Does Gender Matter? Potential Lexical Errors among Iranian EFL Learners

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Abstract. Post method era encourages teachers to attend to the different layers of reality of the classroom. Apparently, the most important layer of reality is "individual differences". Gender as a key factor, among other factors of individual differences, needs to be considered in teaching profession in general and language teaching in particular. A thorough review of literature gives us a vivid picture of dichotomous findings regarding the impact of gender on learning language skills. When it comes to writing, issue becomes more complicated, because, as Williams (2009) puts it, few models of writing have emerged and none is comprehensive. This study seeks to identify and categorize the lexical errors that appear in a group of high school EFL learners' compositions in Khorramabad, Iran in an attempt to find a possible trace of gender in these errors. EFL learners including males and females were under investigation. They were asked to write an essay about computer. The SPSS program was used to process the analysis of the data. Two-way Analysis Of Variance was used to evaluate the hypothesis of significant difference between the mean scores of male and female students' writing performance in types of lexical errors. The results revealed no significant difference between male and female students in type of lexical errors in their writing task. It also was found that female learners outperformed their peer male learners in their writing scores.

Keywords: Lexical errors, gender, individual differences

1. INTRODUCTION

In recent years, there has been a growing research interest in the analysis of errors adults make while learning a second or foreign language. The study and analysis of the errors made by foreign language learners (i.e. Error Analysis or EA), either in their speech or writing or both has been brought under consideration by many educators, EFL teachers, linguists, and researchers throughout the world. In fact, learners' errors have been the subject of controversy for a long time. Therefore this study is an attempt to identify and categorize the lexical errors that appear in a group of high school EFL learners' writing.

Writing is a complex process even in the first language. Undoubtedly, it is more complicated to write in a foreign language. Consequently, lots of researchers have intended to identify the common errors EFL students make in writing the second or foreign language. Of course, a better understanding of the errors and the origin of such errors in the process of EFL writing will help teachers know students' difficulties in learning that language. Moreover, it will aid in the adoption of appropriate teaching strategies to help EFL students learn better. Therefore, EA can be considered as a fundamental tool in language teaching in order to reorganize teacher's point of view and readdress his/her methodology for fixing and fulfilling the students' gaps (Londono Vasquez, 2007).
1.1. Objectives of the study

The objectives of the study include the following:

1. To investigate the types of errors made by both Iranian male and female EFL learners in their writing skills.
2. To find the most common errors, learners make in their essays.
3. To analyze those errors committed in their writing skills.

1.2. Research Questions

In order to conduct the study the following research questions were raised:

1. Is there any significant difference between male and female learners in type of lexical errors made in their writing skills?
2. Is there any significant difference between Iranian EFL male and female learners in their writing scores?

1.3. Statement of Research Hypothesis

Based on the above mentioned research questions, the following hypothesis are formulated.

H1: There is no significant difference between Iranian male and female EFL learners in type of lexical errors committed in their writing skills.

H2: Iranian female learners outperform their peer male learners in writing scores.

2. REVIEW OF THE RELATED LITERATURE

2.1. Gender and Language Overview

From time to time, language and gender has been a growing area of study among researchers. Block (2002) states that in two survey articles, Jane Sunderland (2000) and Aneta Pavlenko and Ingrid Piller (2002) cite over twenty collections of articles which were published during the period 1991-2001, and over 10 monographs devoted to this topic. Among the outstanding studies we may mention the research studies such as the relationship between gender and language or discourse (Goddard & Patterson, 2000; Litosseliti & Sunderland, 2002).

Among others, three famous journals namely: Gender and Education, Discourse and Society and TESOL Quarterly have been publishing articles that focus on gender and language interrelation. In addition, there has been an increase in the number of conferences held on the concepts of language and gender, like the International Gender and Language Association Conference that was held at Lancaster University in April, 2002 and a close look of applied linguistics and language teaching conferences shows that there are progressively more colloquia and individual papers that focus on language and gender (Block, 2002).

A closer look at the historical development of the gender concept in language studies will reveal that the perspectives and the philosophies underlying the research have changed over time. Research on language and gender and theoretical shifts in the field result from real-world
changes brought about by-political movement and therefore represent not only differences in academic perspectives on gender and language, but also changes across time in how gender and language are perceived to work in the world (Cameron, 2004). According to Cameron (1995), "a crude historical-typological account of feminist linguistic approaches since 1973 would probably distinguish between three models of language and gender (p. 33)"; the deficit model, the cultural difference model and the dominance model.

2.2. Deficit Model

In the deficit model, females are seen as disadvantaged speakers and communicators particularly Ly, in the professional world, due to their upbringing and socialization as females (Block, 2002). The deficit theory is well-reflect in Lakoff’s (1973) work on language and women’s place. In these studies the speech of men is accepted as the norm while the women’s speech is perceived to be deficient. In her analysis of verbal hygiene, Cameron (1995) points out the pressure imposed to female members of the society to monitor both the men’s and their own language and clean up their faulty language production accordingly.

2.3. Dominance Model

In the mid 1970s, the dominance framework was adopted by most researchers and they linked negative evaluations of women’s language to their social domination by men (Bergvall, 1999). Studies of gendered language structures and language use suggested that men gain and maintain power over women in social interaction by means of interrupting and overlapping women’s speech, using a high volume of words, or denigrating women (Davis & Skilton-Sylvester, 2004). Because of such studies, most scholars called for nonsexist English language usage (Cooper, 1989; Nichols, 1999). This call resulted in a model which has traditionally existed in feminist linguistics, and the dominance model found a start-off. "In this model women are perceived to perform their ‘woman-ness’ in an ethno methodological frame as they continually negotiate their position of relative powerlessness vis a vis men" (Block, ibid, p.53). The deficit model was more conservative; nevertheless, dominance model was rather radical. Cameron (1995) points out that the dominance model challenges the foundations of socio-economic hierarchies in different societies around the world: what is proposed is not just the adjustment of individuals’ ways of speaking, but the dismantling of the entire social structure edified over centuries which has given men the upper hand over women (Block, ibid).

2.4. Cultural Difference Model

With the turn of the 1980s, the difference framework (dual culture model) was raised as an alternative to the dominance model. According to the cultural difference model, men and women belong to separate but equal cultures which predate the development of individuals who are socialized into them (Block, ibid). That is, girls and boys are socialized into different ways of relating to one another in their predominately same-sex interactions and, thus, acquire different communicative styles within the community they live (Davis & Skilton-Sylvester, ibid). Unlike the deficit model, the cultural difference model does not perceive the differences negatively. It adopts the socially liberal position that men and women are different but equal: women's speech and communication styles are not inferior to men's; rather the relationship between the two are problematic at least in part because of culture clash (Block, ibid). This model assumes that, if communication breaks down between men and women, it’s caused by misinterpreting the other party’s form of interaction (Tannen, 1993, 1996), not because of the men’s dominating power in the communication between men and women.
2.5. Gender and First Language Acquisition

General idea about the way that children learn their mother tongue is quite straightforward. There is always difference in talent when children study other knowledge, for example, some children are good at mathematics, while others have a talent for physics. However, there is little difference in mother tongue acquisition. Although children’s living environments differ in thousands of ways and experiences in physics and intelligence are totally different, these differences don’t influence their acquisition of mother tongue at all. Five or six-year-olds, regardless of their gender, have the same language ability roughly despite their different language environments. It’s easy for children to learn their mother tongue and acquire language ability unconsciously (Li & Bu, 2006).

However, there are also several studies of first language acquisition (Douglas, 1964.) that have shown girls to be better learners than boys. Trudgill (1974) showed that women used the prestige variants more frequently than men and related this phenomenon to female social insecurity. Differences between male and female L1 learners appear more in studies conducted in bilingual settings; and such studies favor female learners in acquiring the languages they are exposed to. In a study of Punjabi migrant children in England, Agnihotri (1979) showed that girls assimilated the prestige variants faster than the boys; they were also better at resisting the stigmatized variants. Satyanath (1982) too found that Kannadiga women in Delhi showed a higher percentage of assimilation of linguistic features associated with Hindi and also a higher degree of usage than men. He found that younger women assimilated the host society's language and culture maximally. Unlike Trudgill (1974), who holds social insecurity to be responsible for greater use of prestige variants, Satyanath attributes it to the socio-cultural aspects of the Kannadiga community which provides women a greater opportunity of interaction with the host society and this seems to be the underlying reason in female learners outscoring their counterparts.

2.6. Gender and Second Language Acquisition (SLA)

SLA, which is a subarea of applied linguistics, has become a genuine field of research for the last three decades. Previously, the research of gender and SLA basically focused on the topics valued in the area of SLA; nevertheless, with the change of perspectives it started to investigate the teachers and the learners more. In the previous period, only such studies that were based on positivist or post positivist assumptions were respected by many scholars.

As (Davis & Skilton-Sylvester, 2004) states, real science meant only experimental or quasi-experimental design, surveys, and post positivist qualitative studies to such scholars; and assuming only this hierarchy as the real track to follow neglects the wide range of contributions made through other paradigms (including gender) and excludes research participants’ diverse experiences, “thereby creating conditions for inaccurate, inequitable and discriminatory outcomes” (p.388).

Such a hierarchy of predetermined research approaches, topics and participants, also, has the potential to cause discriminatory results against the teachers (Davis & Skilton-Sylvester, 2004). Lin et al. (2004) explains the way that educators face “systematic, institutional suppression of research and teaching on minority and diversity issues” (p.497).

They state that “senior staff identified research by minority scholars on marginalized groups as opposed to the adult, middle-class, and white populations that have dominated SLA literature as ‘repetitive’ and ‘trivial’” (p.497).
Even though some significant SLA theorists (i.e. Long, 1998, Gass, 2000) believe that SLA researchers began to ask the right question, investigating these questions in a scientific way and accumulating results that allow them to further refine and make adjustments to existing theories, if we look closer how questions are related to gender have been explored, we cannot say that it is definitely the case (Block, 2002). As Jimenez-Catalan (2000) utters, individual differences such as age, aptitude, learning style and motivation are very-well focused on in most SLA research studies, but gender is often ignored. Besides, as Ehrlich (1997) and Sunderland (2000) points out, even in studies where gender was included into research, it was perceived in an oversimplified way.

2.7. Review papers on errors and gender

In his salient book "The Study of Second Language Acquisition", Rod Ellis (1994) devotes only a few pages to gender in a section entitled "sex", that is included in the section of "Social factors and second language acquisition". He discusses the difference between the terms "sex" and "gender" and mentions the two principles Labov (1991) suggested:

1. In stable sociolinguistic stratification, men use a higher frequency of nonstandard forms than women

2. In the majority of linguistic changes, women use a higher frequency of the incoming forms than men (p.206-207). Then he turns Labov's generalizations into an hypothesis that follows as "women might be better at L2 learning than men as they are likely to be more open to new linguistic forms in the L2 input and they will be more likely to rid themselves of interlanguage forms that deviate from target-language norms" (Ellis, 1994). Ellis then cites two studies, Burstall's (1975) research in England on primary school students of French and Boyle's (1987) research in Hong Kong on university students of English. Either of these studies reveals that female students were more successful than male students in the exams applied. He further states that such generalizations might be misleading as Boyle's study also indicated higher achievement of male students in listening tests and the study by Bacon (1992) of university students of Spanish in the US found no such significant difference between boys and girls.

According to Gardner and Lambert (1972)’s study, female students of L2 French in Canada were more motivated than the male students and also had more positive attitudes towards the speakers of the target language (Block, 2002). Bacon and Finnemann (1992) found that female university students of Spanish in the US were more instrumentally motivated than male students. About the learning strategies, Gass and Varonis's (1986) study of university students of English as a second language is cited to support the notion that "men use the opportunities to interact to produce more output, whereas women use it to obtain more input" (Ellis, 1994: 203 in Block, 2002). However, Teresa Pica et al's (1991) study of adult learners of English in the US indicated no significant differences in interaction strategies (Block, 2002).

According to Ellis’ review, there was nothing conclusive in studies of gender differences in SLA in achievement, attitudes and strategy use at that time. As a result, Ellis concluded the section about gender as follows: "Sex is, of course, likely to interact with other variables in determining L2 proficiency. It will not always be the case, therefore, that females outperform males. Asian men in Britain generally attain higher levels of proficiency in L2 English than do Asian women for the simple reason that their jobs bring them into contact with the majority English speaking group, while women are often "enclosed" in the home. Sex interacts with such factors as age, ethnicity, and, in particular social class (Ellis, 1994, p. 204).

Several other SLA texts published at about the same time (i.e. Cook, 1993; Gass &Selinker, 1994; Towell & Hawkins, 1994, Mitchell & Myles, 1998; Lightbown & Spada, 1999;and Gass
2.8. Gender Differences in Written Language

Research on gender differences in written language is quite limited compared to gender differences in spoken language because formal written texts such as books and articles obviously cannot convey intonation and phonological cues compared to spoken language.

Olsson (2000) looked at gender-relatedness in introductory letters where she applied some of Lakoff, Jespersen and Crawford’s theories (1995) on women’s and men’s language into her study and used their characteristics to analyze her data. She found that even if there are differences between the languages used by the respective gender, these differences differ due to different types of discourse and other factors separating the persons communicating with each other.

Myhill (2007) studied gender differences, focusing on specific linguistic characteristics such as usage of adverbials, repetition of the same words, especially nouns, and the use of synonyms and hyponyms. The findings showed that there were slightly noticeable differences in linguistic characteristics between the sexes. Other studies by Gyllgård (2006) explored the gender differences in Swedish students’ writing. In her study, she also included students’ identification of female and male language features.

In the local context, a study on language use by female Malaysian bloggers was carried out by Akhmaliah (2009), focusing on undergraduate female students (between 20 to 23 years old,) who frequently updated their blogs. She selected two weblog hosts, Friendster and Blogspot, as her baseline data and, using Lakoff (1975) features, she identified only four features. These features are lexical hedges, tag questions, intensifiers, and avoidance of taboo language. Thus, she concluded that the three features appearing in female blog posts which conformed to Lakoff’s theory were lexical hedges, intensifiers and tag questions.

2.9. Gender Differences in Written Expression

A smaller body of research has focused on gender differences in the area of written expression. Berninger (2008) recruited adults and children with dyslexia for a comprehensive study of written expression. The following instruments were used to assess various areas of written expression: the Written Expression subtest of the Wechsler Individual Achievement Test—Second Edition (The Psychological Corporation, 2002) was used as a general measure of written expression skills; the Wide Range Achievement Test—Third Edition (Wilkinson, 1993) was used to measure participants’ spelling accuracy; the Process Assessment of the Learner (Berninger, 2001) was used to measure participant’s orthographic skills; the tasks of Rapid Automatic Naming and Switching also were administered to assess automaticity. For both children and adults with dyslexia, gender differences in measures of automatic letter naming, orthographic skills, and written expression were apparent. Adults also exhibited gender differences in spelling scores. Orthographic skills were measured by assessing participants’ abilities to quickly encode words into short term memory, to quickly write these encoded words, and to choose the correctly spelled word among a group of words that are pronounced the same. Significant gender discrepancies in orthographic skills were found for both children and adults. Girls surpassed boys on all orthographic measures. Orthographic skills are helpful in breaking down written words to verbalize them and in taking verbalized words and spelling them while writing. These researchers suggest that, although writing disabilities occur across genders, males tend to have more severe problems in the area.
Fewer studies have found specific gender differences when comparing scores from informal measures of writing, such as written expression curriculum-based measurement (WE-CBM). Jewell and Malecki (2003) administered 3-minute writing probes to first through eighth grade students in three different school districts in Illinois. The students were presented a simple story starter and were given 1 minute to think about what they were going to write and 3 minutes to write their stories. Six different scores were provided for the writing probes that represented production-dependent, or fluency, and production-independent, or accuracy, aspects of the writing process. Jewell and Malecki found that girls outperformed boys on all six writing indices. Many individual schools collect CBM data to create local norms. Jewell and Malecki cautioned that unless school professionals take gender into account when they establish the norming data, boys could be over-identified for problems in writing. In a study, Jewell and Malecki (2005) collected WE-CBM scores, Stanford Achievement Test (Madden, Gardner, Rudman, Karlsen, & Merwin, 1978) scores, and students’ Language Arts grades in second, fourth, and sixth grades. Girls significantly outperformed boys on all WE-CBM fluency measures. Their results indicated that girls in the sample produced more written material, more correctly spelled words, and more correct writing sequences than boys. However, they did not find gender differences in the production-independent or accurate production indices. In other words, the researchers concluded that males and females were equally accurate in their writing, though girls produced more writing than boys.

3. RESEARCH DESIGN AND METHODOLOGY

3.1. Participant

In this study, a total of 50 students were involved in the completion of the writing task. The data were collected from 25 males and 25 females studying in two classes and two schools. Their age range was 13 to 15 years old in third grade in high school. The schools are located in Khorramabad, Iran. All of them were native speakers of Persian while English was their foreign language. Similar to their other peers, they must learn English in school as it is a subject which is compulsory in the Iran Education System. Their English learning standard was in high degrees in these two schools, and there is an elite class system in these two schools. So there are strong students among the participants in terms of English learning ability. Because the majority of the students have a high standard of English, therefore we concluded that they were homogenized and equal. The participants were randomly selected in two classes which have 70 students in total.

3.2. Instrument

In this study, based on the title of the research, to evaluate the types of errors and to compare the gender differences, the Participants were asked to write a letter about Computer. In order to minimize the variability of the length of the writing, a 100-120 word limit was set. Then we used the checklist with eight items to check the students' scores.

3.3. Procedure

Based on the checklist that is included eight parts (see table 1), the mean scores of the students in each part were calculated separately, and the number of the grammatical errors for each participant were then counted and data were entered into the SPSS software.

3.4. Data analysis

Hypothesis 1. There is no significant difference between Iranian male and female learners in type of lexical errors made in their writing skills.
Two-way Analysis Of Variance (Two-Way ANOVA) is used to evaluate the hypothesis of significant difference between the mean scores of male and female students' writing skills in types of lexical errors. The following table, descriptive statistics represents each of the combinations of factors in the model. Based on this table, a visual comparison between mean scores of male and female students at writing skills in a variety of linguistic errors has been described.

**Table 1. Descriptive Statistics**

<table>
<thead>
<tr>
<th>Dependent Variable: Score</th>
<th>Gender</th>
<th>Type</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td>Appropriate choice of words</td>
<td>.2904</td>
<td>.17660</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grammar</td>
<td>.6100</td>
<td>.30139</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>spelling</td>
<td>.7440</td>
<td>.20632</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>punctuation</td>
<td>.5120</td>
<td>.27900</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>well-organized paragraphs</td>
<td>.2212</td>
<td>.13581</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dividing the essay into introduction, Body and conclusion</td>
<td>.3720</td>
<td>.25334</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>relevant Supporting details</td>
<td>.3980</td>
<td>.30259</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>clarity of idea</td>
<td>.8440</td>
<td>.20833</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>.4989</td>
<td>.31307</td>
<td>200</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>Appropriate choice of words</td>
<td>.4396</td>
<td>.24824</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grammar</td>
<td>.6700</td>
<td>.19948</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>spelling</td>
<td>.8156</td>
<td>.18819</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>punctuation</td>
<td>.5156</td>
<td>.24908</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>well-organized paragraphs</td>
<td>.3920</td>
<td>.29036</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dividing the essay into introduction, Body and conclusion</td>
<td>.4800</td>
<td>.21262</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>relevant Supporting details</td>
<td>.5180</td>
<td>.27984</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>clarity of idea</td>
<td>.8760</td>
<td>.23279</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>.5884</td>
<td>.28929</td>
<td>200</td>
</tr>
</tbody>
</table>

**Table 3. Tests of Between-Subjects Effects.**

<table>
<thead>
<tr>
<th>Source</th>
<th>Type IV Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>14.856a</td>
<td>15</td>
<td>.990</td>
<td>17.207</td>
<td>.000</td>
<td>.402</td>
</tr>
<tr>
<td>Intercept</td>
<td>118.222</td>
<td>1</td>
<td>118.222</td>
<td>2054.019</td>
<td>.000</td>
<td>.842</td>
</tr>
<tr>
<td>Gender</td>
<td>.799</td>
<td>1</td>
<td>.799</td>
<td>13.886</td>
<td>.000</td>
<td>.035</td>
</tr>
<tr>
<td>Type</td>
<td>13.765</td>
<td>7</td>
<td>1.966</td>
<td>34.166</td>
<td>.000</td>
<td>.384</td>
</tr>
<tr>
<td>Gender * Type</td>
<td>.292</td>
<td>7</td>
<td>.042</td>
<td>.724</td>
<td>.652</td>
<td>.013</td>
</tr>
<tr>
<td>Error</td>
<td>22.102</td>
<td>384</td>
<td>.058</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>155.180</td>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>36.958</td>
<td>399</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .402 (Adjusted R Squared = .379)

In table 3, you can see that the effect of independent variable of gender (third row) (F =13.886, Sig = .000) is significant in the writing skill of students separately. This means that, statistically, the mean scores of students writing skills in boys and girls are different, and in general, the female students' writing skill is higher than their male counterparts. In relation to the impact of different variable of Error type on scores of students writing skills (fourth row), based on the value of the test statistic (F = 34.166, Sig = .000), a significant difference is seen between the mean scores of students writing skills in various types of errors. As a result of the two themes mentioned above, it can be concluded that the independent variables of Gender and Types of errors have an effect on dependent variable of students writing skill separately. Now,
the interactive effects of the independent variables are used in the fifth row of the above table. The reported values of the test statistic to examine the interaction between these two independent variables (gender and types of errors) (F = .724, Sig = .652) (fifth row), indicated that these two variables (gender and types of errors) do not have a significant effects on the dependent variable of Students Writing Skills simultaneously. In other words, these two independent variables (gender and types of errors) are not impressive on students' writing skills simultaneously. It means that in terms of different lexical errors, there is not a significant difference between the scores of male and female students writing skills. So, the scores are close to each other. As a result, the first hypothesis "There is no significant difference between male and female learners in type of lexical errors committed in their writing skills" is accepted.

Another result of this table is the coefficient of determination value (R Squared) placed under the table. This coefficient which its adjusted amount is equal to 0.379 is that the two variables of gender and types of language errors are jointly managed 0.379 the variance in the dependent variable of students' writing skills. And the rest of the variance (0.621) in writing skills of students in this study influence factors and variables that have not been studied in this thesis.

The following figure (number 1) shows the distribution of mean scores of male and female students' writing skills in terms of different lexical errors:

![Figure 1](image)

The above linear figure shows that, although there is a difference between male and female students' scores on writing skills, as well as the differences between the scores of students on the basis of different lexical errors, there is not a difference between the scores of male and female students in writing skills simultaneously. So the authenticity of the first hypothesis is rejected.

3.4.1. Iranian EFL learners outperform their peer male learners in their writing scores

At first, for the study of normality distribution in the variable of the scores of students writing, One-Sample Kolmogorov-Smirnov Test is used which the results are summarized in the following table:
Table 4. One-Sample Kolmogorov-Smirnov Test.

<table>
<thead>
<tr>
<th></th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>50</td>
</tr>
<tr>
<td>Normal Parameters a,b</td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>.728</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.664</td>
</tr>
</tbody>
</table>

a. Test distribution is Normal, b. Calculated from data.

Table (4) shows that the significant amount of Kolmogorov-Smirnov Test has been obtained to 0.664. So there is no reason to reject the assumption of normality in scores of students in each level of error. Therefore, to evaluate the hypothesis: EFL female learners outperform their peer male learners in their writing scores, the independent sample t-test is used. The following table is the table of descriptive statistics of the scores:

Table 5. Group Statistics.

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>Male</td>
<td>25</td>
<td>3.9916</td>
<td>1.31193</td>
<td>.26239</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>25</td>
<td>4.7068</td>
<td>.96862</td>
<td>.19372</td>
</tr>
</tbody>
</table>

According to the reported values in table (5) (descriptive statistics), you can see that the mean scores of 25 boys in writing skill is equal to 3.99, and the mean scores of writing skill for 25 female students is equal to 4.71. It seems that there is the difference between these two groups. Standard deviation of writing scores for boys and girls are: 1.311 and 0.969 respectively. The box chart below provides a summary of the graphical descriptive statistics (minimum, maximum, lower quartile, medium and third quartile) in writing scores of students to differentiate their gender (male and female):

![Box chart of male and female students' writing scores](image)

In figure 2, you can see that the minimum, first quartile and medium of female students' scores in their writing are higher than the score values for their male counterparts, and the third
quartile and maximum values for male students' scores are higher than the female students scores for the same amount. it should also be noted that in data 42 (small circle in the above chart) for female students scores is in a higher grades than for their male counterparts. Now, to evaluate the hypothesis: EFL female learners outperform their peer male learners in writing scores, it should first be tested that the equality hypothesis of independence between these two independent groups which can be done by Levene's test (following table), and the null hypothesis is as follows: \( H^0: \sigma_1 = \sigma_2 \)

**Table 6.** Levene's Test for Equality of Variances.

<table>
<thead>
<tr>
<th>Score</th>
<th>Equal variances assumed</th>
<th>F</th>
<th>SIG</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3.927</td>
<td>.053</td>
</tr>
</tbody>
</table>

Levine's test in table (6) shows that a small amount of the Fisher test (3/927) and the great significance level (Sig = .053), which is larger than the error level, one can infer that there is no reason for rejecting the hypothesis of equality in variances of two independent groups. In other words, the variances of the two independent groups listed are equal. So the Student's t-test of two independent groups with equal variances which the null hypothesis is as follows is used: \( H^0: \mu_1 = \mu_2 \), and the result of this test is summarized in the following table:

**Table7: t-test for Equality of Means**

<table>
<thead>
<tr>
<th>t</th>
<th>df</th>
<th>Sig. (2.tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2.193</td>
<td>48</td>
<td>.033</td>
<td>-.71520</td>
<td>(-1.37097, -.05943)</td>
</tr>
</tbody>
</table>

According to the above table, the test statistic value equal to \( t = -2.193 \) at 48 degrees of freedom and also significant level (Sig = .033) indicates that the null hypothesis (the hypothesis equality of writing scores between two independent groups of boys and girls) is rejected at the 5% level of significance. In other words, there is a significant difference between writing scores of male and female students. According to the values of mean scores of female students (4/71) and male ones (3/99) in writing skill, One can determines that the level of female students' scores in writing is higher than their peer male. Also, the confidence interval 0/95 for the mean difference between the two groups mentioned is (-1/371,0/059). The Linear chart below is a chart for two independent groups of male and female students in writing skill is very suggestive that is intuitive to understand:

![Figure 3. Linear chart for writing scores of male and female students.](image-url)
Due to the linear chart above plotted for mean scores in writing (vertical axis) for two independent groups of male and female students (horizontal axis), it can also be noted that there is a much more difference between two independent groups under study. It is clear that the level of female students' scores (4/71) is higher than their male counterparts (3/99).

3.5. Pedagogical Implications

As shown in the findings, there were gender differences in the level of students writing, and there is not a difference between male and female students in lexical errors committed in their writing skills simultaneously.

It is indeed important for teachers to recognize early the appropriate pedagogical approaches to suit the different needs of both sexes. As mentioned by Latham (2002: 15), “teaching strategies need to exploit the strengths and minimize the weaknesses of both, through understanding and a balanced range of techniques”. Additionally, awareness of teachers on understanding more about the factors underlying the gender differences is needed so that they can be more ready to "grips with the nature of individual differences" (Green and Oxford,1995:292). The followings are also another recommendations for both teachers and learners that should be taken in to account.

4. SUGGESTIONS FOR FURTHER RESEARCH

The findings of this study call for more researches in the field of error analysis regarding the two sexes. Such a gender-based error analysis can be re-conducted at elementary and intermediate levels. Some gender-based analyses can be carried out on different error types as well as error sources of advanced EFL learners in different kinds of writing (narrative, descriptive and expository).

The researchers, who are interested in analyzing learners' errors, can conduct gender-based error analyses and employ the findings in other studies which put learners' language learning strategies and psychological as well as socio-cultural factors under question in the two sexes. For example, error orientation which is the reaction of language learners to their own errors can be studied in the two sexes. Previous findings have suggested that reading and writing development and performance in the classroom are closely related (Berninger et al., 2006).

Future research should focus on the similarities in development between reading and writing skills so that comparisons might be made about the development of one skill in terms of the other. For example, it may be more appropriate to assess first-grade students in reading rather than writing since reading instruction is so much more intensive than writing instruction in first grade. If researchers can make predictions for writing performance based on reading, they may discover more specific developmental information in the field of writing.

REFERENCES

Does Gender Matter? Potential Lexical Errors among Iranian EFL Learners


