

ISSN 1799-2591

Theory and Practice in Language Studies, Vol. 5, No. 9, pp. 1863-1873, September 2015

DOI: <http://dx.doi.org/10.17507/tpls.0509.14>

The Relationship among Iranian EFL Learners' Creativity, Emotional Intelligence, and Language Learning Strategies

Behdokht Mall-Amiri

Islamic Azad University at Central Tehran, Iran

Seyedeh Azadeh Fekrazad

Islamic Azad University at Central Tehran, Iran

Abstract—The present study was carried out in an attempt to investigate the relationship among EFL learners' creativity, emotional intelligence, and language learning strategies. To achieve the objective of the research, a group of 120 male and female learners, between the ages of 18 and 35 majoring in English Literature, English Translation, and English Language Teaching, both at B.A. and M.A. levels were non-randomly selected. To obtain the required data, the following questionnaires were utilized: Persian validated Creativity Test, Persian validated Bar-On Emotional Intelligence questionnaire, and Persian validated Strategy Inventory for Language Learning (SILL). The results of correlation analyses revealed that there was no significant relationship between EFL learners' creativity and emotional intelligence. Moreover, a positive medium relationship between EFL learners' creativity and their language learning strategies was observed. In addition, a positive significant correlation was revealed between EFL learners' emotional intelligence and their language learning strategies. This study also demonstrated that EFL learners' creativity was a better predictor about their language learning strategies compared with their emotional intelligence.

Index Terms—creativity, emotional intelligence, language learning strategies

I. INTRODUCTION

Current pedagogical concerns seem to highlight the major role which individual differences play in language learning (Fahim & Zaker, 2014); these individual traits are believed to significantly influence the rate of learning and learners' achievements. Among these individual factors, according to GU (2003), intelligence is often thought to be one of the most significant predictors of language learning success.

Students who receive higher Intelligence Quotient (IQ) scores are usually considered more intelligent. Intelligence as a general concept encompasses social and emotional factors besides the cognitive factors (Cantor & Kihlstorm, 1987; Sternberg, 1985). According to Goleman (1995), IQ is a factor which can significantly contribute to life success, both directly and indirectly. However, he further argues that other factors, e.g. Emotional Intelligence (EQ), can also determine how an individual achieves his/her desired goals. Goleman (ibid) argues that the term EQ refers to the specific features which enable one to identify and adjust their emotions as well as other people's emotions. He also adds that EI has the potential to predict success in different stages of life, as powerfully and significantly as IQ.

By development of the concept of EQ, different issues and variables are attributed to it. Sternberg (1997) believed that academic achievement and intelligence are not measured only by academic scores, and we should consider people skills and attitudes. Sternberg (1997) researches on intelligence resulted into a new theory called "successful intelligence" and he points that to achieve success in life, successful intelligence is required, and this theory is remarkably broader than conventional theories of intelligence.

Regarding success in education and in life, it is believed that creativity, as another mental factor, can play a major role (Nosratinia & Zaker, 2014). Therefore, some recent integrative attempts have been made to describe and study creativity in different domains (Saánchez-Ruiz et al, 2011). Recently, researchers have focused more on the social, emotional, and environmental dimensions of creativity. These studies have made it clear that it is essential for human society to move in creativity and innovation road in order to make progress and take stronger steps towards a better future and solving the existing problems of the society. In a similar vein, Runco (2004) argues that creativity is a factor which is drawing more and more attention among scholars and scientists because creativity can affect a wide range of human activities.

Psychologically, the concept of creativity is believed to be a very important factor due to the fact that the study of creativity can offer a basic principle for describing human beings and might provide some justifications for the existing differences among different individuals. Achieving such a level of understanding about human factors can be highly advantageous in an educational context, especially when it comes to predicting academic success (Naderi, Abdullah, Aizan, Sharir, & Kumar, 2009).

Regarding the existence of creativity among different age groups, Fisher (2005) argues that all learners have the inner ability of thinking creatively, irrespective of the degree of IQ they have. However, there are certain needs to be met in the learning context. Guilford (1950) was one of the pioneers to argue in favor of the advantages of creativity for language learning. Some of the basic components of creativity are believed to be sensitivity to problems, creative fluency of production, the capability to come up with original ideas, mental flexibility, the ability to synthesize ideas, the ability to analyze, being able to reorganize and redefine an organized entity, and evaluation (Hajhashemi, Parasteh Ghombavani, & Yazdi Amirkhiz, 2011).

Regarding the factors which affect the quality and quantity of learning, Dansereau (1985) believed that the way learners participate in the process of learning would be highly dependent upon the way they think, i.e. the cognitive processes. Language learning strategies are believed to be directly related to the quality of cognitive processes and second language learning (Oxford, 1990). These strategies are believed to determine the way learners would process the new information and how they understand or remember.

It is believed that language learning strategies can be quite different and numerous. According to Chamot and Kupper (1989), different language learners might employ different kinds of language learning strategies with different frequencies. However, in order to succeed in language learning, a learner should make use of suitable language learning strategies (Oxford, 1990). In other words, language learning strategies play a key role in learning and the way pedagogical goals are achieved (Nosratinia, Saveiy, & Zaker, 2014). Therefore, considering the abovementioned points, it seems reasonable to systematically inspect the association among EFL learners' creativity, EQ, and language learning strategies.

II. REVIEW OF THE LITERATURE

A. Creativity

In an attempt to define creativity, Piirto (2004) found that the root of the words "create" and "creativity" comes from the Latin *creatus* and *creare*, meaning "to make or produce". As researchers like Amabile (1996), Sternberg & Lubart (1999) put it, creativity refers to the generation of ideas or products that are original, valuable, or useful. Agars, Kaufman, and Locke (2008, p. 6) agree that "Most early definitions of creativity implied that creativity was a singular entity. These initial conceptualizations, although meaningful, were somewhat limited in their application. A commonly held definition by researchers who believed in creativity as a single concept is that "creativity boiled down to two components. First, creativity must represent something different, new, or innovative. Second, it also must be useful, relevant, and appropriate to the task" (Clauss-Ehlers, 2010, p. 270). However, limitation of this kind of definition is that it is very much dependent on the context, setting, and number of people involved in the activity. In fact, in real condition, ideas that are considered new or creative in one context may be old or disruptive in another or something creative done by one person may be impossible for a group.

Rhodes (1961) cited in Sarsani (2005) described the multifaceted construct of creativity by analyzing 56 different definitions of creativity. He came to conclusion that all these definitions linked in four overlapping themes, and introduce the concept of "the four P's of creativity" as follows:

- Person: personality characteristics of the creative individual
- Process: stages of thinking that resulted in producing something creative
- Product: characteristics of the end products or outcomes of new ideas, thoughts, or inventions
- Press: environment that influence the performance of creative people

As argued by Kaufman (2009, p. 21), later, two other P's were added to this framework. One of them is "Persuasion" proposed by Simonton, and the other is "Potential" offered by Runco. The definition of Rhodes is not the only framework we have to understand creativity, but it is a valuable one because it conceptually organizes creativity research (Murdock, Isaksen, Vosburg, & Lugo, 1993).

Arnold (as cited in Proctor, 2010, p. 31) identified some barriers to creativity as follows:

- Perceptual barriers: resulted from factors that inhibit true identification of the world
- Emotional barriers: resulted from factors like fear of risk taking or making a mistake, stress, and feeling unsafe.
- Cultural barriers: resulted from the impact of society on the individual. Later, Adams (1979) cited in Sarsani (2006, p. 158) made the list more complete by adding the following factors to it:

- Environmental blocks: resulted from the impact of the immediate environment
- Intellectual blocks: resulted from lack of flexibility in using problem-solving strategies.
- Expressive blocks: resulted from lack of language skills to express ideas. Soliman (2005) classified barriers to creativity in a broader categorization: historical, biological, physiological, sociological, and psychological Barriers. He confirmed that psychological barriers, that block creativity from inside, are the most important ones. Malone (2003) identified some major psychological barriers: self-imposed barriers, conformity to one expected pattern, not trying to challenge the obvious, rush in evaluation or judgment, fear of looking stupid, lack of willingness to challenge, anxiety, and lack of faith in your own abilities.

Agars et al. (2008) described divergent thinking as the analysis of various responses to questions when no clear single answer is available. Guilford (as cited in Kaufman, 2009) identified the main components of divergent production as follows:

- Fluency: number of ideas comes to the mind
- Flexibility: number of categories one can name
- Originality: uncommon ideas one can produce
- Elaboration: the potential to expand those ideas

Kaufman (2009) pointed to the fact that, "creativity doesn't necessarily just divergent thinking" (p. 18). As mentioned earlier, transformation abilities constitute another category of abilities important in creativity. These abilities enable the individual to understand the information, think out of the box, break a set, and transform the known patterns into the unknown new ones (Russ & Fiorelli, 2010).

B. Emotional Intelligence

According to Goleman (1998), social intelligence is the actual origin of EI. Thorndike, in 1920s, argued that EI is strongly related to social intelligence. As he stated, social intelligence enables one to sympathize with other people and behave appropriately. Later studies in 1948 argued that there is a link between intelligence and emotions (Moafian & Ghanizadeh, 2009). Goleman (1995) argued that EQ is another demonstration of smartness. He later argued that, generally, EQ addresses the ability to notice and adjust emotions in ourselves and in other people (Goleman, 1998).

EQ or EI (Üngür & Karagözoğlu, 2013) has also been defined as being able to observe one's own as well as other people's feelings, to differentiate them, and to employ this data for guiding one's thinking and deeds (Salovey & Mayer, 1990). Different models of EQ are briefly mentioned below.

1. Salovey and Mayer: An Ability Model of EI

Salovey & Mayer (1990) coined the term EI. They have conducted many studies on EI. These scholars' theory of EQ makes use of different important factors from the fields of intelligence and the field of emotion. Regarding the domain of intelligence, they argue that intelligence is the ability to do reasoning abstractly. From the domain of emotion, according to As Mayer, Salovey, & Caruso (2002), it has been stated that emotions are means to transferring usual and comprehensible meanings about relationships. According to this view, a number of fundamental emotions are universal; however, individuals can vary in their ability to analyze emotional information and in their ability to make a link between emotional processing and a wider cognition.

2. Bar-On: A Mixed Model of EI

Reuven Bar-On was the person who managed to develop one of the initial measures of EQ (Syts & L.Brown, 2004). Bar-On's model of EQ revolves around the potential for success and performance, not the performance and success itself. This model is believed to be a process-oriented model, not outcome-oriented (Bar-On, 2002). According to Bar-On (1997), this model highlights a group of emotional and social abilities which include: a) the ability to be cognizant of, comprehend, and voice oneself as well as others, b) the ability to handle deep emotions, and c) the ability to get used to changes and solve social and personal problems. Bar-On (2000) states that EQ would develop over time, as a result of training, and with therapy.

3. Goleman's Model of EI

Goleman, a psychologist and science writer, is believed to have based his ideas about EQ on the findings of Salovey and Mayer in the 1990s. After conducting his own studies, he finally wrote EI in 1995, known to be a remarkable book which could shed light on EI. His 1998 model introduces four principal EI constructs: a) self-awareness which enables one to notice one's emotions and identify their effect; b) self-management which addresses the ability to control one's emotions and impulses as well as the ability to adapt to new conditions; c) social awareness which deals with being able to feel, comprehend, and react to other people's emotions in comprehended social networks; and d) relationship management which addresses the capacity to inspire, influence, and develop other individuals while taking care of conflict (Syts & L.Brown, 2004).

C. Language Learning Strategies

The word strategy originates from the ancient Greek word *strategia*, meaning whatever one might do to win a war. However, nowadays, the war-related part of its meaning has become obsolete. According to Dansereau (1985) and Rigney (1978), language learning strategies is a term used to address those operations which are employed by a learner in order to assist in the acquisition, storage, retrieval, and use of information. Oxford (1990) argues that language learning strategies are steps taken by learners to enhance their own learning, to enhance the chance of success in language learning, and make the process more self-centered and enjoyable. In a similar vein, Griffiths (2007) argues that language learning strategies are those activities which are consciously chosen by learners in order to regulate language learning.

It is believed that progress in studying language learning strategies has been contemporaneous with development of cognitive psychology (Williams & Burden, 1997). Influenced by the ideas of Oxford (1990), Bialystok (1981), O'Malley, et al. (1985), Willing (1988), Stern (1992), and Ellis (1994), language learning strategies have been studied and classified by many researchers. According to Wenden (1986), introducing the strategies of successful language learners might help other students in bettering their own learning processes. Therefore, it seems to be reasonable to study the main taxonomies of language learning strategies.

1. Taxonomies of Language Learning Strategies

1.1. O'Malley's (1985) Classification of Language Learning Strategies

A. Metacognitive Strategies: The term metacognitive is used to emphasize that these strategies would be based on higher levels of cognition, e.g. planning for learning, thinking about the process of learning, monitoring one's language use and comprehension, dealing with mistakes, and the act of evaluating learning (O'Malley et al., 1985).

B. Cognitive Strategies: These strategies are more specific in a way that they might be related to special tasks. Mostly, they might necessitate manipulating the learning material directly. (Brown, 2007).

C. Socioaffective Strategies: as Brown (2007) puts it, these strategies are closely related to social-mediating activities. Two major socioaffective strategies are question for clarification and cooperation.

1.2. Rubin's (1987) Classification of Language Learning Strategies

Based on this model, language learning strategies are categorized into three categories. These categories are: a) Learning Strategies, b) Communication Strategies, and c) Social Strategies.

A. Learning Strategies: These strategies include two basic groups, i.e. Cognitive Learning Strategies and Metacognitive Learning Strategies. They are believed to directly assist language learning. Cognitive strategies are defined as the learning steps which involve direct study, modification, or synthesis of the learning material. They might include: Clarification, Verification, Guessing, Inductive Inferencing, Deductive Reasoning, Practice, Memorization, and Monitoring.

B. Communication Strategies: They emphasize communication through conversation. These strategies are usually employed when the speaker is faced with challenges or problems in communication and misunderstanding by an interlocutor.

C. Social Strategies: They enable learners to put into practice what they know. It is believed that these strategies expose learners to L2; therefore, they indirectly contribute to learning. This is due to the fact that they do not directly lead to internalizing, retrieving, and using the language.

1.3. Oxford's (1990) classification of Language Learning Strategies

Oxford divided language learning strategies into two main categories, direct and indirect strategies. She, then, subdivided them into six classes. The outline of Oxford's classification of language learning strategies is presented below:

■ DIRECT STRATEGIES

I. Memory

- a) Creating mental linkages, Grouping, Associating/elaborating, Contextualizing words
- b) Applying images and sounds, Imagery, Semantic Mapping, Keywords, Sounds in Memory
- c) Reviewing well, Reviewing after increasingly longer intervals of time
- d) Employing action, Physical response or sensation, mechanical techniques

II. Cognitive

- a) Practicing, Repeating, Formally, Formulaic, Recombining, Naturalistically
- b) Receiving and sending messages, Getting the idea quickly, Using resources
- c) Analyzing and reasoning, Deductive, Expression analyzing, Contrastively across languages, Translating, Transferring
- d) Creating structure for input and output, Taking notes, Summarizing, Highlighting

III. Compensation strategies

- a) Guessing intelligently; Using linguistic and other clues
- b) Overcoming limitations in speaking and writing Mother tongue, Help!, Gesture, Avoidance, Topic Selection, Approximating, Coining words, Circumlocution

INDIRECT STRATEGIES

I. Metacognitive Strategies

- a) Centering your learning Overviewing and linking, Paying attention, Just listening
- b) Arranging and planning your learning, Meta-linguistics, Organizing, Setting goals, Identifying purposes, Planning for a task, Seeking times to practice
- c) Evaluating your learning, Self-monitoring, Self-evaluating

II. Affective Strategies

- a) Lowering your anxiety, Relaxation/meditation, Music, Laughter
- b) Encouraging yourself, Positive statements, Wise risk-taking, Rewarding yourself
- c) Taking your emotional temperature, Body awareness, Emotion checklist, Diary, Sharing feelings

III. Social Strategies

- a) Asking questions, Clarification/verification, Correction
- b) Cooperating with others, Peer support, Interaction with native speakers
- c) Empathizing with others, Developing cultural understanding, Becoming aware of others' thoughts and feelings

1.4. Stern's (1992) Classification of Language Learning Strategies

According to Stern (1992), language learning strategies have been classified into the following five groups:

1. Management and Planning Strategies which are related to learner's attempts to control their learning.
2. Cognitive Strategies which addresses those specific learning activities which learners employ to complete specific tasks.

3. Communicative-Experiential Strategies are those strategies which help learners keep the flow of communication, e.g. gesturing, paraphrasing, and circumlocution.

4. Interpersonal Strategies which would make possible monitoring learners' development, L2 cultural awareness, and communication with native speakers.

5. Affective Strategies which are various. They may include frustrating to learn or having a positive perspective towards native speakers (Stern, 1992).

III. SIGNIFICANCE OF THE STUDY

In the educational domain, creativity teaching includes the development of a combination of abilities, skills, attitudes, motivation, knowledge, and other attributes (Kaufman, 2009; Runco, 2004, 2007; Starko, 2010). However, recently, the development of creative potentials of students is emphasized instead of their immediate creative achievements or performance. NACCCE (1999) set out proposals to support the development of creativity in education and in EFL contexts, claiming that creativity in education is not just an opportunity but a necessity. Nowadays, the international trend seems to integrate creativity in curriculum frameworks. With this increasing global concern, reforming the structure of education to include much greater focus on developing creative skills is happening across the world. Universities can be the center of learning and developing creative thoughts. Recently, researchers and physiologists are more concerned about social, emotional, and environmental dimensions of creativity and believe that the emotional aspect is as important as the cognitive dimension in creating creativity.

Different students learn a second language differently because they have different personal characteristics. Research on learning strategies will provide EFL teachers and students with a different view of learning and teaching within the classroom. Furthermore, it can help EFL instructors to identify their students' learning preferences and creativity and then teach in a way that is appealing to most of students. This way, they will be on a more direct path towards achieving their goals. It also aids syllabus planners and material designers to prepare language learning syllabi and materials in line with students' emotions and experiences.

Doing this research is of great importance since the researchers try to inform the managers of English language schools and high ranking managers of education organizations about the role of EQ, creativity, and language learning strategy use in learning as well as the relationship among these three variables.

IV. RESEARCH QUESTIONS

This study was designed to investigate the relationship among Iranian EFL learners' creativity, emotional intelligence and language learning strategies. There was an attempt to find answers to the following research questions:

Q₁: Is there any significant relationship between EFL learners' creativity and emotional intelligence?

Q₂: Is there any significant relationship between EFL learners' creativity and language learning strategies?

Q₃: Is there any significant relationship between EFL learners' emotional intelligence and language learning strategies?

Q₄: Is there any difference between predictability of EFL learners' creativity and emotional intelligence about their language learning strategies?

V. MATERIAL AND METHOD

A. Participants

One hundred and twenty students majoring in English translation and English literature at B.A. level and English teaching at M.A. level at Islamic Azad University, Central Tehran were the participants of this study. These participants who were both female and male, between the ages 18-35, filled out the intended questionnaires for the purpose of this research.

B. Instrumentation

In order to achieve the purpose of this study the following instruments were employed:

1. Persian Creativity Test validated by Zaker (2013),
2. Persian version of Bar-On Emotional Intelligence Test validated by Samooee (2003), &
3. Persian version of Oxford's Strategy Inventory for Language Learning validated by Tahmasebi (1999).

C. Procedure

In order to conduct this study, the following sequence was followed and the following tests were administered to the participants. As the first step, a Bar-On EQ test was distributed among 120 participants. It included 90 items in the form of short sentences and 15 factorial components. The questionnaire took nearly 20 minutes to complete and employed a five-point response scale ranging from 'very seldom' or 'not true of me' to 'very often' or 'true of me'. The highest and lowest values for items are five and one.

In the next stage, the Persian Creativity Test by Zaker (2013) which consists of 50 multiple choice items with 3 choices was administered among the participants, and for the next step, Strategy Inventory for Language Learning

(SILL) including 50 items was administered. After the completion of the data collection phase, the data analysis process was carried out.

D. Design

The design of this study is descriptive as the researchers did not manipulate the variables and no treatment was given to the participants (Best & Kahn, as cited in Zaker, 2013). In fact, the degree of relationship among the variables is the major concern here. In this study, emotional intelligence and creativity were considered as the predictor variables and language learning strategy was considered as the predicted variable. Furthermore, age and gender were categorized as intervening variables.

VI. DATA ANALYSIS

Firstly, the normality of the distribution of the three sets of scores obtained from the three questionnaires was checked as the first assumption for the parametric Pearson correlation, and it was revealed that all the distributions turned out to be normal by virtue of the sig values on Kolmogorov-Smirnov which came to be larger than .05 critical level. Therefore, the first assumption for a parametric correlation analysis was met.

The second assumption, linearity of the relations, was visually checked for each pair of variables and it was observed that the points did not form a curvilinear or any non-linear shape. Also, by a visual inspection, homoscedasticity was virtually verified due to the fact that the points scattered almost equally across the plot. The shape of the distribution was not curvilinear, but rather the points were scattered around a straight line. Besides, by virtue of the fact that the distribution was almost equal from the bottom left to the top right, homoscedasticity was claimed to be met.

The relationship between language learning strategies and EQ turned out to be linear. Furthermore, the equality of this distribution across the plot was virtually observed, hence homoscedasticity.

Testing the Hypotheses

To test the hypotheses, the researchers correlated the variables two by two. With all the assumptions of parametric Pearson correlation being met, the following table can legitimately be drawn upon to test the hypotheses.

TABLE 1.
CORRELATION BETWEEN EQ, LEARNING STRATEGIES, AND CREATIVITY

		EQ	Creativity	Learning strategies
EQ	Pearson Correlation	1	.170	.188*
	Sig. (2-tailed)		.063	.040
	N	120	120	120
Creativity	Pearson Correlation	.170	1	.330**
	Sig. (2-tailed)	.063		.000
	N	120	120	120
Learning strategies	Pearson Correlation	.188*	.330**	1
	Sig. (2-tailed)	.040	.000	
	N	120	120	120

*. Correlation is significant at the 0.05 level (2-tailed).

As depicted in the above table, the relationship between creativity and EQ of learners turned out to be non-significant ($r=.17$, $p=.063$). Hence, the first null hypothesis fails to be rejected.

Also shown in the table, the correlation between creativity and learning strategies came to be significant ($r=.33$, $p=.000$) and positive. Therefore, the second null hypothesis is rejected. The strength of the correlation is medium (.33) according to Cohen (1988), and the coefficient of determination (.108, the R squared value) suggests that the two variables share only 10.8 percent of their variance.

Likewise, the correlation between EQ and learning strategies turned out to be significant ($r=.180$, $p=.04$) and positive. As a result, the third null hypothesis is also rejected. The strength of the relationship, however, is small (.180) according to Cohen (1988), and the two variables have only 3.24 percent of variance in common given the R squared value, which is a weak coefficient of determination.

To test the fourth hypothesis, a multiple regression was needed but firstly the assumptions had to be checked. The assumption of multicollinearity which refers to the relationship between the two independent variables is met by virtue of the correlation coefficient between creativity and EQ which is much less than 0.9, as reported in table 4.2 above. The assumption of normality, that residuals should be normally distributed about the predicted DV scores, was checked visually through the Normal P-P plot below:

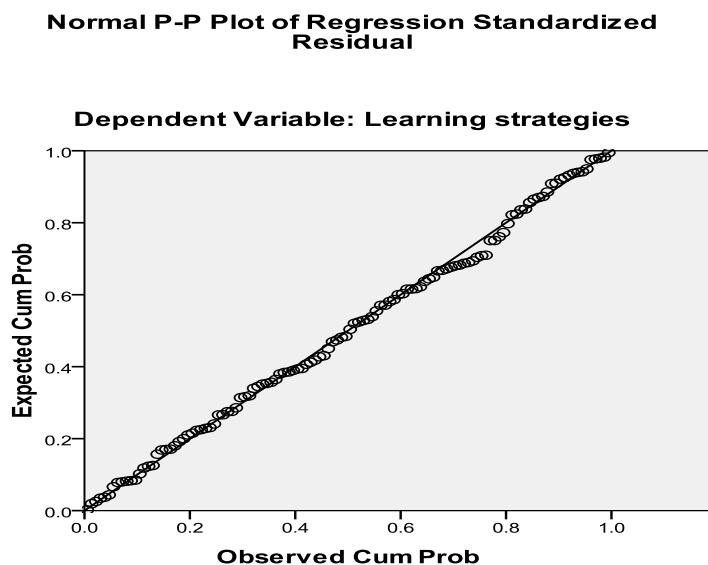


Figure 1: P-P plot representing the distribution of the residuals about the DV

As depicted in the above plot, all of the points in the figure are on an almost straight diagonal line which goes from bottom left to top right. This point suggests that there is no serious deviation from normality. Homoscedasticity condition was also checked. It illustrates that the residuals are roughly rectangularly distributed with most of the values clustered in the center. Hence homoscedasticity is met.

The assumption of outliers was checked through the following table:

TABLE 2.
RESIDUALS STATISTICS^A

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	143.8084	190.4649	173.4417	8.19397	120
Std. Predicted Value	-3.616	2.078	.000	1.000	120
Standard Error of Predicted Value	1.995	7.711	3.284	.984	120
Adjusted Predicted Value	146.8225	191.3223	173.4780	8.21059	120
Residual	-61.83928	55.78482	.00000	21.49493	120
Std. Residual	-2.853	2.573	.000	.992	120
Stud. Residual	-2.941	2.678	.000	1.006	120
Deleted Residual	-65.74403	60.41687	-.03630	22.14953	120
Stud. Deleted Residual	-3.043	2.752	.000	1.016	120
Mahal. Distance	.016	14.065	1.983	1.958	120
Cook's Distance	.000	.199	.010	.026	120
Centered Leverage Value	.000	.118	.017	.016	120

a. Dependent Variable: Learning strategies

Since there are two independent variables in this study (EQ and creativity as the predictor variables), the critical value for Mahal. Distance should be 13.82. As depicted in the above table, the maximum value of 14.06 slightly exceeds the critical value which signifies the presence of an outlier. Observing and sorting the cases by SPSS program, the researchers found only one case exceeding the critical value that was 14.06. Given the large sample size, the researchers considered it not unusual for an outlier to appear which is slightly outside the critical value. The Cook's Distance values do not exceed 1, indicating that there was no case exceeding the standardized residual value (-.3 to .3).

With all the assumptions met, the researchers safely used the regression analyses to test the hypothesis.

TABLE 3.
MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.356 ^a	.127	.112	21.67786

a. Predictors: (Constant), Creativity, EQ

b. Dependent Variable: Learning strategies

Displayed in Table 3, the R Square value (.356) indicates that 35.6 percent of the variance in the dependent variable is explained by the model (the two independent variables). The following table shows the significance of the model.

TABLE 4.
SIGNIFICANCE OF THE MODEL ANOVA^B

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7989.804	2	3994.902	8.501	.000 ^a
	Residual	54981.788	117	469.930		
	Total	62971.592	119			

a. Predictors: (Constant), Creativity, EQ

b. Dependent Variable: Learning strategies

As Table 4 shows, the model is significant ($F=8.5$, $p=.000<.05$). The following table shows which of the independent variables contributed to the prediction of the dependent variable.

TABLE 5.
THE PREDICTION TABLE COEFFICIENTS^A

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	42.909	59.598		.720	.473	-75.121	160.938						
	EQ	.339	.218	.136	1.551	.124	-.094	.771	.188	.142	.134	.971	1.030	
	Creativity	.584	.167	.307	3.501	.001	.254	.914	.330	.308	.302	.971	1.030	

a. Dependent Variable: Learning strategies

Given the Beta values under Standardized coefficients, it was concluded that EQ does not significantly predict LS ($B=.136$, $p=.124>.05$), while Creativity significantly predicts the dependent variable LS ($B=.307$, $p=.001<.05$). *Therefore, the null hypothesis is rejected*, implying that there was a significant difference in the predictability of EQ and Creativity about the learners' LS. And, by virtue of the weak correlation (though significant) between EQ and LS (.188), the non significant predictability of the former about the latter is justified.

VII. RESULTS AND DISCUSSION

Overall, the analyses of data yielded that there was no significant relationship between the EFL learners' creativity and emotional intelligence, but both variables significantly correlated with language learning strategies, and, on the basis of the analyses, the strength of the correlation between creativity and language learning strategies was medium while it was small in the case of emotional intelligence and language learning strategies.

Another finding proved that when it comes to the predictability of the predictor variables, there was a significant difference in the predictability of creativity and emotional intelligence about the learners' language learning strategies which was assumed as predicted variable and creativity was the better predictor of language learning strategies.

Observing no significant relationship between emotional intelligence and creativity among EFL learners is supported by some studies conducted to analyze the relationship between creativity and emotional intelligence in the literature. Hashemi (2009) in her study analyzed the relationship between emotional intelligence, emotional creativity, and creativity and the obtained results indicated that there was no significant relationship between emotional intelligence and creativity among the students of different majors.

Regarding the outcomes of the scores obtained from creativity and language learning strategies and consequently rejection of the second hypothesis of the study and in accordance with Ehrman & Oxford (1995) claims, in educational context, those second language learners who are considered more successful select and mix some strategies which are appropriate for every specific language task based in line with their own learning style preferences. On the other hand, Abraham and Vann (1987) and Vann and Abraham (1990) argue that those second language learners who are not very successful employ different strategies desperately and randomly and do not consider the relevance of an employed strategy to the learning task.

Since in the present study no cause and effect relationship was implied, it can be inferred that students with higher levels of creativity use strategies more extensively and thus are better learners of English. It seems that those students who are more creative are more successful in finding and adapting strategies while learning English. Results obtained from testing the third null hypothesis of the current research were in line with the findings of previous studies. The studies empirically support the positive relationship between EQ and language learning strategy use (Aghasafari, 2006).

In his study of emotional intelligence and learning strategies, Aghasafari (as cited in Rastegar & Karami, 2013) found a considerable relationship between emotional intelligence and language learning strategies.

Based on the analysis of the data, it was concluded that there was a significant difference in the predictability of EQ and creativity about the learners' language learning strategies. By virtue of the weak correlation (though significant) between EQ and language learning strategies, the non-significant predictability of the former about the latter is justified. Furthermore, between creativity and EI, creativity was a better predictor of language learning strategies among EFL learners in this study as the correlation between language learning strategies and creativity was stronger.

VIII. CONCLUSIONS

First, in order to investigate the probable relationship between the variables of this study, the following null hypotheses were posed:

H₀₁: There is no significant relationship between EFL learners' creativity and Emotional Intelligence.

H₀₂: There is no significant relationship between EFL learners' creativity and Language learning strategies.

H₀₃: There is no significant relationship between EFL learners' Emotional Intelligence and language learning strategies.

H₀₄: There is no difference between predictability of EFL learners' creativity and emotional intelligence about their language learning strategies.

■ The first null hypothesis of the research failed to be rejected ($r=.17$, $p=.063$) implying that there was no significant relationship between EFL learners' emotional intelligence and creativity among EFL learners.

■ The second null hypothesis of the research was rejected ($r=.33$, $p=.000$) on the grounds that there existed a positive significant relationship between EFL learners' creativity and their language learning strategies.

■ The third null hypothesis of the research was rejected ($r=.180$, $p=.04$) showing that a positive significant correlation, though small in size, existed between EFL learners' emotional intelligence and their language learning strategies.

■ The fourth null hypothesis of the research was rejected as well ($\text{Beta}=.307$, $p=.001<.05$) indicating that EFL learners' creativity was a better predictor of their language learning strategies rather than emotional intelligence ($\text{Beta}=.136$, $p=.124>.05$).

All the findings summed up, it was shown in this study that creativity and EQ of the learners were not significantly correlated, but that creativity and language learning strategies were significantly correlated (with medium strength). The relationship between EQ and language learning strategies of the learners turned out to be significant, though the strength was shown to be small. Also, it was revealed in this study that EQ could not predict learning strategies of the learners, while creativity came out to be a significant predictor of the learners' learning strategies.

IX. IMPLICATIONS

It seems necessary to do research about the type of language learning strategies used by weak and strong students. It should be brought into teachers' consideration why some students are more successful when it comes to learning a language as a second language. Moreover, the type of strategies as well as frequency of activities they employ in order to improve their comprehension and meet the learning goals.

Actually, findings of the present study have this potential to help teachers promote and adjust their instruction to meet the needs of their students as much as they can. This is based on the belief that when teachers have a reasonable degree of understanding about learners' intellectual strengths and weaknesses, they might be able to assist learners in developing their intellectual abilities. On the other hand, as far as Oxford and Ehrman (1995) state, L2 learners employ a bigger number of learning strategies in an environment in which the language is used for basic communication and survival. By knowing language learning strategies and their relationship with creativity, learners can expand increase their strength in overcoming the obstacles they may encounter during the language learning efforts and mitigating the negative aspects of some variables.

Regarding implications concerned with curriculum developers and syllabus designers, it can be stated that they should cooperate with English teachers. So in collaboration with teachers, they can allot appropriate time in the curriculum for teachers to work on strategies and creativity in EFL/ESL classes. Also, material designers and curriculum developers should work cooperatively with teachers so that they can produce materials which are congruent with students' level of creativity, emotional intelligence, and language learning strategies.

X. SUGGESTIONS

While the researchers were carrying out this study, they came across some questions that can be investigated by those who are interested:

1. Future studies could explore qualitative approaches such as interviews, diaries, case studies, and observations by which creativity, emotional intelligence, and strategy use nurture in the classroom context.

2. Further research can investigate the impact of factors such as social background and academic achievements on the development of the constructs embedded in this study.

3. This study can be replicated considering different age groups. In other words other researchers may investigate the correlation between age and learners' creativity, EQ and language learning strategies.

4. Since in this research the number of male and female participants was not equal, it can be a good idea to conduct a new research with the equal number of male and female participants to investigate the effect of gender on these variables.

5. Further research can be conducted on the correlation between creativity and/or emotional intelligence of English teachers and their learners' course achievement.

6. Other interested researchers may reveal through an experimental study the effect of creativity instruction on the use of language learning strategies. Moderator variables such as gender and proficiency level may be incorporated as well.

REFERENCES

- [1] Agars, M. D., Kaufman, J. C., & Locke, T. R. (2008). Social influence and creativity in organizations: A multi-level lens for theory, research, and practice. In M. D. Mumford, S.T. Hunter, & K. E. Bedell-Averse (Eds.), *Multi-level issues in creativity and innovation* (pp. 3-62). Amsterdam, Netherlands: JAI Press.
- [2] Amabile, T. M. (1996). *Creativity in context*. Boulder, Colorado: Westview Press.
- [3] Bar-On, R. (1997). *Bar-On Emotional Quotient Inventory (EQ-I): Technical Manual*. Toronto, Canada: Multi-Health Systems.
- [4] Bar-On, R. (2000). Emotional and social intelligence: Insights from the emotional quotient inventory (EQ-i). In R. Bar-On & J. D. A. Parker (Eds.), *Handbook of emotional intelligence* (pp. 363-388). San Francisco: Jossey-Bass.
- [5] Bar-On, R. (2002). *Bar-On Emotional Quotient Inventory (EQ-I): Technical Manual*. Toronto, Canada: Multi-Health Systems.
- [6] Bialystok, E. (1981). The role of conscious strategies in second language proficiency. *Modern Language Journal*, 65(1), 24-35.
- [7] Brown, D. H. (2007). *Principles of language learning & teaching*. (5th Eds.). Pearson: Longman.
- [8] Cantor, N., & Kihlstrom, J. (1987). *Personality and social intelligence*. Englewood Cliffs, NJ: Prentice Hall.
- [9] Chamot, A. U., & Kupper, L. (1989). Learning strategies in foreign language instruction. *Foreign Language Annuals*, 22, 13-24.
- [10] Clauss-Ehlers, C. (2010). *Encyclopedia of cross-cultural school psychology*. New Jersey: Springer.
- [11] Dansereau, D. F. (1985). The development of a learning strategy curriculum. In J. H. F.O'Neil (Ed.), *Learning strategies* (pp. 1-29). San Francisco, CA: Academic Press.
- [12] Ellis, R. (1994). *The study of second language acquisition*. (2nd Ed.) London: Sage publications.
- [13] Fahim, M., & Zaker, A. (2014). EFL learners' creativity and critical thinking: Are they associated? *Humanising Language Teaching*, 16 (3). Retrieved from <http://www.hltmag.co.uk/jun14/mart01.htm>.
- [14] Fisher, R. (2005). *Teaching children to think* (2nd ed.). Cheltenham, UK: Nelson Thornes.
- [15] Goleman, D. (1995). *Emotional Intelligence*. New York: Bantam Books.
- [16] Goleman, D. (1998). *Emotional Intelligence: Why it can matter more than IQ?* New York: Bantam.
- [17] Gu, Y. (2003). Vocabulary Learning in a Second Language. *TESL-EJ*, 7, 1-26.
- [18] Guilford, J. P. (1950). Creativity. *American Psychologist*, 5, 444-454.
- [19] Hajhashemi, K., & Parasteh Ghombavani, F., & Yazdi Amirkhiz, S. Y. (2011). The Relationship between Iranian EFL High School Students' Multiple Intelligence Scores and Their Use of Learning Strategies. *English Language Teaching* 4 (3), 214-222.
- [20] Hashemi, S., (2009). A study on the relationship between emotional intelligence, emotional creativity and creativity among art, literature and science students. *New Training Thoughts Journal*, 5(2), 79-103.
- [21] Kaufman, J. C. (2009). *Creativity 101*. New York: Springer Publishing Company, LLC
- [22] Malone, S. A. (2003). *Learning about learning: An A-Z of training and development tools and techniques*. London: CIPD.
- [23] Mayer, J. D., & Salovey, P. & Caruso, D. (2002). *Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT): User's manual*. Toronto, Canada: Multi-Health Systems.
- [24] Moafian, F., & Ghanizadeh, A. (2009). The relationship between Iranian EFL teachers' emotional intelligence and their self-efficacy in language institutes. *System*; 37(4);708-718
- [25] Murdock, M. C., Isaksen, S. G., Vosburg, S. K., & Lugo, D. A. (1993). The program and potential of an emerging discipline. In S. G. Isaksen, M. C. Murdock, R. L. Firestein, & D.J. Treffinger (Eds.), *Understanding and recognizing creativity: The emergence of a discipline* (pp. 105-140). Norwood, NJ: Ablex.
- [26] Naderi, H., Abdullah, R., Aizan, H. T., Sharir, J., & Kumar, V. (2009). Creativity, age and gender as predictors of academic achievement among undergraduate students. *Journal of American Science*, 5(5), 101-112.
- [27] Nosratinia, M., Saveiy, M., & Zaker, A. (2014). EFL learners' self-efficacy, metacognitive awareness, and use of language learning strategies: How are they associated? *Theory and Practice in Language Studies*, 4 (5), 1080-1092. doi: 10.4304/tpls.4.5.1080-1092.
- [28] Nosratinia, M., & Zaker, A. (2014). Metacognitive attributes and liberated progress: The association among second language learners' critical thinking, creativity, and autonomy. *SAGE Open*, 4, 1-10. doi: 10.1177/2158244014547178.
- [29] O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Kupper, L.J. & Russo, R.P. (1985). Learning strategies used by beginning and intermediate ESL students. *Language Learning*, 35(1): 21-46.
- [30] Oxford, R. L. (1990). *Language Learning Strategies: what every teacher should know*. New York: Newbury House Publishers.
- [31] Oxford, R. L. & Ehrman, M.E.(1995) Adults language learning strategies in an Intensive foreign language program in the United State, *System* 23.3, 359-386.
- [32] Piirto, J. (2004). *Understanding creativity*. Scottsdale, AZ: Great Potential Press.
- [33] Proctor, T. (2010). *Creative problem solving for managers. Developing skills for decision making and innovation*. 3rd edition. London: Routledge.
- [34] Rastegar, M. & Karami, M. (2013). On the Relationships among Emotional Intelligence, Affective and Social Strategy Use, and Academic Achievement of Iranian EFL Learners. *Theory and Practice in Language Studies*, 3, 2: 389-396.

- [35] Rigney, J. W. (1978). Learning strategies: A theoretical perspective. In H. F. O'Neil (Ed.), *Learning Strategies* (pp. 165-205). New York: Academic Press.
- [36] Rubin, J., (1987). Learner strategies: Theoretical assumptions, research history and typology. In: Wenden, A., Rubin, J. (Eds.), *Learner Strategies in Language Learning* Prentice/Hall International, Englewood Cliffs, NJ, pp. 15–30.
- [37] Runco, M. A. (2004). Creativity. *Annual Review of Psychology*, 55, 657–687.
- [38] Runco, M.A. (2007). Creativity: Theories and themes: Research, development and practice. Amsterdam: Elsevier Academic Press.
- [39] Russ, S. W., & Fiorelli, J. A. (2010). Developmental approaches to creativity. In J. C. Kaufman & R. J. Sternberg (Eds.), *The Cambridge handbook of creativity* (pp. 233-249). New York: Cambridge University Press.
- [40] Salovey, P. & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition, and Personality*, 9, 185-211.
- [41] Salovey, P., Hsee, C., & Mayer, J.D. (1993). Emotional intelligence and the self-regulation of affect. In D. M. Wegner & J. W. Pennebaker (Eds.): *Handbook of mental control* (pp. 258-277). Englewood Cliffs, NJ: Prentice-Hall
- [42] Sañchez-Ruiz, M. J., Hernaández-Torrano, D., Pérez-González, J. C., Batey, M., Petrides, K. V.(2011). The relationship between trait emotional intelligence and creativity across subject domains. *Motivation and Emotion*, 35, 461-473.
- [43] Sarsani, M. R. (2005). Creativity: Definition and approaches. In M. R. Sarsani (Ed.). *Creativity in education* (pp. 107). New Delhi: Sarup & Sons.
- [44] Sarsani, M. R. (2006). Creativity in schools. New Delhi: Sarup & Sons.
- [45] Soliman, S. A. H. (2005). Systems and creative thinking. Egypt: Center of Advancement of Postgraduate Studies and Research in Engineering Science.
- [46] Starko, A.J. (2010). Creativity in the classroom: Schools of curious delight (4th ed.).New York: Routledge.
- [47] Stern, H.H. (1992). Issues and Options in Language Teaching. Oxford: OUP.
- [48] Sternberg, R.J. (1985). Beyond the IQ: The Triarchic Theory of Human Intelligence. New York: Cambridge University Press.
- [49] Sternberg, R. J. (1997). Successful intelligence. New York, USA: Plume.
- [50] Sternberg, R.J., & Lubart, T.I. (1999).The concept of creativity: Prospects and paradigms. In R.J. Sternberg (Ed.), *Handbook of creativity*. Cambridge: University Press.
- [51] Stys, Y. & L.Brown, Sh. (2004). A Review of the Emotional Intelligence Literature and Implications for Corrections. *Correctional Service Canada*, R-150.
- [52] Tahmasebi, A. (1999). Vocabulary learning strategies and language proficiency. Tehran: Tarbiat Modares University.
- [53] Üngür, G. & Karagözöglü, C. (2013). The Relationship between Emotional Intelligence, Social Physique Anxiety and Life Satisfaction in Physical Education and Sports Students. *International Journal of Humanities and Social Science*, 3,13: 4.
- [54] Wenden, A. L. (1986). Learner strategies for learner autonomy. London: Prentice -Hall International.
- [55] Williams, M., & Burden R. L. (1997). Psychology for language teachers: A Social Constructive Approach. Cambridge: CUP.
- [56] Willing, K. (1988). Learning Styles in Adult Migrant Education. Australia: NCRC.
- [57] Zaker, A. (2013). The relationship among EFL learners' creativity, critical thinking, and autonomy (Unpublished master's thesis). Islamic Azad University at Central Tehran, Iran.



Behdokht Mall-Amiri is Assistant Professor of TEFL at Islamic Azad University, Central Tehran. She has published several articles in domestic and foreign academic journals. She is specifically interested in research areas related to translation, cognitive and learning styles, motivation, and program evaluation.



Seyedeh Azadeh Fekrazad was born in Mashhad in 1979. She started her bachelor's degree in pure chemistry in 1997 at Mazandaran University, Iran and graduated in 2000. Then she started her master's degree in TEFL at Islamic Azad University at Central Tehran in 2011 and graduated in 2014. She has been involved in teaching and translation for several years as a part time job and is interested in doing translations in specific fields like medicinal, scientific, cultural, and social issues from Persian to English and vice versa. Her main job is related to her bachelor's degree.