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# The Interplay between Language Anxiety, Locus of Control and Language Proficiency in Online Classes: The Case of EFL Learners

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## Abstract

The present study investigated the interplay between language anxiety, locus of control, and language proficiency of EFL students in online classes. The participants of the study were 67 upper-intermediate students between 18 to 30 years old and were selected randomly from a few language institutes in Shiraz. Two questionnaires and a proficiency test were used: Chametzky's Online World Language Anxiety Scale, Rotter's Locus of control questionnaire, and The Examination for the Certificate of Proficiency in English. Pearson-product-moment correlation, multiple regression analysis, and independent-samples t-test were run to answer the research questions. The results of the study revealed a strong negative correlation between locus of control and language proficiency, meaning that those who had higher scores on the proficiency test were internal. In addition, a strong negative correlation was found between language anxiety and language proficiency, indicating that anxiety has adverse effects on language proficiency. Thirdly, both locus of control and language anxiety could predict language proficiency, but the former was a better predictor. This means that the effect of locus of control is much higher than anxiety on the language proficiency of Iranian EFL learners in online classes. This research can help students and teachers to recognize individual differences better.

***Keywords***: language anxiety, locus of control, language proficiency, online classes for EFL learners

## Introduction

Learning a language is a complicated process affected by many factors and accompanied by various difficulties that learners try to overcome. There has been a question among different students and teachers all over the world that why the language learning process is a difficult and demanding task for some learners while some other learners achieve language proficiency in a short time. To answer this question, many researchers investigated different factors that influence the field of language proficiency. Alongside other elements, psychological factors are recognized as key factors that directly impact language proficiency (Dewaele, 2012, Zhang, Dai, & Wang, 2020).

A plethora of researchers emphasized the role of anxiety and locus of control as two momentous psychological variables that are in line with language proficiency (Al Mulhim,2021; Chang& Ho,2009; Gardner,1991; Nowicki,2016; Rotter,1954; Salmaninodushan,2012; Sparks & Ganschow,1991; Spielberger,1983). The role of language anxiety or its influence on language learning and proficiency is investigated in different studies in face-to-face classes (Alsowat, 2016; Bashosh, Abbas Nejad, Rastegar, & Marzban, 2013; Debreli & Demirkan, 2016; Seidikenova, Malshy & Akkari, 2020). Meanwhile, the impact or relationship between Locus of control and language learning and proficiency is highlighted in several studies in face-to-face classes (Abbas, 2016; Akunne & Anyamene, 2021; Ghonsooly & Elahi, 2010; Heidari & Khorasaniha, 2013; Rastegar, 2010; Salmani Nodoushan, 2012).

Based on the findings of the previous studies, the significant role of locus of control and language anxiety in students' language proficiency in face-to-face classes was revealed. However, with the spread of the Coronavirus and the imperative to hold online classes in different universities and institutes, there is an urgent need to delve into the factors that facilitate or debilitate the language learning and proficiency of students. In addition, to the best of the researcher’s knowledge and based on the review of literature, no study has yet investigated the interplay between these three variables altogether, namely, anxiety, locus of control, and language proficiency of students regarding online classes in the context of Iran.

**Language Proficiency**

Language proficiency has been defined as a quality that shows an individual's ability in using all for skills (speaking, listening, reading, and writing) of a particular language for the purpose of communication (Renandya, Hamied, & Nurkamto, 2018); this means the ability to use all four skills in a proper way. To enhance the rate of language proficiency, learners must confront real-world language use situations. Bialystok (1981) investigated the factors that can affect language proficiency directly or indirectly. He exemplified motivation, environment, psychological factors, personality variables, and attitude. An abundance of researchers investigated the influence of psychological factors on language proficiency (Clement ,1986; Nijat et al.,2019). Among these psychological factors, Anxiety and locus of control have attracted the attention of researchers (Chang&Ho,2009; Gardner,1991; Rotter,1954; Salmani nodushan,2012; Sparks & Ganschow ,1991; Spielberger,1983).

**Anxiety**

One of the significant factors that many researchers have recognized is anxiety. (Andrade & Williams, 2009; Horwitz, 1986; Nan&Haoda,2020; Spielberger, 1983; Zheng, 2008). Anxiety is characterized as a "subjective feeling of tension, apprehension, nervousness, and worry" (Horwitz, 1986, p.125). Scholars have divided anxiety into a more detailed taxonomy. Different types of anxiety are defined in the following sub-sections. Moreover, anxiety can arise from various sources such as learner's attributes, environmental issues, learning strategies, instructor beliefs, language testing, etc. (Young, 1991). Generally, there are two categories in anxiety: trait and state anxiety.

According to Eysenck (1979), trait anxiety is "a semi-permanent predisposition to experience anxiety having an important hereditary component" (p.363). In another definition Spielberger (1983) states that trait anxiety or general anxiety is a type of anxiety that an individual possesses in any situation. It is permanent and stable in all situations. It is called the deepest or global level of anxiety that an individual is anxious about in different situations (Endler & Kocovski, 2001). In a study about anxiety in

the pandemic situation, Atika et al. (2021) stated that trait anxiety or basic anxiety is the tendency of individuals to experience state anxiety.

Researchers have introduced another type of anxiety that is situation depended. Andrade and Williams (2009) defined state anxiety as a state of uneasiness and worry which is not permanent but is situation-related. It may happen to an individual in a specific context. In another study, Spileberger (1983) mentioned that state anxiety or transitory situation-specific anxiety is an experience that happens at a specific moment in life, such as stress and tension before taking part in an exam. He also mentioned that there is a close relationship between trait anxiety and state anxiety. Those who experienced a higher level of trait anxiety are more anxious in different situations. Atika et al. (2021) recently mentioned that state anxiety is the feeling of nervousness that an individual possesses while confronting a particular situation.

A particular type of anxiety which is relevant to this study is foreign language anxiety. Based on Horwitz, Horwitz, and Cope (1986), foreign language anxiety is a notion and belief that due to the low communicative ability of an individual in applying a language leads to silence and fear of communication. To measure this type of anxiety, Horwitz (1986) created a Foreign Language Classroom Anxiety Scale (FLCAS) which is used in many research studies. According to Furnham and Ribchester (1995), foreign language anxiety is related to the ambiguity tolerance of an individual. They defined ambiguity tolerance as an individual's perception and understanding of unfamiliar information in an ambiguous situation. Hence, its intensity may differ in different situations. In another study, Macintyre (1998) believes that foreign language anxiety is situation-based anxiety and considered it as “the worry and negative emotional reaction aroused when learning or using a second language” (p. 27). This feeling plays a key role in language learning area.

**Locus of Control**

One psychological attribute that significantly affects language learning is the locus of control (Rotter, 1954; Chang & Ho,2009; Kilic,2021). Rotter first used the term locus of control in her social learning theory in 1954. Rotter (1966) defined Locus of control as the ability of a person to control the circumstances in different situations and events in his life. Marks (1998)

defined locus of control as a belief that a person possesses about the outcome of his actions and the extent to which a person is responsible for these outcomes. Nodoushan (2012), in a study about the relationship between locus of control and language achievement, defined locus of control as an attributional style that shows the responsibility of an individual about success or failure in his efforts. The attributional style appears in different life events. Akunne (2021) defined locus of control as "a personality characteristic that determines the degree with which an individual believes they are in control of life events" (p.48). Rotter (1966) introduced two types of locus of control on a continuum, with the internal locus of control on one side of the continuum, and the external locus of control being located at another side of the continuum. He defined that those with an internal locus of control believe that they find themselves responsible for any outcome that happens in different events and situations. In a recent study, Kurtça and Kocatürk (2020) defined internal locus of control as an individual expectation and belief that punishments and rewards are due to their behaviors and actions. In contrast, the external locus of control is" the general expectation with rewards and punishments that are applied, governed or supervised by other powers" (p.107). As an example for better understanding, a person with internal LOC believes that his success in exams is related to his efforts and studies but a person with external LOC blames external factors such as teachers and questions for his low marks.

**Language Proficiency and Anxiety**

Bashosh et al. (2013) investigated the relationship between foreign language classroom anxiety, shyness, and EFL students' proficiency. Participants of the study were 60 students of English translation. They were selected through simple random sampling. The foreign language classroom anxiety scale was used as an instrument to identify the anxiety level of sample participants. Furthermore, Oxford Placement Test is used as a proficiency test to determine students' proficiency level. The correlation coefficient was checked to evaluate the relationship between anxiety and proficiency. Surprisingly, there was no significant difference between students' proficiency and the foreign language anxiety of participants.

Seidikenova, Malshy and Akkari (2020) investigated learners' anxiety in the distance and online learning during the COVID-19 pandemic. Moreover, they found some ways of reducing students' levels of anxiety. They emphasized that psychological factors are essential parts of language learning, which can negatively or positively impact language learning. They pointed to the role of anxiety in language classes and problems that students may experience during language learning. It was claimed that students showed different levels of anxiety based on their level of proficiency. In the end, it was concluded that students with different levels of proficiency had different levels of anxiety.

**Language Proficiency and LOC**

The relationship between listening proficiency, locus of control, test anxiety, and sex was investigated by Sotoudehnama and Otaghsarayi (2014). It was questioned whether there was a significant relationship between the participants' LOC and their listening ability. The sample participants who participated in the study were ninety-six EFL students. Two instruments were used in this study; Rotter's internal/ external locus of control scale which was used to evaluate the participants' LOC status, and a listening part test which was driven from the TOEFL (2003) test. According to the results of the study, students with internal LOC orientation outperformed students with external loc.

Abbas (2016) sought to find out a relationship between writing proficiency, writing apprehension, and academic internal-external locus of control status of EFL students in Iraq. To tackle this, 160 students were randomly selected from EFL learners of Baghdad University. Trice's scale (1985) was applied to examine the students' LOC orientation. The students were asked to write three paragraphs to evaluate their writing proficiency. Brown's analytical scheme (2007) was used to analyze the writing performance of students. Results revealed that Iraqi EFL students were externally oriented regarding the academic locus of control. Moreover, internal orientation had a positive correlation with the students' writing performance.

**LOC and Anxiety**

Badakhshan (2012) investigated the relationship between LOC and reading anxiety of Iranian EFL learners. 170 participants who were enrolled

in a private university participated in this study. FLRAS (Foreign Language Reading Anxiety Scale) was used to determine the participants' reading anxiety levels. Moreover, Duttweiler's (1984) LOC scale was used to determine the participants' LOC orientation. A Pearson correlation was conducted to estimate the correlation between LOC and reading anxiety. The findings revealed that there was a meaningful correlation between the variables. In addition, a negative correlation between external LOC and reading anxiety was found.

Ehsani and Moghaddam (2021) explored the relationship between foreign language anxiety (FLA), LOC, and Willingness To Communicate (WTC) among Iranian EFL learners. 80 intermediate students took part in this study. They were asked to complete Rotter's LOC questionnaire. After one week, a willingness to communicate questionnaire was administered to them. One week later, they filled out the FLA questionnaire. Pearson correlation was used as the statistical test to investigate the relationship between variables of the study. According to the results, no significant relationship was found between LOC and FLA. Moreover, there was no relationship between LOC and WTC.

The current study investigates the relationship between two psychological variables, namely, locus of control and language anxiety with students' language proficiency during the pandemic. More specifically, it aimed to see to what extent the psychological factors (LOC/ anxiety) would affect the language proficiency of EFL learners. In addition, the role of LOC and language anxiety in predicting language proficiency was investigated. Hence the following research questions were posed for the purposes of this study:

**RQ1:** Is there a significant difference between EFL learners with internal and external LOC orientation in terms their language proficiency?

**RQ2:** Is there a significant relationship between Iranian EFL learners' LOC/Foreign language anxiety and their proficiency scores?

**RQ3:** Which one is a better predictor EFL learners' language proficiency in online classes: foreign language anxiety or internal/external LOC?

## Method

### Participants

The participants of the current study included 67 EFL students who participated voluntarily in the study. All participants were English students in language institutes in Shiraz whose proficiency levels were upper-intermediate based on their previous semesters and GPA (grade point average). Moreover, the participants' first language was Persian. The participants' age range was between 18 to 30, including both genders. Table 1 shows the demographics of the participants.

Table 1

*The Participants' Features*

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| gender | man | 21 | 31.34 | 31.34 | 31.34 |
| | woman | 46 | 68.66 | 68.66 | 100.0 |
| | Total | 67 | 100.0 | 100.0 | |
| age | 18-25 | 65 | 97.0 | 97.0 | 97.0 |
| | 26-30 | 2 | 3.0 | 3.0 | 100.0 |
| | Total | 67 | 100.0 | 100.0 | |
| Online class experiences | Less than 1 year | 19 | 28.4 | 28.4 | 28.4 |
| | 1-3 years | 40 | 59.7 | 59.7 | 88.1 |
| | More than 3 years | 8 | 11.9 | 11.9 | 100.0 |
| | Total | 67 | 100.0 | 100.0 | |
| Length of time in foreign language classes | 8 weeks | 9 | 13.4 | 13.4 | 13.4 |
| | 12 weeks | 6 | 9.0 | 9.0 | 22.4 |
| | 15 weeks | 6 | 9.0 | 9.0 | 31.3 |
| | More than 15 weeks | 46 | 68.7 | 68.7 | 100.0 |
| | Total | 67 | 100.0 | 100.0 | |
| Locus of control | internal | 35 | 52.2 | 52.2 | 52.2 |
| | external | 32 | 47.8 | 47.8 | 100.0 |
| | Total | 67 | 100.0 | 100.0 | |

As indicated in Table 1, the study sample included 67 participants, 21 were males (31.34%) and 46 were females (68.66%). Moreover, based on the findings of Rotter's questionnaire, 35 participants (52.2%) had an internal locus of control and 32 participants (47.8%) had an external locus of control orientation.

**Instrument**

***The Examination for the Certificate of Proficiency in English (ECPE)***

The Examination for the Certificate of Proficiency in English (ECPE) is a widely used test aimed at qualifying learners' proficiency level since 1953 developed by Cambridge University and Michigan language assessment teams. A truncated version of the test with 35 multiple-choice questions was used in the study: 10 vocabulary questions, 10 cloze questions, 10 grammar questions, and 5 questions regarding reading comprehension. For each question, students had to select the correct answer among four items. Each item received 1 point, and hence the total score was 35. Students who obtain scores higher than 28 are considered as high-intermediate students. The validity and the reliability of this test have been reported by Cambridge and Michigan University language assessment teams as reasonably high (a= .91). According to Ameriks(2009), this test provides a good content validity for examining students' proficiency. The reliability estimated for this study by running the alpha Cronbach test was a=0.86 which is of an acceptable level.

***Online World Language Anxiety Scale (OWLAS)***

To determine the participants' anxiety, OWLAS developed by Chametzky (2019) was used. OWLAS is an adapted form of Horwitz, Horwitz, and Cope (1986), which comprised of 37 items. The participants had to respond to thirty-three 5-point Likert-type questions (Strong Agree, Agree, Neither Agree Nor Disagree, Disagree, and Strongly Disagree) and four demographic questions. The mean score of students answers to the questions reveal their anxiety status. The higher the scores, the more anxious the students. To determine the reliability of the questionnaire, a reliability test using Cronbach alpha was run on the data by the researcher, the result was 0.81, which is reasonable. The validity of the questionnaire has been reported as high (Chametzky,2019). In addition, calculating

Cronbach's alpha, a high internal consistency (a=1.0) was determined by Chametzky (2019).

***Rotter's LOC questionnaire***

Rotter's locus of control questionnaire is a questionnaire used by many researchers who sought to find out students' LOC orientation (Bozorgi, 2009; Nodousahn, 2012; Sotoudehnama and Otaghsarayi, 2014). Rotter's LOC questionnaire comprised 29 items. Students had to select one sentence based on what was right about them and what they felt. Twenty-three items were designed to determine the locus of control (Internal/ External) type. Six items were designed as lie detectors and worked as distractors. (1, 8, 12, 19, 23, and 28). Higher scores reveal the external orientation of LOC for participants, and lower scores reflect internal orientation. Scores higher than nine are considered the external locus of control, scores lower than 9 reflect the internal locus of control, and those who obtain 9 are considered as moderate. Different studies have confirmed good reliability and validity indexes of Rotter's questionnaire (Bozorgi, 2009; Nodoushan, 2012). A translated version of the questionnaire, which was used in the Iranian context was used (Cheraghi,2018), and the reliability index was a=.74 which was on an acceptable level. The reliability estimated for this study by running the alpha Cronbach test was a=0.76 which is an acceptable level.

**Procedure**

Due to COVID-19 pandemic restrictions, Rotter's locus of control questionnaire, online world language anxiety scale (OWLAS), and Michigan proficiency test were inserted into Google Forms. After this, a link was created and sent to students. In order to achieve better results, they were asked to answer the tests while they were at ease in their homes in their free time. The allocated time for answering questionnaires and the proficiency test was 40 minutes (google form closes after 40 minutes). Questionnaires and the proficiency test were administered to the participants in the same session at home. After answering the questions, students' answers and their scores were recorded in Google drive for further analysis. To analyze the data, Statistical Package for Social Sciences (SPSS) version 25 was used.

First, descriptive statistics were conducted to summarize the participants' demographic characteristics and the mean scores and standard deviation

were calculated for the answers. In order to determine the overall LOC orientation of the participants, the mean scores of the participants were calculated. The higher the LOC score than 9, the higher the external orientation, and the lower the score than nine, the higher the internal LOC orientation (Bozorgi, 2009). To determine the relationship between the variables of the study regarding the second research question (LOC, anxiety, and language proficiency), Pearson linear correlation was conducted. To answer the last research question and to determine the predictive power of LOC and anxiety, linear regression was conducted.

## Results

### Descriptive Statistics for LOC, Anxiety, and Language Proficiency

The mean and standard deviation for the main variables of the study namely LOC, anxiety, and language proficiency were separately calculated and the results are displayed in Table 2.

Table 2
*Descriptive Statistics for LOC, Anxiety, and Language Proficiency*

| | Locus of control | Language anxiety | Language proficiency |
|---|---|---|---|
| Mean | 9.07 | 2.807 | 20.50 |
| Std.deviation | .5032 | .4811 | 4.793 |

As the results in Table 2 reveal, the mean score of language proficiency of the sample (67 participants) is 20.50, which indicates that the language proficiency of the sample was higher-intermediate. In addition, the SD of language proficiency scores was 4.79. Regarding the anxiety scores of participants, the mean was 2.807, with the SD of 0.4811, which means that the students' anxiety level was moderate . In addition, the mean for LOC was calculated 9.07 and std. Deviation for this variable was 0.5032. This shows that LOC orientation of participants was moderate.

### The Relationship between Variables of the Study

This section is concerned with the relationship among the variables of the study, which includes the relationship between LOC and language

proficiency, the relationship between language anxiety and language proficiency, and the relationship between LOC and language anxiety.

Table 3 shows the correlation between language proficiency, LOC, and language anxiety using the Pearson Product-Moment formula.

Table 3

*Results of Pearson Product-Moment Correlation Coefficient for Language Proficiency, LOC, and Language Anxiety.*

| | | **language proficiency** | **Locus of control** | **anxiety** |
|---|---|---|---|---|
| **Language proficiency** | Pearson Correlation | 1 | -.780** | -.620** |
| | Sig. (2-tailed) | | .000 | .000 |
| | N | 67 | 67 | 67 |
| **Locus of control** | Pearson Correlation | -.780** | 1 | .506** |
| | Sig. (2-tailed) | .000 | | .000 |
| | N | 67 | 67 | 67 |
| **anxiety** | Pearson Correlation | -.620** | .506** | 1 |
| | Sig. (2-tailed) | .000 | .000 | |
| | N | 67 | 67 | 67 |

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

As illustrated in Table 3, there was a strong negative correlation between language proficiency and LOC, r = -.780, n =67, p<.01. This finding is in line with the finding of Rastegar (2010) who found a strong negative relationship between LOC and language proficiency. It is also in line with the findings of the study done by Salmani Nodoushan (2012), who investigated the relationship between language proficiency and LOC of Iranian EFL students and found a negative relationship between LOC and language proficiency of students.

As indicated in Table 3, there was a strong negative correlation between language proficiency and anxiety, r = -.620, n =67, p<.01. This finding is in line with Alsowat's (2016) finding of a significant negative relationship between language proficiency and language anxiety in university students. However, this finding is in contrast to the findings of Debreli and Demirkan (2010), who found a positive relationship between language proficiency and language anxiety. They concluded that high proficiency students were more anxious than low proficiency students.

As can be seen in Table 3, there was a moderate positive relationship between LOC and language anxiety, r = .506, n =67, p<.01. This finding contrasts that of Ehsani and Moghaddam (2021), who found no significant relationship between LOC and foreign language anxiety.

One purpose of the study was to compare the learners' language proficiency in online classes in terms of internality/externality of LOC orientation. To answer the first research question, the mean and standard deviation for participants' language proficiency scores were computed separately for both internal and external LOC orientation participants. This appears in Table 4 below.

Table 4
*Mean of Language Proficiency Scores by Locus of Control*
**Group Statistics**

| | LOC | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| proficiency | internal | 35 | 24.0571 | 3.69374 | .62436 |
| | external | 32 | 16.6250 | 2.04387 | .36131 |

As Table 4 shows, the Mean of language proficiency scores of the study sample is determined by locus of control. According to the gathered data, participants with an internal locus of control orientation had a higher language proficiency score than participants with an external locus of control orientation. In other words, the mean score of language proficiency score for participants with internal LOC orientation was (M=24.05) which was much higher than the mean score of externally LOC orientated participants (M=16.62). The findings for the first research question of this study are in line with previous studies conducted by Rastegar (2010), Salmani Nodoushan (2012), and Peek (2016) in which those who believe in themselves ( internal LOC) outperformed externalizers in proficiency tests. However, this difference does not indicate the impact of locus of control on language proficiency. For this purpose, the researcher moved on to the next part of the study, and an independent t-test was used to determine the significance of this difference and compare language proficiency scores in the two groups of internal and external LOC.

Table 5
*Independent t-test to Compare Learners with Internal and External LOC Orientation*

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | F | Sig. | T | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference Lower | Upper |
| Proficiency | Equal variances assumed | 6.124 | .016 | 10.057 | 65 | .000 | 7.43214 | .73899 | 5.95627 | 8.90801 |
| | Equal variances not assumed | | | 10.303 | 53.94 | .000 | 7.43214 | .72136 | 5.98587 | 8.87842 |

According to Table 5, the value of F is 6.12 at a significance level of 0.05. This significant difference indicates that our groups (participants with an internal locus of control and participants with an external locus of control) are not homogeneous. To explain the results of the t-test, statistical information related to "Equal variances not assumed" should be utilized. The results of the t-test (t=10.303) with a degree of freedom of 53.94 were significant at the significance level of 0.01(Sig 2-tailed=.000). This demonstrated that the difference between the mean of internal locus of control and the external locus of control (MD=7.43) score is significant. Therefore, participants with internal LOC orientation are more language proficient than participants with external LOC orientation. These findings are in line with previous studies conducted by Rastegar (2010), Salmani Nodoushan (2012), Heidari et al. (2013), and Peek (2016) in which internalizers outperformed externalizers in proficiency tests.

**The Impact of Locus of Control and Language Anxiety on Language Proficiency**

Multiple regression analysis (Tables 6,7, & 8) was conducted to estimate whether LOC and language anxiety can predict language proficiency. The results of Table 6 revealed that 60.9% of the variance in language

proficiency is explained by our model for LOC ($R^2$= .609). In addition, 67.7% of the variance in language proficiency is explained by our model for language anxiety ($R^2$= .677).

Table 6

*Model Summary for Standard Multiple Regression*

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .780[a] | .609 | .603 | 3.02143 |
| 2 | .823[b] | .677 | .667 | 2.76650 |

a. Predictors: (Constant), loc

b. Predictors: (Constant), language anxiety

Table 7

*ANOVA[a] Results for Standard Multiple Regression*

**ANOVA[a]**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 923.361 | 1 | 923.361 | 101.146 | .000[b] |
| | Residual | 593.386 | 65 | 9.129 | | |
| | Total | 1516.746 | 66 | | | |
| 2 | Regression | 1026.921 | 2 | 513.460 | 67.088 | .000[c] |
| | Residual | 489.826 | 64 | 7.654 | | |
| | Total | 1516.746 | 66 | | | |

a. Dependent Variable: language proficiency

b. Predictors: (Constant), loc

c. Predictors: (Constant), language anxiety

**Table 8**

*Coefficients[a] of Standard Multiple Regression*

**Coefficients[a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 37.807 | 2.016 | | 18.756 | .000 |
| | loc | -5.971 | .785 | -.627 | -7.610 | .000 |
| | Language anxiety | -3.019 | .821 | -.303 | -3.678 | .000 |

a. Dependent Variable: language proficiency

As indicated in Table 8, LOC can predict language proficiency (B = -.627, t = -7.610, Sig. = .000) since there was a significant relationship between LOC orientation and language proficiency (Sig = .000, p<.01). This finding is in line with that of Fakeye (2011), who found a significant relationship between LOC and language proficiency. Moreover, language anxiety can predict language proficiency since there was a significant relationship between language proficiency and language anxiety (B = -.303, t = -3.678, Sig = .000). This finding is in contrast with that of Ehsani and Moghaddam (2021) who found no significant relationship between language proficiency and language anxiety.

## Conclusion

To answer the first research question, with regard to the comparison between Iranian students' language proficiency according to their LOC orientation, the results revealed that students with internal LOC orientation had a higher mean (m=24.0571) and outperformed those with external LOC orientation (m=16.6250). This means that the more internal LOC orientation, the higher the language proficiency of students. One possible reason for this finding is that internally-oriented people believe in themselves more than the external ones and do not blame others for their success or failure.

To answer the second research question, with regard to the relationship between language proficiency and students' LOC orientation, there was a strong negative relationship between them (r = -.780). This means that with an increase in the students' language proficiency, the score of LOC decreases (it becomes more internal) and with decreasing proficiency score, the score of LOC increases (it becomes more external). This finding can help teachers and students to improve their inner criteria and find themselves responsible for the outcomes of their efforts, and not reflect on the uncontrollable external factors.

In addition regarding the relationship between language proficiency and language anxiety, a strong negative correlation was found between them (r =-.620). This indicates that with an increase in the score of language

proficiency, the language anxiety decreases, and with falling in the score of language proficiency, language anxiety increases. This means that anxious students are less proficient. This finding can help teachers to reduce the anxiety-provoking factors that are important for the students' language proficiency.

Moreover, regarding the relationship between language anxiety and LOC, a positive relationship was found between them(r =.506). It shows that with increasing language anxiety, the score of the LOC test increases and it becomes more external.

Multiple regression was conducted to answer the last research question regarding the role of LOC and language anxiety in predicting language proficiency of the students .The findings revealed that there was a significant relationship between LOC and language proficiency (B = -.627, t = -7.610, Sig. = .000). In addition, a significant relationship existed between language anxiety and students' language proficiency, meaning that language anxiety can predict language proficiency (B = -.303, t = -3.678, Sig = .000). Based on the aforementioned findings, the LOC had a higher Beta and it was a better predictor of language proficiency.

**Declaration of interest:** none

## References

Abbas, S. A. (2016). Writing apprehension and performance of Iraqi EFL students according to their academic locus of control orientation. *International Journal of English Language Teaching*, *4*(7), 34-48.

Akunne, L. I, & Anyamene, A. N. (2021). Locus of control and self-esteem as correlates of secondary school students' academic achievement in English language in Anambra state. *Asian Journal of Advanced Research and Reports*, *15*(2), 46-54.

Ameriks, Y. (2009). Investigating validity across two test forms of the examination for the certificate of proficiency in English (ECPE): a multi-group structural equation modeling approach. Submitted in partial fulfillment of the requirements for the Degree of Doctor of Education in Teachers College, Columbia University.

Al Mulhim, E. N. (2021). Flipped learning, self-regulated learning and learning retention of students with internal/external locus of control. *International Journal of Instruction*, *14*(1), 827-846.

Alsowat, H. (2016). An EFL flipped classroom teaching model: Effects on English language higher-order thinking skills, student engagement and satisfaction. *Journal of Education and Practice*, *7*(9), 108-121.

Andrade, M., &Williams, K. (2009). Foreign language learning anxiety in Japanese EFL university classes: physical, emotional, expressive, and verbal reactions. *Sophia Junior Faculty Journal*, *29*, 1-24.

Aslan, E., & Thompson, A. S. (2021). The interplay between learner beliefs and foreign language anxiety: insights from the Turkish EFL context. *The Language Learning Journal*, *49*(2), 189-202.

Badakhshan, S. (2012). The Relationship between Reading Anxiety and Locus of Control among Iranian EFL learners. *The Iranian EFL Journal*, *4*, 133-152.

Bashosh, S., Nejad, M. A., Rastegar, M., & Marzban, A. (2013). The relationship between shyness, foreign language classroom anxiety, willingness to communicate, gender, and EFL proficiency. *Theory and Practice in Language Studies*, *3*(11), 2098.

Bialystok, E. (1981). The role of conscious strategies in second language proficiency. *The Modern Language Journal*, *65*(1), 24-35.

Bozorgi, S. (2009). On the Relationship between Locus of Control and the Grade Point Average of the Iranian Azad University EFL Students. *Online Submission.*

Chametzky, B. (2019). The online world language anxiety scale (OWLAS*). Creative Education*, *10*, 59-77.

Chang, M. M., & Ho, C. M. (2009). Effects of locus of control and learner-control on web-based language learning. *Computer Assisted Language Learning*, *22*(3), 189-206.

Cheraghi, M. (2018). *The relationship between attribution style, locus of control and self efficacy marital with marital satisfaction in married People in Ahvaz*. Unpublished Masters Thesis. University of Hormozgan.

Clément, R. (1986). Second language proficiency and acculturation: An investigation of the effects of language status and individual characteristics. *Journal of Language and social Psychology*, *5*(4), 271-290.

Debreli, E., & Demirkan, S. (2015). Sources and levels of foreign language speaking anxiety of English as a foreign language university student with

regard to language proficiency and gender. *International Journal of English Language Education*, *4*(1), 49-62.

Dewaele, J . M. (2012) Learner internal psychological factors. In: Herschensohn, J. and Young- Scholten, M. (eds.) *The Cambridge handbook of second language acquisition* (pp. 159-179). Cambridge, UK: Cambridge University Press.

Ehsani, F., & Moghaddam, J. N. (2021). The relationship between willingness to communicate, locus of control and foreign language anxiety among Iranian EFL learners. *Iranian Evolutionary and Educational Psychology Journal*, *3*(3), 319-331.

Endler, N. S., & Kocovski, N. L. (2001). State and trait anxiety revisited. *Journal of Anxiety Disorders*, *15*(3), 231-245.

Eysenck, M. W. (1979). Anxiety, learning and memory: A reconceptualization. *Journal of Research in Personality*, *13*,363-385.

Fakeye, D. O. (2011). Locus of control as a correlate of achievement in English as a second language in Ibadan. *Journal of International Social Research*, *4*(17), 546-552.

Furnham, A., & Ribchester, T. (1995). Tolerance of ambiguity: A review of the concept, its measurement and applications. *Current Psychology*, *14*(3), 179-199.

Ghonsooly, B., & Elahi, M. (2010). Validating locus of control questionnaire and examining its relation to General English (GE) achievement. The Journal of Teaching Language Skills (JTLS), 2( 1), 117-143.

Heidari, F., & Khorasaniha, N. (2013). Delving into the relationship between LOC, MI, and reading proficiency. *Journal of Language Teaching and Research*, *4*(1), 89-96.

Horwitz, E., Horwitz, M., and Cope, J.(1986). Foreign language classroom anxiety. *The Modern Language Journal*, *70*(2), 125-132.

Kılıç, A. (2021). Academic locus of control: Voluntary English preparation program students of a Turkish university. Master's thesis, Bursa Uludağ Üniversitesi.

Maclntyre, P. D., & Gardner, R. (1991). Methods and results in the study of anxiety and language learning: A review of the literature. *Language Learning*, *41*, 85-117.

MacIntyre, P. D. (1998). Language anxiety: A review of the research for language teachers. In D. J. Young (Ed.), *Affect in foreign language and second language learning* (pp. 24-45). Boston: McGraw-Hill.

Marks, L.I. (1998). Deconstructing locus of control: Implications for practitioners. *Journal of Counseling and Development, 76*, 251-260.

Nan, J., & Haoda, F. (2020). Research on students' anxiety in online English classes during the epidemic. *Advances in Social Science, Education and Humanities Research, 496*, 627-633.

Nijat, N., Atifnigar, H., Chandran, K., Tamil Selvan, S. L., & Subramonie, V. (2019). Psychological Factors that Affect English Speaking Performance among Malaysian Primary School Pupils. *American International Journal of Education and Linguistics Research, 2*(2), 55-68.

Nowicki, S. (2016). *Choice or Chance: Understanding your locus of control and why it matters*. New York, NY: Prometheus Books

Oxford, R. L. (1999). Anxiety in the language learner: New insights. In J. Arnold (Ed.), *Affect in language learning* (pp. 58–67). Cambridge: Cambridge University Press.

Pallant, J. (2016). *SPSS Survival manual: A step by step guide to data analysis using IBM SPSS.* New York: McGrew Hill.

Peek, R. (2016). Exploring learner autonomy: language learning locus of control in multilinguals. *International Journal of Multilingualism, 13*(2), 230-248.

Rastegar, M. (2010). A study of causal relationship between attitude, self-esteem, ambiguity tolerance, locus of control, and language proficiency of Iranian learners of the English as a foreign language. *International Journal of Psychology (IPA), 4*(1).

Renandya, W. A., Hamied, F. A., & Nurkamto, J. (2018). English language proficiency in Indonesia: Issues and prospects. *Journal of Asia TEFL, 15*(3), 618.

Rotter, J. B. (1954). Social learning and clinical psychology. Prentice-Hall, Inc. Retrieved from https://doi.org/10.1037/10788-000

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied, 80*(1), 1–28.

Salmani Nodoushan, M. A. (2012). The impact of locus of control on language achievement. *International Journal of Language Studies, 6*(2), 123-136.

Seidikenova, A., Malshy, M., & Akkari, A. (2020). Language anxiety in online education. *Central Asian Journal of Social Sciences and Humanities, 6*(4), 28-34.

Sotoudehnama, E., & Hosini Otaghsarayi, S. (2014). The relationship between locus of control, test anxiety, sex, and listening comprehension test performance of Iranian undergraduate EFL students. *ZABANPAZHUHI (Journal of Language Research)*, *6*(12), 57-74.

Sparks, R., & Ganschow, L. (1991). Foreign language learning differences: Affective or native language aptitude differences? *Modern Language Journal*, *75*, 3-16.

Spielberger, C. D. (1983). State-trait anxiety inventory for adults. https://doi.org/10.2466%2Fpms.1983.57.1.15

Türk-Kurtça, T., & Kocatürk, M. (2020). The role of childhood traumas, emotional self-efficacy and internal-external locus of control in predicting psychological resilience. *International Journal of Education and Literacy Studies*, *8*(3), 105-115.

Young, D. J. (1991). Creating a low-anxiety classroom environment: What does language anxiety research suggest? *Modern Language Journal*, *75*, 426-439.

Zhang, H., Dai, Y., & Wang, Y. (2020). Motivation and second foreign language proficiency: The mediating role of Foreign Language Enjoyment. *Sustainability, 12(4),* 1302.

Zheng, Y. (2008). Anxiety and second/foreign language learning revisited. *Canadian Journal for New Scholars in Education/ Revue Canadienne des jeunes chercheures et chercheurs en education*, 1(1), 1-12.

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