

## **Creativity and Language Learning Strategies: Toward a More Successful Language Learning**

**Mania Nosratinia**

*Assistant Professor, Islamic Azad University at Central Tehran, Faculty of Foreign  
Languages, English Department, Tehran, Iran*

*Email: mania\_nosratinia@yahoo.com*

**Zahra Mojri**

*MA Candidate in TEFL, Islamic Azad University at Central Tehran, Faculty of Foreign  
Languages, English Department, Tehran, Iran*

**Elnaz Sarabchian**

*MA in TEFL, Islamic Azad University at Central Tehran, Faculty of Foreign Languages,  
English Department, Tehran, Iran.*

*Email: elnaz.sarabchian@gmail.com*

## **Abstract**

*The present study aimed at investigating the relationship between EFL learners' creativity and language learning strategies. For this purpose 140 EFL students, ranging between 19 and 32 years old, majoring in English Translation and English Literature at Islamic Azad University, at Central Tehran, Iran were randomly selected and given two questionnaires: The Strategy Inventory for Language Learning and Creativity Questionnaire. The results of Pearson correlation indicated that there are significant relationships between EFL learners' total use of language learning strategies and their creativity. Also, running multiple regressions showed that social strategy predicted 79 percent of creativity scores. The affective strategy added up the percentage of prediction to 82.6 percent, and finally the metacognitive strategy entered the model on the last step and increased prediction to 93.2 percent. Conclusion and pedagogical implications are presented and discussed.*

## **1. Introduction**

During the last decades, many scholars [1], [2] have studied the relationship between second language acquisition (SLA) and psychological variables, i.e. individual differences such as motivation, self-esteem, self- efficacy, and anxiety.

However, creativity has been less involved in the research on individual

differences. Researchers [3] believe that the underlying components of creativity are normally distributed in the population. In other words, creativity is ability or some abilities possessed by all people to some degree. Therefore, creativity which implicitly involves imagination, unconventionality, risk-taking, flexibility and creating new classifications and systematizations of knowledge [4] can be an important factor affecting language learning acquisition. Furthermore, according to [5], learning strategy concept is very much dependent on the proposal of learners' cognizant engagement in classroom activities in order to achieve pre-specified goals. Stern defines learning strategies as broadly conceived intentional directions and learning techniques. Thus, creative use of strategies can help students in better engagement of learning process. This study was designed to examine the relationship between creativity and language learning strategies (LLSs) among Iranian EFL learners.

### **1.1 Creativity**

The field of creativity as it is known today has been developed basically by outstanding attempts made by Guilford and Torrance [6]. Creativity is complex in nature and one of the complexities in defining the concept of creativity is the existence of different relevant notions such as the creative performance or product, the creative person, the creative situation, the creative process, and creative potential [7]

As stated by [8], creativity is generally characterized as the ability to create new and original products, which are considered as appropriate for the features and limitations of a given task, where products can refer to a variety of ideas, viewpoints, and innovations. "These products must be original as they should not be just a mere copy of

what already exists” [9]. In Kneller’s argument (quoted in James 1999), creativity is characterized by two factors, i.e. novelty and relevance. The first refers to the arrival of something new or original, and the second characteristic, relevance, reminds us that creativity is always in a context and a creative act is a response to a situation in which something requires a solution or at least clarification. [9] declare that creativity is a multidimensional construct and may be measured as a personality trait or a creative style.[10], who investigated the role of creativity in entrepreneurship education, specify creativity as a unique ability of individuals and the undiscovered mystery of the brain as well.

[11] is one of those who have reported the significance of creativity in learning a second/foreign language and language use. Hadley maintains that students, who hope to make progress in their language skills beyond the elementary phases, must learn to create with the language, or in other words make use of language creatively.

## **1.2 Language Learning Strategies**

Since the mid 1970s, there has been substantial growth in the literature on learning strategies [12],[13], [14], [15], [16]. Learning strategies, according to [17] are the specific mental and communicative procedures that learners employ in order to learn and use language. [18] state that the goal of learning strategies is to “affect the learner’s motivational or affective state, or the way in which the learner selects, acquires, organizes, or integrates new knowledge” (p. 315). Learning strategies enable students to take more responsibilities of their own language learning and develop autonomy in their studies. In other words, “learners proactive contribution to enhancing the effectiveness of

their own learning” is essential in developing skills in learning-how-to-learn. [19] makes a distinction between direct and indirect strategies. Direct strategies are those specific procedures that learners can use to improve their language skills, and include memorizing, analyzing, reasoning and guessing intelligently. On the other hand, indirect strategies include factors such as evaluating one’s learning and cooperating with others. Studies of LLSs have shown that their application is related to both individual differences [20], [21] and the contexts in which learners acquire the language [22], [23]. Since language is socially mediated and context dependent, it would follow that learners’ use of language learning strategies could vary with the environment. Starting out from this perspective, this study attempts to examine the relationship between LLSs and creativity among Iranian EFL learners.

## **2. Method**

### **2.1 Participants**

One hundred forty eight male and female EFL learners, ranging between 19 and 32 years old, majoring in English Translation and English Literature at Islamic Azad University, at Central Tehran, Iran were randomly selected and given two questionnaires. The participants were almost evenly split between men (48.0%) and women (52.0%).

### **2.2 Instruments**

In order to carry through the purpose of the study, the following two instruments were utilized:

#### **2.2.1 The Strategy Inventory for Language Learning (SILL)**

SILL (Version 7.0) questionnaire originally developed by [24] covers six categories of strategies for language learning: Items 1-9 are concerned with the effectiveness of memory (memory strategies); items 10-23 are concerned with the use of mental processes (cognitive strategies); items 24-29 relate to the compensation for missing knowledge (compensation strategies); items 30-38 deal with the organization and evaluation of learning (meta-cognitive strategies); items 39-44 are concerned with emotion management (affective strategies); and items 45-50 deal with learning with others (social strategies). According to [24], SILL has consistently scored above .90 using Cronbach alpha, which indicates high internal reliability. Also the content validity of the instrument is very high (0.95).

### **2.2.2 Creativity Questionnaire**

This questionnaire is designed by O'Neil, Abedi, and Spielberger and called the Abedi-Schumacher Creativity Test or the ACT [25]. The ACT consists of 60 multiple-choice items used for establishing the scores of the four traits underlying creative thinking and is thus divided into the four subscales of fluency (22 items), flexibility (11 items), originality (16 items), and elaboration (11 items). Each item has three options ranging from least to most creative responses with a range of scores between 0-2. Therefore, the ultimate score is estimated in a range between 0-120, and participants are supposed to answer the items in 60 minutes.

The estimated reliability of each of the subscales of the ACT ranges from 0.61 to 0.75, which demonstrates that the test is also reliable [26].

### **2.3 Procedure**

A brief session with students studying at Islamic Azad University, at central Tehran, Iran was arranged. Students were informed that their performance on the test will not affect their final test results and their scores will be used for the purpose of research. The students were also assured for the confidentiality of the data gathering procedure. After giving an oral instruction of how to perform on the questionnaires, participants received a package of research instruments containing the creativity and SILL questionnaire along with the written instructions for each form. Students answered questionnaires in 90 minutes. In exchange for their participation, individuals were provided the opportunity to receive confidential feedback on their results on each of the questionnaires. In order to preserve confidentiality of the results, participants could code their papers with alphabet instead of their names; each questionnaire package was labeled with a 4-digit code to prevent misunderstanding of possible similar alphabet coding.

Questionnaires were gathered and data was extracted and inserted into an excel file. Data were rechecked by a second person for recheck of data input process. SPSS V. 17 was used for statistical analyses.

### **3. Results**

148 students were enrolled to the study. 77 (52%) participants were male and 71 (48%) were female. Age of the participants ranged from 18 to 32 with an average of  $24.7 \pm 4.2$ .

#### **3.1 Relationship between EFL learners' total score of language learning strategies and creativity**

The Pearson correlation was run to probe any significant relationships between EFL learners' total score in the use of language learning strategies and creativity. Before discussing the results, a review of the descriptive statistics is displayed in Table 3.1.

**Table 3.1: Descriptive Statistics; Language Learning Strategies and Creativity**

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
<b>Learning Strategy</b>	<b>148</b>	<b>63</b>	<b>169</b>	<b>125.02</b>	<b>21.991</b>	<b>483.612</b>
<b>Creativity</b>	<b>148</b>	<b>24</b>	<b>91</b>	<b>57.5</b>	<b>13.702</b>	<b>187.745</b>

The results of the Pearson correlation, Table 3.2, indicate that there are significant relationships between EFL learners' total use of language learning strategies and their creativity ( $r(146) = .88, P < .05$ )

**Table 3.2: Pearson Correlation: Language Learning Strategies and Creativity**

	Creativity
<b>Pearson Correlation</b>	<b>.738**</b>
<b>Learning Strategy Sig. (2-tailed)</b>	<b>.000</b>
<b>N</b>	<b>148</b>

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

As table 3.2 shows, there was a positive relationship between the two variables. The value of correlation (0.73) indicates how closely learning strategies and creativity are related.

Pearson-correlations was also run to investigate the correlation between subcategories of language learning strategies with creativity, as illustrated in Table 3.3.



**Table 3.3: Pearson Correlations; EFL Learners' Language learning Strategies and Creativity**

	<b>Creativity</b>	
	<b>Pearson</b>	<b>.551**</b>
	<b>Correlation</b>	
<b>Memory</b>	<b>Sig. (2-</b>	<b>.000</b>
	<b>tailed)</b>	
	<b>N</b>	<b>148</b>
	<b>Pearson</b>	<b>.578**</b>
	<b>Correlation</b>	
<b>Cognitive</b>	<b>Sig. (2-</b>	<b>.000</b>
	<b>tailed)</b>	
	<b>N</b>	<b>148</b>
	<b>Pearson</b>	<b>.531**</b>
	<b>Correlation</b>	
<b>Compensation</b>	<b>Sig. (2-</b>	<b>.000</b>
	<b>tailed)</b>	
	<b>N</b>	<b>148</b>
	<b>Pearson</b>	<b>.744**</b>
	<b>Correlation</b>	
<b>Metacognitive</b>	<b>Sig. (2-</b>	<b>.000</b>
	<b>tailed)</b>	
	<b>N</b>	<b>148</b>
	<b>Pearson</b>	<b>.728**</b>
	<b>Correlation</b>	
<b>Affective</b>	<b>Sig. (2-</b>	<b>.000</b>
	<b>tailed)</b>	
	<b>N</b>	<b>148</b>

	<b>Pearson</b>	<b>.894<sup>**</sup></b>
	<b>Correlation</b>	
<b>Social</b>	<b>Sig. (2-tailed)</b>	<b>.000</b>
	<b>N</b>	<b>148</b>

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

Based on these results creativity showed significant correlations with memory strategy ( $r(146) = .55, P < .05$ ), cognitive strategy ( $r(146) = .57, P < .05$ ), compensation strategy ( $r(146) = .53, P < .05$ ), metacognitive strategy ( $r(146) = .74, P < .05$ ), affective strategy ( $r(146) = .72, P < .05$ ), and social strategy ( $r(146) = .89, P < .05$ ),

Table 3.3 reveals that creativity is correlated positively and significantly with all subcategories of learning strategies.

### **3.2 Predictive power of EFL learners' use of language learning strategies in terms of predicting their creativity.**

Multiple regression was run to predict EFL learners' creativity by using six components of the language learning strategies. The regression model converged in four steps. The social strategy was entered into the model on the first step to predict 79.9 percent of scores on creativity ( $R = .894, R^2 = .799$ ). The cognitive strategy increased the predictive power to 82.1 percent ( $R = .906, R^2 = .821$ ). The affective strategy added up the percentage of prediction to 82.6 percent ( $R = .909, R^2 = .826$ ). And finally the metacognitive strategy entered the model on the last step to increase prediction to 93.2 percent ( $R = .912, R^2 = .832$ ).

As displayed in Table 3.4, social strategy was the best predictor of creativity ( $r = 0.89$ ,  $r^2 = .79$ ). That is to say social strategy predicted 79 percent of CR, while cognitive, affective and metacognitive learning strategies added only 4 percent to the r-squared.

**Table 3.4: Model Summary; Regression Analysis Predicting Creativity by Using Components of Language Learning Strategies**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.894 <sup>a</sup>	.799	.798	6.158
2	.906 <sup>b</sup>	.821	.819	5.832
3	.909 <sup>c</sup>	.826	.823	5.767
4	.912 <sup>d</sup>	.832	.828	5.687
a. Predictors: (Constant), Social				
b. Predictors: (Constant), Social, Cognitive				
c. Predictors: (Constant), Social, Cognitive, Affective				
d. Predictors: (Constant), Social, Cognitive, Affective, Metacognitive				
e. Dependent Variable: Creativity				

Also, the results of the ANOVA test of significance of the regression model ( $F(4, 143) = 177.56$ ,  $P < .05$ ,  $\omega^2 = .827$ ) indicated that the regression model was statistically significant (Table 3.5)

**Table 4.15: ANOVA Test of Significance of Regression Model; Predicting Creativity by Using Components of Language Learning Strategies**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	22973.276	4	5743.319	177.566	.000 <sup>e</sup>
Residual	4625.285	143	32.345		
Total	27598.561	147			

---

**a. Dependent Variable: Creativity**

---

**b. Predictors: (Constant), Social**

---

**c. Predictors: (Constant), Social, Cognitive**

---

**d. Predictors: (Constant), Social, Cognitive, Affective**

---

**e. Predictors: (Constant), Social, Cognitive, Affective, Metacognitive**

---

#### **4. Discussion**

The aim of this study was to investigate the relationship between EFL learners' language learning strategies and creativity. According to the results creativity showed significant correlations with memory strategy ( $r(146) = .55, P < .05$ ), cognitive strategy ( $r(146) = .57, P < .05$ ), compensation strategy ( $r(146) = .53, P < .05$ ), metacognitive strategy ( $r(146) = .74, P < .05$ ), and affective strategy ( $r(146) = .72, P < .05$ ), social strategy ( $r(146) = .89, P < .05$ ). Furthermore, results of multiple regression analysis revealed that social strategy predicts 79.9 percent of scores on creativity, the cognitive strategy increases the predictive power to 82.1 percent, the affective strategy adds up the percentage of prediction to 82.6 percent, and finally the metacognitive levels prediction to 93.2 percent. Thus, LLSs, as important techniques in the processes of language learning, can be considered as effective factors in fostering creativity.

In a study conducted by [27] creativity showed a significant relationship with language achievement and proficiency. Likewise, in a number of studies a positive relationship between strategy use and language performance was reported [28], [29]. Thus, both creativity and language learning strategies are important factors in language performance and achievement of EFL students. [31] affirmed the positive impact of bilingualism on creativity, positing that it is the underlying processes and mechanisms of

creativity that are influenced by bilingual practice not the unitary concept per se.

## **5. Conclusion**

Creativity has been under scientific investigations for more than half a century and it is still at the peak of attention. Lately, a number of researchers have engaged in unfolding the relation between bilingualism and creativity and have found significant associations between them. On one hand, bilingualism enhances cognitive functions such as planning, cognitive flexibility and working memory; on the other hand, creativity is heavily dependent on the strength and power of these functions.

The present study found a strong correlation between creativity and use of language learning strategies among EFL learners. The strong link persuades English teachers, curriculum designers and even parents to consider creativity as an effective factor in successful second /foreign language learning. Thus, learners are advised to develop a greater range of strategies and flourish creativity to handle learning difficulties more effectively. They should, in short, be encouraged to be strategic and think creatively about the processes underlying their own learning, and to see that, ultimately; they are responsible for their own learning [32].

## References

- [1] H.B. Altman and C.V. James, *Foreign Language Teaching: Meeting Individual Needs: Papers Form the First Pergamon Institute of English Seminar Oxford, 1979*, Pergamon Pr, 1980.
- [2] Z. Dörnyei, "Individual differences in second language acquisition," *AILA review*, vol. 19, no. 1, 2006.
- [3] Á. Albert, "Learner creativity as a potentially important individual variable: Examining the relationships between learner creativity, language aptitude and level of proficiency," *University of Pécs Roundtable 2006: Empirical Studies in English Applied Linguistics*, pp. 77, 2006.
- [4] R.J. Sternberg, "Implicit theories of intelligence, creativity, and wisdom," *Journal of personality and social psychology*, vol. 49, no. 3, pp. 607, 1985.
- [5] H.H. Stern, *Issues and options in language teaching*, Oxford Univ Pr, pp. 1992.
- [6] R.J. Sternberg, "Domain-general versus domain-specificity of creativity," *Milieus of Creativity*, Springer, pp. 25-38, 2009.
- [7] A. Albert and J. Kormos, "Creativity and narrative task performance: An exploratory study," *Language Learning*, vol. 61, no. s1, pp. 73-99, 2011.
- [8] T. Lubart and J.-H. Guignard, "The Generality-Specificity of Creativity: A Multivariate Approach," 2004.
- [9] E. Trevlas, O. Matsouka and E. Zachopoulou, "Relationship between playfulness and motor creativity in preschool children," *Early Child Development and Care*, vol. 173, no. 5, pp. 535-543, 2003.
- [10] J. Abutalebi and A. Costa, "Acquisition, processing and loss of L2: Functional, cognitive and neural perspectives," *Journal of Neurolinguistics*, vol. 21, no. 6, pp. 473-476, 2008.
- [11] A.O. Hadley and E. Reiken, *Teaching Language in Context, and Teaching Language in Context--Workbook*, ERIC, pp. 1993.
- [12] A.D. Cohen and E. Apeh, "Easifying second language learning," *Studies in second language acquisition*, vol. 3, no. 02, pp. 221-236, 1981.
- [13] A. Wenden and J. Rubin, *Learning strategies in language learning*, Prentice-Hall International, 1987.
- [14] J.M. O'malley and A.U. Chamot, *Learning strategies in second language acquisition*, Cambridge University Press, 1990.
- [15] R. Ellis, *The study of second language acquisition*, Oxford University Press, 1994.
- [16] H. Marefat and M.A. Shirazi, "The Impact of Teaching Direct Learning Strategies on the Retention of Vocabulary by EFL Learners," *Reading Matrix: An International Online Journal*, vol. 3, no. 2, 2003.
- [17] A.U. Chamot, "Language learning strategy instruction: Current issues and research," *Annual Review of Applied Linguistics*, vol. 25, pp. 112-130, 2005.
- [18] C.E. Weinstein and R.E. Mayer, "The teaching of learning strategies," *Handbook of research on teaching*, vol. 3, pp. 315-327, 1986.
- [19] R.L. Oxford, "Styles, strategies, and aptitude: Connections for language learning," *DOCUMENT RESUME*, pp. 73, 1990.

- [20] M.E. Ehrman, B.L. Leaver and R.L. Oxford, "A brief overview of individual differences in second language learning," *System*, vol. 31, no. 3, pp. 313-330, 2003.
- [21] P. Skehan, "Individual differences in second language learning," *Studies in second language acquisition*, vol. 13, no. 02, pp. 275-298, 1991.
- [22] E.E. García, *Teaching and learning in two languages: Bilingualism & schooling in the United States*, Teachers College Press, 2005.
- [23] S. Parks and P.M. Raymond, "Strategy Use by Nonnative English - Speaking Students in an MBA Program: Not Business as Usual!," *The modern language journal*, vol. 88, no. 3, pp. 374-389, 2004.
- [24] M. Ehrman and R. Oxford, "Adult language learning styles and strategies in an intensive training setting," *The modern language journal*, vol. 74, no. 3, pp. 311-327, 1990.
- [25] A.J. Cropley, *Creativity in education and learning: A guide for teachers and educators*, Psychology Press, 2001.
- [26] E. Auzmendi, A. Villa and J. Abedi, "Reliability and validity of a newly constructed multiple-choice creativity instrument," *Creativity Research Journal*, vol. 9, no. 1, pp. 89-95, 1996.
- [27] I. Otto, "The relationship between individual differences in learner creativity and language learning success," *Tesol Quarterly*, vol. 32, no. 4, pp. 763-773, 1998.
- [28] J. Bruen, "Strategies for success: Profiling the effective learner of German," *Foreign Language Annals*, vol. 34, no. 3, pp. 216-225, 2001.
- [29] G.P. Park, "Language learning strategies and English proficiency in Korean university students," *Foreign Language Annals*, vol. 30, no. 2, pp. 211-221, 1997.
- [30] R. Sheorey, "An examination of language learning strategy use in the setting of an indigenized variety of English," *System*, vol. 27, no. 2, pp. 173-190, 1999.
- [31] B. Hommel, L.S. Colzato, R. Fischer and I.K. Christoffels, "Bilingualism and creativity: benefits in convergent thinking come with losses in divergent thinking," *Frontiers in psychology*, vol. 2, 2011.
- [32] D. Nunan, "Closing the gap between learning and instruction," *Tesol Quarterly*, vol. 29, no. 1, pp. 133-158, 1995.