

# The Effect of Gender on Language Learning

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**ABSTRACT:** This study aims to examine the effect of gender on English as a foreign language (EFL) achievement test at the end of RUN2 (Young adults) at ILI (Iran language institute in 2013). In other words, the aim of this study was to determine whether students' gender can affect learning English as a foreign language or not. Participants of the study were 100 guidance school students (50 males and 50 females) selected from four different classes. The employed procedures were quantitative methods of analysis and making use of descriptive analysis, pair t-test, and the effect size. The results indicated that EFL learning is to some extent related to gender and it has a significant effect on the achievement test. The results of this study help instructors to select their instructional strategies more effectively related to gender of students.

**Keywords:** achievement test, gender, t-test, effect size.

## INTRODUCTION

Most recently, evidence has shown that while both boys and girls have improved their performances, girls achieved higher marks than boys in EFL learning. Gender has been regarded as an important affective factor that plays a specific role and influences second language acquisition. There are some differences between the language of men and that of women, and no education or social conditioning can wholly erase these differences. A gender difference is a disparity between male and female RUN2. According to gender role theory, prevalent gender stereotypes are culturally shared expectations for gender appropriate behaviors. Females and males learn the appropriate behaviors and attitudes from the family and overall culture they grow up with, and so non-physical gender differences are a product of socialization (Eagly, 1987; Eagly and Karau, 2002). From the biological viewpoint, females and males also differ fundamentally in terms of cognitive ability and learning style. These differences are derived both from basic physiological differences, such as differences in the development of brain, and from differences in higher-level cortical functions (Keefe, 1982). Males and females have somewhat different patterns of lateralization, with males being more left-hemisphere dominant than females (Banich, 1997, p. 306-312). No matter what gender differences are primarily culturally or biologically determined, educational research in the last several decades has proven that the gender differences manifestly influence students' academic interests, needs, and achievements (Halpern, 1986; Collins, Kenway and McLeod, 2000; Swiatek & Lupkowski-Shoplik, 2000). However, different educational domains have different claims to the gender issue. The theorists of Second Language Acquisition (SLA) believe that female learners show possible superiority in their second language learning process (Burstall, 1975; Boyle, 1987; Ehrlich, 2001). Therefore, whether ESL students leaning English with CALL programs will gain or counteract the learning efficiency due to their gender difference has become a significant issue of ESL instruction. As (Bernhardt's ,1991) model predicted that studies revealed significant gender differences in comprehension with different passages at early stages of acquisition, but not at more advanced stages.

**Review of literature**

Gender is an issue with important theoretical and pedagogical assumption in L2 learning. A good number of studies found that gender can have a significant effect on how students learn a language. A large number of researches worked on topics about gender, including language learning ability, motivation, teacher perceptions, learning styles and strategies, classroom interaction, teaching materials, testing and pedagogies. Many studies that examined gender as a variable in the use of language learning strategies (LLS) reported that significant gender differences almost always are the same, and they show greater use of LLS by females (see for instance, Green & Oxford, 1995; Noguchi,1991). (Politzer ,1983) reported that females used social LS significantly more than males. (Ehrman and Oxford ,1990), using the LLSL with both students and instructors at the U.S. Foreign Institute came to the conclusion that compared to males, females reported significantly greater use of LLS in four areas of general study strategies, functional practice strategies, strategies for communicating meaning, and self management strategies.

**MATERIALS AND METHODS**

The participants in this study were guidance school students who were learning English at ILI at level of RUN2 and RUN3 (50 males and 50 females and age about 12-14) who were selected at random from four different classes. They attended the English language classes in the spring semester of the year 2012 and participated in the final English achievement test at the end of that semester. Out of 100 male students, 50 were studying in Run2 and 50 in RUN3; Both females and males. In order to ensure that the participants shared similar characteristics, such as language skills, only those participants, who had previously passed the first semester final exam, were included in this study. They all were from different classes of institute. The age of the participants was between 12 and 14, and they all had 1 year of experience in English language learning.

**Materials**

The raw scores of the students’ English achievement test which administered at the end of second semester were used as instrument in this study. The test paper included four parts: vocabulary, grammar, sentence function, and reading comprehension. The items contained fill in the blank, matching, multiple choice, and dictation which intended to assess students’ overall ability in language use. To ensure the effectiveness of the test, a nationwide English test was chosen. A sample of the test has been provided at the end of the paper in appendix section.

**Data Analysis**

SPSS (Statistical Package for Social Sciences) 21 was employed to analyze the data. Firstly, descriptive analysis was performed to compute the means, and standard deviations to see the mean differences of two groups (males and females). Secondly, Independent-Samples T-Tests were run to compare the differences among different groups (between RUN3 male and female students, between RUN2 male and female students, and between total of RUN3 and RUN2 male and female students). This study aimed to investigate if there were females’ outperformance rather than that of males in their EFL achievement tests. The research questions were analyzed by means, standard deviations, independent-samples t-tests, and effect sizes.

As can be seen in table 1, the total average of the RUN2 female students (M=13.18) is higher than that of males’ (M= 11.47). RUN2 female students outperformed the RUN2 male students. In this case, Female students have a standard deviation of 3.20 whereas males have achieved a standard deviation of 3.54 that shows the amount of variation within female scores is smaller than males’.

Table 1 .RUN2 Male and Females' Mean and Standard Deviation

|                | RUN2   | N  | MEAN | SD  |
|----------------|--------|----|------|-----|
| Scores of RUN2 | male   | 25 | 11.5 | 3.4 |
|                | female | 25 | 13.5 | 3.2 |

In table 2, the result of the independent-samples t-test indicates that there is a significant difference between the scores of the two RUN2 groups. (P< 0.05, Sig= 0.00).

Table 2. RUN2 Male and Females' Independent T-Test

| Equal variances assumed | T-test for equality of Means |     |                 |                 |
|-------------------------|------------------------------|-----|-----------------|-----------------|
|                         | t                            | df  | Sig. (2-tailed) | Mean Difference |
| Scores of RUN2          | -3.928                       | 238 | .000            | -1.71458        |

Here, the effect size was calculated in order to see the magnitude of the difference and the strength of association in RUN2 males' and females' students. The calculated effect size is 0.06, so it is concerned with a moderate effect between RUN2 males' and females' scores. Cohen (1988, as cited in Pallant, 2001, p.175).

Table 3 indicates that the total mean of the RUN3 female students (M=16.0) is higher than that of males' (M= 15.2). In this case, female students outperformed the male students. Female students have a standard deviation of 2.84 whereas that of males' is 3.2. This shows that the amount of variation within female scores is smaller than males'.

Table 3. RUN3 Male and Females' Mean and Standard Deviation

| RUN3   | N  | MEAN | SD  |
|--------|----|------|-----|
| male   | 25 | 15.3 | 3.4 |
| female | 25 | 16   | 2.8 |

As can be seen in table 4, the results also indicate that there is a significant difference between the scores of two RUN3 groups. (P< 0.05, Sig= 0.04).

Table 4. RUN3 Male and Female Independent T-Test

| Equal variances assumed | T-test for equality of Means |     |                 |                 |
|-------------------------|------------------------------|-----|-----------------|-----------------|
|                         | t                            | df  | Sig. (2-tailed) | Mean Difference |
| Scores of RUN3          | -2.041                       | 238 | .042            | -.81042         |

The result of the effect size obtained for the third question (d= 0.01) also shows that there is a small effect of difference between RUN3 males' and females' students

Table 5 indicates that the total mean of all female students (M= 15.59) is higher than that of males' (M= 12.33). Here, female students outperformed the male students. The standard deviation of all females is 3.09 while all males have achieved a standard deviation of 3.48. It reveals that females' scores have a small amount of variation rather than males'.

Table 5 .Total Male and Female Mean and Standard Deviation

| Gender of total              | N  | MEAN  | SD   |
|------------------------------|----|-------|------|
| Total Male And Female Scores | 50 | 12.33 | 3.48 |
| female                       | 50 | 15.59 | 3.09 |

As table 6 shows, results of statistical analysis of independent-samples t-test also reveal that the p-value is 0.00. (P < 0.05) This means that there was a significant difference between the total mean males and the total mean females

Table 6 .Total Male and Female Independent T-Test

| Equal variances assumed      | T-test for equality of Means |     |                 |                 |
|------------------------------|------------------------------|-----|-----------------|-----------------|
|                              | t                            | df  | Sig. (2-tailed) | Mean Difference |
| Total Male And Female Scores | -10.84                       | 478 | .00             | -3.26           |

Then, the effect size was calculated for the third question in order to investigate the strength and the magnitude of difference in total males' and females' students. It was equal to 0.19. It also indicates that there is a small relative magnitude of difference between the total females and the total males.

## CONCLUSION

### **Discussion and conclusion**

The aim of this study is to understand if females outperform rather than males in their EFL achievement tests. After using the SPSS program and getting the results, we understood that the findings were same as the past results and findings. What we got from the analyses is the fact that female students at both the levels RUN2 and RUN3 outperform male students. According to Majors and Gender, it clearly showed that the success of the total females was better than males in all regions of Dezfoul in their EFL achievement test. For example, the means among RUN2 and RUN3 females was 13.18, 16 respectively, while it was 11.5 and 15.5 among males for the same levels. Again the total mean of females was 15.59 while it was 12.33 for total males at ILI.. These results imply that gender is a factor which is concerned with EFL learning. Gender was found to have significant effect ( $P < 0.05$ ,  $Sig = 0.00$ ) on students' EFL achievement test. (Rammouz, 2003) suggested that females are better second language learners. These findings however revealed a significant interaction effect of gender on students' achievement test, the effect sizes (RUN2  $d = 0.06$ , RUN3  $d = 0.01$ , and total  $d = 0.19$ ) were relatively moderate and small respectively. Again the results of this study are congruent with findings of Rayan and who suggested that there was little differential performance by gender, the opt did not demonstrate gender (DIF Zwick, 2002) who stated that the means of females' differences were slightly higher than those of (males and Rammouz, 2003) who suggested that the percentage of success among females was 76.33%, 57.52%, 55.89%, 73.14%, 55.38% and 55.42% in Beirut, the North, the South, Mount Lebanon, Nabatiyé and the Bekaa respectively, while it was 63.61%, 52.11%, 52.52%, 67.09%, 54.64% and 53.15% Iranian EFL Journal 202 among males for the same regions. All the above findings showed that there was a small effect size between males' and females' performances. It is important that EFL instructors be informed more with the gender effects. They need to be more familiar with the differences between males and females. The findings of this study help instructors to select their instructional strategies more effectively related to gender. In view of the quantitative findings of this study, it is clear that female students in RUN2 and RUN3 outscored that of the males'. The total female students outperformed the total male students. This study indicates that however there is a significant difference between males' and females' performance, the magnitude of the difference and the strength of association between the total males and the total females is relatively small. Therefore, gender could have a small effect on students' EFL achievement tests. This study has some limitations. First of all, the number of participants was rather limited; secondly, they were all from the same city. Caution should therefore be exercised in generalizing the current findings beyond this student population, or indeed to other wider population. third limitation which can be mentioned here is related to the final test used in the article. Much more time, energy, and study are needed in order to prepare a more valid and reliable test. For further research, this study is needed to be done in different Types of context students. The effects of gender could be investigated more with treatment and control groups. Some research with learners with different ages could be helpful to find the best answers to the above research questions. Another interesting approach could be investigating whether it is necessary to present the content of the curriculum of EFL classes.

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