



The Relationship between EFL Learners' Autonomy, Anxiety, and Their Motivated Strategies for Learning

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Abstract

The purpose of this study was to investigate the relationship between EFL learners' autonomy, anxiety and their motivated strategies for learning. To this end, 158 undergraduate students, within the age range of 21 to 30 ($M_{age} = 25$), majoring in English Translation and English Literature at Islamic Azad University, Central Tehran, South Tehran, and North Tehran were selected based on convenience sampling strategy. They were asked to fill in three questionnaires, namely the English versions of the Zhang and Li's Learner Autonomy Questionnaire (2004), Foreign Language Classroom Anxiety Scale (Horwitz, Horwitz, and Cope, 1986), and the Motivated Strategies for Learning Questionnaire (Pintrich, Smith, Garcia, and McKeachie, 1991). Since the assumptions of normality of distribution were violated for the scores of anxiety and motivated strategies for learning, in order to find out the relationships among the variables the non-parametric test, Spearman Rank Order Coefficient of Correlation was conducted. The results revealed that there was a significant and positive correlation between autonomy and motivated strategies, a significant and negative correlation between anxiety and autonomy, a significant and negative correlation between anxiety and motivated strategies. Furthermore, a regression analysis revealed that motivated strategies make the strongest significant unique contribution to suppressing anxiety.

Keywords: Motivated Strategies for Learning, Autonomy, Anxiety, EFL Learners

INTRODUCTION

Over the past decades, a gradual but extremely important shift has occurred in the field of second language (L2) learning, putting great emphasis on learners, learners' related factors and learning (Bagheri, Yamini, and Riazi, 2009; Hismanoglu, 2000). Motivation, as one of the learner-related factors, is a key factor in successful L2 learning (Dailey, 2009). "Motivation serves as the initial engine to generate learning and later functions as an

ongoing driving force that helps to sustain the long and usually laborious journey of acquiring a foreign language" (Cheng & Dornyei, 2007, p. 153). Since motivation is determined as one of the main factors in learning, the strategies that are used to motivate L2 learners seem to be crucial to be taken into consideration.

Among those strategies motivated strategies for learning are considered as one of the most important ones (Pintrich, 1988, cited in Bagheri, Yamini, & Riazi, 2009). "Motivated strategies for learning are based on a social cognitive view of motivation and learning strategies" (Pintrich, 1988, cited in Bagheri, Yamini, & Riazi, 2009, p. 12). In this view, learner is believed to be an active processor of information whose cognitions and beliefs are significant mediators of instructional input and task features (Weinstein & Mayer, 1986). So, learners' motivation is directly related with their capability to self-regulate their learning tasks and activities (Eccles & Wigfield, 2002).

Since 1970, many studies have been done on how teachers can promote learner autonomy and increase learner independence. Consequently, it is frequently discussed among English language teachers and scholars around the world (e.g., Benson & Voller, 1997; Dickinson, 1995; Little, 1991; Spatt, Humphreys & Chan, 2002). Holec (1981) who is considered as the father of autonomous learning defines autonomy as the ability "to have, and to hold the responsibility for all the decisions concerning all aspects of this learning" (Holec, 1981, p. 3). Thus, an autonomous language learner is one who assumes responsibility for his/her own learning and can do so without teacher intervention (Kaltenbock, 2001). This responsibility is not only for determining the purpose, content, rhythm, and method of learning, but also for monitoring the learning progress, and evaluating its outcomes (Byram, 2004).

In addition to autonomy and motivation, there has been a growing awareness and sensitivity in the last few decades towards the importance of the affective factors of learners (Brown, 2000). Second language researchers (Clement, Dornyei & Noels, 1994; Horwitz, Horwitz & Cope, 1986; Young 1991) have long been aware that second language learning is often associated with affective factors, among which anxiety have been recognized as important predictors of second language performance (Clement, Dornyei & Noels, 1994).

According to Horwitz, Horwitz and Cope (1986), foreign language anxiety is "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the language learning process" (p. 31). Anxiety causes many potential problems for the foreign language learners because it can interfere with the acquisition, retention and production of the new language. Moreover, foreign language anxiety has been found to be a powerful factor hindering L2 learning achievement (MacIntyre, 1999; Young, 1992). Most research has already proved that foreign language production, improvement, and achievement can be avoided by the emotional symptoms of anxiety (Horwitz, 2001; Huang, Eslami & Hu, 2010; Hussain, Shahid & Zaman, 2011; Liu & Jackson, 2008; Liu & Zhang, 2010).

Because of the importance of autonomy, anxiety and motivated strategies for learning in the area of second language learning and their effects on learners' trend to become successful, and also in order to come up with a more comprehensible picture, the present study was an attempt to systematically investigate the relationship among these three variables.

LITERATURE REVIEW

Motivated Strategies for Learning

Motivated strategies for learning are based on a social-cognitive outlook of motivational strategies and self-regulated learning (Pintrich, 2003). According to Eccles and Wigfield (2002), in this model, learners' motivation is directly related with their capability to self-regulate their learning tasks and activities, in which, as pointed out by Eccles and Wigfield (2002), self-regulated learning is typically defined as being motivationally, metacognitively, and interactively active in the processes of an individual's own learning and also in accomplishing an individual's own objectives.

This framework supposes that motivated strategies for learning and learning strategies are not static features of the student, but somewhat, as pointed out by Duncan and McKeachie (2005), "motivation is dynamic and contextually bound and that learning strategies can be learned and brought under the control of the student" (p. 117). In other words, learners' motivation and motivated strategies vary from course to course (for instance, depending on their efficacy for accomplishment of a course, their own interest in the course itself, etc.), and consequently their learning strategies may also differ, due to several reasons such as the nature and type of the course.

According to Pintrich (1988), the use of motivated strategies for learning is defined as the use of those strategies that make learners employ their knowledge of cognitive, metacognitive and socioaffective strategies in order to regulate their own cognition and effort. The learner is regarded as a vigorous processor whose cognitions and beliefs control task characteristics and instructional input.

It is noteworthy that self-regulation is regarded as the theoretical background of motivated strategies for learning (Bagheri, Yamini, & Riazi, 2009), which basically refers to self-activated, self-generated and self-monitored feelings, thoughts and actions which in due course affect individual's learning, thoughts, feelings and actions (Bagheri, Yamini & Riazi, 2009). Moreover, as pointed out by Pintrich (2000), self-regulation strategies are active and constructive strategies through which students trigger, monitor and control their motivation, cognition and performance in a given setting.

Autonomy

Learner autonomy was first coined in 1981 by Henri Holec, the father of learner autonomy. Learner autonomy grows out of the individual learner's acceptance of responsibility for his or her own learning (Benson & Voller, 1997; Dickinson, 1995; Little, 1991). Autonomous learners accept responsibility for their own learning and they can

evaluate its effectiveness. Little (1991) theorizes that autonomous learners can be seen as those who are able to reflect on their own learning through knowledge about learning and who are willing to learn in collaboration with others.

Holec's (1981) definition entails that autonomous learners can freely apply their knowledge and skills outside the immediate context of learning a language. According to a large body of research in social psychology, autonomy "feeling free and volitional in one's actions" (Deci, 1995, p. 2) is a basic human need.

In educational contexts, learner autonomy entails reflective involvement in raising students' awareness, monitoring, and learning process. Autonomous learner has the mean to translate the barriers between learning and living that have been a major preoccupation of educational psychology and curriculum development (Little, 1995). Learners must be operating within a structure which enables them to exercise control over their learning and to assume responsibility (Holec, 1981, as cited in Spatt, Humphreys, and Chan, 2002).

Little (1995) typically easily identified the characteristics of autonomous learners as autonomous learners understand the purpose of learning, accept responsibility for their learning, share in the setting of learning goals, take the initiative in planning and executing learning tasks, and regularly review their learning to evaluate its effectiveness. Chan (2001) reported that the learners identified the following characteristic qualities of autonomous learners: highly motivated, goal oriented, well organized, hardworking, initiative, enthusiastic about learning, flexible, active, willing to ask questions, and making use of every opportunities to improve their learning.

Anxiety

Anxiety refers to both physical and emotional responses to situations, people, or expectations that arouse fear or misgivings in a person (Horwitz, Horwitz & Cope, 1986). Test Anxiety refers more specifically to an individual's fear of performance evaluation (Liebert & Morris, 1967; Sinclair & Ryan, 1987). It can occur in students where it may appear as fear of not doing well on measures of achievement. Worry is a cognitive phenomenon concerned with future events where there is uncertainty about the outcome, the future being is thought of in a negative way, and this is accompanied by feelings of anxiety (Barlow, 1988; Borkovec, Robinson, Pruzinsky, & Depree, 1983).

Horwitz and Cope (1986) introduced the construct of situational anxiety and its measurement scale to second/foreign language anxiety research. The situational anxiety refers to foreign language anxiety, which is defined 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" (Horwitz, Horwitz & Cope, 1986, p. 28). It is distinguished from trait anxiety, which refers to individual's anxiety arousal in a variety of situations due to his/her personality traits.

Instead, foreign language anxiety refers specifically to the anxiety foreign language learners experience in the process of learning a foreign language in a classroom setting,

regardless of the learners' personality traits. This situational anxiety or foreign language anxiety is what MacIntyre and Gardner (1991) called situational-specific anxiety. Later on they described language anxiety as "the apprehension experienced when a situation requires the use of a second language with which the individual is not fully proficient" (p. 5). Anxiety can be either debilitating or facilitative. Debilitating anxiety is a kind of anxiety which is viewed as a negative factor or something to be avoided at all costs, like a feeling of test anxiety before exam (Brown, 1986). Facilitative anxiety is a kind of anxiety which is viewed as a positive factor that facilitates language learning, like a feeling of nervousness before giving a public speech (Brown, 1986). Because anxiety may have a debilitating effect on the acquisition of a second language, it is important to help learners to cope with and reduce second language anxiety.

THE STUDY

To the best of the researchers' knowledge, no study has been done to investigate the relationships among autonomy, anxiety and motivated strategies for learning in the area of second language learning. Thus, this study was an attempt to fill this gap by exploring the relationship among aforementioned variables. Regarding the purpose of this study the following research questions were raised:

Q1: Is there any significant relationship between EFL learners' anxiety and autonomy?

Q2: Is there any significant relationship between EFL learners' anxiety and motivated strategies for learning?

Q3: Is there any significant relationship between EFL learners' autonomy and motivated strategies for learning?

Q4: Is there any significant difference between EFL learners' autonomy and motivated strategies for learning in preventing their anxiety?

METHOD

Participants

The participants of this study were 158 (96 or % 60.75 female and 62 or % 39.24 male) undergraduate EFL learners, within the age range of 21 to 30 ($M_{age} = 25$), studying in English Language Literature, and English Translation at Islamic Azad University, Central Tehran, South Tehran, and North Tehran. They were selected based on convenient non-random sampling. It should be mentioned that the preliminary number of participants was 300, but 142 of them were excluded from data analysis due to careless coding, and incomplete answers bringing the final number to 158 participants.

Instrumentation

In order to accomplish the purpose of the study, the following three instruments were utilized.

Foreign Language Classroom Anxiety Scale

In order to assess the participants' anxiety level, the English version of Foreign Language Classroom Anxiety Scale (FLCAS) designed by Horwitz, Horwitz and Cope (1986), was administered. The instrument is a self-report scale which contains 33 items scored on a 5-point Likert scale ranging from "strongly agree =5" to "strongly disagree =1". The items are categorized based on three main factors: "fear of negative evaluation", "test anxiety", and "communication apprehension", which are regarded as common factors of anxiety among foreign language learners of English. Moreover, the items are written in both directions, consequently some items (2, 5, 8, 11, 14, 18, 22, 28, & 32) should be reversely scored. The participants were required to respond in 20 minutes. The possible range of score is 33-165; the higher score indicates the more anxious the student is. In a study conducted by Ipek (2006), the reliability of this instrument was found to be 0.83. Using Cronbach's Alpha coefficient, the reliability of the FLCAS was calculated to be 0.83 in the present study.

Motivated Strategies for Learning Questionnaire

To identify the level of participants' self-regulation, the English version of Motivated Strategies for Learning Questionnaire (MSLQ), developed by Pintrich, Smith, Garcia, and McKeachie (1991) was used in this study. The MSLQ is a self-report survey instrument designed to assess college students' motivational orientations and their use of different learning strategies.

The original form of MSLQ consists of 81 Likert-scale statements, from 1 "not at all true of me" to 7 "very true of me", within 15 modular subscales divided into two categories: Motivation (6 subscales) and Learning Strategies (9 subscales). Within the Motivation category there are 31 items that assess students' goals and value beliefs for a course, their beliefs about their skill to succeed in a course, and their anxiety about tests in the course. The Learning Strategies category totally consists of 50 items comprising 31 items regarding students' use of different cognitive and metacognitive strategies and 19 items concerning students' management of different resources.

There were eight items that had to be reversely-scaled including 33, 37, 40, 52, 57, 60, 77, and 80. For these items, 1 = 7, 2 = 6, 3 = 5, 4 = 4, 5 = 3, 6 = 2, and 7 = 1. In this regard, the result could vary from 81 to 567, and the higher the mark, the more self-regulated was the participant. The respondents were supposed to answer the questions in 45 minutes. According to Pintrich et al. (1991), using Cronbach alpha, the overall internal consistency reliability of the instrument was found to be adequate (.78 and .71 for motivation scales and learning strategies, respectively). Bagheri, Yamini, and Riazi (2009) reported its overall reliability to be 0.87. Moreover, using Cronbach's Alpha coefficient, the reliability of the MSLQ was estimated to be 0.87 in the present study.

The Learner Autonomy Questionnaire

The English version of Zhang and Li's (2004) autonomy questionnaire was used in order to evaluate learner's autonomy. The questionnaire has two parts. The first part contains

11 items and second 10, totally 21 items. The first 11 items has five options in Likert-scale from never to always (A. never, B. rarely, C. sometimes, D. often, E. always). The second part of the questionnaire is in multiple-choice format. The participants chose the closer answer to their beliefs and their attitudes or ideas. The participants' choices in the questionnaire were the scores from A to E that are respectively 1, 2, 3, 4 and 5. All the items of this instrument are directional and therefore, the range of scores is basically from 21 to 105. The participants were required to respond in 15 minutes.

According to Zhang and Li (2004), using Cronbach's Alpha, the reliability of this questionnaire was estimated to be 0.80. Furthermore, Zhang and Li (2004) reported that this questionnaire enjoyed high validity. The reliability of learner autonomy questionnaire in this study was estimated to be 0.84 using the Cronbach's alpha coefficient.

Procedure

To achieve the purpose of this study and address the questions posed, the researchers followed the following procedure. After obtaining a formal approval for conducting the research in the universities mentioned above, the required explanations were given to the participants in Persian. First, the EFL students were informed about the aim of the study. Then the procedures in filling all three questionnaires were explained. Also, the researchers announced that the results of the questionnaires would be just used for the sake of the academic value of this research.

All three questionnaires were distributed in one package. The instruments were administered in no specific order with the aim of preventing sequence effect. It takes approximately 80 minutes to complete the instruments. The completed questionnaires were collected and scored by the researchers. From the initial 300 administered questionnaires, a number of 158 sets answered for three questionnaires were considered for statistical analyses. At the final step, the statistical procedures were conducted to see whether or not there was any significant relationship among EFL learners' autonomy, anxiety and their motivated strategies for learning.

Statistical Analysis

In the present study, the data analyses were carried out using descriptive and inferential statistics. This study attempted to answer four research questions. Based on the fact that the assumptions of normality of distribution were violated, the non-parametric formula, Spearman rank order coefficient of correlation was employed in order to answer the first, second, and third research questions which require employing a correlational analysis. The legitimacy of considering the fourth research question, which needed running a multiple regression, is dependent on the answer of the three initial research questions. It should be mentioned that, running each of the abovementioned analyses calls for checking some assumptions and preliminary analyses which were checked beforehand.

RESULTS

In order to examine the normality of the distributions further, Kolmogorov-Smirnov test was run, results of which are presented in Table 1.

Table 1: Tests of Normality of the Scores

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Anxiety	.097	158	.001	.975	158	.006
Autonomy	.056	158	.200*	.982	158	.035
Motivated Strategies	.087	158	.005	.972	158	.002

As presented in Table 1, only the Sig. value for the scores of autonomy is significantly higher than the critical value (.05). Therefore, the normality of distribution for anxiety and motivated strategies scores is not supported (Tabachnick & Fidell, 2007). Taking into consideration the results of the Kolmogorov-Smirnov test, the researchers concluded that the data did not meet the assumptions of parametric statistical techniques. Therefore, the pertinent research questions were answered through employing non-parametric tests.

The First Research Question

As stated earlier, the first driving force behind conducting this study was to systematically investigate the relationship between EFL learners' anxiety and autonomy. Therefore, the subsequent question was posed as the first research question of this study:

Q₁: Is there any significant relationship between EFL learners' anxiety and autonomy?

In order to answer this question, the data were analyzed using the Spearman rank order coefficient of correlation which is a non-parametric formula. Table 2 shows the result of this analysis.

Table 2: Spearman's Correlation between Anxiety and Autonomy

		Autonomy	
Spearman's rho	Anxiety	Correlation Coefficient	-.633**
		Sig. (2-tailed)	.000
		N	158

According to the results of the analysis reported in Table 2, it was concluded that there was a significant and negative correlation between anxiety and autonomy, $\rho = -.633$, $n = 158$, $p < .01$, and high levels of anxiety were associated with low levels of autonomy.

The Second Research Question

The second intention of this study was to systematically investigate the relationship between EFL learners' anxiety and motivated strategies for learning. Therefore, the subsequent question was posed as the second research question of this study:

Q₂: Is there any significant relationship between EFL learners' anxiety and motivated strategies for learning?

In order to answer this question, the data were analyzed using the Spearman rank order coefficient of correlation, a non-parametric formula. Table 3 shows the result of this analysis.

Table 3: Spearman's Correlation between Anxiety and Motivated Strategies

Spearman's rho	Anxiety	Motivated Strategies	
		Correlation Coefficient	-.637**
		Sig. (2-tailed)	.000
		N	158

According to the results of the analysis reported in Table 3, it was concluded that there was a significant and negative correlation between anxiety and motivated strategies for learning, $\rho = -.637$, $n = 158$, $p < .01$, and high levels of anxiety were associated with low levels of motivated strategies.

The Third Research Question

The third intention of this study was to systematically investigate the relationship between EFL learners' autonomy and motivated strategies for learning. Therefore, the subsequent question was posed as the third research question of this study:

Q3: Is there any significant relationship between EFL learners' autonomy and motivated strategies for learning?

In order to answer this question, the data were analyzed using the Spearman rank order coefficient of correlation, a non-parametric formula. Table 4 shows the result of this analysis.

Table 4: Spearman's Correlation between Autonomy and Motivated Strategies

Spearman's rho	Autonomy	Motivated Strategies	
		Correlation Coefficient	.591**
		Sig. (2-tailed)	.000
		N	158

According to the results of the analysis reported in Table 4, it was concluded that there was a significant and positive correlation between autonomy and motivated strategies for learning, $\rho = .59$, $n = 158$, $p < .01$, and high levels of autonomy were associated with high levels of motivated strategies.

The Fourth Research Question

The researchers opted for the multiple regression analysis in order to answer the following research question:

Q4: Is there any significant difference between EFL learners' autonomy and motivated strategies for learning in preventing their anxiety?

In order to answer this question, a standard multiple regression was run. Table 5 presents the regression model summary including the R and R^2 .

Table 5: Model Summary – R and R Square

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.730 ^a	.532	.526	12.769

a. Predictors: (Constant), Motivated Strategies, Autonomy

b. Dependent Variable: Anxiety

As reported in Table 5, R came out to be 0.73 and R^2 came out to be 0.532. This means that the model explains 53.2 percent of the variance in anxiety (Cohen, Cohen, West, & Aiken, 2003). Moreover, $f^2 = 1.136$ indicated a large effect size for the regression.

Table 6 reports the results of ANOVA ($F(2, 155) = 88.275, p = 0.0005$), the results of which were considered significant. This means that the model can significantly predict EFL learners' anxiety, autonomy, and motivated strategies for learning.

Table 6: Regression Output: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28787.401	2	14393.700	88.275	.000 ^a
	Residual	25273.568	155	163.055		
	Total	54060.968	157			

a. Predictors: (Constant), Motivated Strategies, Autonomy

b. Dependent Variable: Anxiety

Table 7 demonstrates the Standardized Beta Coefficients which signify the degree to which each predictor variable contributes to the prediction of the predicted variable. The inspection of the Sig. values showed that both autonomy and motivated strategies for learning make a statistically significant unique contribution to the equation as their Sig. values are less than .05.

Table 7: Regression Output: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		T	Significance	Part Correlation
	B	Std. Error	β				
(Constant)	200.293	7.904			25.340	.000	
Autonomy	-.519	.091	-.393		-5.694	.000	-.313
Motivated Strategies	-.215	.035	-.421		-6.091	.000	-.335

The comparison of β values revealed that motivated strategies has the largest absolute β coefficient ($\beta = -0.421, t = -6.09, p = 0.0005$). This means that motivated strategies makes the strongest statistically significant unique contribution to suppressing anxiety. Therefore, it was concluded that motivated strategies could more significantly prevent anxiety of the participants. This is to say that motivated strategies for learning is more negatively affected by high levels of anxiety. Autonomy turned out to be the second significant preventer of anxiety ($\beta = -0.393, t = -5.7, p = 0.0005$). Finally, the inspection of Part correlation (semipartial correlation coefficient) revealed that motivated strategies uniquely explains 11.22 percent of the variance in anxiety ($-.335 \times -.335 = .1122$).

DISCUSSION

The main purpose of this study was to examine the relationship among EFL learners' autonomy, anxiety and motivated strategies for learning. Based on the requirements, four

research questions were proposed. In this section a discussion and interpretation for obtained findings of each research question is provided.

As stated earlier, the first driving force behind conducting this study was to systematically investigate the relationship between EFL learners' anxiety and autonomy. The findings of the study in this respect indicated that there was a significant and negative correlation between anxiety and autonomy, $\rho = -.633$, $n = 158$, $p < .01$, and high levels of anxiety were associated with low levels of autonomy, consequently, the higher the level of autonomy, the lower the EFL learners' foreign language anxiety, and vice versa.

Hence, not paying sufficient attention to autonomy in foreign language milieus, in turn, might lead to EFL students' ineffectiveness to overcome their foreign language anxiety. As pointed out by Seyed Rezaei and Karbalaei (2013), nurturing EFL learners' autonomy can help learners to identify different goals and objectives, employ various effective strategies to attain these goals and objectives, raise mindfulness of social and educational contexts, and consequently overcome their foreign language anxiety.

A number of studies (HadidiTamjid, 2015; Hashemian, 2011; Heydari, Neyestani, Ghamarani & Faramarzi, 2012; Mahmoodabadi & Tabatabaei, 2015; Parikhani, 2012; Tavallali & Marzban, 2015) have examined the state of EFL learners' autonomy with different learner-related variables. However, since no study was found to scrutinize the relationship between EFL learners' autonomy and their foreign language anxiety, the results of the present study in this respect cannot be compared. To sum up this part, it seems that the findings of the present study as investigated by the first research question provide empirical support for the prediction that EFL learners' autonomy and foreign language anxiety are negatively related.

The second intention of this study was to systematically investigate the relationship between EFL learners' anxiety and motivated strategies for learning. According to the results of the analysis it was concluded that there was a significant and negative correlation between anxiety and motivated strategies for learning, $\rho = -.637$, $n = 158$, $p < .01$, and high levels of anxiety were associated with low levels of motivated strategies. It can be assumed that the knowledge and awareness of the motivated strategies for learning is crucial for having lower levels of foreign language anxiety. In other words, one way to reduce the foreign language anxiety level of EFL learners is the enhancement of their use of motivated strategies for learning.

As pointed out by Wenden and Rubin (1987), motivated strategies for learning are strategies that primarily contribute to the improvement of the language system that the learner constructs and influences learning directly. Therefore, it can be concluded that the knowledge, awareness and use of motivated strategies for learning can increase better language learning and consequently having lower levels of language anxiety in general and foreign language anxiety in particular.

However, since no study was found to scrutinize the relationship between EFL learners' anxiety and their use of motivated strategies for learning, the results of the present study in this respect cannot be compared. To sum up this part, it can be stated that the results

of the second research question seem to provide empirical support for the prediction that foreign language anxiety and motivated strategies for learning are reversely related. The findings of the study imply that EFL learners should be mindful of the positive role of motivated strategies for learning and do their best to apply them as frequently and efficaciously as possible.

The third aim of this study was to systematically explore the relationship between EFL learners' autonomy and motivated strategies for learning. According to the results of the analysis, it was concluded that there was a significant and positive correlation between autonomy and motivated strategies for learning, $\rho = .59$, $n = 158$, $p < .01$, and high levels of autonomy were associated with high levels of motivated strategies. In other words, as EFL learners' use more motivated strategies for learning, they gradually become more autonomous learners. According to Holec (1981), autonomy is the ability "to have and to hold the responsibility for all the decisions concerning all aspects of this learning" (p. 3). This accountability is not only for determining the purpose, content, rhythm, and method of learning, but also for monitoring the learning progress, and evaluating its outcomes through using appropriate learning strategies (Byram, 2004).

The findings of the present study in this respect would signify that a focus on the improvement of EFL learners' use of motivated strategies for learning would be beneficial to increasing their autonomy level and being autonomous learners. Consequently, not paying adequate attention to motivated strategies for learning in EFL courses, in turn, might result in EFL students' incompetence of being autonomous learners.

It should be mentioned that, the findings of the present study are not in line with those of Tavallali and Marzban (2015), which indicated that there existed no significant relationship between EFL learners' use of motivated strategies for learning and autonomy. It might be said that the participants of Tavallali and Marzban's study (2015), were 40 Iranian intermediate EFL learners, aged 18-20, attending speaking courses in four English language institutes in Shiraz, Iran. Considering that the motivated strategies for learning questionnaire is a self-report, instrument which was designed to assess motivation and use of learning strategies by college students (Pintrich, Smith, Garcia, & McKeachie, 1991) on the one hand and the level of education of the participants of the two studies is not the same on the other hand so, there was a contradiction in results of their study and the results of the present study.

Based on the findings of the three initial research questions, both autonomy and motivated strategies were significantly and negatively related to anxiety among EFL learners. So, the fourth research question of the present study investigated the significant difference between EFL learners' autonomy and motivated strategies for learning in predicting anxiety. The findings in this respect revealed that motivated strategies for learning made the strongest statistically significant unique contribution to suppressing anxiety. Therefore, it was concluded that motivated strategies for learning could more significantly prevent anxiety of the participants. Furthermore, EFL learners' autonomy turned out to be the second significant preventer of anxiety ($\beta = -0.393$, $t = -5.7$, $p = 0.0005$).

It seems that EFL students need to be informed by their instructors and teachers of the significance of using of motivated strategies for learning and being autonomous in learning. However, more attention should be given to motivated strategies for learning at different teaching contexts to reduce EFL learners' foreign language anxiety since it had the strongest statistically significant unique contribution to suppressing foreign language anxiety.

CONCLUSION AND PEDAGOGICAL IMPLICATIONS

The current study was an attempt to systematically investigate the relationship between EFL learners' autonomy, anxiety and their motivated strategies for learning. Based on the obtained results it was concluded that: a) there was a significant and negative correlation between anxiety and autonomy, b) there was a significant and negative correlation between anxiety and motivated strategies, c) there was a significant and positive correlation between autonomy and motivated strategies, and finally d) motivated strategies for learning make the strongest statistically significant unique contribution to suppressing anxiety. The significance of the findings, with regard to the relationships among EFL learners' autonomy, anxiety and motivated strategies for learning, lies not merely in their contribution to the literature but also in their prominent educational implications for teaching, learning and curriculum development.

The results might imply that EFL teachers should try to identify the potential sources of the EFL learners' anxiety and provide some useful strategies to diminish them among EFL learners thus, creating a low-anxiety milieu. To be autonomous learners, Pintrich and DeGroot (1990) argue that learners should acquire the essential knowledge and information to pick and apply different motivational and learning strategies. So, EFL teachers should do their best in identifying EFL students who rarely use strategies and helping them in this regard, consequently reducing their anxiety level. In the same vein, Zimmerman, Bonner, & Kovach, (1996) stated that EFL teachers are strongly recommended to make EFL students mindful of valuable learning strategies in different types of learning milieus and support EFL learners use the appropriate learning and motivated strategies in different educational situations.

Language-related anxiety and potential emotional stress need to be recognized, considered, and overcome so that EFL learners can demonstrate their existing capabilities to the fullest. Thus, it necessitates the need to shift the EFL teachers' role from a pure information and knowledge imparter to an organizer and facilitator in the course of foreign language learning that needs a mutual respect between the EFL teachers and the EFL learners. Consequently, learners can become more autonomous and more accountable for their own language learning.

Curriculum developers and syllabus designers are the other group that may profit from the findings of the current study. As pointed out by Nation and Macalister (2010), there is no doubt that curriculum developers and syllabus designers, through providing the instructional materials, can intensely affect and direct the language learning process. They may aim to design and compile the curricula and materials in a way that, EFL

learners become autonomous and professional users of various motivated strategies for learning, and consequently, handle their foreign language anxiety much better. Syllabus designers and material developers can produce materials including design and exercises which improve not only autonomous learning but also the motivated strategies that EFL learners use to feel more relaxed, self-assured and motivated as these aspects seem to be interrelated and also fundamental in leaning.

Based on the principles of descriptive research, the focus of this study, its peculiarities, and the characteristics of the learners, there are a number of areas which were not touched in this study. Accordingly, a limited number of recommendations are presented here, hoping that other researchers would find them interesting enough to pursue in the future. In this study all the variables (autonomy, anxiety and motivated strategies for learning) were measured through self-report questionnaires. Thus, it is recommended to replicate this study employing some qualitative instruments (i.e., journals & interviews) to increase the validity and reliability of the results and interpretations. Moreover, this study could be repeated with a larger sample to find out whether the same results would be obtained in other contexts.

REFERENCES

- Bagheri, M. S., Yamini, M. & Riazi, A. (2009). Motivational and learning strategies of Iranian EFL learners exposed to an e-learning program. *The Journal of Teaching Language Skills (JTLS) of Shiraz University*, 1(1), 1-35.
- Benson, P., & Voller, P. A. (1997). *Independence in language learning*. Harlow: Longman.
- Borkovec, T. D., Robinson, E., Pruzinsky, T., & DePree, J. A. (1983). Preliminary exploration of worry: Some characteristics and processes. *Behaviour Research and Therapy*, 21(1), 9-16.
- Byram, M. (2004). *Routledge encyclopedia of language teaching and learning*. London: Psychology Press.
- Cheng, H. F., & Dörnyei, Z. (2007). The use of motivational strategies in language instruction: The case of EFL teaching in Taiwan. *International Journal of Innovation in Language Learning and Teaching*, 1(1), 153-174.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). NJ: Lawrence Erlbaum Associates.
- Dickinson, L. (1995). Autonomy and motivation a literature review. *System*, 23(2), 165-174.
- Duncan, T. G. & McKeachie, W. J. (2005). The making of the motivated strategies for learning questionnaire. *Educational Psychologist*, 40(2), 117-128.
- Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual review of psychology*, 53(1), 109-132.
- Hashemian, M. (2011). The interrelationship of autonomy, motivation, and academic performance of Persian L2 learners in distance education contexts. *Theory and Practice in Language Studies*, 1(4), 319-326.
- Hismanoglu, M. (2000). Language learning strategies in foreign language learning and teaching. *The Internet TESL Journal*, 6(8), 12-21.

- Holec, H., (1981). *Autonomy and foreign language learning*. Oxford: Pergamon.
- Horwitz, E. K. (2001). Language anxiety and achievement. *Annual Review of Applied Linguistics*, 21, 112-126.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-132.
- Huang, S., Eslami, Z., & Hu, R. J. S. (2010). The relationship between teacher and peer support and English-language learners' anxiety. *English Language Teaching*, 3(1), 32-43.
- Hussain, M. A., Shahid, S., & Zaman, A. (2011). Anxiety and attitude of secondary school students towards foreign language learning. *Procedia-Social and Behavioral Sciences*, 29, 583-590.
- Heydari, M., Neyestani, M., Ghamarani, A., & Faramarzi, S. (2012). Relationship between the level of personal autonomy in high school students and the rate of teachers' attention to teaching approaches of personal autonomy. *Journal of Education and Learning*, 1(1), 35-44.
- Ipek, I. (2006). *The motivation and job satisfactions of computer teachers*, Unpublished Master's thesis, Ankara University, Ankara, Turkey.
- Kaltenbock, G. (2001). Learner autonomy: A guiding principle in designing a CD-ROM for intonation practice. *ReCALL*, 13(2), 179-190.
- Liebert, R. M., & Morris, L. W. (1967). Cognitive and emotional components of test anxiety: A distinction and some initial data. *Psychological reports*, 20(3), 975-978.
- Little, D. (1991). *Autonomy: Definitions, issues and problems*. Dublin: Authentik.
- Little, D. (1995). Learning as dialogue: The dependence of learner autonomy on teacher autonomy. *System*, 23(2), 175-181.
- Liu, M., & Jackson, J. (2008). An exploration of Chinese EFL learners' unwillingness to communicate and foreign language anxiety. *The Modern Language Journal*, 92(1), 71-86.
- Lynch, D. J., (2010). Motivational beliefs and learning strategies as predictors of academic performance in college physics. *College Student*, 44(4), 920-927.
- MacIntyre, P. D. (1999). Language anxiety: A review of the research for language teachers. *Affect in foreign language and second language learning: A practical guide to creating a low-anxiety classroom atmosphere*, 24, 41-60.
- MacIntyre, P. D., & Gardner, R. C. (1991). Language anxiety: Its relationship to other anxieties and to processing in native and second languages. *Language Learning*, 41, 513-534.
- Mahmoodabadi, M. M., & Tabatabaei, O. (2015). The Relationship between motivation and autonomy in Iranian intermediate EFL learners. *International Journal of Educational Investigations*, 2(1), 58-79.
- Nation, I. S. P., & Macalister, J. (2010). *Language curriculum design*. New York: Routledge.
- Parikhani, R. A. (2012). *The relationship between learner autonomy and learner motivation among Iranian EFL learners*. Unpublished Doctoral dissertation, Urmia University, Urmia, Iran.
- Pintrich, P. R. (1988). Student learning and college teaching. In R. E. Young and K. E. Eble (Eds.), *College teaching and learning: Preparing for new commitments. New directions for teaching and learning* (33, pp. 71-86). San Francisco: Jossey-Bass.

- Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 451–502). San Diego, CA: Academic.
- Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology*, 95(4), 667–686.
- Pintrich, P. R., & DeGroot, E. (1990). Quantitative and qualitative perspectives on student motivational beliefs and self-regulated learning. In *Annual Meeting of the American Educational Research Association, Boston, MA*.
- Pintrich, P. R., Smith, D., Garcia, T. & McKeachie, W. J. (1991). *A manual for the use of the motivated strategies for learning questionnaire*. National Center for Research to Improve Postsecondary Teaching and Learning, University of Michigan, Ann Arbor, Mich, USA.
- Seyed Rezaei, F. & Karbalaei, A. (2013). The effect of vocabulary strategy training among autonomous and non-autonomous learners in Iranian EFL context. *European Online Journal of Natural and Social Sciences*, 2(2), 35-49.
- Sinclair, K. E., & Ryan, G. (1987). Teacher anxiety, teacher effectiveness, and student anxiety. *Teaching and Teacher Education*, 3(3), 249-253.
- Spratt, M., Humphreys, G., & Chan, V. (2002). Autonomy and motivation: Which comes first?. *Language teaching research*, 6(3), 245-266.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Boston, MA: Pearson Education, Inc.
- Tavallali, E. & Marzban, A. (2015). Becoming autonomous learners through self-regulated learning. *Journal of Applied Linguistics and Language Research*, 2(3), 72-83.
- Weinstein, C. E. and Mayer, R. E. (1986). The teaching of learning strategies. In M. Wittrock (Ed.), *Handbook of research on teaching* (p. 315-327), New York: Springer-Verleg.
- Wenden, A. L. (1998). Metacognitive knowledge and language learning1. *Applied linguistics*, 19(4), 515-537.
- Wenden, A., & Rubin, J. (Eds.). (1987). *Learning strategies in language learning*. Prentice-Hall International.
- Young, D. J. (1991). Creating a low anxiety classroom environment: What does language anxiety research suggest? *The Modern Language Journal*, 75, 426-439.
- Young, D. J. (1992). Language anxiety from the foreign language specialist's perspective: Interviews with Krashen, Omaggio Hadley, Terrell, and Rardin. *Foreign Language Annals*, 25(2), 157-172.
- Zhang, L., & Li, X. (2004). A comparative study on learner autonomy between Chinese students and West European students. *Foreign Language World*, 24(4), 15-23.
- Zimmerman, B. J., Bonner, S., & Kovach, R. (1996). *Developing self-regulated learners: Beyond achievement to self-efficacy*. American Psychological Association.