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# Creativity, Language Learning Strategies and Language Proficiency

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#### **Abstract**

The present study is an attempt to investigate the relationship between creativity, language learning strategies and language proficiency. To measure these three variables, Nelson Quick Check Test, Strategy Inventory for Language Learning (SILL), and Creative Personality Measurement Questionnaire (CPM) were administered. These tests measure language proficiency, learning strategies, and creativity respectively. The results showed that creativity and degree of strategy use and also creativity and language proficiency were significantly correlated; but the degree of strategy use and language proficiency did not show any relationship. As far as the participants' strategy use scores were concerned, no particular difference among high and low creativity subjects was discovered. But they were significantly different with respect to their language proficiency. The preferred strategy type for both high and low creativity groups was the metacognitive strategies and the least preferred strategy type for both groups turned out to be affective ones. The subjects were also divided into two groups of high and low proficiency. The favorite strategy type for the high proficiency group was the compensation strategies and the favorite strategy type for the low proficiency group was the metacognitive strategies. Both high and low proficiency groups preferred the affective strategies least of

**Key Words:** Creativity; Learning Strategies; Language Pedagogy;

Proficiency; Cognitive Strategies; Metacognitive Strategies.

#### 1. Introduction

The primary purpose of the field of second language pedagogy is, undoubtedly, to enhance students' learning. Educators have tried not only to find better techniques and methods of teaching but also to assist the learners in learning and progressing *autonomously* (Gremmo and Riley, 1995). The concept of learner autonomy and its associated concept, i.e., learning strategies, have led to a surge of research in the field of second language education.

Language learning strategy research began in the 1960s under the influence of cognitive psychology. At first, researchers intended to know what good language learners do that makes them successful in language learning. The American sociolinguist, Joan Rubin (1975), was the primary figure in good language learner research. With the establishment of language learning strategy research, many turned to developing taxonomies of learning strategies including Wenden and Rubin (1987), O'Malley and Chamot (1990), Oxford (1990) and Stern (1992). Oxford's (1990) classification, however, is considered to be the most comprehensive one. Her classification consists of direct strategies and indirect strategies. Direct strategies are those strategies that are directly involved in the processing of linguistic input and include memory, cognitive and compensation strategies. The indirect strategies are involved in the general management of the learning process and include metacognitive, affective and social strategies. Studies have shown that learning strategies contribute to success in language learning (Ellis, 1994) and their choice is influenced by a variety of factors such as motivation, gender, attitudes, beliefs, type of task, age, L2 level, learning style and tolerance of ambiguity (Oxford, 1990).

Prior to 1950, creativity research was largely ignored by psychologists. But Guilford's (1950) presidential address to the American Psychological Association made that year a turning point for creativity research. Generally speaking, creativity research is done from three broad perspectives: a) 'intelligence and abilities', b) 'personality characteristics', and c) 'education and training' (Freeman, et al., 1968). As to the 'intelligence and abilities perspective', people's creative responses to psychological tests and problems, as it is the case in problem solving contexts, are measured. In the 'personality characteristics' perspective, the personality characteristics of creative people are identified and measured. In the 'education and training' perspective, the principles and techniques that contribute to the development of creativity are investigated.

The present paper is an attempt to investigate the relationship between creativity and language learning strategies taking into account the perspective of personality characteristics. The questions addressed are:

Is there any relationship between creativity and the extent of the subjects' use of learning strategies?

Is there any relationship between creativity and language proficiency?

Is there any relationship between proficiency and the extent of the subjects' use of learning strategies?

Which learning strategies do the high creativity and low creativity learners prefer?

Which learning strategies do the high proficiency and low proficiency learners prefer?

## 2. Method

## 2. 1. Participants

The participants are 29 freshman students studying English Language and Literature at the Faculty of Foreign Languages, University of Tehran: 22 girls and 7 boys.

## 2. 2. Instrumentation\*

In this study, three paper-and-pencil instruments were used. Nelson's Quick-Check Test (NQCT) which is a multiple choice test was used to measure English language proficiency. This test consists of 100 grammar and vocabulary items. It was used instead of TOEFL because the students were freshmen and TOEFL was considered to be too difficult for them. Reliability of this test as indicated by Cronbach alpha turned out to be 0.91.

Oxford's (1990) Strategy Inventory for Language Learning (SILL), which is a Likert scale questionnaire, was used to measure both the extent of learning strategies and their types the learners usually employ. This questionnaire has four scales (never, sometimes, usually, and always) and the statements represent the six types of strategies in Oxford's taxonomy: memory, cognitive, compensation, metacognitive, affective and social strategies.

SILL was translated into Persian by Tahmasebi (1999) who reported Cronbach alpha of 0.77 for the Persian version of SILL. Also, Nyikos and Oxford (1993) reported Cronbach alpha of 0.96 for SILL. In the present study, the Crobach alpha calculated for this instrument turned out to be 0.93.

To measure the level of creativity of the subjects, American Association for Personality Assessment's Creative Personality Measurement Questionnaire (CPM) was used. This questionnaire has 30 items and each item contains two rather opposing statements, the second of which is considered to describe a creative personality trait. The subjects marked how close their views were to each statement on a scale of 1 to 4, representing 'high agreement', 'relative agreement' with the first statement, 'relative

<sup>\*</sup> Please contact the authors for the instruments used in this study.

agreement', and 'high agreement' with the second statement respectively. This questionnaire was translated into Persian by Khodayari (1998) for which he reported the Cronbach alpha of 0.64. It was also used by Hatamian (2002) to measure the creativity level of high school teachers. He reported Cronbach alpha of 0.72 for the questionnaire. The Cronbach alpha calculated for this test, in the present study, turned out to be 0.71.

#### 2. 3. Procedure

The NQCT, the SILL, and the CPM were administered to a class consisting of 29 learners. The learners were fully briefed as to how to answer the questions; they were also given enough time for finishing the tests.

## 3. Results

## **3. 1. Question 1**

In order to answer this question, a correlation was run between the two variables, i.e. creativity and the extent of use of strategies in order to find the answer to the first question. As it is evident from Table 3 below, the result proved to be significant at the 0.05 level. The correlation (r = 0.422) shows that there is a positive relationship between creativity and the extent of use of strategies. In other words, the more creative the learners are, the more they use learning strategies (Table 1).

Table 1: Pearson correlation between creativity and strategies

	Mean	Std. Deviation	N	Correlation	Sig. (2-tailed)	
Creativity	78.90	10.28	29	400	022	
Strategies	128.72	21.78	29	.422	.023	

## 3. 2. Question 2

To answer the second question, another correlation was run between creativity and proficiency. The correlation coefficient turned out to be 0.448 at the .05 level of significance. Thus, the second null hypothesis was rejected. This means that there is a positive relationship between creativity and language proficiency (Table 2).

Table 2: Pearson correlation between creativity and proficiency

	Mean	Std. Deviation	N	Correlation	Sig. (2-tailed)	
Creativity	78.90	10.28	29	.448	015	
Proficiency	81.59	10.73	29	.446	.015	

## **3. 3. Question 3**

To answer this question, first the subjects were divided into two groups of high creativity and low creativity using the median-split method, i.e. the subjects having creativity scores equal to or lower than the median were labeled the low creativity group and the subjects having creativity scores higher than the median were put in the high creativity group. The results of the t-test demonstrated that the two groups are significantly different (Table 3).

Table 3: Independent samples t-test between the high and low creativity groups based on creativity scores

Creativity Level	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)	Mean Difference
Low Creativity	15	70.87	7.405	7.66	27	0.000	16.62
High Creativity	14	87.50	3.838	-7.66	27	0.000	-16.63

Then the mean strategy use for each type of strategy for both high

creativity and low creativity groups are calculated and based on the results, the favored strategy type for each group will be determined. In the next step, a correlation was run between the variables, language proficiency and the degree of strategy use. As it is shown in table 4, the result was not significant. This confirms the null hypothesis and it means that there is no relationship between language proficiency and the extent of strategy use. Putting together the results of questions 2 and 3, it is observed that proficiency has a higher correlation with creativity rather than with the degree of strategy use.

Table 4: Pearson correlation between language proficiency and strategy use

	Mean	Std. Deviation	N	Correlation	Sig. (2-tailed)
Proficiency	81.59	10.73	29	222	224
Strategies	128.72	21.78	29	.233	.224

## 3. 4. Question 4

To answer question 4, the subjects were divided into two groups of high proficiency and low proficiency using the median-split method, i.e., the subjects with proficiency scores equal to or lower than the median were labeled 'low proficiency group' and those with proficiency scores higher than the median were put in the 'high proficiency group'. Then, mean strategy use for each type of strategy for both high proficiency and low proficiency groups was calculated and based on the results, the preferred strategy type for each group was determined. The t-test run between the high and low proficiency groups, as shown in Table 5, demonstrated that the two groups were significantly different.

Table 5: Independent samples t-test between the high and low proficiency groups based on proficiency scores

Proficiency Level	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)	Mean Difference
Low Proficiency	15	74.33	10.300	5 421	27	000	15.02
High Proficiency	14	89.36	2.845	-5.431	27	.000	-15.02

To determine the strategy types preferably used by high creativity and low creativity learners, the mean strategy use for each type of strategy and for each group was calculated (Table 6). The table shows that the preferred strategy type for both high creativity and low creativity groups is metacognitive strategies; while the least favored strategy type for both groups is affective strategies. Generally speaking, the two groups are very similar in the type of strategies they use; they only differed in compensation and social ones.

Table 6: Mean strategy use for each strategy type for high and low creativity subjects

Creativity Level		Memory	Cognitive	Compensation	Metacognitive	Affective	Social
	Mean	2.277	2.466	2.686	2.826	2.120	2.595
Low Creativity	SD	.443	.2991	.632	.442	.380	.443
	Rank	5	4	2	1	6	3
	Mean	2.288	2.663	2.747	2.940	2.139	2.912
High Creativity	SD	.640	.464	.501	.749	.575	.534
	Rank	5	4	3	1	6	2

## **3. 5. Question 5**

In order to determine the preferred strategy types for high proficiency

and low proficiency learners, the mean strategy use for each strategy type and for both groups of learners was calculated (Table 7). The results show that the favorite strategy type for high proficiency learners is the compensation strategies while the favorite strategy type for low proficiency learners is the metacognitive strategies. The least preferred strategy type for both high and low proficiency learners is the affective strategies.

Table 7: Mean strategy use for each strategy type for high and low proficiency subjects

Proficiency Level		Memory	Cognitive	Compensation	Metacognitive	Affective	Social
	Mean	2.217	2.580	2.519	2.959	2.042	2.762
Low	SD	.493	.348	.530	.489	.429	.536
Proficiency	Rank	5	3	4	1	6	2
	Mean	2.352	2.541	2.926	2.797	2.222	2.732
High	SD	.590	.449	.537	.711	.520	.492
Proficiency	Rank	5	4	1	2	6	3

## 4. Conclusions

The statistical analyses demonstrated that creativity and the extent of use of strategies are positively related. Although no cause and effect relationship is implied here, it can be inferred that students with higher levels of creativity use strategies more extensively and thus are better learners of English. It is obvious that those students who are more creative are more successful in finding and inventing methods of improving their language proficiency. This explains the relationship between creativity and the degree of strategy use, because a higher degree of strategy use is the result of the student's ability to devise and invent strategies for success.

Creativity was also demonstrated to be significantly linked to

proficiency. This is the result of the same process as explained above. Creative students find more and better ways to improve their English and as a result their English improves more and faster than that of less creative students.

Contrary to previous studies (for example Shoerey, 1999), this research could not find any significant relationship between proficiency and the extent of use of strategies. This may imply that the relationship between proficiency and the degree of strategy use might be under the influence of other factors which yet need to be identified and studied. This may also be due to the small size of the sample. Larger samples are more likely to yield more significant results.

The answers to questions 4 and 5 show that the learners use affective strategies least of all which might be the result of lack of awareness of these strategies on the part of the learners which itself is caused by the educational system's emphasis on the cognitive and metacognitive aspects of learning and its ignoring the affective and interpersonal factors involved in the learning process.

As the results demonstrated, the metacognitive strategies which involve planning and organizing were highly favored by both low creativity and high creativity learners which might be a product of the planning-oriented mentality propagated by the media, educational authorities and the instructors at all levels of education.

While metacognitive strategies were shown to be the preferred strategy type by low proficiency students, surprisingly, the high proficiency students demonstrated higher tendency to use and prefer compensation strategies. At first, it might seem contrary to expectations, since the higher proficiency learners appear to need the compensation strategies least of all. Yet, a closer look reveals a different view. Maybe, it is the compensation strategies that help the learners quickly achieve high proficiency levels allowing them to perform way beyond their real competence levels. Still, this issue requires further research.

Overall, creativity seems to be an important factor affecting both the learners' proficiency and the extent to which they use learning strategies, but it does not seem to affect the type of strategies the learners use. The higher correlation between creativity and language proficiency than that between degree of strategy use and language proficiency might indicate that creativity is even more important than strategy use in language learning.

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