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Research Paper

The Interplay Between Oral Communication Strategies and Willingness to Communicate in Impulsive and Reflective EFL Learners

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Abstract
This descriptive quantitative study scrutinized the relationship between impulsive and reflective EFL learners' oral communication strategies (OCS) and willingness to communicate (WTC). To this end, 114 impulsive and reflective graduate-level EFL learners (67% female; 33% male), within the age range of 23 to 40, were selected employing convenience sampling. The data collection instruments were the impulsiveness sub-scale of Eysenck's impulsivity inventory (Eysenck & Eysenck, 1978), the OCS inventory (Nakatani, 2006), and the WTC scale (McCroskey, 1992). Subsequent to checking and verifying the pertinent assumptions, using Pearson's correlation coefficient indicated that there existed a positive yet insignificant correlation between impulsive EFL learners' OCS and their WTC; however, a positive and significant correlation between reflective EFL learners' OCS and their WTC was observed. In addition, the results of linear regression analyses and comparing the β values revealed that impulsive EFL learners' OCS cannot significantly predict their WTC whereas reflective EFL learners' OCS can significantly predict their WTC. In general, the obtained results confirmed that OCS can positively affect EFL learners' WTC, although attention should be paid to learners' impulsivity o reflectivity prior to planning the pedagogical practice.

Keywords: *Impulsivity, Oral communication strategies, Reflectivity, Willingness to communicate*

رابطه ی بین راهبردهای ارتباط گفتاری و تمایل به برقراری ارتباط زبان آموزان تکانشی و تعمقی زبان انگلیسی به عنوان زبان دوم
در این تحقیق توصیفی-کمی، رابطه ی بین راهبردهای ارتباط گفتاری و تمایل به برقراری ارتباط زبان آموزان تکانشی و تعمقی زبان انگلیسی به عنوان زبان دوم مورد بررسی قرار گرفت. بدین منظور، 114 نفر از دانشجویان تکانشی و تعمقی زبان انگلیسی به عنوان زبان دوم در مقطع ارشد و دکترا (67% زن، 33% مرد) در محدوده سنی 23 تا 40 انتخاب شدند. سه پرسشنامه ی تیپ شخصیتی آیزنک و آیزنک (1978)، استفاده ازراهبردهای ارتباط گفتاری (Nakatani, 2006) و تمایل به برقراری ارتباط (McCroskey, 1992) به عنوان ابزار جمع آوری اطلاعات قرار گرفت. سپس به منظور بررسی فرضیه های تحقیق از روش ضریب همبستگی پیرسون استفاده شد که بر اساس نتایج به دست آمده ارتباط مثبت اما ناچیزی بین راهبردهای ارتباط گفتاری و تمایل به برقراری ارتباط در زبان آموزان تکانشی وجود دارد. همچنین ارتباط مثبت و معناداری بین راهبردهای ارتباط گفتاری و تمایل به برقراری ارتباط در زبان آموزان تعمقی وجود دارد. به علاوه، نتایج به دست آمده از تحلیل رگرسیون خطی و مقایسه β values نشان داد که

راهبردهای ارتباط گفتاری زبان آموزان تکانشی نمیتواند تمایل به برقراری ارتباط آنها را پیش بینی کند. در حالیکه راهبردهای ارتباط گفتاری زبان آموزان تعمقی میتوانند به صورت معناداری تمایل به برقراری آنها را پیش بینی کنند.به طور کلی، نتایج به دست آمده از این تحقیق ثابت میکند که راهبردهای ارتباط گفتاری میتواند تاثیر بسزایی بر تمایل به برقراری ارتباط زبان آموزان زبان انگلیسی به عنوان زبان دوم داشته باشند. اگرچه توصیه میشود که قبل از برنامه ریزی برای تمرین های آموزشی، به این موضوع که زبان آموزان تکانشی هستند یا تعمقی توجه شود.
واژگان کلیدی: تعمقی، راهبردهای ارتباط گفتاری، تکانشی، تمایل به برقراری ارتباط

Introduction

Back in 1999, contemporaneous with the growing cognizance of the role of mental/cognitive and personality factors in human behavior and learning, Gardner sensibly stated that "the biggest mistake of past centuries in teaching has been to treat all students as if they were variants of the same individual, and thus to feel justified in teaching them the same subjects in the same ways" (Gardner, 1999, p. 9); however, in this day and age, the realm of English language teaching is witnessing an endeavor to fathom how learners' unique mental qualities affect the development of second language skills (Nosratinia & Zaker, 2014; Zaker, 2016). As an influential mental quality among EFL learners, one of the dimensions of cognitive style, i.e. impulsivity or reflectivity, is explicitly acknowledged to be a major player in mastering second language skills (Brown, 2007; Kettler, 2014; Thomson, 2010).

As postulated by Dörnyei (2005), the cognitive style is capable to determine "an individual's preferred and habitual modes of perceiving, remembering, organizing, processing and representing information" (p. 125). In general, it is believed that reflective learners are "slow deciders in uncertain situations" while impulsive learners are "quick deciders in uncertain circumstances" (Block, Block, & Harrington, 1974, p. 611). From another perspective, "an impulsive person makes quick guesses and relies heavily on his/her hunches" whereas a reflective person "takes into account a variety of factors before making a calculated decision, requiring more patience" (Rashtchi & Keyvanfar, 2010, pp. 177-178).

Numerous ELT scholars agree that this specific dimension of cognitive style (impulsivity vs. reflectivity) has the capability to exert profound influence on other mental qualities among EFL learners (Oxford, 1990; Pashler et al., 2008). Furthermore, there exists a unanimous consensus among ELT researchers and psycholinguists that among hundreds of studied and scrutinized mental qualities pertinent to the quality of L2 learning, oral communication strategies and willingness to communicate are two immensely influential mental qualities when it comes to developing second (in this case English) language proficiency (MacIntyre et al., 1998; Marashi & Moghaddam, 2014; Richard & Rodgers, 2001).

Basically, oral communication strategies show "how speakers comprehend a conversation or how they produce sentences, how they get help from other factors, and what their reaction will be if they do not succeed" (Shojaee, 2016, p. 21). Arguably, mastery of these strategies has the potential to develop individuals' communication skills (Nakatani, 2010). On the other hand, willingness to communicate is defined as "a readiness to speak in the L2 at a particular time with a specific person and as such, is the final psychological step in the initiation of L2 communication" (Macintyre & Doucette, 2010, p. 162). Such a desire to engage in communication is believed to function as a means for developing L2 proficiency (Howatt, 1984; Zaker, 2016).

One of the most common problems observed among EFL learners is reluctance to participate in classroom discussion, and many learners lack a willingness to communicate (Alemi, Tajeddin, & Mesbah, 2013). Due to this unwillingness to communicate, some learners

would prefer to be silent and not to interact with others in communicative activities. Lack of willingness to communicate leads to low interaction and language production (Freiermuth & Jarrel, 2006), and it is believed that one of the sources of EFL learners' lack of willingness to communicate is that they do not apply efficient oral communication strategies (Nakatani, 2010). Therefore, considering that the most important goal of second or foreign language learning is improving communication skills among learners with different cultures and languages (Yashima, Zenuk-Nishide, & Shimizu, 2004), it seems sensible and legitimate to systematically inspect the way oral communication strategies and willingness to communicate interact among the two abovementioned dimensions of cognitive style (impulsivity or reflectivity).

Excluding the type of cognitive style from the equation, multiple studies have directly and indirectly suggested or confirmed the existence of a positive association between oral communication strategies and willingness to communicate (McCroskey & Richmond, 2007; Nakatani, 2006; Sarvghadi, 2016). Nonetheless, the systematic examination of the abovementioned association while considering reflectivity and impulsivity appeared to be a somehow neglected area which turned into the main purpose of this study. From the pedagogical perspective, the results of this endeavor can assist ELT practitioners in making well-informed and sensible pedagogical decisions when the amplification of willingness to communicate among EFL learners with different cognitive styles (impulsive and reflective) is intended. Accordingly, in order to partially fill the abovementioned gap, the researchers formulated these research questions:

Q_1: Is there any significant relationship between impulsive EFL learners' oral communication strategies and their willingness to communicate?

Q_2: Is there any significant relationship between reflective EFL learners' oral communication strategies and their willingness to communicate?

Q_3: Do impulsive EFL learners' oral communication strategies significantly predict their willingness to communicate?

Q_4: Do reflective EFL learners' oral communication strategies significantly predict their willingness to communicate?

Review of the Literature

Impulsivity and Reflectivity

Field dependence/field independence, left/right-brain functioning, ambiguity tolerance, visual/auditory and impulsivity/reflectivity are the proposed dimensions of cognitive styles (Brown, 2000), and as an influential mental quality among EFL learners, one of these dimensions, i.e. impulsivity or reflectivity, is explicitly acknowledged to be a major player in developing L2 skills (Brown, 2007; Kettler, 2014; Thomson, 2010). Kagan et al. (1964) were the first researchers who proposed the term impulsivity and reflectivity. Kagan et al. (1964) stated that impulsive individuals are "those who make decisions and announce them very fast with little concern for accuracy" and reflective individuals are "those who take relatively longer decision time and make fewer errors" (p. 27).

Numerous ELT scholars agree that this specific dimension of cognitive style (impulsivity vs. reflectivity) has the capability to exert profound influence on other mental qualities among EFL learners (Oxford, 1990; Pashler et al., 2008). There have been several studies related to impulsivity and reflectivity in the field of language learning. For instance, Navid Adham (2013) investigated the effect of two different types of learning modalities, namely cooperative and competitive, on impulsive and reflective EFL learners' writing achievement. The results indicated

that reflective learners performed better both in cooperative and in competitive techniques in comparison with the impulsive learners.

In another study, Mahdavinia and Molavizade (2013) reported that reflective learners used more idioms in their writings than impulsive ones. Also, Salimian and Tabatabaei (2015) reported that there was a relationship between EFL learners' level of autonomy and their degree of reflectivity. The abovementioned example studies, in addition to numerous others in the literature, leave no doubt that impulsivity and reflectivity can directly and indirectly affect the process of language learning and learners' other mental attributes. Therefore, the present study aspired to focus on the association between oral communication strategies and willingness to communicate while considering reflectivity and impulsivity, a somehow neglected area in the ELT domain.

Oral Communication Strategies

The word strategy comes from the ancient Greek term strategia meaning generalship or the art of the war. Oxford (1990) defined strategy as "actions, behaviors, steps, or techniques students use, often unconsciously, to improve their progress in apprehending, internalizing, and using the L2" (p. 1). These strategies can facilitate the internalization, storage, retrieval or use of the new language. According to Brown (2000, p. 122) there are two types of strategy: learning strategies and communication strategies. Learning strategies are related to "input- processing, storage and retrieval- to taking in messages from others" and communication strategies are related to "output- how we productively express meanings and deliver messages to others" (Brown, 2000, p. 123).

Many experts in the field of language learning and teaching have provided various classifications of communication strategies. Nakatani (2006) used the term oral communication strategies instead of communication strategies to refer to "strategic behaviors that learners use when facing communication problems during interactional tasks" (p. 152). This term is used to "highlight interlocutors' negotiation behavior for coping with communication breakdowns and their use of communication enhancers" (p. 118). Oral communication strategies consist of 58 items with two broad categories: strategies for coping with speaking problems with 32 items and strategies for coping with listening problems with 26 items. The first part consists of eight subcategories of social affective, fluency-oriented, negotiation for meaning while speaking, accuracy-oriented, message reduction and alternation, nonverbal strategies while speaking, message abandonment, and attempt to think in English. The second part consists of seven subcategories of negotiation for meaning while listening, fluency-maintaining, scanning, getting the gist, nonverbal strategies while listening, less active listener, and word-oriented (Nakatani, 2006, pp. 155-157).

Willingness to Communicate

The concept of *un*willingness to communicate was introduced by Burgoon back in 1976; it was defined as "a chronic tendency to avoid and/or devalue oral communication and to view the communication situation as relatively unrewarding" (Burgoon, 1976, p. 60). Later, unwillingness to communicate was replaced with a positive term which was willingness to communicate by McCroskey and Baer (1985) in L1 education to describe individual differences in communication. Willingness to communicate is the influential variable that has a very important role in learning a foreign or second language (MacIntyre & Legatto, 2011); it is defined as "an individual's volitional inclination towards actively engaging in the act of communication in a

specific situation, which can vary according to interlocutor, topic, and conversational context, among other potential situational variables" (Kang, 2005, p. 291).

McCroskey and Richmond (2007) stated that there are some variables that lead to differences in the degree of willingness to communicate among individuals. They referred to these variables as "antecedents". The most significant antecedents are communication apprehension (communication anxiety), self-perceived communication competence, motivation, personality, content and context, gender and age. Besides, MacIntyre et al. (1998) proposed a heuristic model of the willingness to communicate construct with an account of linguistic, communicative, and social psychological variables that may influence learners' willingness to communicate in the second or foreign language communication. Some researchers such as MacIntyre et al. (2003) and MacIntyre et al. (1998) have argued that an ultimate goal of L2 education should be the encouragement of willingness to communicate in language learning, because willingness to communicate is expected to facilitate the language learning process. This means that higher willingness to communicate among students causes increasing opportunity for practice in L2 and authentic language use. Therefore, understanding the factors that might increase or decrease language learners' opportunities and readiness to speak in language classrooms is necessary.

Methodology

Design

The present study adopted a descriptive correlational research design in the sense that there was no manipulation in the research context (Best & Kahn, 2006). Participants' cognitive style, impulsive/reflective, was considered a moderator variable. Also, two correlated variables were involved in this study, i.e. oral communication strategies and willingness to communicate. Furthermore, participants' gender was categorized as intervening variable over which the researcher had no control.

Participants

The participants of the present study were 114 graduate-level male and female (76 or 67% female & 38 or 33% male) EFL learners, within the age range of 23 to 40, studying English Translation, Teaching English as a Foreign Language, and English Literature at Islamic Azad University, Central Tehran and South Tehran branches. They were selected based on convenience sampling strategy. It should be mentioned that the initial number of participants was 201; however, a number of 87 individuals were excluded from data due to providing incomplete answers, bringing the final number to 114 participants.

Instrumentation

In order to fulfill the purpose of this study the three following questionnaires were utilized.

Impulsiveness sub-scale of Eysenck's impulsivity inventory

This instrument, also known as the Impulsiveness, Venturesomeness and Empathy questionnaire, was developed by Eysenck and Eysenck (1978). It consists of three sub-scales which are designed to assess three traits of Impulsivity (19 items), Venturesomeness (16 items) and Empathy (19 items), each of which can be used separately (Eysenck & Eysenck, 1978). In this study, only the impulsiveness sub-scale of the questionnaire was answered by the participants based on yes or no responses. The respondents were supposed to answer the questions in 10

minutes. The calculated reliability index of this instrument in the present study was estimated to be 0.82, using the Cronbach's alpha coefficient.

Oral communication strategy inventory

Developed and validated by Nakatani (2006), the Oral Communication Strategy Inventory (OCSI) for EFL university students aims to assess the frequency with which the students use certain strategies in oral communication while coping with speaking problems in L2 communicative tasks. The inventory consists of 58 statements divided into two sections: strategies for coping with speaking problems related to strategic behavior during communicative tasks (32 items) and strategies for coping with listening problems related to strategic behavior in comprehension during communicative tasks (26 items).

Participants are expected to respond on the five-point Likert scale ranging from 1 (*never or almost never true of me*) to 5 (*always or almost always true of me*). The allocated time for responding to the items of the questionnaire is 30 minutes, and the scores can vary from 58 to 290. In this study, the reliability index of this instrument was estimated to be 0.82, using Cronbach's alpha coefficient.

Willingness to communicate scale

The Willingness to Communicate Scale, developed by McCroskey (1992), was designed as a direct measure of the respondents' willingness to initiate communication. It consists of twenty situations in which an individual may choose to communicate or avoid communication. Including 20 items, this instrument can yield a total score of 0 to 100. Eight items are fillers, and 12 are scored as part of the scale; the participants are supposed to respond by determining the percentage of times they would choose freely to communicate ranging from 0 (*never*) to 100 (*always*). The allocated time for answering the questionnaire is 10 minutes. In the present study, the reliability of this questionnaire was computed through Cronbach alpha at 0.88.

Procedure

To achieve the purpose of this study and address the aforementioned research questions, the researchers went through the following procedure. Because of the Coronavirus pandemic, the online version of the three instruments of the study was prepared. This was followed by sharing the link of the online questionnaires among the participants, using messaging applications and e-mail. The main ethical guidelines were followed (Zaker & Nosratinia, 2021), and the participants were provided with the required information on the purpose of the study, the answering procedure, and the time they may spend on answering the questionnaires. The questionnaires were answered by 201 of the abovementioned EFL learners; however, from 201 received files, only a number of 114 questionnaire sets were answered completely. The completed files/questionnaires were scored by the researchers, and finally, the statistical procedures were conducted in order to answer the formulated research questions.

Results

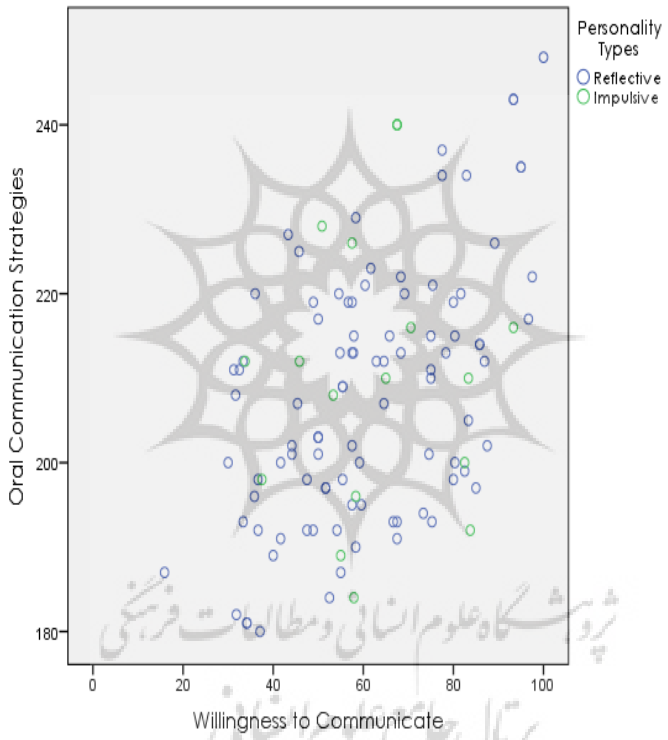
In this correlational descriptive study (Best & Kahn, 2006), EFL learners' oral communication strategies and willingness to communicate were the correlated variables, and cognitive style with two possibilities (impulsiveness and reflectiveness) was the moderator variable. Using the collected data, the researchers conducted a series of pertinent calculations and statistical routines whose results are presented in this section.

Preliminary Analyses

Prior to answering the research questions, it was essential to check a number of assumptions and perform some preliminary analyses. To begin with, the assumptions of interval data (for oral communication strategies and willingness to communicate) and independence of subjects/participants (Tabachnick & Fidell, 2013) were already met as the present data (on oral communication strategies and willingness to communicate) were measured on an interval scale and the participants were independent of one another. In order to check the linearity of relations, the researchers created a scatterplot in which cognitive styles are highlighted (Figure 1).

Figure 1

The scatterplot of oral communication strategies and willingness to communicate highlighting the cognitive styles



Through inspecting Figure 1, it can be inferred that the relationship between these variables is not non-linear. Additionally, the distribution of scores was not funnel shape, i.e. wide at one end and narrow at the other; therefore, the assumption of homoscedasticity was met. For checking the normality of the distributions, two procedures were followed. First, the descriptive statistics of the data were obtained and kurtosis and skewness ratios were calculated; this was followed by inspecting the distribution histograms and Normal Q-Q Plots. Second, the Kolmogorov-Smirnov test was run as a further attempt to inspect the normality of the distributions.

Table 1
Descriptive Statistics of the Scores

					Skewness			Kurtosis		
	Cognitive Styles	N	Mean	SD	Statistic	Std. Error	Ratio	Statistic	Std. Error	Ratio
Oral Communication Strategies	Reflective	96	207.99	15.032	.382	.246	**1.55**	-.225	.488	**-.46**
	Impulsive	18	212.06	17.437	.265	.536	**.49**	-.781	1.038	**-.75**
Willingness to Communicate	Reflective	96	60.88	19.241	.116	.246	**.47**	-.786	.488	**-1.61**
	Impulsive	18	62.83	16.178	.084	.536	**.15**	-.391	1.038	**-.37**

As demonstrated in Table 1, the distribution of oral communication strategies and willingness to communicate scores among impulsive and reflective participants seemed to be normal as the pertinent skewness ratio and kurtosis ratio values fell within the range of -1.96 and +1.96. This point supports the normality of distributions (Tabachnick & Fidell, 2013). Next, checking the actual shapes of the distribution of the scores and the normal probability plots provided further support for the normality of distributions. Finally, Kolmogorov-Smirnov and Shapiro-Wilk tests were run, results of which are presented in Table 2.

Table 2
Tests of Normality of Total Scores

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Cognitive Style	Statistic	df	Sig.	Statistic	df	Sig.
Oral Communication Strategies	Reflective	.088	96	**.062**	.978	96	**.101**
	Impulsive	.133	18	**.200***	.944	18	**.335**
Willingness to Communicate	Reflective	.084	96	**.092**	.976	96	**.077**
	Impulsive	.110	18	**.200***	.973	18	**.850**

Note. [a]Lilliefors Significance Correction. *This is a lower bound of the true significance.

As presented in Table 2, all the Sig. values of both Kolmogorov-Smirnov and Shapiro-Wilk tests among impulsive and reflective participants are higher than the critical value (.05).

Therefore, the normality of distribution for the scores is supported (Tabachnick & Fidell, 2013). Considering the results obtained above, it was systematically suggested that the assumption of normality is met for the scores of oral communication strategies and willingness to communicate among impulsive and reflective participants. Therefore, the researchers concluded that the research questions should be answered through employing parametric tests.

Answering the Research Questions

In what follows, each research question is separately addressed and dealt with. However, as the legitimacy of considering the third and fourth research questions is dependent on the answers of the first and second research questions, the preliminary analyses pertinent to the third and fourth research questions will be reported after answering the initial research questions.

The first research question. The first intention of this study was to systematically investigate the relationship between impulsive EFL learners' oral communication strategies and willingness to communicate. In order to answer this question, the data were analyzed using Pearson's product-moment correlation coefficient, a parametric formula. Table 3 shows the result of this analysis.

Table 3

Pearson's Correlation between Impulsive EFL Learners' Oral Communication Strategies and Willingness to Communicate

		Oral Communication Strategies	Willingness to Communicate
Oral Communication Strategies	Pearson Correlation	1	**.075**
	Sig. (2-tailed)		.766
	N	18	18

According to the results of the analysis reported in Table 3, it was concluded that there was a positive yet insignificant correlation between impulsive EFL learners' oral communication strategies and willingness to communicate, r = .075, n = 18, p = .76, and high levels of oral communication strategies were roughly associated with high levels of willingness to communicate in this small sample of impulsive EFL learners (n = 18).

The second research question

The second intention of this study was to systematically investigate the relationship between reflective EFL learners' oral communication strategies and willingness to communicate. In order to answer this question, the data were analyzed using Pearson's product-moment correlation coefficient. Table 4 shows the result of this analysis.

Table 4

Pearson's Correlation between Reflective EFL Learners' Oral Communication Strategies and Willingness to Communicate

		Oral Communication Strategies	Willingness to Communicate
Oral Communication Strategies	Pearson Correlation	1	**.540****
	Sig. (2-tailed)		.000
	N	96	96

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

As reported in Table 4, it was concluded that there existed a significant and positive correlation between reflective EFL learners' oral communication strategies and willingness to communicate, r = .54, n = 96, p < .01, and high levels of oral communication strategies were

associated with high levels of willingness to communicate. According to Cohen (1988), this signified a large effect size (99% confidence intervals: 0.325 to 0.702).

The third research question

As reported above, the correlations between impulsive EFL learners' oral communication strategies and willingness to communicate turned out to be positive yet insignificant. However, to investigate the relationship between these two variables among impulsive participants further, the researchers opted for the linear regression analysis. In order to answer this question, a standard linear regression was run. Prior to running the analysis, the Tolerance (*Tolerance* = 1 > .10) and VIF (*VIF* = 1 < 10) values were checked, indicating that multicollinearity did not exist in this sample. Moreover, inspecting the Normal Probability Plot (P-P) and the scatterplot of the standardized residuals indicated that the assumption of normality was met. Based on the obtained results, R came out to be 0.075 and R^2 came out to be 0.006, meaning that the model explains 0.6 percent of the variance in willingness to communicate among impulsive EFL learners (Cohen et al., 2003). Moreover, f^2 =.006 indicated a very small effect size for the regression. The results of ANOVA (*F* (1, 16) =.091, *p* = 0.766), the results of which were considered insignificant, indicated that the model cannot significantly predict the involved variables.

Table 5 demonstrates the Standardized Beta Coefficient which signifies the degree to which each predictor variable contributes to the prediction of the predicted variable. The inspection of the Sig. values section showed that oral communication strategies make a statistically insignificant unique contribution to the equation as its Sig. value is above .05.

Table 5

Regression Output: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients			Part Correlations
		B	Std. Error	β	T	Significance	
1	(Constant)	48.011	49.203		.976	.344	
	Oral Communication Strategies	.070	.231	.075	.302	**.766**	**.075**

Finally, the inspection of Part correlation (semipartial correlation coefficient) revealed that oral communication strategies uniquely explains 5.6 percent of the variance in willingness to communicate among impulsive EFL learners (.075 × .075 = .0056).

The fourth research question

As reported earlier, the correlations between reflective EFL learners' oral communication strategies and willingness to communicate turned out to be positive and significant. Nevertheless, in order to answer this question, a standard linear regression was run. Prior to running the analysis, the Tolerance (*Tolerance* = 1 > .10) and VIF (*VIF* = 1 < 10) values were checked, indicating that multicollinearity did not exist in this sample. Furthermore, inspecting the Normal Probability Plot (P-P) and the scatterplot of the standardized residuals indicated that the assumption of normality was met. Based on the obtained results, *R* came out to be 0.54 and R^2

came out to be 0.292, meaning that the model explains 29.2 percent of the variance in willingness to communicate among reflective EFL learners (Cohen et al., 2003). Moreover, f^2 =.412 indicated a large effect size for the regression. The results of ANOVA (F (1, 94) = 38.76, p = 0.0005), the results of which were considered significant, indicated that the model can significantly predict reflective EFL learners' oral communication strategies and willingness to communicate.

Table 6 demonstrates the Standardized Beta Coefficient which signifies the degree to which each predictor variable contributes to the prediction of the predicted variable. The inspection of the Sig. values section showed that oral communication strategies makes a statistically significant unique contribution to the equation as its Sig. value is less than .05.

Table 6

Regression Output: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients			Part Correlations
		B	Std. Error	β	T	Significance	
1	(Constant)	-82.983	23.166		-3.582	.001	
	Oral Communication Strategies	.692	.111	.540	6.226	**.000**	.540

Finally, the inspection of Part correlation (semipartial correlation coefficient) revealed that oral communication strategies uniquely explains 29.16 percent of the variance in willingness to communicate among impulsive EFL learners (.54 × .54 = .2916).

Discussion

The present study aspired to inspect the relationship between oral communication strategies and willingness to communicate among impulsive and reflective EFL learners. In this correlational descriptive study (Best & Kahn, 2006), EFL learners' oral communication strategies and willingness to communicate were the correlated variables, and cognitive style with two assumed possibilities (impulsiveness and reflectiveness) was the moderator variable.

Subsequent to the satisfaction of the assumptions of normality, the research questions were answered through employing parametric tests. Through answering the first research question, it was indicated that there was a positive yet insignificant correlation between impulsive EFL learners' oral communication strategies and their willingness to communicate, r = .075, n = 18, p = .76. The basis of formulating the second research question was to inspect the state of the same relationship, this time among reflective participants, and the obtained results indicated that there was a significant and positive correlation between reflective EFL learners' oral communication strategies and their willingness to communicate, r = .54, n = 96, p < .01 (signifying a large effect size).

To rephrase it, when impulsiveness or reflectiveness was involved, a positive correlation between oral communication strategies and willingness to communicate was observed. However, this correlation was only significant among reflective EFL learners. This could be interpreted as a preliminary indication of the assumed potential of cognitive styles for affecting other mental qualities among individuals (Oxford, 1990; Pashler et al., 2008). However, it is important to emphasize that observing the abovementioned difference in terms of the significance of the

relationships between the two groups is directly related to the difference between the participant numbers in the two groups and its impact on the degree of expected relationships between the two variables (Best & Kahn, 2006).

With regard to previous research, the obtained answers to the first and second research questions provided further support for the existence of a positive relationship between oral communication strategies and willingness to communicate, as reported and suggested in previous studies (e.g. McCroskey & Richmond, 2007; Nakatani, 2006; Sarvghadi, 2016). Consequently, it seems sensible to argue that developing oral communication strategies would enhance the level of willingness to communicate among EFL learners, pushing them toward possessing higher levels of learner autonomy as well as increasing their exposure and practice in authentic second language communication (Kang, 2005; MacIntyre et al., 2001). In terms of research design and statistics, the observed relationships made it more reasonable to consider oral communication strategies the predictor variable of EFL learners' willingness to communicate (Best & Kahn, 2006). However, a systematic probe was required in order to scrutinize the predictive capacity of oral communication strategies in terms of predicting willingness to communicate.

Answering the third and fourth research questions enabled the researchers to probe into the capacity of oral communication strategies for predicting willingness to communicate among impulsive and reflective EFL learners. Based on the obtained results, in the small group of impulsive EFL learners (n = 18), using oral communication strategies was not a significant predictor of willingness to communicate (β = .075, p = .766). However, in the relatively larger group of participants, i.e. reflective participants (n = 96), oral communication strategies could significantly predict participants' willingness to communicate (β = .54, p = .0005).

Based on the previously obtained results in research questions one and two, observing such a difference between impulsive and reflective EFL learners' oral communication strategies in predicting their willingness to communicate was not a false expectation, and it is sensible to state that this difference is attributed to the difference between the two groups regarding the number of participants (Best & Kahn, 2006). However, it is legitimate to suggest that further studies are required in order to confirm or reject the existence of the difference between the two groups when the predictive capacity of oral communication strategies is under investigation. All in all, it makes sense to argue that considerable support is provided for the existence of a positive relationship between oral communication strategies and willingness to communicate (McCroskey & Richmond, 2007; Nakatani, 2006; Sarvghadi, 2016).

Finally, it is essential to make the point that participants' internal factors, which are highly diverse and influential (Nosratinia & Zaker, 2014, 2017), along with other features of the context and participants can influence the findings of studies in the ELT domain (Best & Kahn, 2006; Tabachnick & Fidell, 2007); this suggests that the state of the relationship between EFL learners' oral communication strategies and willingness to communicate should be checked and confirmed in other ELT contexts.

Conclusion

As stated earlier, observing different levels of correlation among impulsive and reflective EFL learners in this study could be considered a preliminary indication of the assumed potential of impulsiveness or reflectiveness for affecting other mental qualities among EFL learners (Oxford, 1990), in this case oral communication strategies and willingness to communicate. However, due to the fact that there were unequal numbers of participants in the impulsive and reflective groups, there are some key points to consider regarding the interpretation of the obtained results. On the one hand, there is an idea that willingness to communicate is affected by

personality and mental qualities (McCroskey & Richmond, 2007), and there exists a firm belief that cognitive styles have the capability to exert profound influence on mental qualities like oral communication strategies (Oxford, 1990; Pashler et al., 2008). On the other hand, an equal or almost equal number of individuals is needed if making a reliable comparison between two groups of participants is intended (Best & Kahn, 2006). Therefore, other replication studies with equal numbers of impulsive and reflective EFL learners are needed in order to get a more profound understanding of the way cognitive styles affect mental qualities among different individuals.

All in all, the obtained results in this study confirm that oral communication strategies can positively affect EFL learners' willingness to communicate, although attention should be paid to learners' cognitive styles prior to planning the instruction and focusing on strategy training. Therefore, teacher training programs need to provide EFL teachers with adequate training on how to introduce and instruct different oral communication strategies required for improving reflective EFL learners' willingness to communicate; furthermore, these teachers need to master skills for assisting impulsive EFL learners' with developing their willingness to communication. Expecting such a focused instruction calls for giving EFL teachers the required tools for detecting EFL learners' cognitive styles as well as developing learners' oral communication strategies and willingness to communicate. In order to amplify impulsive learners' willingness to communicate, in addition to working on this willingness directly, EFL teachers might resort to encouraging reflectivity among the learners through providing some psychological treatments and techniques, such as asking them not to answer questions hurriedly and carelessly; furthermore, EFL learners can be encouraged to exercise and implement critical thinking when carrying out pedagogical tasks and activities in order to obtain a higher level of reflectivity (Nosratinia & Zaker, 2014; Zaker, 2016).

Both reflective and impulsive EFL learners need models to learn how to use the most effective oral communication strategies (Faerch & Kasper, 1983), and it is believed that if learners know how to use oral communication strategies appropriately, they will be able to fill the gap between pedagogic and non-pedagogic communication situations (Faerch & Kasper, 1983) and consequently have more willingness to communicate. Not only the teachers, but also the students (both impulsive and reflective EFL learners) can try to create a friendly and secure atmosphere in the classroom through being considerate and having a friendly behavior. In fact, in such an atmosphere EFL learners feel comfortable to speak or communicate with other classmates, ask and answer questions, get actively involved in class discussions, and finally have more willingness to communicate. This way, a sense of cooperation rather than competition is created among EFL learners which can ease the application of oral communication strategies (Zou, 2004).

Syllabus designers are recommended to incorporate different oral communication strategies in their syllabi and consequently improve both impulsive and reflective EFL learners' willingness to communicate. Material developers can encourage EFL learners to use appropriate oral communication strategies, provide more communication opportunities for language learners, motivate them to have an engagement in communication, and enhance their willingness to communicate. These materials should be developed in a way to satisfy EFL learners' cognitive styles (reflective/impulsive). Besides, material developers need to take into consideration the influence of different cognitive styles on using EFL learners' oral communication strategies and their willingness to communicate. They should also develop various tasks in the way that EFL learners with different cognitive styles can benefit from them and consequently have more willingness to communicate.

Considering the focus, design, and limitations of this study, other researchers are recommended to replicate this study with an equal number of males and females, so that impact of gender as an intervening variable may be eliminated; they may also consider the impact of age on the level of cognitive styles under investigation. Also, selecting the participants from different contexts, e.g. private language schools, can be exercised in other studies. Another recommendable idea is employing some qualitative instruments in order to increase the validity and reliability of the results and interpretations. Besides, other researchers may employ pure/simple random sampling while replicating this study in order to enhance the validity of the findings; they may also attempt to have an equal number of impulsive and reflective EFL learners or have a larger sample of both impulsive and reflective EFL learners, and, finally, other researchers are recommended to take other cognitive styles such as field dependent vs. field independent, or extroversion vs. introversion into account.

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