THE RELATIONSHIP AMONG IRANIAN EFL TEACHERS’ GENDER, CRITICAL THINKING AND THEIR TEACHING STYLES

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ABSTRACT
This study attempted to explore the relationship among Iranian EFL teachers’ gender, critical thinking and their teaching styles. To fulfill this purpose, 238 Iranian EFL teachers (119 males and 119 females) teaching at different branches of Shokouh Language Institute across different cities and towns in Tehran and Alborz provinces were asked to fill out two questionnaires including the Critical Thinking Questionnaire and Teachers Teaching Style Inventory. The data derived from the aforementioned questionnaires was fed into SPSS. Afterwards, the collected data was analyzed through Pearson Correlation statistical procedures, the results of which revealed that there was a statistically significant relationship between Iranian EFL teachers’ gender, critical thinking and their teaching styles. Moreover, the application of the independent sample t-tests indicated that there was not any statistically significant difference between Iranian EFL male and female teachers’ critical thinking and their gender. However, a statistically significant was found between Iranian EFL teachers' teaching styles and their gender. The results of this study would help all involved in language teaching to better deal with teaching and learning issues. Educators must strive to pursue promising teaching strategies and styles in order to promote the learners’ achievement levels.

Keywords: Gender, Critical Thinking, Teaching Styles, EFL Teacher

INTRODUCTION
Critical thinking has been one of the hottest issues since the times of ancient Greece. Paul et al., (1997) assert that thinking intellectually refers to the teaching practice and vision of Socrates 2500 years ago who discovered that people could not rationally justify their confident claims to knowledge. He established the importance of asking deep questions that probe profoundly into thinking before we accept ideas. His method of questioning is now known as "Socratic Questioning" and is the best known critical thinking teaching strategy. He highlighted the need in thinking for clarity and logical consistency.

On the other hand, teaching style is one of the most important factors affecting the development of teachers’ professional expertise (Akbari et al., 2005) that is always consistent with teachers’ personality type and varies among individuals (Cooper, 2001). According to one definition from late seventies teaching style is “a pervasive way of approaching the learners that might be consistent with several methods of teacher” (Fischer & Fischer, 1979). This definition emphasizes the importance of teaching methods and the ability of the teacher to select the right approach for the class. Accordingly, teaching styles selected by a person who has critically selected them may play a critical role in teaching outcomes.

Statement of the Problem
The notion of critical thinking has received a great deal of attention in recent years and it has been vastly studied. It is not only of interest to academic psychologists, but also has been emphasized in the practical context of further and higher education. Indeed, the various skills that are collectively termed ‘critical thinking’ are regarded as an important component of the so-called ‘transferable skills’ accrued during higher education. Critical thinking is a very hotly debated topic these days. All educators are now aware of the importance of equipping L1 and L2 language learners’ and teachers with critical thinking techniques, and educational policy makers are making efforts to teach these techniques to both language learners and teachers in the most appropriate way.

A critical thinker tries to solve complex problems in different ways by asking important questions, gathering relevant information, determining findings, and communicating effectively (Paul & Elder,
2002), all which seem to be essential activities in any educational context. Foreign and second language teaching contexts have extensively utilized the critical thinking to promote learners’ and teachers’ encounters with the L2.

As mentioned above, critical thinking has gained widespread popularity in various disciplines nowadays. Educators have realized the importance of nurturing students who are critical thinkers and have a critical eye to look at the world surrounding them. Critical thinking skills figure prominently among the goals for education, whether one asks developers of curricula, educational researchers, parents, or employers. Although lots of studies have been conducted on learners' critical thinking in learning an L2, we don’t know much about L2 teachers’ critical thinking patterns. Furthermore, our knowledge about L2 teachers' critical thinking patterns, the relationship between these critical thinking patterns with the gender of teachers, and how these two factors interact in the choice of teaching styles is shallow. To shed more light on this important issue, the researcher embarked on the task of investigating the relationship among Iranian EFL teachers’ gender, critical thinking and their teaching styles.

Research Questions
To fulfill the purposes of the present study, the following important research questions were addressed:

Q1. Is there any significant relationship between Iranian EFL teachers’ critical thinking and their teaching styles?
Q2. Is there any significant difference between Iranian EFL male and female teachers’ critical thinking?
Q3. Is there any significant difference between Iranian EFL male and female teachers’ teaching styles?

Research Hypotheses
To come up with reasonable results based on the aforementioned research questions, the following null hypotheses were proposed:

H01. There is not any significant relationship between Iranian EFL teachers’ critical thinking and their teaching styles.
H02. There is not any significant difference between Iranian EFL male and female teachers’ critical thinking.
H03. There is not any significant difference between Iranian EFL male and female teachers’ teaching styles.

Review of the Literature
In the last decade, there has been a surge of interest in scrutinizing the role of teachers’ personal characteristics in their teaching preferences. Frequently the studies focus on how demographic variables such as gender, age, and experience influence teaching and learning styles (Brew, 2002; Severiens, 1997).

Gender is one crucial factor which might influence, in one way or another, teachers’ professional lives in general and their teaching preferences in particular considering their personality and individual characteristics. It is believed that social relations and the dominance of either gender (usually male) affects teachers’ lives (Karimvand, 2011). Female professionals are usually subordinate to male authorities in educational settings where professional interactions are usually characterized by marginalization of women (Bartlett, 2005). However, studies which have focused on how gender might affect teachers’ choice of different teaching styles are a few and have shown some different results (Karimvand, 2011). For instance, in a study of gender differences in Iran, Aliakbari and Soltani (2009) found that Kurdish females prefer active, reflective, sensing, intuitive, verbal and sequential styles except for the visual and global ones. They also found that Persian male EFL teachers and students prefer all teaching styles including active, reflective, sensing, intuitive, visual, verbal, and global except for the sequential one. The way we think affects all aspects of our private and social life and education is not an exception. Human beings think differently and teachers who have key roles in education do so. Recently proper attention has been given to the ways teachers think (Calderhead, 1987) and now teaching is more characterized as a thinking activity (Richards & Farell, 2005).

One of the prevailing concepts in educational reform today is critical thinking. The significance of critical thinking in education and particularly higher education is now acknowledged by a large number of educators.
Schafersman (1991) asserted that all education must involve not only ‘what to think,’ but also ‘how to think.’ However, he regrets, most education has been preoccupied with transmitting and acquiring knowledge and facts, and the subtlety of the concept of critical thinking has obviated students’ realization of its absence and educators’ recognition of its significance all alike. But given the increasing number of disciplines, the vitality of learning and teaching techniques to acquire, understand and evaluate information surfaces.

Indeed, the notion of CT is by no means new since it was Socrates who introduced this approach of thinking about two thousand years ago (Fisher, 2001). However, despite the long history of critical thinking tradition, there is no single and agreed-upon definition for what constitutes critical thinking. As Fisher (2001) notes, Dewey (1933) is the father of modern critical thinking, and Dewy defined CT as; “active, persistent, and careful consideration of a belief or supposed form of knowledge in the light of the grounds which support it and the further conclusions to which it tends” (p. 9). In line with Dewey, there is consensus that CT is one of the fundamental goals of learning and particularly central to higher education (Ennis, 1996; Paul, 1987). Furthermore, the notion of CT has a fundamental role in assessing students' engagement. In the same line CT also affects teachers' strategies, and classroom management. However, it should be kept in mind that CT is related to other affective and socio-cognitive variables such as self-efficacy. Thus, much research related to self-efficacy and especially teacher self-efficacy has gained significant insights as important factors in teaching and learning (Bandura, 2007).

The notion of style refers to an individual’s preferred way of using his/her abilities and in this way differs from ability (Fan & Ye, 2007). Style is a very important factor in trying to account for the marked individual differences in performance shown by people as they think, learn, teach or carry out various tasks (Sternberg & Grigorenko, 1997; cited in Fan & Ye, 2007). Teaching style was determined to be part of one's personal make-up and any instructional process that tried to mold how a teacher’s thought would either encourage and reinforce a preferred style, or generate pressures to modify it (Grasha and Yangarber-Hicks, 2000). The teacher's personality preceded any choice and was always a strong, if not the first, contributing factor to a teaching style (Gayle, 1994). Various researchers discussed teaching methods and styles. Gayle (1994) stated that teaching style was influenced by its core, which gave it character and embodied the individual's manner or philosophy, or way of life, which might be rooted in religious conviction and practice and that this core was the basis of personality. Teaching styles summarized the needs, motives, emotions, and beliefs, one possessed about how to teach (Grasha and Yangarber-Hicks, 2000). The concept of teaching is not a simple choice between alternative sets of strategies, techniques, or teaching acts (Gayle, 1994). Bennett (1976) has identified two categories of teaching styles: formal and informal. Formal teaching regarded the role of teacher as a very vital feature in preparing children for academic work. Formal teachers also attempted to instill what they perceived as normal standards of behavior in their students. Informal teachers valued the development of students' creative abilities and were more concerned with developing students' self-expression. Students in formal classrooms showed greater improvement in reading and math skills than those students who received instruction in less formal classroom settings.

MATERIALS AND METHODS

Methodology

1. Design of the Study

According to Hatch and Lazaratan (1995), a factorial design is one involving two or more factors in a single experiment. Put it another way, there will be more than one independent variable (i.e. moderator variable/s) in a factorial design and the variables may have one or more levels. The present study will have a factorial design, containing gender as the moderator variable. Their age and field of study were regarded as the control variables.

2. Participants

A group of 238 Iranian EFL teachers comprising 119 men and 119 women, who were teaching English language at different branches of Shokouh Language Institute across cities and towns in Tehran and
Alborz Provinces including Tehran, Karaj, Shahr-e-Rey, Varamin, Shahriyar, and Robatkarim, shaped the participants of the present study. Almost all of them had a university degree in English translation, literature or teaching. Majority of them had a BA degree, but some of these teachers possessed MA or Ph.D. degrees. All the participants were selected in a random sampling. Every teacher answered the two questionnaires of the study willingly. The participants were restricted to ages between 20 and 40 because the researcher wanted to control the age factor. Participants’ mother tongue was mainly Persian. These selected Iranian EFL teachers were from different social strata. Some of these teachers were also teaching at the educational office but majority of them were teachers who worked for Shokouh Language Institute.

3. Materials
To accomplish the purposes of the study, instruments were employed: Honey's (2005) Critical Thinking Questionnaire and Grasha's Teaching Style Inventory (1996). The two utilized instruments are further explained in the two following subsequent sections.

Peter Honey's critical thinking questionnaire was administered in this study to measure the participants' critical thinking skills. This questionnaire is constructed by Honey (2005) with the purpose of evaluating the skills of analysis, inference, evaluation, and reasoning. In a study conducted by Nosratinia and Abbasi (in press) on EFL learners, the reliability of this questionnaire was estimated to be 0.79 using the Cronbach’s alpha coefficient. The questionnaire includes 30 Likert type questions each followed by five alternatives including Never (1), Rarely (2), sometimes (3), Often (4), and Always (5). To calculate the total score, the values of all the items are added up. Each participant's score can range from 30 to 150 (See Appendix A).

4. Procedure
To obtain the needed data for the aims of the current study, 238 Iranian EFL teachers (119 males and 119 females) from Shokouh Language Institute in cities and towns across Tehran and Alborz provinces were asked to fill out two questionnaires including the Critical Thinking Questionnaire and Teaching Styles Inventory in 2014. The questionnaires were distributed among the participants through Emails and personal contacts. The researcher advised every participant to take each of the questionnaires separately in two different sessions to reduce the effect of boredom. All EFL teachers were expected to read and answer the items of the two questionnaires then they were asked to mark their preferred answers on the Likert Scales specified. The researcher assured the participants that their information would be kept confidential and will be only used for the research purposes of the study. After two months, a total number of 238 set of questionnaires were collected and scored for data analysis.

RESULTS AND DISCUSSION
1. Introduction
This study investigated the relationship among Iranian EFL teachers’ gender, critical thinking and their teaching styles. To this end, the following null hypotheses were formulated:

H₀₁. There is not any significant relationship between Iranian EFL teachers’ critical thinking and their teaching styles.

H₀₂. There is not any significant difference between Iranian EFL male and female teachers’ critical thinking.

H₀₃. There is not any significant difference between Iranian EFL male and female teachers’ teaching styles.

In order to test these null hypotheses, the researcher conducted a series of calculations and statistical procedures that are comprehensively elaborated in this chapter. Both descriptive and inferential statistics were utilized in the process, details of which are presented below.

2. Descriptive Statistic
To run a correlation some assumptions should be checked. First there should be a linear relation between each pair of variables and also each set of scores should be normally distributed and the data should be homogeneous. These assumptions were checked respectively to see whether running correlation was legitimate or not.
This questionnaire was administered in the study in order to estimate the participants’ degree of critical thinking. The descriptive statistics related to the obtained scores on the instrument appears below in Table 4.1.

Table 4.1: Descriptive Statistics for the Critical Thinking Questionnaire

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness Statistic</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Thinking</td>
<td>238</td>
<td>56</td>
<td>139</td>
<td>99.11</td>
<td>21.13</td>
<td>.015</td>
<td>.145</td>
</tr>
</tbody>
</table>

The minimum and maximum scores on this questionnaire were 56 and 139, respectively. The mean score for EFL teachers’ performances on the critical thinking questionnaire was 99.11 with a standard deviation of 21.13.

The descriptive statistics (including mean, SD, and standard error of measurement) were also calculated for all the 30 items included in Critical Thinking questionnaire. All the obtained indices were acceptable for the whole Critical Thinking questionnaire and for each of the 30 included items.

The ratio of skewness statistic over its standard error is within the acceptable range of ±1.96, which means that the distribution did not show a significant deviation from normality. Figure 4.1 shows the distribution of the critical thinking scores:

![Distribution of Critical Thinking Scores](image)

The figure shows that the distribution of the scores in this scale was normal. As you can see, the curve for the distribution of scores is symmetrical and bell-shaped with a single peak.

Descriptive Statistics for the Teaching Styles Inventory

Another instrument used in this study was the teaching styles questionnaire. The descriptive statistics of the participants’ performance on this questionnaire are represented below in Table 4.2. The mean score for EFL teachers’ performances on the teaching styles questionnaire was 115.01 with a Standard Deviation of 22.47. The minimum and maximum scores on this questionnaire were sequentially 62, and 189.
Table 4.2: Descriptive Statistics for the Teaching Styles Inventory

<table>
<thead>
<tr>
<th>Teaching Styles</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness Statistic</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>238</td>
<td>62</td>
<td>189</td>
<td>115.01</td>
<td>22.47</td>
<td>-0.141</td>
<td>0.145</td>
</tr>
</tbody>
</table>

The ratio of Skewness statistic over its standard error is within the acceptable range of ±1.96, which means that the distribution did not show a significant deviation from normality. To visually inspect the results, all participants’ scores on the Teaching Style Inventory are depicted in Figure 4.2.

Figure 4.2: Iranian EFL teachers’ scores on the teaching styles inventory

The curve is bell-shaped and symmetrical with only one highest peak illustrating a normal distribution for the participants’ scores on the teaching style inventory.

4.2.3 Reliability Statistics

The reliability indices for the scales have been calculated and turned out to be as demonstrated in Tables beneath. The reliability of the Critical Thinking Questionnaire was calculated. The result of the calculation for this used data collection instrument is shown in the following table (Table 4.3):

Table 4.3: Reliability Statistics for Critical Thinking Scale

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.812</td>
<td>30</td>
</tr>
</tbody>
</table>

Critical Thinking questionnaire’s reliability in the current study, with a number of 30 items on a 5-point Likert scale, was .81 which is a really strong index. Such a high reliability shows that the questionnaire results are dependable. The obtained reliability index (Cronbach's Alpha) for Teaching Styles Inventory turned out to be .85 which is a strong value, indicating the high dependability of this inventory (See Table 4.4).
Research Article

Table 4.4: Reliability Statistics for Teaching Style Inventory

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.854</td>
<td>40</td>
</tr>
</tbody>
</table>

These high reliability indices also are prerequisite premises to validity of arch of the two instruments in the sense that when they provide consistent information about candidates’ language performance, they can assess what they intend to assess.

4.3 Testing the First Null Hypothesis

The first hypothesis of the study wanted to check whether there was no significant relationship between Iranian EFL teachers’ critical thinking and their teaching styles. To test the first hypothesis, the researcher conducted a correlation analysis. As previously mentioned, all the assumption such as outliers and normality of distribution were checked before the application of the correlation analysis. None of these necessary assumptions for correlation analysis was violated. The results for the application of the Pearson Product-Moment correlation are displayed in Table 4.5 below:

Table 4.5: Correlation between Critical Thinking and Teaching Styles

<table>
<thead>
<tr>
<th>Critical Thinking</th>
<th>Teaching Styles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.550**</td>
</tr>
<tr>
<td>N</td>
<td>238</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.550**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>238</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed)

As seen in table 4.5, the obtained value for the Pearson Product-Moment Correlation Coefficient is .55 at p < .05 level of significance. This value is rather a strong one, indicating that there is a high go-togetherness between Iranian EFL teachers’ critical thinking and teaching styles. Then the correlation coefficients between Iranian EFL teachers’ critical thinking scores and their scores on the five dimensions of the teaching styles questionnaire (Expert, Formal Authority, Personal Model, Facilitator and Delegator) were calculated using five separate applications of Pearson Product-Moment Correlation Statistics. The results can be seen in Table 4.6 below:

Table 4.6: Correlation between Critical Thinking and the Dimensions of Teaching Styles

<table>
<thead>
<tr>
<th>Dimension of Teaching Styles Inventory</th>
<th>Critical Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>238</td>
</tr>
<tr>
<td>Formal</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>238</td>
</tr>
<tr>
<td>Personal</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>238</td>
</tr>
<tr>
<td>Facilitator</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>238</td>
</tr>
<tr>
<td>Delegator</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>238</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed)
Five applications of Pearson product-moment correlation revealed significant relationships between Iranian EFL teachers’ critical thinking scores and their scores on the five dimensions of the teaching styles questionnaire as followed:

- Critical thinking and Expert \( (r = .398, n = 238, p < .0005) \)
- Critical thinking and Formal Authority \( (r = .368, n = 238, p < .0005) \)
- Critical thinking and Personal Model \( (r = .517, n = 238, p < .0005) \)
- Critical thinking and Facilitator \( (r = .415, n = 238, p < .0005) \)
- Critical thinking and Delegator \( (r = .315, n = 238, p < .0005) \)

The data showed that the correlation between Critical Thinking and Personal Model is the strongest of all and the correlation between Critical Thinking and Delegator is the weakest. The relationship between the variables is significant; thus, the first null hypothesis is rejected.

4.4 Testing the Second Null Hypothesis

In order to test the second hypothesis, stating that "there was not any significant difference between Iranian EFL male and female teachers’ critical thinking," descriptive statistics of males’ and females’ scores on the Cortical Thinking (CT) questionnaire were calculated and tabulated using SPSS program. Furthermore, an independent sample t-test was run to inspect the difference between EFL male and female teachers.

Descriptive statistics for the performances of male and female Iranian EFL teachers on the critical thinking questionnaire are shown in Table 4.7.

**Table 4.7: Descriptive Statistics for the Male vs. Female Teachers' Critical Thinking Scores**

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT Scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>119</td>
<td>56</td>
<td>139</td>
<td>107.42</td>
<td>20.49</td>
<td>.34</td>
</tr>
<tr>
<td>Female</td>
<td>119</td>
<td>66</td>
<td>137</td>
<td>100.77</td>
<td>16.50</td>
<td>.35</td>
</tr>
</tbody>
</table>

As seen in Table 4.7, the mean score of the male participants on the critical thinking questionnaire was 107.42 with a standard deviation of 20.49. However, Female teachers’ mean score was 100.77 with a standard deviation of 16.50. The lowest and the highest scores for the male group were 56 and 139, while the minimum and maximum scores for the female group were 66 and 137, respectively. The values for the standard error of measurement for the critical thinking score of the groups of teachers were very similar (.34 and .35).

Apparently there was a difference between the mean scores for the critical thinking performances of the two groups in favor of the males. In order to check if such a difference is statistically significant or not, an independent-sample t-test was applied. Prerequisite assumptions of independent-samples t-test such as random sampling, independence of observations, normal distribution, and homogeneity of variance were checked. None of these assumptions was violated.

**Table 4.8: Independent-Samples T-test for Male vs. Female Teachers' Critical Thinking Scores**

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>Equality t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig. t</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.395</td>
<td>.53</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.868</td>
<td>232.74</td>
</tr>
</tbody>
</table>

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Preliminary analysis showed that all the prerequisite assumptions of independent-samples were available. Table 4.8 shows the results of the independent-samples t-test that were run to investigate the difference between males’ and females’ mean scores on the critical thinking questionnaire. Results of the t-test did not show statistically significant mean differences ($t (236)=867$, Sig. =.53> .05) in critical thinking scores between female and male teachers. Put it in more tangible words, because the observed value for $t (t_{\text{observed}}= .867)$ with a df of 236 is less than the critical value for $t (t_{\text{critical}}= 1.645)$ the second null hypothesis was accepted. Therefore, Iranian EFL male teachers’ demonstrated rather the same levels of critical thinking compared with their female counterparts. Therefore, the second null hypothesis could not be rejected and this conclusion was drawn that gender did not play any significant role in shaping Iranian EFL teachers' critical thinking abilities.

### 4.5 Testing the Third Null Hypothesis

To test the third hypothesis stating that, there was no significant difference between Iranian EFL male and female teachers’ teaching styles, another independent sample $t$-test was run. Descriptive statistics for the performance of the male and female Iranian EFL teachers on the Teaching Styles (TS) questionnaire are shown Table 4.9.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>119</td>
<td>62</td>
<td>188</td>
<td>138.44</td>
<td>34.19</td>
<td>.37</td>
</tr>
<tr>
<td>Female</td>
<td>119</td>
<td>59</td>
<td>189</td>
<td>110.36</td>
<td>34.80</td>
<td>.38</td>
</tr>
</tbody>
</table>

As shown in Table 4.9, the mean score of the male participants on the Teaching Styles questionnaire was 138.44 with a standard deviation of 34.19; however, the females’ mean score was 110.36 with a standard deviation of 34.80. The male teachers scored on the Teaching Styles Inventory as low as 62 and as high as 188 while the female teachers performed on this inventory with the lowest score of 59 and the highest score of 189. The standard error of means did not differ very much between the two groups. As mentioned above, the mean score for the performance of male teachers was greater than the performance of the female teachers. In order to statistically examine such a mean difference, an independent-samples $t$-test was run. Results of the independent-samples $t$-test are displayed in Table 4.10.

<table>
<thead>
<tr>
<th>Levene's Test of Variances</th>
<th>Test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>3.38</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>2.342</td>
</tr>
</tbody>
</table>

As seen in the above table, the observed value for $t$ was 2.34. This value was greater than the critical value for $t$ with 236 degrees of freedom at p<.05 level of significance ($t_{\text{observed}}>$ $t_{\text{critical}}$, Sig.< .05). Therefore, the third null hypothesis of the study could be rejected and it was revealed that there was a statistically significant difference between the male Iranian EFL teachers' scores on the Teaching Styles Inventory.
Inventory and the scores obtained by male EFL teachers on this inventory. Accordingly, it was concluded that male teachers have outperformed the female teachers in their use of teaching styles.

**Conclusion**
This study arrived at some major conclusions which are presented here. First, the results of this study revealed that there was a statistically significant relationship between Iranian EFL teachers’ critical thinking and their teaching styles. As discussed in the previous section, there may be a factor underlying both these two variables which leads to more successful teaching in EFL classroom. However, we cannot make any causal relationships between these two factors, namely we cannot claim that more critical thinking leads to better and effective use of teaching styles or vice versa. The only conclusion we can make is that these two factors are positively and strongly correlated and high levels of critical thinking mean better use of teaching styles by Iranian EFL teachers.

The second conclusion was that there was not any statistically significant difference between Iranian EFL male and female teachers’ critical thinking regarding their gender, i.e. although there were some differences between the performances of male vs. female Iranian EFL teachers on the critical thinking questionnaire, such differences were not statistically significant. In fact, both male and female teachers showed the same critical thinking levels based on the findings of the current investigation.

The third major conclusion of the current investigation was that Iranian EFL male teachers outperformed the female counterparts in their use of language teaching styles. It was found that Iranian EFL male teachers used more various teaching styles both quantitatively and qualitatively in comparison with female language teachers. Of course, this conclusion is only reported by this study and only in Iranian EFL context. In order to increase the generalizability of this conclusion more robust, comprehensive, and complex studies should be launched to reconsider this under-researched issue.

Fourth, the results of this study would help all involved in language teaching to better deal with teaching and learning issues. Therefore, teacher training programs should be designed in a way that encourage teachers to use more modern teaching styles (Delegator and Facilitator) as their dominant teaching styles in order to develop students’ capacity to become self-directed learners, to work independently, or on a team, with the teacher available as a consultant and also to increase the responsibility of the students in doing teaching tasks. Effective teachers allow students chances to learn, succeed, and interact at their fullest potentials. Teacher quality can be directly linked to student achievement (Barnes & Aguerebere, 2006). Teaching styles are thus a key part of instruction.

Fifth, having long been hailed as a salient aspect of scientific thinking and taken to extremes by positivists, the ability to think critically was in this study applied to a more flexible, but less clearly intelligible, domain of human knowledge, the study of language, more specifically the study of language teachers’ professional success. Prior to the quest for developing communicative competence in language learners, a good language teacher was best conceived of as one who was there to simply impart knowledge of the target language onto the minds of learners, a hypothetical ‘jar’ of information to fill out empty ‘mugs’(Richards & Rodgers, 2001). This conceptualization underwent a major breakthrough with the more demanding burden language teachers had to bear within a communicative language teaching framework, placing a premium on the dynamics of the classroom and sweeping away from pre-set methods. The just-mentioned paradigm shift is best articulated by Brown (2000) who contends that nowadays “language teaching is not easily categorized into methods and trends; instead each teacher is called on to develop a sound approach to various language classrooms” (p.14). Such a perspective of language teaching resonates with a view of language teachers as critical thinkers, as ones who are not caught up in the ever swinging pendulum of pre-packaged ideas of others. To develop one’s unique approach and work out what is likely to thrive in a particular setting; critical thinking should be at work.

1. **Pedagogical Implications**
Teaching styles and critical thinking are of significant roles in EFL teaching and learning contexts. As a result, learning a foreign language is expected to be facilitated by teachers’ improvement in thinking and teaching skills.
On the other hand, several characteristics are attributed to good teachers, which the current study attempted to reveal relationships among them. A number of pedagogical implications are presented here, based on the findings of this research on the degree of correlation among Iranian EFL teachers’ gender, critical thinking and their teaching styles.

2. Implications for EFL Teachers

With respect to the findings of the study, a statistically significant and positive relationship was found between Iranian EFL teachers’ critical thinking and their use of teaching styles. This outcome has implications for EFL teachers to motivate and teach their students to think critically which can lead to effective teaching and learning.

The present study revealed that there is a positive significant relationship among Iranian EFL teachers’ gender, critical thinking and their teaching styles. Therefore, we can conclude that, teachers need to think thoroughly before designing classroom activities to see how much they can provide a non-threatening environment to let learners take responsibility for their own learning and become motivated to progress. They should carefully orchestrate instruction to arm learners with the strategies they require to operate autonomously, to help them make appropriate choices and to encourage them to expand their capabilities by considering them as active participants in the learning process.

To sum up, teachers are assumed to realize their role as a contributor to improvement of their learners’ evolution of critical thinking strategies by exposing them to different global, problem solving issues on the one hand, and by providing a way to progress gradually to be more active and responsible for their own learning on the other hand.

3. Implications for EFL Learners

Due to the fact that language learning is a multidimensional phenomenon, not only language teachers, but also language learners are required to play their role properly in order to facilitate and optimize this complicated process. Therefore, results of the current study have implications for language learners, encouraging them to become more conscious, autonomous, and evaluative about their best learning styles; particularly thinking strategies as a beneficial learning tool. In addition, improving critical thinking in a learning context can help learners to be equipped with strategies designed to instill positive attitudes toward learning and positive views of themselves as readers. When students are empowered with critical thinking strategies, they become more eager toward their learning.

4. Implications for Syllabus Designers

Syllabus designers as providers of a great portion of the language learning setting, have a fundamental role to make the process easier. They are required to know that incorporation of activities related to critical thinking and teaching styles in their courses can result in intellectual, active teachers that through using strategies can overcome their teaching difficulties. When relevant training hints or motives are inserted in appropriate parts of a course book, teachers are provided with a powerful device to optimize language learning activities, and learners can benefit from a more detailed EFL context.

REFERENCES


Research Article