

# The Relationship between Foreign Language Anxiety and Language Learning Strategies among University Students

Ebrahim Ghorban Mohammadi

Department of English, Khorramabad Branch, Islamic Azad University, Lorestan, Iran

Reza Biria

Department of English, Khorasgan (Isfahan) Branch, Islamic Azad University, Isfahan, Iran

Mansour Koosha

Department of English, Khorasgan (Isfahan) Branch, Islamic Azad University, Isfahan, Iran

Azam Shahsavari

Department of English, Khorramabad Branch, Islamic Azad University, Lorestan, Iran

**Abstract**—This study sought to investigate the relationship between Language Learning Strategies (LLS) and Foreign Language Anxiety among Iranian university students. The instruments used in the study consist of: (a) the SILL (a questionnaire on language learning strategies developed by Oxford, 1990), and (b) the FLCAS (a questionnaire to measure the amount of anxiety English language learners experience while taking part in English classes, developed by Horwitz, 1986). The participants of the study were 85 students studying English at Islamic Azad University in Khorramabad, Iran. The results of this study revealed that generally language learning strategies correlate meaningfully and significantly with language anxiety. This correlation was negative ( $r = -0.33$ ) which means that the higher use of LLS is related to less amount of English Language Classroom Anxiety (ELCA). On the other hand, cognitive, compensation, and social strategies correlated meaningfully with language anxiety, while metacognitive, memory, and affective strategies did not correlate significantly with ELCA. After calculating the homogeneity of variances, a t-test was run to find whether there is a meaningful difference between high and low LLS users in terms of their ELCA. The results of the t-test analysis showed that a significant and meaningful difference exists between the two groups. High LLS users had a relatively lower ELCA than low LLS users.

**Index Terms**—language learning strategies, foreign language anxiety, correlation, khorramabad, Iranian university students

## I. INTRODUCTION

A prominent change has occurred in language teaching and learning over the last forty or so years. In the past the emphasis was on teachers and teaching, but now the emphasis is on learners and learning. As a result, much research has been aimed to find the roles of learner characteristics on language learning such as attitude (e.g. Wenceslao, 1991), self-concept, self-efficacy and self-perception (e.g. Chapman, & Tunmer, 2002; Slavin, 2003 in Brown, 2007), and motivation (e.g. Yihong, Yuan, Ying & Yan, 2007). Other learner variables such as aptitude, age, gender, career choice, cultural background, cognitive style, and learning strategies are investigated as the role of the learner has received due emphasis. Among these, learning strategy research has experienced tremendous growth. In Nyikos and Oxford's (1993) words, "interest in leaning strategies is due in large part to increased attention to learner and to learner-centered models". Of these characteristics, affective factors have always been an area of interest to the researchers in the field of educational psychology and language teaching and learning. Many studies have been conducted on the relationship between affective factors and other variables.

Research studies designed to determine the effect of anxiety in the classroom have indicated that anxiety is common among students (Aida, 1994). A previous body of literature suggests that a high level of foreign language anxiety interferes with foreign language learning (Bailey, 1983; Baily, Daley, Onwuegbuzie, 1999; Horwitz, Horwitz & Cope, 1986; MacIntyre & Gardner, 1994; Young, 1991; Ohata, 2005; Pappamihel, 2002; Williams & Andrade, 2008). In concluding their paper, Lucas et al., (2011), state that "foreign language learners ... equip themselves with learning strategies that would help them not only to learn the target language but also to cope with their language learning anxieties". Therefore, conducting research into the correlates of language learning strategies used by student with different level of foreign language anxiety can help both teachers and learners in meeting teachers' desire to teach foreign language in a way that their students learn efficiently. This study will attempt to identify whether any

relationship between the extent of language learning strategy use and foreign language anxiety exists or not. In other words, the purpose of the study is to find out whether students who use more language learning strategies will be less or more anxious than the other students. Moreover, this study will attempt to investigate the amount of foreign language anxiety that high and low users of language learning strategies, at the university level, report experiencing.

In this study we will try to make a brief introduction of language learning strategies and language anxiety and the related research done on both. Then, the procedures of the study, the results of the study and finally the conclusion will be presented.

## II. LITERATURE REVIEW

### *Language Learning Strategies*

Much of the research done on language learning strategies, beginning in the 1960s, was influenced by developments in cognitive psychology (Williams and Burden, 1997, p.149). In most of this research, the major concern has been on "identifying what good language learners report they do to learn a second or foreign language" (Rubin and Wenden, 1987, p.19). Rubin started doing research in 1971, focusing on the strategies of successful learners and claimed that, if such strategies were identified, they could be made available to less successful learners. Processes contributing directly or indirectly to language learning were the basis of Rubin's (1975) strategy classification. Strategies employed by language learners while processing foreign language learning were investigated by Baily et. al. (1999), Cohen (1998), Wenden (1987), Chamot and O'Malley (1987), and many other researchers.

The term, "*Language Learning Strategy*" has been defined by many researchers which show more or less similar assumptions, so only a few of them are mentioned here. Rubin (1975, p. 43) defined the learning strategies as 'the techniques or devices that a learner may use to acquire knowledge. Based on Chamot (1984, p.71) "learning strategies are techniques, approaches, or deliberate actions that students take in order to facilitate the learning and recall of both linguistic and content area information". Oxford and Nyikos (1989, p.291) defined learning strategies as "operations used by learners to aid the acquisition, storage, and retrieval of information." O'Malley and Chamot (1990, p.2) stated that learning strategies are "special ways of processing information that enhance the comprehension, learning, or retention of the information." According to Ehrman and Oxford (1990 p.312), "Strategies are the often conscious steps or behaviors used by language learners to enhance the acquisition, storage, retention, recall, and use of new information." They (1995, p.68) stated that language learning strategies are "the specific behaviors or techniques learners use to improve any aspects of their learning development." Cohen (1998, p.1) maintains that "the term strategies, in the second-language-learning sense, has come to be applied to the conscious moves made by second-language speakers intended to be useful either in learning or using the second language." And Oxford and Lavine (1991, p.203) in an attempt to compare learning style with learning strategies, state that, "in contrast to language learning styles, language learning strategies are specific behaviors or techniques that students use, often consciously, to improve their own progress in internalizing, storing, retrieving, and using the target language."

Classification of Language Learning Strategies (LLS) has been done by various scholars including, Wenden and Rubin 1987; O'Malley et al. 1985; Oxford 1990; Stern 1992; Ellis 1994, etc. However, these classifications follow more or less the same categorizations of language learning strategies. In this study, only Oxford's (1990), taxonomy of language learning strategies is handled because it is considered more systematic by many scholars.

Oxford (1990, p.9) considers the goal of language learning strategies as 'being oriented towards the development of communicative competence'. Oxford divides Language Learning Strategies into two major categories, **direct** and **indirect**, which are then sub-divided into 6 sub-groups. In Oxford's system, *metacognitive* strategies aid learners to regulate their learning; *affective* strategies deal with the learner's emotional requirements such as confidence; and *social* strategies make enhanced interaction with the target language. *Cognitive* strategies are the mental strategies learners use to understand their learning, *memory* strategies are those used for memorizing information, and *compensation* strategies provide devices for learners to overcome knowledge gaps to continue the flow of their communication.

### *Foreign Language Learning Anxiety*

Anxiety has been said by many researchers to influence language learning and language performance (Onwuegbuzie, Bailey, & Daley, 2000). MacIntyre and Gardner (1994) defined language anxiety as "the feeling of tension and apprehension specifically associated with second language contexts, including speaking, listening, and learning" (p. 284). For years, researchers have indicated that language anxiety is a special type of anxiety experienced in the course of learning a second or foreign language (Horwitz, Horwitz, & Cope, 1986; MacIntyre & Gardner, 1989). Horwitz et al. (1986), found that more than one third (38%) of the respondents to their survey selected "strongly agree" or "agree" for the item that had stated "I feel more tense and nervous in my language class than in my other classes." A number of other studies (such as Gardner and Lambert, 1989) failed to find evidence of the effect of general anxiety on second language learning. Horwitz, Horwitz, and Cope (1986) define language anxiety as "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process." (p.128). Horwitz and Young (1991) also refer to language anxiety as a form of performance anxiety, which 'can be observed through face-saving (e.g., joking), physical activity (e.g., tapping a pencil), psychosomatic symptoms (e. g., headache), and avoidance behavior (e.g., not doing homework)'. Horwitz et al. (1986) defines *foreign language anxiety* as "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to

classroom language learning arising from the uniqueness of the language learning process” (p.31). The interrelated processes that are the basis of their theory are: a form of 'communication apprehension', 'concern about the frequent testing and examinations in a language classroom', and 'fear of negative evaluation'. Horwitz (1986) has reported evidence to support this theory. Spielberg (1983) reported significant correlations 'between the Foreign Language Class Anxiety Scale (FLCAS) and scales of test anxiety, fear of negative evaluation, communication apprehension, and trait anxiety'.

Jen (2003) found that irrespective of the language teaching method, secondary school students experienced anxiety. Personality factors, fear of negative evaluation, low English proficiency, lack of preparation, pressure from the language instructor and tests, and parental pressure were found to be the common instigator of foreign language anxiety among highly anxious language learners (Jen, 2003). Five main causes of foreign language anxiety among elementary school children, mentioned by Chan and Wu (2004), include: 'an anxious personality, fear of negative evaluation, low language proficiency, competitive games, and pressure from parents and self'.

Some other studies attempted to tackle other variables related to language anxiety, such as reading comprehension (Liu, 2010; Wu, 2011), learning difficulties (Chen & Chang, 2004), emotional intelligence (Chao, 2003), and motivation (Huang, 2005).

Clinical observations reported by Horwitz, and Cope (1986) have supported the general identification by teachers of the existence of anxiety specific to language learning context. Based on Krashen (1981), anxiety causes the arousal of an 'affective filter', which blocks students from receiving input, and as a result language acquisition fails to progress.

Gardner, Moorcroft, and MacIntyre (1987) claimed that 'students could structure the free speech according to their level of ability, thereby coping with the anxiety that the task might arise'. This ability is accessible to language learners through the application of language learning strategies.

The pattern of French Class Anxiety Scores was found by Gardner, Smythe, & Brunet (1977) examining 62 English speaking students learning French in an intensive summer school environment. In their study beginner learners experienced the most anxiety and advanced learners the least, and intermediate learners were between the other two groups. The levels of French Class Anxiety from the beginning to the end of the course declined in all three groups. Desrochers and Gardner (1981) came to the same results and they suggested similar implications for their results, i.e., the level of anxiety in language learners could be reduced if they gain some experience in the course of language learning. This experience leads to favorable attitudes in those participating in language learning situations. In a study by Chapelle and Roberts (1986) students of English as a second language were tested and they did not find a significant correlation between English Class Anxiety and TOEFL scores at the beginning of a semester while they found a significant correlation between the two by the end of the semester. The reason for this reduction of language learning anxiety in the course of language learning can be attributed to the learning of some language learning strategies over time. Research on the relationship between language learning strategies and language learning anxiety have indicated that there is a meaningful relationship between different subsets of language learning strategies and language anxiety. For example, Schmeck (1988) found that highly anxious students show a “shallow learning style” that is associated with strategies such as repetitive, rehearsal, rote memory, and use of mnemonic devices. Oxford and Ehrman (1995) found that self-report anxiety about speaking in class was positively related to the use of cognitive strategies. Furthermore, the use of compensation strategies was negatively related to anxiety about outcomes ( $r=-0.30$ ,  $p<0.05$ ). Noormohammadi (2009) also found a negative and significant correlation between all categories of language learning strategies and language anxiety.

### III. RESEARCH METHODOLOGY

#### *Research Questions and Hypotheses*

Because the use of language learning strategies can have a positive effect on the acquisition of a foreign or second language, it is important to be able to identify students with a high level of language learning strategy use and those with a low level of it; so that, where possible activities can be adjusted to their level of abilities. By studying different research papers, it becomes evident that studies examining the relationship between LLS and learners' characteristics can help us increase our understanding of language learning from the learners' perspective and provide a wider range of insights. Language anxiety is one of the learners' characteristics, which has received little attention in research.

By considering the above-mentioned points, the aims of this study are as follows:

1. To focus on the relationship between the participants' amount of strategy use, and their level of language anxiety.
2. To investigate the amount of anxiety of the high and low language learning strategy users.

Accordingly an attempt was made to find an empirically justified answer to each of the following questions:

1. Is there any relationship between the extent of language learning strategy use and the level of English language anxiety?
2. Is there any relationship between different categories of LLS (Language Learning Strategies) and the level of English language anxiety?
3. Do the learners who have a relatively higher extent of language learning strategy use differ significantly from those who have a lower extent of language learning strategy use, in terms of the level of English language anxiety?

For each of these questions a null hypothesis will be adopted. The hypotheses are:

**HO1.** There is no significant relationship between the extent of Language Learning Strategy use and the level of English Language Classroom Anxiety.

**HO2.** There is no relationship between different categories of LLS and the level of English Language Classroom Anxiety.

**HO3.** There is no significant difference between learners who have a relatively higher Language Learning Strategy use and those who have a relatively lower Language Learning Strategy use, in terms of the level of English Language Classroom Anxiety?

#### *Design of the Study*

First of all it should be noted that this study is a descriptive one. Based on Best & James (1989), "A descriptive study describes and interprets what is. It is concerned with conditions or relationships that exist, opinions that are evident, or trends that are developing. It is primarily concerned with the present, although it often considers past events and influences as they relate to current conditions" (p.76). As a result, the design of the study is *ex post facto*. In this design, the researcher has no control over what has already happened to the participants. As Hatch & Farhady (1981) maintain: "Correlational designs are the most commonly used subset of *ex post facto* design." (p.27). Accordingly, in this study the extent of Language Learning Strategy use has been taken as independent variable and the level of Foreign Language Classroom Anxiety as the dependent one. The other way, that is, looking at language anxiety as independent has been considered in an earlier study by Noormohammadi (2009). So, comparing the results of these two studies might be fruitful for foreign language learning and teaching.

#### *Participants*

The participants of the present study were 85 students at Islamic Azad University in Khorramabad, Iran, studying English language teaching at the BA level. In order to have a homogeneous group of respondents only the junior and senior students were selected as the sample of the study. The participants aged 20-28.

In fact the sample will be considered representative of typical Iranian students at this age range and field of study, while having different social, economical and cultural backgrounds.

#### *Instrumentation*

Two paper-and-pencil instruments used in the study include:

- 1) A questionnaire on language learning strategies, which is called **SILL** (Strategy Inventory for Language Learning).
- 2) A questionnaire on language anxiety, which is called **FLCAS** (Foreign Language Classroom Anxiety Scale).

The definitions, descriptions and characteristics of each of these instruments are discussed below.

##### *a. The SILL (Strategy Inventory for Language Learning)*

The Persian version of the 50-item Strategy Inventory for Language Learning (SILL) (Oxford, 1990), translated by Noormohammadi (2009), was one of the instruments of this study. Primarily, the SILL was designed, as an instrument, for assessing the frequency of use of Language Learning Strategies by students at the Defense Language Institute, Foreign Language Center in Monterey, California. Two revised versions of the SILL appeared in Oxford's (1990) book in the appendices. One of these instruments consisted of 80 items and the other one had 50 items. The former is used for learners whose native language is English; the latter is most appropriate for learners of English as a second or foreign language. The 50-item questionnaire (used in the present study) includes six categories of strategies for language learning: **Memory** strategies, **Cognitive** strategies, **Compensation** strategies, **Metacognitive** strategies, **Affective** strategies, and **Social** strategies.

For the SILL, Cronbach alpha has been chosen as the most appropriate reliability index (Oxford, 1996). In general, the ESL/EFL SILL reliabilities have been very high. A number of studies have revealed high reliabilities of the SILL. To name a few, it was .93 with 332 Korean university EFL learners (Park, 1994), and in the range of .91 to .95 for the 80-item questionnaire (Oxford and Ehrman, 1995, Oxford and Nyikos, 1989).

Each of the items in SILL was answered on a five point Likert scale, ranging from "Always true of me" to "Never true of me". A subject's endorsement in "Always true of me" was equated with 5, "Generally true of me", 4, "somewhat true of me" was equated with 3, "Generally not true of me", was 2, and "Never true of me" was equated with 1.

##### *b. The FLCAS (Foreign Language Classroom Anxiety Scale)*

Horwitz's (1986 in Al Sibai, 2005) Foreign Language Classroom Anxiety Scale (FLCAS) has been used in most research done on language learning anxiety. In FLCAS items have been classified into three dimensions of related performance anxieties: 1) communication apprehension, 2) test anxiety, and 3) fear of negative evaluation which are considered sources of anxiety.

The Persian translation of the FLCAS was the second instrument of this study. It is consisted of 33 items, which is based on Horwitz et al.'s (1986) Foreign Language Classroom Anxiety Scale. This scale is used to measure the amount of anxiety that English language learners experience while taking part in English classes. The FLCAS has been translated into Persian language by Noormohammadi (2009) and revised by the researcher. Translation of this instrument prevents the impact of English language proficiency on the result of the study.

Internal consistency of the FLCAS, as measured by Horwitz (1986) by Cronbach alpha coefficient, was 0.93, and test retest validity over eight weeks was 0.83 ( $p=0.001$ ,  $n=78$ ). Criterion-related studies, concerning the construct validity of the scale, have also been conducted by Horwitz and Young (1991). The correlation of the FLCAS with the scale of the State-Trait Anxiety Inventory (Spielberger, 1983) obtained was 0.29 ( $p=0.002$ ,  $n=108$ ); and with the Personal Report of

Communication Apprehension (McCroskey, 1987) was 0.28 ( $p=0.063$ ,  $n=44$ ). Watson and Friend (1989) found that the correlation between FLCAS with the fear of Negative Evaluation Scale was 0.36 ( $p=0.007$ ,  $n=56$ ); and the correlation of the FLCAS with the Test Anxiety Scale (Sarason, 1980) was 0.53 ( $p=0.001$ ,  $n=60$ ).

Each of the items in the FLCAS was answered on a five point Likert scale, ranging from: a) “strongly agree”, to c) “neither agree, nor disagree”, to e) “strongly disagree”. A subject’s endorsement in a) “strongly disagree” was equated with a numerical value of **one**; b) “disagree” was **two**; c) “neither agree nor disagree”, **three**; d) “agree”, **four**; and e) “strongly agree” was **five**. For each subject, an anxiety score is derived, by summing his or her ratings of the thirty-three items. The theoretical range of this scale is from 33 to 165.

#### Data collection

The Persian versions of the SILL (Strategy Inventory for Language Learning) and the FLCAS (Foreign Language Classroom Anxiety Scale) were attached to each other and then they were administered to the participants of the study. Prior to this, they were fully briefed on how to fill out the questionnaires. The questionnaires were collected within a week. Some of the questionnaires were discarded because they had been hastily worked on.

#### Data Analysis

After the administration of the questionnaires, the data were collected and analyzed (with a significance level of .05) to the following statistical methods:

1. Phillips (1992), Onwuegbuzie et al. (1999), Noormohammadi (2009), and Aida's (1994) studies, all used Pearson-product-moment correlation to determine correlation between foreign language anxiety and the selected variables such as course grades, oral exam grades, language learning strategies, etc. Therefore, in this study Pearson correlation was calculated between the SILL and the FLCAS. Moreover, Pearson-product-moment correlation was calculated between different categories of the SILL and the FLCAS.

2. For the purpose of answering the third question of the study, each subject was classified into either a high Language Learning Strategy user group or a low Language Learning Strategy user group by a median split procedure, based upon their total score on the SILL. Then, because the scores were normally distributed, the t-test was conducted to compare and find the difference between means of these two mentioned groups on their FLCAS.

#### Descriptive Statistics

After collecting the questionnaires, the SILL scores of the participants in the study were calculated. The results of the participants’ SILL scores are as follows.

##### a. Frequency of Use for the Different Categories of Language Learning Strategies

Comparing the means of the subsets of Language Learning Strategies (LLS), it turned out that *metacognitive* strategies were most frequently used (mean = 3.94), and *affective* strategies were the least frequently used strategies (mean = 2.97) (see table 4.1).

TABLE 1:  
FREQUENCY OF USE FOR THE SUBSETS OF LLS

Rank	LLS category	N of items	Mean	N of participants
1st	Metacognitive	9	3.94	85
2nd	Compensation	6	3.60	85
3rd	Social	6	3.50	85
4th	Cognitive	14	3.49	85
5th	Memory	9	3.16	85
6th	Affective	6	2.97	85

Table 2 demonstrates the frequency of use for the six categories of the SILL in some of the above-mentioned studies.

TABLE 2:  
THE FREQUENCY OF SILL STRATEGIES ACROSS DIFFERENTS STUDIES

Rank	The Present Study (2012)	Oxford et al. (1989)	Phillips (1990, 1991)	Oxford and Ehrman (1995)	Tajjeddin (2001)	Salehi (2002)
1 <sup>st</sup>	Metacognitive	Social	Metacognitive	Compensation	Metacognitive	Metacognitive
2 <sup>nd</sup>	Compensation	Metacognitive	Social	Social	Cognitive	Cognitive
3 <sup>rd</sup>	Social	Cognitive	Compensation	Cognitive	Social	Compensation
4 <sup>th</sup>	Cognitive	Compensation	Cognitive	Metacognitive	Compensation	Social
5 <sup>th</sup>	Memory	Affective	Affective	Memory	Memory	Memory
6 <sup>th</sup>	Affective	Memory	Memory	Affective	Affective	Affective

There is a difference between this frequency-based strategy ranking and the one resulted from Oxford and Ehrman’s (1995) study, where *compensation* strategies were the most frequently used category of strategies among 855 adults in an intensive training in a wide variety of languages at the U.S Department of State. In their study, *social*, *cognitive*, and *metacognitive* strategies received second, third, and fourth ranks respectively, while in this study they received third, fourth, and first ranks, respectively. However, in their study, *memory* and *affective* strategies received the same ranks as in this study. They received the fifth and sixth ranks. Oxford and Nyikos (1989) found *affective* and *memory* strategies to be receiving the lowest frequencies, while the highest frequencies went to *social*, *metacognitive*, *cognitive*, and *compensation* strategies. In the present study the same results are approved.

Phillips' (1990, 1991) found the same results. In that study, *cognitive*, *affective*, and *memory* strategies were found to receive the lowest frequency of strategy use. In the same study, *metacognitive*, *social*, and *compensation* strategies had the highest frequency ranking. Tajjeddin (2001) and Salehi (2002) also found that *metacognitive* strategies were the most frequently used strategies. In their studies, *affective* strategies got the sixth rank.

*b. The Level of Anxiety Experienced by High and Low LLS Users*

After dividing the participants into high and low LLS users, we calculated the mean of anxiety scores for each group to find the level of anxiety experienced by each group. The results of this computation are shown in table 3.

TABLE 3:  
ANXIETY MEAN SCORE OF HIGH AND LOW LLS USERS

Statistics LLS users	Mean for SILL (50 items, 250 points)	Mean for FLCAS (33 items, 165 points)
High LLS users	192.69	82.07
Low LLS users	152.10	95.86

*Correlational Analysis*

*a. LLS and Language Anxiety*

To test the first null hypothesis, i.e., "**H01: There is no significant relationship between the extent of LLS use and the level of English Language Classroom Anxiety**", a correlational analysis was run. It was found that there is a negative and significant correlation between LLS use and foreign language anxiety ( $r = -0.33$ ,  $p < .05$ ,  $n = 85$ ). So, this null hypothesis is rejected.

TABLE 4:  
CORRELATION OF THE FLCAS & THE SILL

Pearson Correlation (r)	FLCAS
SILL	$r = -0.33$

This finding supports an inverse relationship between LLS use and ELCA, i.e., students who use more LLS, express less ELCA than those who use less LLS. This amount of relationship is also meaningful and significant at  $p < 0.01$ .

*b. Categories of LLS and Language Anxiety*

In order to test the second null hypothesis, i.e., "**H02: There is no relationship between different categories of LLS and the level of English Language Classroom Anxiety**", another correlation analysis was calculated. As it is shown in table 5, there is a negative and significant correlation between different categories of LLS and English Language Anxiety.

TABLE 5:  
PEARSON CORRELATION BETWEEN CATEGORIES OF LLS AND ENGLISH LANGUAGE CLASSROOM ANXIETY (ELCA)

Strategies	Metacognitive	Cognitive	Memory	Compensation	Affective	Social
ELCA	-0.17	-0.42	-0.14	-0.31	-0.03	-0.27

The highest significant correlation belongs to that of *cognitive* strategies and ELCA ( $r = -0.42$ ,  $p < .05$ ,  $n = 85$ ). The lowest correlation was found to be between *affective* strategies and ELCA ( $r = -0.03$ ). There was a statistically significant, but little, correlation between *social* strategies and ELCA ( $r = -0.27$ ,  $p < .05$ ,  $n = 85$ ) and between *compensation* strategies and ELCA ( $r = -0.31$ ,  $n < .05$ ,  $n = 85$ ). No significant correlation was found between *affective*, *memory*, and *metacognitive* strategies and ELCA. So, the above hypothesis is rejected if we consider *cognitive*, *compensation*, and *social* strategies and it is accepted if we talk about *affective*, *memory*, and *metacognitive* strategies.

*T-Test*

*a. Total English Language Classroom Anxiety*

In previous sections, taking the *median-point* into account the total scores for LLS were arrived at, and two LLS groups, high and low, were determined. The median score for LLS use for this sample was 117. Therefore, participants with scores of 117 and above have been considered as high LLS users and participants with scores lower than 117 have been considered as low LLS users group.

To test the third null hypothesis of the study, i.e., "**H03: There is no significant difference between learners who have a relatively higher LLS use and those who have a relatively lower LLS use, in terms of English Language Classroom Anxiety?**", another index, called total English Language Classroom Anxiety, was calculated. To determine whether the samples meet the criterion of equality of variances, an *F*-test was used.

$$F = \frac{S^2 \text{ (Highest variance)}}{S^2 \text{ (Lowest variance)}} = \frac{646.36}{369.34} = 1.75$$

TABLE 6:  
F-TEST OF THE HIGH AND LOW LLS USERS ON THE FLCAS

F-observed	df for numerator	df for denominator	F-critical
1.75	41	41	2.11

As it can be seen from table 6, the F-observed (1.75) is less than the F-critical (2.11). So, it was concluded that the variances fulfilled the condition of the homogeneity of variances and that the method of pooled variances was appropriate.

Then a t-test was used to test the third null hypothesis. As shown in table 7 and 8, this null hypothesis was rejected. In table 7 high LLS users group show a mean of (M=82.07, sd=25.42, n=42) on their FLCAS and low LLS users group show a mean of (M=95.86, sd=19.22, n=42) on their FLCAS. The results of this t-test analysis show that there is a significant and meaningful difference between high LLS users and low LLS users in terms of English Language Classroom Anxiety at  $p < 0.05$  and even at  $p < 0.01$ . High LLS users have a relatively lower anxiety than low LLS users. AS a result of this t-test analysis, the third null hypothesis of this study is rejected. As it can be seen, mean anxiety for high LLS users is less than mean anxiety for low LLS users. This finding supports the result of the correlational study, in which a negative correlation ( $r = -0.33$ ) was found between LLS use and language classroom anxiety.

It is worth repeating here that, in this study, LLS and ELCA have been considered to be independent and dependent variables of the study, respectively. As it can be seen, the difference between groups was founded to be significant and meaningful, showing that more frequent use of LLS is related to the less amount of ELCA. High LLS users are less anxious in the foreign language classroom than low LLS users.

TABLE 7:  
T-TEST FOR HIGH AND LOW LLS USERS, ASSUMING EQUAL VARIANCES IN TERMS OF THEIR ELCA

Statistics	Low LLS Users	High LLS Users
Mean on the FLCAS	95.85714	82.07143
Variance on the FLCAS	369.3449	646.3606
Standard Deviation	19.22	25.42
Observations	42	42
Degrees of Freedom	82	
Hypothesized Mean Difference	0	
Pooled Variance	507.8528	
t-Observed	2.803303	
t-Critical (two-tailed)	1.98932	
Level of Significance (two-tailed)	0.006312	

#### IV. SUMMARY OF THE FINDINGS

This study was an attempt to see whether the use of Language Learning Strategies is correlated with the amount of English Language Anxiety experienced in the classroom situation. Besides, the frequency of the use of Language Learning Strategies (LLS) and the correlation between different categories of Language Learning Strategies with English Language Classroom Anxiety were investigated. Running a Pearson-product-moment correlation, it was found that the use of LLS correlate significantly with English Language Classroom Anxiety (ELCA) ( $r = -0.33$ ,  $p < 0.01$ ,  $n = 85$ ). Among different categories of LLS, *metacognitive* strategies were most favored by students and *affective* strategies were the least used category. The results of correlational analysis revealed that *cognitive* strategies correlate with ELCA more than the other categories, and *affective* strategies correlate less than the others. It should be mentioned that all the correlations were negative.

After running a t-test, it was found that high LLS use is related to less amount of ELCA. The high LLS users reported less ELCA than the low LLS users.

#### V. CONCLUSION AND DISCUSSION

A number of researchers have suggested that the existence of foreign language anxiety is not a favorable phenomenon and it must be overcome by students at different stages of learning and for different language learning situations, so that they can take full advantage of foreign language instruction (Horwitz, et.al, 1986). This aim can partly be obtained through using language learning strategies. The main purpose of this study was to investigate the correlation between LLS and ELCA among Iranian EFL learners. Proposing the research questions, three null hypotheses were formulated. There were 85 junior and senior students participating in the study. They were studying English language at Islamic Azad University. They were all administrated the SILL and the FLCAS. Based on the statistical analyses of the data in this study, the following conclusions were drawn:

1. There is a meaningful negative relationship between the degree of LLS use and the level of ELCA ( $r = -0.33$ ,  $p < 0.01$ ,  $n = 85$ ).
2. There is a meaningful negative relationship between *cognitive*, *compensation* and *social* LLS and the level of ELCA. But there is not any significant relationship between *affective*, *memory*, and *metacognitive* LLS and ELCA.
3. The learners who have a relatively higher extent of LLS use, report less ELCA than those who have a relatively lower extent of LLS use.
4. *Metacognitive*, *compensation*, and *social* strategies are used more frequently by Iranian EFL learners.
5. *Affective*, *cognitive*, and *memory* strategies are used less frequently by Iranian EFL learners.

Wenden and Rubin (1987) state that "LS are strategies which contribute to the development of the language system which the learner constructs and affects learning directly." It can be inferred that the knowledge and use of LLS can improve better language learning. If teachers can tailor LLS to their students' needs, it can enhance their learning as well as their level of language anxiety.

As language instructors, many may notice some level of anxiety in their students that result in unpleasant feelings in them. Even though it is not suggested that LLS be taught directly, language teachers can have a side in their teaching to talk to their students about LLS and how to employ them to lower their level of anxiety. The possible anxiety, that students might have, could have a negative effect on their learning. Despite their pressure of time, sometimes teachers may hesitate so that their students share their concerns and emotional stress caused by language issues. However, this language-related anxiety and possible emotional stress should be acknowledged, considered, and overcome so that students can display their existing abilities to the fullest. All these boosts the need to shift the teachers role from a pure knowledge imparter to a facilitator in the process of language learning which needs a mutual respect between the teacher and the learners. As a result, students can become more independent and more responsible for their own learning. Acknowledging the relationship between LLS and ELCA, the language teachers can provide an environment in their classes to train their students to be familiar with LLS and employ such strategies when confronting ELCA. This way, students can take optimum results from instructions in their classes and take full advantage of learning and acquisition opportunities in the society.

For future studies, it is recommended that other learner variables not accounted for by this study such as learning styles, age, self-perception, risk taking, gender, learning style, language background, etc., and their relationships with each other be considered.

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**Ebrahim Ghorban Mohammadi** is currently a PhD candidate in Teaching English as a Foreign Language in Islamic Azad University, Khorasgan (Isfahan) Branch. He has published papers in domestic and international journals. His areas of interest include pronunciation and vocabulary acquisition, EFL reading and writing, language assessment, and psycholinguistics.

**Reza Biria** currently works as an Assistant Professor at Khorasgan Azad University, Isfahan. His research interests include teaching English as a second and foreign language and ESP.

**Mansoor Koosha** is an associate professor of applied linguistics. He earned his M.A. in Teaching English as a Foreign Language (TEFL) from American University of Beirut, Lebanon, in 1970. Later, he did his Ph.D. studies in English Education in University of Colorado, U.S.A., 1980. He is currently an associate professor at Islamic Azad University, Khorasgan (Isfahan) Branch, Iran. He has published several ESP textbooks for EFL students in Iran, and has also been the author of several articles in Iran and abroad. His research interests include materials development, L2 acquisition, EFL reading, translation studies, and ESP.

**Azam Shahsavari** is currently a PhD candidate in General Linguistics at Islamic Azad University, Science and Research Branch in Tehran, Iran. She has written books and published papers in domestic and international journals. Her areas of interest include pronunciation and vocabulary acquisition, translation studies, syntax, semantics, discourse analysis, dialectology, sociolinguistics, and psycholinguistics.