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The Relationship Between Iranian EFL Learners' Willingness to Communicate and Their Creativity

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Abstract. Willingness to communicate (WTC), as the intention to initiate communication, has received lots of attention in the field of foreign language teaching and learning, and previous studies have demonstrated the significant role of learners' WTC in their learning process. However, it is unclear what psychological factors are related to this variable. This study aimed at substantiating the association between Iranian EFL learners' WTC and their creativity. The present study also attempted to explore whether the components of Iranian EFL learners' creativity predict their WTC in the classroom. To this end, measures of the WTC and creativity of 118 Iranian EFL learners were obtained employing the WTC inside the Classroom Questionnaire (MacIntyre et al., 2001) and Creativity Questionnaire (Abedi, 1993). The results of the Pearson product-moment correlation analysis showed a statistically significant relationship between EFL learners' WTC and their creativity. In addition, the multiple linear regression analysis indicated that among four components of creativity, only fluency emerged as a reliable predictor of learners' WTC in the classroom. Finally, pedagogical implications for educational policymakers, curriculum developers, and language teachers were presented.

Keywords: Creativity, EFL learning, English as a foreign language, Iranian EFL learners, Willingness to communicate

1. Introduction

For second language learners, the ability to utilize the target language for communication has been highlighted as a crucial component of effective

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second language learning (Hashimoto, 2002). It has been presupposed that active engagement in classroom activities by language learners is a precondition for attaining communicative competence (Cao, 2014).

According to Lucarz (2014, p. 37), the primary goal of most foreign language (FL) learners is to improve their speaking abilities. Speaking is also regarded as a required prerequisite for language acquisition (Savignon, 2005). As a result, it is essential that learners participate in speaking exercises in FL classrooms. In fact, this should be one of the instructors' primary priorities.

MacIntyre and Charos (1996) were the pioneers in introducing willingness to communicate (WTC) in foreign/second language (L2) communication. To do so, they applied McCroskey's & Richmond's (1987) first observations on WTC to L2 communication. Willingness to communicate may be broadly characterized as a learner's tendency to begin a conversation (McCroskey & Richmond 1987, 1990).

WTC in a second language has recently received a lot of attention (e.g., MacIntyre, 2007; Cao, 2011). Considering this, it is evident how crucial learners' WTC is in today's teaching and learning programs.

As creativity influences almost every area of our life, it is considered a crucial skill in a wide range of fields, including education. Pir Khaefi (2001) also pinpointed that any innovation necessitates creativity. Nonetheless, creativity in L2 has been largely understudied (Birdsell, 2013) and mostly neglected (Albert, 2006). Given creativity plays such an important part in language acquisition, the present study explored the potential correlation between Iranian EFL learners' WTC and their creativity.

2. Literature Review

2.1. Willingness to communicate

Willingness to communicate (WTC) was described by MacIntyre et al. (1998) as "a learner's eagerness to participate in a conversation at a given time with a specific person or individuals using L2" (p. 548). Kang (2005) also defined WTC as the volitional propensity toward directly participating in communication in a certain setting, which might change

depending on interlocutor(s), subject, and context of the conversation, among other important situational factors.

To support the conceptualization of WTC in an L2 context, MacIntyre et al. (1998) suggested a heuristic model. Rather than indicating a trait-like perspective, in this model, the WTC was seen as a situational factor having both short-term and long-term effects (see Figure 1). MacIntyre et al. (1998) identified and classified the following transient and enduring effects:

The enduring effects (for example, intergroup relationships, learner personality, and so on) are steady, long-term features of the environment or person that are applicable to almost every situation. Situational influences (e.g., willingness to communicate with a certain person, understanding of the issue, etc.) are viewed as more transient and depend on the precise setting in which an individual performs at any one time.

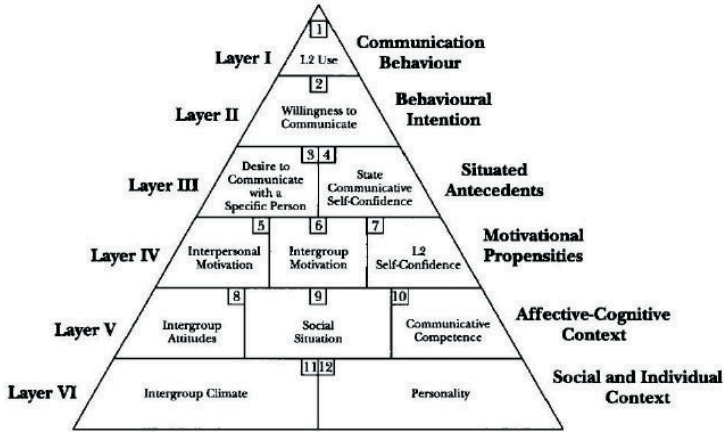

Figure 1. Heuristic Model of Factors Influencing WTC (MacIntyre et al., 1998)

The WTC heuristic model displays the string of possible factors that influence WTC in an L2. The pyramid scheme represents contributing variables that may have an impact on establishing an L2 conversation. The situational impact on the WTC is depicted in the first three layers (Communication Behavior, Behavioral Intention, and Situated Antecedents). The last three layers (Motivational Predispositions,

Affective-Cognitive Context, and Social and Individual Context) show long-term impacts on the L2 communication process. As a result, the layers show a progression from the most urgent to the more steady situation-based settings, with long-term consequences on L2 communication circumstances.

Concerning the significance of WTC in learning, several studies focused on the personal characteristics that were supposed to influence learners' WTC. For example, several research studies have documented the influence of specific individual characteristics on WTC when considering a trait-like perspective of WTC. Among them, self-perceived communicative competence and communication apprehension have been identified as the primary predictors of WTC (Baker & MacIntyre, 2000; MacIntyre et al., 2001).

In addition, employing the thematic analysis and focusing on a computer-assisted (digital) language learning context, Soyoof (2021) investigated Iranian EFL students' perception of WTC. He discovered that four major sources impacted students' L2 WTC: "educational practices, interpersonal variables (familiarity with the interlocutors and supportive communities), affective variables (L2 confidence and anxiety in ED context), and social variable (intergroup climate)" (p. 2).

Ranjbar and Goldoust (2017) reported that the WTC of Iranian EFL learners is very situation sensitive. They discovered that, as compared to other communication situations, EFL learners are more willing to communicate with friends and in groups.

Conducting semi-structured interviews, Riasati (2012) found that variables like conversation topic, instructor, self-perceived speaking ability, the atmosphere of the classroom, interlocutor, and personality contribute to Iranian EFL learners' WTC. Zarrinabadi and Abdi (2011) also found that Iranian EFL learners' language orientations were more closely related to their readiness to speak outside of the class than inside.

Furthermore, among the different elements thought to be associated with EFL learners' WTC, creativity has received insufficient attention. It is claimed that by investigating the association between these two factors, new insights into the learning process and, in particular, EFL learners' WTC may be achieved. To fill this gap in the current literature, the

present study examined the relationship between EFL learners' WTC and their creativity.

2.2. Creativity

Creativity is a mental ability category that is of relevance since it penetrates practically every aspect of our lives. Divergent thinking tasks are often used to assess creativity, as they examine the fluency, adaptability, originality, and elaboration of individual production of a number of diverse tasks.

Regarding the role of creativity in education, Piaget (as cited in Fisher, 2005) pinpointed that the primary purpose of education is to promote and develop creative individuals because the major aim of education is the foundation of a creative world. Creative thinking in the classroom enables learners to enhance their social skills, motivation, self-esteem, and achievement (Leahy & Sweller, 2008).

Previous studies in the field of EFL teaching have revealed that effective second/foreign language acquisition necessitates an adequate learning environment and is focused on personal psychological elements like as creativity and motivation (Lightbown & Spada, 2013).

The term "creative" derives from the Latin crere, which means "to generate or make" (Piirto, 2004). Dickhut (2003) considered creativity as a process including creating valuable and original ideas. Torrance (1988) also defined four components for creativity: Fluency (as the capacity to come up with many ideas), Flexibility (as a high level of variety and innovation in generating ideas), Originality (as the ability to create uncommon ideas, and Elaboration (as the process of creating ideas to produce a lot of information and details).

A variety of studies on EFL learners' creativity have been undertaken. For instance, previous studies showed that learners' performance is related to both their creativity (Nami et al., 2014) and their instructors' level of creativity (Baghaei & Riasati, 2013). The results of a recent study by Baghaei & Baghaei (2022) also demonstrated that the creativity level of advanced English learners and their usage of grammar learning strategies were substantially associated.

Conducting a mixed-methods research, Zarinkamar et al. (2021)

found that dynamic assessment-based teaching can enhance EFL learners' creativity. In another study, Norouzi Sedeh and Tabatabaei (2021) concluded that employing social media for teaching vocabulary can improve EFL learners' creativity.

In an investigation into personality characteristics and creativity as the factors influencing on university students' foreign language learning, Novikova et al. (2020) found creativity has a greater influence on participants' foreign language proficiency than personality traits do.

In another study, Seddigh and Shokrpour (2016) investigated the influence of creativity in the use of vocabulary acquisition techniques by Iranian medical university students learning English. According to the researchers, there is a considerable relationship between creativity and the usage of vocabulary acquisition tools. Furthermore, in a correlational study, Baghaei and Bagheri (2013) discovered that the speaking ability of Iranian EFL learners was favorably associated with their creativity.

Alothman (2012) also explored the correlation between EFL learners' creativity and communicative skill in writing. The findings revealed that EFL learners with greater levels of creativity outperform those with lower levels of creativity in language learning (particularly in writing).

While creativity is thought to be a significant aspect of foreign language learning, research on how it links to other areas of learning including learners' WTC is totally inadequate. With the aid of this study, this research gap will be filled in. Accordingly, the current study sought to answer the following research questions.

1. Is there any significant relationship between Iranian EFL learners' willingness to communicate and their creativity?

2. Do the components of Iranian EFL learners' creativity predict their willingness to communicate in the classroom?

3. Methods

3.1. Design

This study employed a correlational design since it was attempting to estimate the correlation coefficient between two variables (learners' WTC

and their creativity). A correlational study is considered a form of quantitative research methodology. The components of EFL Learners' creativity (fluency, originality, flexibility, and elaboration) were also examined as the predictors for EFL learners' WTC.

3.2. Participants

The sample of the current study comprised 118 Iranian EFL learners learning English at several Shiraz language institutes. The participants were 73 females and 45 males whose ages ranged from 15 to 23 (M = 19.25, SD = 4.13) and their mother tongue was Farsi. Their language proficiency varied from intermediate to advanced levels. All participants provided informed consent via consent forms included in the questionnaires. They were assured that their replies would be held strictly confidential. In this investigation, a convenience sampling technique was used and the decision to take part in the study was fully voluntary. Participants were recruited through the distribution of questionnaires in language institutions and social networks (WhatsApp and Telegram).

3.3. Instruments

3.3.1. Willingness to communicate inside the classroom questionnaire

McIntyre et al. (2001) devised a Likert-type questionnaire to assess students' WTC in the classroom. The scale has 27 items ranging from 1 to 5 (with 1 being almost never willing, to 5 being almost always willing). In this questionnaire, participants are asked to express their willingness to communicate throughout class tasks. The items include participants' WTC inside the class in all four skills.

The followings are the alpha reliability estimates of the WTC questionnaire: speaking (8 items, r =.81), understanding (5 items, r =.85), reading (6 items, r =.79), and writing (8 items, r =.88).

3.3.2. Creativity questionnaire

Abedi's (1993) creativity questionnaire comprises 60 questions (with three answers) for assessing creativity in line with Torrance's framework (1965). It is worth mentioning that Abedi's creativity questionnaire is widely used in previous creativity studies, specifically in the

context of Iran. The creativity questionnaire has four scales: fluency (22 items), originality (11 items), flexibility (16 items), and elaboration (11 items). Each item contains three replies varying from the lowest level to the highest level of creativity, with a score ranging from 1 (low creativity) to 3 (high creativity). The sum of each sub-scale yields an overall score extending from 60 to 180, indicating overall creativity. In this study, the Persian version of this instrument was employed. In the current study, the reliability of the creativity questionnaire was assessed generally by applying Cronbach's alpha (r = .87).

3.4. Data collection procedure

In the first step, the researcher administered the questionnaires in language institutions, and in some cases, with the kind cooperation of the teachers, the questionnaires were sent to their students' educational groups on social media networks (WhatsApp and Telegram).

The purpose of the study and instructions regarding answering the questionnaires were presented in the first page of the questionnaires. In the electronic form of the questionnaires, participants indicated their willingness to participate in this research by clicking the link to access the questionnaires. They finished the surveys in 20 minutes.

Additionally, the participants were informed about the possibility to quit the participation whenever they wanted. Totally, 123 EFL learners constituted the population of the study. The refusal rate among the students was low. Of the study population, 121 subjects completed the questionnaires. By the end of the data collection period, data had been collected from 121 individuals, 3 of whom were discarded because of partial, incomplete, or inconsistent responses.

3.5. Data analysis procedures

All the statistical analyses of the study were done by SPSS 27. Tables were applied to represent the results of both descriptive and inferential statistical analysis. After collecting the data, the researcher engaged in data analysis in order to answer the study questions. First, Cronbach's alpha was run to estimate the reliability of the instruments. Furthermore, the face validity of the questionnaires was assessed by two experts. In the next step, the Kolmogorov-Smirnov test was used to as-

certain if the data distribution was normal. The association between the learners' WTC and their creativity was then calculated using the Pearson product-moment correlation coefficient. At last, the multiple linear regression analysis was run to explore the amount of variance accounting for the learners' WTC by the dimensions of learners' creativity.

4. Results

As previously stated, the factors of the current study were learners' WTC and their creativity. To begin, the skewness and kurtosis ratios were determined to check the normality of the data. To satisfy the normality assumption, the skewness and kurtosis ratios over their respective standard errors must be between +/- 1.96 (Kim, 2013). Table 1 depicts the results of the normality test.

Table 1: Normality Test

	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Creativity	1.23	.22	2.34	.44
Fluency	1.35	.22	1.44	.44
Originality	.23	.22	-.38	.44
Flexibility	.93	.22	.68	.44
Elaboration	1.13	.22	1.87	.44
WTC Total	.26	.22	.37	.44
WTC Speaking	-.13	.22	.02	.44
WTC Reading	-.66	.22	.79	.44
WTC Writing	1.89	.22	9.47	.44
WTC Comprehension	.32	.22	.08	.44

According to Table 1, it is reasonable to conclude that the data are normally distributed.

To investigate the first research question, Pearson correlation analyses were performed to explore if there was any statistically significant relationship between Iranian EFL learners' WTC and their creativity. Furthermore, the Cohen (1988) guideline was used to evaluate the strength of the link: "small relationship r=.10 to.29, medium relationship r=.30

to.49, and large relationship r=.50 to 1.0" (pp. 79-81). The Pearson correlation coefficient data are demonstrated in Table 3.

Table 2: Descriptive Statistics

	N	Minimum	Maximum
Creativity	118	105.00	157.00
Fluency	118	27.00	73.00
Originality	118	18.00	30.00
Flexibility	118	30.00	43.00
Elaboration	118	20.00	29.00
WTC Total	118	59.00	134.00
WTC Speaking	118	16.00	40.00

Table 3: Correlation between Learners' WTC and Their Creativity

		WTC Total	WTC Speaking	WTC Reading	WTC Writing	WTC Comprehension
Creativity	Pearson Correlation	.713**	.660**	.458**	.717**	.608**
	Sig. (2-tailed)	.00	.00	.00	.00	.00
	N	118	118	118	118	118

Based on the results presented in Table 3, it can be concluded that there was a positive and strong relationship between the participants' WTC and their creativity ($r = 0.71, n = 118, p < .05$). In addition, learners' creativity correlated significantly with their WTC in the following skills: speaking ($r = .66, p < .05$), reading ($r = .45, p < .05$), writing ($r = .71, p < .05$), and comprehension ($r = .60, p < .05$). The results suggest that more creative learners are more willing to communicate in the classroom.

A multiple linear regression analysis was applied to address the second study question, and the amount of variance accounting for the learners' WTC by each dimension was determined. Prior to this procedure,

to verify the normality and multicollinearity assumptions, preliminary studies were carried out. The normality of the data was checked by the skewness and kurtosis ratios (Table 1).

The Mahalanobis distance was then calculated to test the multicollinearity assumption. The pertaining results are presented in Table 4. Pearson and Hartley (1956) determined that for studies with four variables, the critical value for Mahalanobis distance is 18.47. Mahalanobis distances that exceed this threshold are considered to be of extreme value (Pallant, 2005).

Table 4: Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Mahal. Distance	.18	41.56	3.96	5.03	118

Following the evaluation of the assumptions, the regression analysis was carried out to investigate the capacity of each of the four dimensions of creativity in predicting WTC scores. Table 5 displays the relevant results.

Table 5: ANOVA Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12830.53	4	3207.63	41.36	.00[b]
	Residual	8762.55	113	77.54		
	Total	21593.09	117			

As shown in Table 5, the general model considerably predicted the WTC scores ($F(4, 113) = 41.36, p < .01$). Table 6 demonstrates the Model summary results.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.77[a]	.59	.58	8.80

The four independent variables (Fluency, Originality, Flexibility, and

Elaboration) explained 59 percent of learners' WTC (R =.77, R2 =.59). In keeping with the previous analysis, the results of multiple regression are shown, revealing the strength of the four dimensions in predicting WTC (Table 7).

Table 7: Coefficients in Multiple Regression Analysis

		Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-18.17	14.32		-1.26	.207					
	Fluency	1.86	.18	.67	10.24	.00	.75	.69	.61	.82	1.21
	Originality	.78	.42	.14	1.81	.07	.39	.16	.10	.60	1.64
	Flexibility	.41	.39	.08	1.06	.28	.42	.10	.06	.60	1.66
	Elaboration	-.07	.63	-.00	-.11	.90	.26	-.01	-.00	.74	1.34

According to Table 7, a significant t value was discovered for Fluency as one of the independent variables in the model. Furthermore, because the tolerance values are not close to zero and the Variance Inflation Factor (VIF) values are lower than 10, meaning that multicollinearity did not occur. Table 7 shows that the tolerance and VIF values computed for all independent variables were appropriate.

Following that, the B weights that reflected the predictive power of each independent variable were examined. According to the findings in Table 7, fluency was a significant predictor that had a positive B value, which meant that a rise in the predictor anticipated a rise in the participants' WTC.

5. Discussion

This study set out to determine if there is any statistically significant correlation between Iranian EFL learners' WTC and their creativity. The results demonstrated a positive significant association between the two variables under consideration. According to the magnitude of this relationship, high levels of creativity are associated with high levels of learners' WTC. This is not unexpected considering that, according to its different definitions, learners' creativity may be considered to be related to

almost all aspects of their speaking learning (Baghaei & Bagheri, 2013), writing (Alothman, 2012), and even using learning strategies (Baghaei & Baghaei, 2022).

Tomlinson (2015) also asserted that the potential for the required emotional and cognitive involvement of the learners, which is crucial for language learning is provided through creativity. In the same vein, Read (2015) indicated that creativity has effective use in the language learning process and language learners need creativity in all areas of the curriculum. Gurosy and Kubra Bag (2018) also pointed out that if English language learners successfully employ their creativity, they can easily participate in language production and the development of new meanings.

It is interesting to note that learners' creativity positively correlates with their WTC in speaking, reading, writing, and comprehension. It was also revealed that among the four aspects of WTC, creativity had the highest relationship with writing followed by speaking and comprehension, respectively. Reading, on the other hand, exhibited the lowest relationship. This rather intriguing finding might be explained by the fact that creativity is mostly manifested in learners' productive skills. Consistent with existing research evidence (Alothman, 2012; Baghaei & Bagheri, 2013), it is evident that creativity has a prominent role in learners' productive skills. As learners' WTC has a strong relationship with learners' speaking (Yousefi & Kasaian, 2014) and writing (Gholami & Barzegar, 2018) skills, learners' creativity positively relates to their WTC in the classroom.

Another purpose of the present study was to explore if the components of learners' creativity can predict their WTC in the classroom. The findings revealed that among four components of creativity, only fluency emerged as a reliable predictor of learners' WTC in the class. Fluency refers to the ability to generate a large number of thoughts and ideas (Torrance, 1965). Hence, it can plausibly be maintained that the more learners are able to provide interpretable, meaningful and relevant ideas, the more they are willing to communicate in class. The results of the current study are also in accord with the findings of the study conducted by Albert and Kormos (2004). They also found that among the

aspects of creativity, fluency plays the most important role in learners' performance in oral tasks.

6. Conclusion

This study set out to develop a better understanding of the role of creativity in learners' WTC. One of the more significant findings to emerge from this study is that learners' creativity is positively associated with their WTC in the classroom. The results also showed that learners' creativity has a positive correlation with their WTC in speaking, reading, writing, and comprehension, respectively. Furthermore, the findings substantiated the predictive role of fluency as one of the components of creativity in learners' WTC. Taken together, these findings suggest a significant role for learners' creativity in promoting their WTC.

The present study adds to the expanding body of evidence demonstrating that creativity is a significant factor in education. It can also have significant implications for educational policymakers and curriculum developers and EFL teachers in particular. First and foremost, it should inform EFL teachers. These findings can incite them to take their learners' creativity into account when evaluating their WTC. Additionally, teachers are urged to motivate their learners to produce novel and different ideas and responses in their classrooms.

Education policymakers and curriculum developers can create and promote curricula and teaching strategies with the goal of enhancing the creativity of EFL learners since as Isaksen, Puccio, and Treffinger (1993) indicated, "creativity can be promoted and nourished" (p. 158). To put it another way, they can focus on creative pedagogy, which develops learners' creativity in English classes whilst simultaneously enhancing language proficiency via extensive activities designed to stimulate their creativity.

When interpreting the present results, the following limitations have to be considered. First, the data of the current study only cover EFL learners learning English at language institutes. Although the findings are quite consistent with the results of preceding studies, future research has to show whether our results can be replicated for EFL learners learning English at schools or universities. In addition, in this study,

questionnaires were used to evaluate the relevant variables. Prospective researchers would be able to ascertain not only whether there are any possible correlations between the constructs but also the processes by which these constructs evolve by investigating these constructs using qualitative methods including interviews, case studies, and observations.

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