Abstract

The present study was conducted to investigate learning styles (Visual, auditory, kinesthetic, tactile, individual, and group) as predictors of self-esteem and anxiety. The participants were 90 male and female young EFL learners studying English at a language institute in Qazvin, Iran. The instruments included Young Learners English Starter test (YLE), Young EFL Learners’ Learning Style Questionnaire, Self-Esteem Inventory, and Foreign Language Classroom Anxiety Scale (FLCAS). Data were analyzed through correlation coefficient and multiple regression analyses. Results indicated that auditory style had predictive power on self-esteem, but none of the six learning styles could predict anxiety. There was also a significant correlation between learners’ self-esteem and anxiety. The present study can have implications for teachers, syllabus designers, material developers, and researchers.

Key words: EFL children, learning styles, self-esteem, anxiety

Introduction
Researchers have long been interested in studying the effect of different methods of teaching English on students’ English learning achievement. However, the findings have indicated that there is no single magical method that can satisfy all learners and teachers. Recently, researchers have shifted their focus from teaching-centered to learning-centered approaches and have focused more on personal characteristics and individual differences.

It is believed that many cognitive, affective, and perceptual factors are at work when adults want to learn a second or foreign language. Among these factors are learning styles, which are habitual ways of perceiving, processing, and storing information (Naserieh & Anani Sarab, 2012). Like adults, children, who are believed to be natural language acquirers, have a particular approach to learning with which they feel most comfortable. In other words, children learn more readily when they process information in their own natural and preferred ways.

There are different ways of learning. Reid (1987) grouped these into four basic styles: auditory, visual, tactile, and kinesthetic. According to her, auditory learners learn through listening to what others have to say and talking about what they are learning. As the name suggests, visual learners learn through watching. Visual style is believed to be the most dominant learning style (Dunn & Dunn, 1993), and many traditional classrooms help the visual learner. For their learning to make sense, they need to be able to see, visualize, and illustrate their knowledge, skills and concepts. Tactile learners learn through the sense of touch. They need to take notes when they listen and underline the text while they are reading. Kinesthetic learners like to be actively involved in the learning process, and learn best through hands-on activities and movement.

In addition to learning styles, the rising tide of interest in affective factors of language learning has captured the attention of many scholars of the field over the past few decades. This interest is reflected in some modern teaching stances which focus on reducing anxiety and increasing learner’s self-esteem (Andres,
MacIntyre and Gardner (1994) define language anxiety as “the feeling of tension and apprehension specifically associated with second language contexts, including speaking, listening, and learning” (p. 284). And self-esteem is defined by Coopersmith (1967) as the evaluation that each person makes about himself; self-esteem is the attitude of approval or disapproval, and shows the extent to which an individual believes in his ability to be significant, successful, and worthy.

Although many educational researchers have considered language learners’ learning styles, self-esteem, and anxiety separately, there seems to be a paucity of research on the relationship between these variables, especially for young language learners. Accordingly, the present study is aimed at partially filling this gap.

1. Literature Review

The term ‘learning styles’ refers to different ways in which we learn, process, and retain information. According to Kirby (1984), researchers started to use the term ‘learning styles’ when they tried to find ways to match teaching methods and instructional materials to the needs of each learner. Keefe (1979) states that learning styles are cognitive, affective, and physiological traits that are quite unchangeable and indicate how learners perceive, interact with, and respond to learning environments.

There have been several classifications for learning styles, one of the important classifications belongs to Reid (1995). She introduced a framework of learning styles which is specifically important for ESL/EFL teachers and learners in language classrooms. She divides learning styles into three main categories: cognitive, sensory, and personality learning styles. Sensory learning style is divided into environmental and perceptual learning styles. The importance of perceptual learning styles has been emphasized by many scholars (Hyland, 1993; Isemonger & Watanabe, 2007; Kinsella, 1995; Reid, 1987). Therefore; the aim of the present study is to examine learning styles of young learners from a perceptual
aspect. Perceptual learning styles involve six types of learning including auditory, kinesthetic, tactile, visual, group, and individual.

In Iran, there have been several studies about preferred learning styles. For example, Seifoori and Zarei (2011) reported that for Iranian adult learners, the most preferred learning style is kinesthetic (80%), followed by auditory (78%), visual (77%), tactile (74%), group (73%), and individual (67%). The frequencies obtained showed that each participant used a combination of different style modalities. In another study, Santos, Cunha & Hein (2017) investigated the factors related to the students’ academic performance in Accounting Sciences at a university in Brazil. They reported that a majority of the students (48.3%) used the converging learning style, followed by assimilator (33.1%), divergent (11.3%) and accommodating (7.3%). They also reported that the academic performance of the learners was influenced, among other things, by the learners’ learning style and gender.

In another Iranian study, Heidari and Naseri (2012) investigated the preferred learning modalities of participants at different proficiency levels. Much like the finding of the previous study, they also found that beginners mostly prefer kinesthetic (34%) and visual (24%) styles. Besides, beginning language learners were more extrovert (12%) than introvert (3%). They were more energetic and liked to actively take part in class activities. In general, Kinesthetic learning style appears to be the most preferred style of beginners, who show their interest in playing with language in comparison with advanced level learners.

A number of studies have examined the relationship between learning styles and foreign language achievement. As an example, the results of a study by Oxford, Park-Oh, It, and Sumrall (1993) showed that among 107 high school students learning Japanese through satellite television, visual students significantly outperformed auditory and tactile/kinesthetic students. Similarly, Gilakjani (2012) found that the most preferred learning style of Iranian learners was visual style,
and students with this type of learning style had the best academic achievement in their educational major. In another study, Bailey, Onwuegbuzie, and Daley (1999) used learning styles to predict foreign language achievement at college level. The results showed that higher achievers in foreign language courses tended to like informal classroom designs and to prefer not to receive information via the kinesthetic mode.

Various aspects of learning styles have been examined in previous studies. The present study is an attempt at finding out whether or not there are significant differences among the selected learning styles as predictors of self-esteem and anxiety, a brief description of which is given as follows.

### 1.1. Self-esteem

Self-esteem is a significant factor in determining an individual’s success in an activity. It is one of the psychological variables that have been defined by many scholars in the field of language learning. Rosenberg (1965) defined it as a favorable or unfavorable attitude toward the self. The significance of self-esteem in language learning has been highlighted in several studies. Most of the studies have indicated that self-esteem is positively correlated with language performance and achievement (Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005; Hashemian, 2012; Heidari & Naseri, 2012; Vialle, Heaven, & Ciarrochi, 2005).

Although there is general agreement in the literature on the relationship between self-esteem and second language achievement, there is no such agreement on the nature of the relationship. According to Baumeister, Campbell, Kreuger, and Vohs (2003), the average correlation between self-esteem and school performance does not mean that high self-esteem leads to good performance. Instead, high self-esteem could be the result of good school performance. Brown (2000) has also referred to the ambiguous nature of the relationship by asking whether high self-esteem causes language success or language success causes high self-esteem. This question is reminiscent of the classic, unsolved chicken-or-egg question.
1.2. Foreign language anxiety

Another affective factor which affects achievement in foreign language learning is anxiety (Gardner, 1985). Generally, anxiety is the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the automatic nervous system (Spielberger, 1983).

Gregersen and Horwitz (2002) argue that students’ language anxiety may stem from learners’ perfectionist tendencies. They conclude that for anxious students, language learning experience may be unpleasant. Such students may not be easily satisfied with their achievements and will be more worried in cases of making errors than non-anxious learners who feel happy for achieving small objectives. Young (1994) states that classroom procedures such as teachers’ error correction methods and the interaction between teachers and students may increase students’ anxiety.

1.3. Previous studies on learning styles, self-esteem, and language anxiety

A quick review of the related literature shows that many studies have established a relationship between self-esteem and anxiety. Oxford (2000), for example, correlated self-esteem to language anxiety and concluded that among highly anxious language learners, high self-esteem learners handle their anxiety better than those with low self-esteem. In another study, Zare and Riasati (2012) in an attempt to study the relationship between anxiety and self-esteem among Iranian adult EFL learners, found a negative correlation between these variables. Moreover, the findings of the studies conducted by Patten (1983), Peleg (2009), and Rashidi, Yamini, and shafiei (2012) reinforced the findings of the previous studies and indicated a close relationship between second language anxiety and learners’ self-esteem in learning a second language.
Regarding the relationship between learning styles and foreign language anxiety, Bailey et al. (1999) found that from among twenty learning styles (visual, tactile, responsibility, kinesthetic, auditory, etc.), only two (i.e., responsibility and peer-orientation) were associated with foreign language anxiety, providing weak support for the hypothesis of an overall relationship between learning styles and foreign language anxiety.

In another study, Reece and Todd (1989) found that, at college level, expressed preferences for the formal deductive style of thinking and mathematics anxiety were negatively correlated. Following his study, McCoy (1992) reported that the tactile/kinesthetic learning styles are significant predictors of mathematics anxiety. These findings about the relationships between learning styles and other related anxieties are indicative of the potential role learning styles may play in moderating foreign language anxiety. Thus, this study is designed to identify a combination of learning styles that might be correlated with foreign language anxiety. Although several researchers such as MacIntyre and Gardener (1991) have considered foreign language anxiety as a variable in relation to language learning among adult learners, empirical studies on the role of anxiety among children or young adults are quite rare. There have been several studies on students’ foreign language anxiety, but most of them have examined either college (Aida, 1994; Ehrman & Oxford, 1990; Ganschow et al., 1994) or high school level students (Chang, 1999; Ganschow & Sparks, 1996; Liao, 1999). Few studies have examined elementary school level learners, except for the study of Chan and Wu (2004), which was an investigation into foreign language anxiety of primary school students in Taiwan. To this end, this study focuses on foreign language anxiety of young students in the Iranian EFL context. More specifically, it addresses the following research questions.

1. Are there any significant differences among selected learning styles as predictors of self-esteem?
2. Are there any significant differences among selected learning styles as predictors of anxiety?

3. Is there any significant relationship between self-esteem and anxiety?

2. Method

2.1. Participants

The participants who took part in the study were initially 100 male and female learners, aged between 10 to 12. They were studying English at Kish-e Mehr language institute in Qazvin, Iran. All of the participants were native speakers of Persian, and they were at low-intermediate proficiency level. A general proficiency test for EFL/ESL children, Young Learners English Starter test (YLE), was administered to homogenize the participants in terms of their level of English proficiency. After the administration of the YLE, 10 of the participants were removed from the study because they had a different level of proficiency.

2.2. Instruments

The following instruments were used to collect data for the purpose of the present study.

2.2.1. Young Learners English Starter test (YLE)

Young Learners English tests come from Cambridge ESOL (English for Speakers of Other Languages), which is a part of Cambridge Assessment, a department of the world-famous University of Cambridge in the UK. YLE is one of the popular tests for measuring ESL or EFL children’s level of language proficiency. The table below shows the different parts of YLE Starters and how long each part takes.

Table 3.1 Different parts of YLE

<table>
<thead>
<tr>
<th>Name of paper</th>
<th>Number of parts</th>
<th>Number of questions</th>
<th>Time allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>4 parts</td>
<td>20 questions approx</td>
<td>20 minutes</td>
</tr>
</tbody>
</table>
2.2.2. Young EFL Learners’ Learning Style Questionnaire

Two of the most popular and widely used learning style measurements are Reid’s (1978) Perceptual Learning Style Preference Questionnaire (PLSPQ) and Kolb’s (1985) Learning Style Inventory; however, both of them were designed for adult language learners. In fact, the lexicon and sentence structures of these two measurements are complicated and abstract for young learners. For this reason, the present study applied Young Learners’ Learning Style Preference questionnaire developed by Hsu (2007). This questionnaire is based on Reid’s (1978) categorization of learning styles (visual, auditory, kinesthetic, tactile, individual, and group). There are 20 items in this questionnaire, and each category includes three to four statements. Each item in the questionnaire is a 5-point Likert scale with responses ranging from 1 (strongly disagree) to 5 (strongly agree). Cronbach’s alpha was used to check the reliability of the Persian version of the questionnaire, which turned out to be 0.76. The validity of the translated version was confirmed by judgments of three university instructors.

2.2.3. Self-Esteem Inventory

This inventory was developed by Coopersmith (1967) and consists of 58 items, all of which try to measure the degree to which students have a sense of self-esteem during the class. Eight of the items (items No. 6, 13, 20, 27, 34, 41, 48, and 55) are considered as filters, so there remains 50 items, which show four kinds of self-esteem (whole self-esteem, social self-esteem, family self-esteem, and academic self-esteem). The Persian version of this inventory was used in Heidari and Naseri’s (2012) study; the reliability and validity of the inventory were checked. The reliability of the questionnaire turned out to be 0.76 using Cronbach alpha formula. The content validity was confirmed to be valid by three university instructors.
2.2.4. Foreign Language Classroom Anxiety Scale (FLCAS)

This scale was the modified version of the Foreign Language Classroom Anxiety Scale (FLCAS), which was developed by Horwitz et al. (1986). The new version consists of 20 items in a Likert type scale. The participants were expected to choose one of the five answers from strongly agree to strongly disagree. In the present study, since the participants were young, in order to make sure they understood the items, the questionnaire was translated into Persian. Again, the validity of the translated version was confirmed by three university instructors. And the reliability was checked through Cronbach's Alpha. Its result turned out to be 0.77.

2.3. Procedures

To achieve the purpose of the study, the following procedure was followed. At the very first stage, the participants were selected from among the young EFL learners from an English language institute in Qazvin, Iran. Next, the Young Learners English Starter test was given to the participants to homogenize them and to make sure that there were no significant differences among the participants in terms of their proficiency level. The participants had 45 minutes to complete the test. The participants whose scores fell between one standard deviation above and below the mean were selected.

Then, the three questionnaires including the Young Learners’ Learning Style Preference questionnaire, the self-esteem inventory, and the FLCAS were administered to the participants. At this stage, if the participants had any questions regarding each part of the questionnaires, they were answered. The three questionnaires were administered in two separate sessions and altogether, 60 minutes were allocated for the three questionnaires.
To analyze the collected data in order to test the research hypotheses and to answer the research questions, correlation coefficient and multiple regression analyses were used.

3. Results and Discussion

3.1. Investigation of the First Research Question

The first question attempted to see which learning styles are better predictors of self-esteem. To this end, a stepwise multiple regression analysis was used, the results of which are presented in the following tables. Table 4.1 indicates that among the six learning styles, only auditory style predicts self-esteem. The other kinds of learning styles did not contribute to the regression model (Stepwise criteria: probability of F<= .05).

Table 4.1 Variables Entered/Remove

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>auditory</td>
<td></td>
<td>Stepwise (Criteria: Probability-of-F-to-enter &lt;= .050, Probability-of-F-to-remove &gt;= .100).</td>
</tr>
</tbody>
</table>

a. Dependent Variable: self-esteem

The result of the model summary (Table 4.2) shows that auditory style shared about 5 percent of variance with self-esteem.

Table 4.2 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Change Statistics</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.230a</td>
<td>.053</td>
<td>.042</td>
<td>R Square Change</td>
<td>F Change</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>.053</td>
<td>4.934</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>df1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>df2</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sig. F Change</td>
<td>.029</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), auditory
b. Dependent Variable: self
The results of the ANOVA (Table 4.3) indicates that the F-value is statistically significant ($F_{(1, 88)} = 4.93, p < .05$). The results show that the predictive power of the model is significant.

Table 4.3 ANOVAa results on Self-esteem

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>221.833</td>
<td>1</td>
<td>221.833</td>
<td>4.934</td>
<td>.029</td>
</tr>
<tr>
<td>Residual</td>
<td>3956.789</td>
<td>88</td>
<td>44.964</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4178.622</td>
<td>89</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: self-esteem
b. Predictors: (Constant), auditory

Table 4.4 contains the unstandardized as well as standardized coefficients, along with the observed t-value and the significance level. The table shows that for every one standard deviation of change in one's auditory style, there will be about .23 of a standard deviation change in one's self-esteem. The relationship between the two variables is negative. This means that as learners' auditory style improves their self-esteem decreases.

Table 4.4 Coefficientsa of Auditory Style

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>43.070</td>
<td>2.978</td>
<td>14.462</td>
</tr>
<tr>
<td></td>
<td>auditory</td>
<td>-.680</td>
<td>.306</td>
<td>-.230</td>
</tr>
</tbody>
</table>

a. Dependent Variable: self

3.2. Investigation of the Second Research Question

The second research question sought to investigate which kinds of learning styles are predictors of anxiety. To do so, a stepwise multiple regression analysis was done. Since no variable entered into the equation, it can be concluded that none of the learning styles could predict the learners anxiety.
3.3. Investigation of the Third Research Question

The third question attempted to see whether there is any significant relationship between self-esteem and anxiety. To this end, the Pearson correlation procedure was used. As Table 4.5 shows, there is a statistically significant but negative relationship ($r = -0.392, p > .05$) between the two variables. This means when learners’ self-esteem increases, their anxiety decreases.

Table 4.5 Correlation Coefficient between Self-esteem and Anxiety

<table>
<thead>
<tr>
<th></th>
<th>self</th>
<th>anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>self</td>
<td>1</td>
<td>-0.392</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>90</td>
<td>90</td>
</tr>
</tbody>
</table>

3.4. Discussion

The present study attempted to investigate how specific learning styles can predict learners’ self-esteem and anxiety. Moreover, it sought to find out if there is any significant relationship between these two variables. Based on the findings of this study, from among the six learning styles, auditory style was the only predictor of self-esteem. Regarding anxiety, none of the six learning styles could predict it.

As the first finding of this study showed, auditory style had significant relationship with self-esteem. This is in contrast with the findings of several previous studies. Oxford et al. (1993), for example, found that visual learners are more successful in language achievement. Similarly, Gilakjani (2012) found that visual learners had the greatest academic achievement in their educational major. Since, in most of the previous studies (Hashemian, 2012; Heidari & Naseri, 2012) it was shown that learners with high self-esteem are more successful, it can be concluded that the more visual the learners, the higher self-esteem they have; but the present study does not seem to support this claim.
The other finding of this study, which shows no relationship between anxiety and learning styles, partially lends support to that of Bailey et al. (1999), who found no significant relationship between anxiety and visual, tactile, auditory, and kinesthetic learning styles. Though this finding contradicts those of Ehrman and Oxford (1990), who believe that there may exist some relationship between learning styles and anxiety; for example, visual learners may be frustrated and anxious when working with audio materials in classrooms or language labs. Learners with tactile/kinesthetic preferences might experience great anxiety in classrooms where little movement and hands-on learning is encouraged.

Based on the other finding of the study, the self-esteem of the participants had significant negative correlation with anxiety. This negative correlation supports the finding of Peleg (2009), who found a negative correlation between test anxiety and self-esteem and a positive correlation between self-esteem and academic achievement. Besides, Zare and Riasati (2012) reported the same result. They found a negative correlation between language learning anxiety and self-esteem among Iranian university students. Furthermore, this result lends support to two other previous studies which were reviewed in the present study (Oxford, 2000; Rashidi et al., 2012). Although in some of these studies gender, age, and different kinds of self-esteem were variables, all of them showed a negative correlation between self-esteem and anxiety. In several other studies, the causal relationship of the two variables was investigated. For example, Rosenberg, Schooler, and Schoenbach (1989), in their appraisal principle, claim that our self-esteem and self-perception can have an effect on foreign language anxiety; on the other hand, Zheng (2008) showed that our anxiety has effect on self-esteem.

The finding that auditory style was inversely related to self-esteem might sound a bit unusual because usually learners whose style orientation is not auditory are expected to experience higher levels of anxiety and, as a result, report lower levels of self-esteem. This may be partially explained by the type of oral text learners listen to. It might be argued that sometimes learners, due to the desire to listen to
oral texts, opt for authentic audio materials. Given the fact that authentic materials are not necessarily geared down to their level of comprehension ability, such learners, especially at lower levels of proficiency, might become frustrated. It may be this frustration that leads to increased levels of anxiety and decreased levels of self-esteem.

4. Conclusion

The present study was an attempt to find out which learning styles can predict young Iranian EFL learners’ self-esteem and anxiety. Besides that, the correlation between learners’ self-esteem and anxiety was investigated. Visual, auditory, kinesthetic, tactile, individual, and group were the styles which were examined in this study.

As the findings of the present study showed, from among the six learning styles, auditory style had significant negative correlation with self-esteem. As the correlation was negative, it can be concluded that the more auditory the learners are, the more chances there are that they may have low self-esteem. Therefore, if teachers’ aim is to increase learners’ self-esteem, they do not need to encourage learners to overuse the auditory style. In fact, it may be advisable for teachers not to force learners to listen and speak, especially in early stages. Moreover, self-esteem turned out to be significantly correlated with anxiety. This finding implies that for improving self-esteem, learners’ anxiety should be lessened. This is again another responsibility of teachers, especially those who teach children, to create an unthreatening and supporting environment in the classroom.

Based on the other finding of the present study, none of the six learning styles had strong correlation with anxiety. Therefore, teachers have to know that to avoid the debilitative effects of this variable, there is no need to focus on one specific style. In other words, teachers should not insist that students make use of predetermined learning styles, nor should they discourage the use of particular other styles lest those styles augment learners’ anxiety. Instead, they may encourage the use of a
variety of styles to allow for individual differences and to allow learners to benefit from the facilitative aspects of each learning style.

References


Hsu, Y. J. (2007). Elementary school EFL students' learning style preferences and strategy use and their relationship with the students' English learning achievement (Unpublished master's thesis). Providence University, Taiwan.


Received: Jul, 24, 2016
Approved: Aug, 06, 2017