. For example, slow reading caused by inefficient decoding very seriously impairs the understanding of text (Carver, 2000), fluent reading normally enhances it (Teale \& Yokota, 2000).

Bügel and Buunk (1996) had formerly found that the topic of text is an important factor explaining gender-based differences in the reading part of the national foreign language examination. Males outperformed females on MC comprehension items for essays about laser thermometers, volcanoes, cars, and football players. Females outperformed males on the comprehension tests for essays on topics such as midwives, a sad story, and a housewife's dilemma.

Pae (2004) found that passage content was not a reliable factor to explain the interaction between gender and performance in reading comprehension, and that item type might provide a better index in this regard. Studying the Korean students taking the Korean National Entrance Exam, Pae found that items classified as Mood/Impression/Tone tended to be easier for females, whereas items classified as Logical Inference were more likely to favor males regardless of item content.

In a review article, Al-Shumaimeri (2005) claimed that most of reading comprehension studies use gender-oriented reading texts and that there was a need for more research on L2/FL reading comprehension using gender-neutral text,; although, some studies like Bügel and Buunk (1996) had formerly indicated a gender-based difference even with neutral texts. They included a gender-neutral text in their study and found that males performed significantly better than females.

Finally, some other studies have related gender differences in reading comprehension to different strategies those readers employ (Abu-Rabia, 2004; Bacon, 1992; Chavez, 2001; Kaylani, 1996; Oxford et al, 1996; Oxford et al, 1993 and Sheorey, 1999).

### 1.2. Bilingualism

It has been estimated that approximately $60 \%$ of the world's population is either bilingual or multilingual; that is, more than half the people in the world routinely use two or more languages in their daily communication (Baker, 2001 and Padilla, 1990, cited in Maghsoudi,2008) Multilingualism and multiculturalism are social facts of this new century, which can be seen in most classrooms and playgrounds. For bilingual students in English as a second language learning context, being able to speak, read and write in the English language is critically important as "English is the main language required for school success and interaction with the wider society" (Molyneux, 2004, p. 6). However, the role played by bilingual students' first language in such a learning environment is also important.(Parvanehnezhad and Clarkson, 2008).

As Maghsoudi (2008) expressed: Knowing two or more languages truly gives kids so many advantages in life. Bilingual kids have the advantage of knowing two cultures, of being able to communicate with a wider variety of people, and of possible economic advantages in their future.

Regarding the above discussion, the following hypotheses are formulated:
H1: Male and female learners' ability in gender-based reading comprehension differ significantly.

H2: Monolingual and bilingual learners' ability in gender-based reading comprehension differ significantly.

## 2. Methodology

### 2.1. Participant

The initial sample of this study consisted of 220 students with the age range of 15-18. They consisted of two groups: 1) Monolingual students have been lived in Arak for more than 7 years.
2) Bilingual students have been lived in Farahan for more than 7 years. By means of a background questionnaire some information about subjects were elicited, so by using the background questionnaire the subjects divided into two groups as:

Group A (50 male and 50 female monolinguals)
Group B ( 45 male and 48 female bilinguals).

### 2.2. Materials

The different materials which were used in this paper include:
a) Questionnaire on readings interest : It determined male and female's interest in different reading Comprehension topics. To meet the aim, the subjects were requested to mark the topics from a list according to their interest. This test has included 29 topics.
B) Background questionnaire: It was utilized to elicit some information as: the subjects $\square$ full name, their age, name of their school and the language/languages they use.
c) Language Proficiency Test (Transparent): This test was composed of multiple choice cloze passage, 30 questions about grammar, 10 questions about vocabulary and 10 questions for reading comprehension, totally it contained 50 questions.
d) General reading comprehension test: It was used to determine the proficiency level of the subjects in reading comprehension ability. This test was consisted of two separate texts with 6 questions in each one.
e) Gender oriented Reading comprehension test: It was used to measure the effect of subjects' interest on their reading comprehension ability.

### 2.3. Procedures

Firstly, the subjects were informed that their performance will be kept confidential and will not have any effect on their final exam scores. The following procedures were adopted in order to meet the objective of this study.

Phase 1: At the very beginning of the research, Questionnaire on readings interest was administered to the participants. In this part, male and female students marked especial topics which were more desirable for them. This process was done by means of a five-point Likert scale questionnaire (Never/ Seldom/ Sometimes/ Usually/ and Always true of me).

Phase 2: The Background questionnaire was given to the subjects to fill them out.
Phase 3: The Transparent test was given to 220 (Persian-Turkish) male and female high school students who were monolingual and bilingual. Two groups of High and Low language proficiency levels were identified, that is, those whose scores were 1SD below the mean were taken as Low and those whose scores were 1SD above the mean as High level, making 193 students in total. The time allowed as determined at the pilot study was 45 minutes.

Phase 4: The reading comprehension test was administered among the subjects to be completed in 30 minutes as determined at the pilot study in order to have an assessment of their English reading comprehension ability.

Phase 5: The subjects were given the gender-oriented reading comprehension test. That is Male-based text (M.B.T) and Female-based text (F.B.T) and Male, Female-based text(M.F.B.T).

## 3. Results and Discussion

Independent samples't' test and repeated measure ANOVA were employed to compare the mean scores of data. Statistical representation of the analyzed data is given in Table 1 and figure 1.

As indicated in table 1 and figure 1, there is a significant difference between male and female learners in F.B.T... ( $\mathrm{p}<0 / 05$ ). So the obtained means show that females outperform

Table 1. Results of t-test and one-way ANOVA for mean scores on F.B.T scores on male and female students.

| Group | Number | Mean | Standar <br> d deviation | Standar <br> d error <br> mean | P value |
| :---: | :---: | ---: | ---: | ---: | :--- |
| female | 98 | 3.13 | 1.09 | 0.110 | 0.007 |
| male | 95 | 2.71 | 1.03 | 0.106 |  |



Figure 1. Results of $\boldsymbol{t}$-test and one-way ANOVA for mean scores on F.B.T scores on male and female students.

As Nourzadeh concluded in his paper, there was a relationship between Iranian Pre-university EFL learners' gender and their use of reading strategies. This finding, therefore, supports the findings of other studies in this area (Nunan, 1999; Ehram \& Oxford, 1989; Oxfordet al. 1995). The female subjects showed more strategy awareness than male subjects.

Table 2. Results of $\mathbf{t}$-test and one-way ANOVA for mean scores on M.B.T scores on male and female learners.

| Group | Number | Mean | Standar <br> d deviation | Standar <br> d error <br> mean | P value |
| :--- | :---: | ---: | ---: | ---: | :---: |
| female | 98 | $2 / 57$ | $1 / 06$ | $0 / 107$ | 0 |
| male | 95 | $3 / 4$ | $1 / 24$ | $0 / 128$ |  |



Figure 2. Results of $t$-test and one-way ANOVA for mean scores on M.B.T scores on male and female learners.

Regarding to obtained mean, there is meaningful difference between male and female students in their M.B.T. ( $\mathrm{p}<0 / 05$ ).Obtained mean which belong to these data have shown that males are better females in M.B.T.

Al-Shumaimeri (2005) claimed that most of reading comprehension studies use genderoriented reading texts and that there was a need for more research on L2/FL reading comprehension using gender-neutral text,; although, some studies like Bügel and Buunk (1996) had formerly indicated a gender-based difference even with neutral texts. They included a gender-neutral text in their study and found that males performed significantly better than females.( Ahmadi and Mansoordehghan,2012)

The following mean and standard deviation were obtained:
Table 3. Results of $\mathbf{t}$-test and one-way ANOVA for mean scores on( M.F.B.T) scores on male and female students.

| Group | Number | Mean | Standar <br> d deviation | Standar <br> derror <br> mean | P value |
| :--- | :--- | :--- | ---: | ---: | :---: |
| female | 98 | $2 / 82$ | $1 / 218$ | $0 / 123$ | 122 |
| male | 95 | $3 / 1$ | $1 / 275$ | $0 / 130$ |  |

Regarding to obtained mean, there isn't significance difference between male and female students in their (M.F.B.T). ( $\mathrm{p}>0 / 05$ ).So females and males answered to this text equally. As it is clear in table3 and figure3, they had same scores in this reading comprehension test.


Figure 3. Results of $\mathbf{t}$-test and one-way ANOVA for mean scores on ( M.F.B.T) scores on male and female students

Bügel and Buunk (1996) had formerly found that the topic of text is an important factor explaining gender-based differences in the reading part of the national foreign language examination. Males outperformed females on multiple choice comprehension items for essays about laser thermometers, volcanoes, cars, and football players. Females outperformed males on the comprehension tests for essays on topics such as midwives, a sad story, and a housewife's dilemma.

In another study by Ahmadi (2012) indicated that in general both males and males had a successful performance on referential questions asking for the reference of specific words or pronouns in the text.

As indicated in table 4 and also figure 4, the following mean and standard deviation were obtained:

Table 4. Results of $t$-test and one-way ANOVA for mean scores on F.B.T scores on female bilingual and monolingual students.

| Group | Number | Mean | Standar <br> d deviation | Standar <br> d error <br> mean | P value |
| :---: | :---: | :---: | ---: | ---: | :---: |
| female | 48 | $2 / 91$ | $0 / 963$ | $0 / 139$ | 040 |
| female | 50 | $3 / 34$ | $1 / 171$ | $0 / 165$ |  |



Figure 4. Results of $\mathbf{t}$-test and one-way ANOVA for mean scores on F.B.T scores on female bilingual and monolingual students.

In this part by regarding to obtained mean ,there is difference scores between female monolingual and female bilingual in F.B.T. p<0/05).The mean which was obtained in this part have shown that female bilingual outperform female monolingual in F.B.T.

As Maghsoudi (2008) pointed out: mono and bilingual students differed significantly in their reading comprehension scores. Meaning that bilingual students had significantly higher scores than monolingual students irrespective of their proficiency levels.

A study by Sandoval, Gollan, Ferreira, and Salmon (2010) compared monolinguals and Spanish-English bilinguals who reported high proficiency in both languages for their performance on several category and letter fluency conditions in English, and in a second experiment also compared the time course of retrieval from bilinguals' two languages (English vs. Spanish). In another study by Luo, Luk, and Bialystok (2010), a standardized version of the category and letter fluency tasks in English was administered to monolinguals and bilinguals who were either matched on English vocabulary or had a lower English receptive vocabulary. In both studies, the bilinguals produced words later into the allotted time, indicating slower and more effortful retrieval for each word produced, likely due to interference from the non target language (Sandoval et al., 2010).

According to obtained data which were mean and standard deviation in table 5 and figure 5:
Table 5. Results of t-test and one-way ANOVA for mean scores on F.B.T scores on female monolingual and male monolingual students.

| Group | Number | Mean | Standar <br> d deviation | Standar <br> d error <br> mean | P value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Female <br> monolingual | 48 | $2 / 91$ | $0 / 963$ | $0 / 139$ | 022 |
| Male <br> monolingual | 50 | $2 / 46$ | $1 / 973$ | $0 / 137$ |  |



Figure 5. Results of $t$-test and one-way ANOVA for mean scores on F.B.T scores on female monolingual and male monolingual student.

According to obtained mean and standard deviation ,there is difference scores between male monolingual and female monolingual in F.B.T. ( $p<0 / 05$ ). Obtained means indicated that Female monolingual outperform male monolingual in F.B.T .

Oxford (1993 a, 1993 b) offered many possible biological and socio-cultural reasons for gender differences in L2 strategy use. Ehram and Oxford (1989: 8) pointed to documented "female superiority in verbal attitude and social orientation, as well as possible sex differences in integrative (socially- based) motivation" and in psychological type.

Mean and standard deviation have shown in table 6 and figure 6.
Table 6. Results of t-test and one-way ANOVA for mean scores on M.B.T scores on female monolingual and male monolingual students.

| Group | Number | Mean | Standar <br> d deviation | Standar <br> d error <br> mean | P value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Female <br> monolingual | 48 | $2 / 47$ | $1 / 05$ | $0 / 151$ | 004 |
| Male <br> monolingual | 50 | $3 / 18$ | $1 / 28$ | $0 / 182$ |  |

Regarding to obtained mean, there is significance difference between male monolingual and female monolingual in M.B.T.( $\mathrm{p}<0 / 05$ ).Obtained means indicated that male monolingual are better female monolingual in M.B.T.


Figure 6. Results of t-test and one-way ANOVA for mean scores on M.T.B scores on female monolingual and male monolingual students

Table 7. Results of $\mathbf{t}$-test and one-way ANOVA for mean scores on (M.F.B.T) scores on female monolingual and male monolingual students.

| Group | Number | Mean | Standar <br> d deviation | Standard <br> error mean | P value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Female <br> monolingual | 48 | $2 / 68$ | $1 / 27$ | $0 / 183$ | 334 |
| Male <br> monolingual | 50 | $2 / 94$ | $1 / 30$ | $0 / 184$ |  |



Figure 7. Results of t-test and one-way ANOVA for mean scores on (M.F.B.T) scores on female monolingual and male monolingual students.

The findings of studies on gender differences in reading strategy use and reading performance are not consistent. Chavez (2001) found that females scored higher than males in a multiple-choice reading comprehension test. Bugel and Buunk (1996) found that male students scored higher than females in a reading test which had passages neutral in gender.

It is obvious in table 7 and figure 7 mean and standard deviation of scores.
Regarding to obtained mean, there isn't significance difference between male monolingual and female monolingual in (M.F.B.T). $(\mathrm{p}<0 / 05$ ).Obtained means indicated that male monolingual and female monolingual are equal in (M.F.B.T).

## 4. Conclusion

Data analysis in this study indicated that gender has effect on reading comprehension ability. In first part, the researchers talked about reading among other skills in English language and they pointed out the important role of interest in readings topics. Also, they have mentioned that there would be some factors which can influence reading comprehension ability. In next part, the genderoriented reading texts were analyzed by different researchers. At the end, bilingualism discussed briefly.

That is, learners can understand easily those texts which they are interested in. To motivate the learners for further reading comprehension practice, it is advised that expose the students with those texts in which they are interested.

It was indicated that females either monolingual or bilingual are better males in understanding and comprehending reading texts which have caught the eyes of females rather than males.

Finally, it was obvious that subjects, both males and females had equal capability in understanding the texts which had caught the eyes of female and male learners equally. That is they had shown the same interest in these texts.

As Maghsoudi (2008) has mentioned: earlier studies suggested that bilingualism is associated with negative consequences (see, for example, Printer \& Keller, 1922; Saer, 1923; Anastasi \& Cordova, 1953; Darcy, 1953 and Tse, L. 2001). Many investigators have also found that bilingualism has a positive effect on foreign language achievement (Lerea \& Laporta, 1971; Cummins, 1979; Eisenstein, 1980; Ringbom, 1985; Thomas, 1988; Valencia \& Cenoz, 1992; Zobl, 1992; Klein, 1995; Sanz, 2000; Hoffman, 2001; Richard-Amato 2003, and Flynn 2006). Eisenstein (1980), for example, found that childhood bilinguality had a positive effect on adult aptitude for learning a foreign language. That is, those who learned a second language during childhood would have a greater success in learning foreign languages as adults.

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