

# Self-regulation and Locus of Control Predicting EFL Learners' Willingness to Communicate

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**Abstract**—The purpose of this descriptive quantitative research was to systematically investigate the association among EFL learners' Self-Regulation (SR), Locus of Control (LC), and their Willingness to Communicate (WTC). To fulfill this purpose, 222 male and female EFL learners, within the age range of 20 to 32 ( $M_{age} = 26$ ) were selected based on the convenience sampling strategy. These participants were asked to fill in three questionnaires, namely the English versions of the Motivated Strategies for Learning Questionnaire (Pintrich, Smith, Garcia, & McKeachie, 1991), the Internal Control Index (Duttweiler, 1984), and the WTC Scale (McCroskey, 1992). Since the assumptions of normality of distribution were partially violated, the research questions were answered using parametric and non-parametric tests. The obtained results led the researchers to conclude that significant and positive correlations exist between SR and WTC, SR and LC, and LC and WTC. Furthermore, considering WTC the predicted variable, a regression analysis revealed that LC is a better predictor of WTC than SR. The study finally presents a discussion on the results and provides some implications for those engaged in EFL learning and instruction.

**Index Terms**—internal factors, locus of control, self-regulation, speaking, willingness to communicate

## I. INTRODUCTION

In the previous decades, English has established its position as a lingua franca – an extremely common international language (Mitchell & Myles, 2004; Morley, 1987). More recently, we have witnessed the growing endorsement of the social constructivist theory, highlighting the role of active and planned communication in second language (L2) learning (Ashton-Hay, 2006; Zaker, 2016a, 2016b). As a result, many studies have tried to investigate some factors to help learners to learn English more effectively while their main focus is on oral communication or speaking (MacIntyre, 2007; MacIntyre, Baker, Clément, & Donovan, 2003; Sheldon, 2008; Yashima, 2002).

One variable that seems to have an important impact on speaking is willingness to communicate. Speaking in a second or foreign language has often been viewed as "the most demanding of the four skills" (Bailey & Savage, 1994, p. 7) and the most difficult and challenging skill language learners have to face (Brown, 1994). The notion of willingness to communicate is the first step to speak and plays a key role in learning how to speak in a second/foreign language (MacIntyre, Dörnyei, Clément, & Noels, 1998; Moazzam, 2014). The concept of willingness to communicate was first introduced in first language (L1) by McCroskey and his colleagues (McCroskey, 1992; McCroskey & Richmond, 1990; Zakahi & McCroskey, 1989) to describe individual differences in L1 communication (MacIntyre, Baker, Clément, & Conrod, 2001). It is defined as "variability in talking behavior, which is rooted in a personality variable" (McCroskey & Baer, 1985, p. 3).

Today, willingness to communicate is emerging as a concept not only to describe individual differences in L1 but also individuals' differences in L2 communication (Yashima, 2002). In regard to L2 contexts, willingness to communicate is described as "a readiness to enter into discourse at a particular time with specific person or persons using an L2" (MacIntyre et al., 1998, p. 547). MacIntyre et al. (1998) added that willingness to communicate is a multifaceted factor and influenced by the degree of self-confidence, attitude toward L2 culture, communication context, and personality factors.

Considering the importance of willingness to communicate in learning a foreign language for language learners (MacIntyre et al., 1988), many attempts have been made to identify and determine factors which influence, enhance, or even impede learners' willingness to communicate. In this regard, Dörnyei (2005) underscores the effect of psychological factors on the process of language learning specifically in speaking process. One of the probable influential psychological factors in willingness to communicate and consequently speaking process is learners' self-regulation (Mahjoob, 2015). Schunk and Zimmerman (1994) defined self-regulation as "a process student use in order to activate and sustain cognitions, behaviors, and affects, which are systematically oriented toward attainment of their goals" (p. 309).

As Mahjoob (2015) believed, high achievers in speaking a foreign language are self-regulated learners. Since 1991, when Albert Bandura attracted attentions to the social cognitive theory, self-regulation has been a topic of interest for

numerous scholars, educators, and researchers. Self-regulation, which has a critical and essential role in current educational system (Pintrich, 2000), is an active process which helps learners to control their behavior, motivation, cognition, and also helps them in specifying goals for learning (Paris & Paris, 2001, as cited in Heidari Soureshjani, 2013).

Since willingness to communicate and speaking in a foreign language is a rather complex issue which interacts with a variety of psychological, cultural, cognitive, and social variables, focusing on not only the academic aspects of learning, but also the way that learners observe their surroundings, or the locus of control, could be another significant related variable in willingness to communicate and speaking skill (Jain & Pratabsingh, 2008; Williams & Burden, 1997).

Locus of control as one of the important and influential variables in language learning (Jain & Pratabsingh, 2008), was initially developed by Julian Rotter in 1954. Locus of control, a construct from social learning theory which is cognitive by nature (Ahmad & Fotowwatzadeh, 2013; Jain & Pratabsingh, 2008), is believed to determine the way individuals shoulder responsibility in life, i.e. who or what in their opinion is in charge of the success and failure they experience (Rotter, 1966, 1975). It is a theory of "a person's beliefs about control over what happens to him or her" (Jarvis, 2005, p. 125). Measures of this construct are reported in terms of people having an internal or external orientation (Rotter, 1966, 1975). This means that, locus of control indicates individuals' beliefs regarding the control they have over what happens in their lives, as opposed to the passive point of view.

Regarding the above-mentioned points and in order to foster communication, it is important to be aware of the different factors influencing the degree of willingness to communicate. So, this study investigates the relationship among self-regulation, locus of control, and willingness to communicate of EFL learners. For accomplishing this purpose, the researchers formulated these research questions:

**Research Question 1:** Is there any significant relationship between EFL learners' self-regulation and willingness to communicate?

**Research Question 2:** Is there any significant relationship between EFL learners' self-regulation and locus of control?

**Research Question 3:** Is there any significant relationship between EFL learners' locus of control and willingness to communicate?

**Research Question 4:** Is there any significant difference between EFL learners' self-regulation and locus of control in predicting their willingness to communicate?

## II. METHOD

### *Participants*

222 undergraduate EFL learners (87 males and 135 females) whose age ranged from 20 to 32 ( $M_{age} = 26$ ) took part in this study. They were Islamic Azad University students at Central Tehran, South Tehran, and Science and Research branches and majored in English Translation and English Literature. The sampling strategy for selecting the participants was convenience sampling, and from the initial number of 270, 48 individuals were excluded from the data; this happened because these EFL learners had provided incomplete and careless answers to the research instruments. Consequently, the sample pool shrank to 222 individuals.

### *Instrumentation*

The instruments mentioned below were employed in order to collect the quantitative data and fulfill the purpose of the study:

- ◆ The Internal Control Index
- ◆ The Motivated Strategies for Learning Questionnaire
- ◆ The Willingness to Communicate Scale

### *Duttweiler's Internal Control Index*

In the present study, the Internal Control Index (Duttweiler, 1984) was used to estimate the degree of internality and externality of the participants' locus of control. This instrument is designed based on two factors: self-confident and autonomous behavior (Duttweiler, 1984). It consists of 28 Likert-type items with five options, "rarely" to "usually". The possible score range is 28 to 140, and higher scores indicate a higher level of internal locus of control. Fifteen minutes were given to the participants to complete this questionnaire.

This instrument is considered the most reliable and valid questionnaire for assessing the degree of internality and externality of the adults' locus of control (Furnham & Steele, 1993). According to Duttweiler (1984) the questionnaire has good internal reliability with a Cronbach alpha of .85. Moreover, this instrument has "fair concurrent validity with a low but significant correlation with Factor I of the Rotter I-E Scale" (Fischer & Corcoran, 1987, p. 198). In this study, the reliability of Internal Control Index was computed through Cronbach alpha at 0.81.

### *Pintrich, Smith, Garcia, and McKeachie's Motivated Strategies for Learning Questionnaire*

For estimating participants' level of self-regulation, the Motivated Strategies for Learning Questionnaire (MSLQ), developed by Pintrich, Smith, Garcia, and McKeachie (1991) was employed in this study. The original form of this instrument has 81 Likert-scale statements, and the alternative options score 1 "not at all true of me" to 7 "very true of me". The instrument consists of 15 modular subscales which are divided into two categories, Motivation and Learning Strategies. The final score could range from 81 to 567, and the higher the mark, the more self-regulated is the participant. The participants were given 35 minutes to answer the questions.

Reportedly, the psychometric qualities of this instrument have been recognized at different educational levels (Duncan & McKeachie, 2005; Pintrich et al., 1991, 1993; Wolters, Pintrich, & Karabenick, 2005). Besides, several studies have supported the reliability and validity of this instrument (Garcia & Pintrich, 1994, 1996; Kivinen, 2002; Pintrich, Smith, Garcia, & McKeachie, 1993). In this study, the reliability of MSLQ was computed through Cronbach alpha at 0.79.

#### *McCroskey's Willingness to Communicate Scale*

The Willingness to Communicate Scale devised by McCroskey (1992) was used to estimate the participants' willingness to initiate communication. It has been argued that this instrument estimates individuals' inclination to approach or avoid the initiation of communication. It consists of 20 situations in which a person might choose to communicate or not to communicate. The participants are supposed to respond by determining the percentage of times they would choose freely to communicate ranging from 0 for "never" to 100 for "always". The allocated time for answering the questionnaire is 15 minutes.

Reliability of this scale appears to be excellent according to McCroskey (1992); reportedly, the reliability indices range from .86 to .95 (McCroskey, 1992). In this study, the reliability of willingness to communicate scale was computed through Cronbach alpha at 0.87.

#### *Procedure*

In order for the researchers to accomplish the purpose of this study, the following procedure was followed. At the first step, the participants were selected from among undergraduate female and male students who were majoring in English Translation and English Literature at Islamic Azad University, Tehran Central, South and Science and Research branches.

Before administrating the questionnaires, the participants were provided with some brief explanation as to how the questionnaires are completed, and they were asked to complete them in approximately 65 minutes. For encouraging the participants' attentiveness and honesty in answering the questionnaires, the participants were assured that their responses would be kept confidential and used only within the framework of this study. Moreover, the order of the administered questionnaires was intentionally randomized in order to control for the impact of order upon the validity of the data and the completion process. Out of 270 initially administered questionnaire sets, 222 usable and carefully-answered sets qualified for the statistical analyses.

### III. RESULTS

The design of this study was descriptive. The predicted variable was willingness to communicate, being predicted by locus of control and self-regulation. Besides, the intervening variables were participants' gender and age. In this section, the conducted analyses and calculations are reported.

#### *The Preliminary Analyses*

Prior to answering the research questions, a number of assumptions needed to be checked. Initially, the assumptions of participants' independence and interval data (Tabachnick & Fidell, 2007) were checked and met as the employed instruments provided interval data and the participants answered the questionnaires independently. Furthermore, some other critical assumptions had to be checked in the data. As suggested by Tabachnick and Fidell (2007), these assumptions are:

1. The existence of linear relations between pairs of variables,
2. Homoscedasticity, and
3. The normality of distribution.

The abovementioned assumptions, checked in the following sections, are pertinent to the first, second, and third research questions. Furthermore, due to the nature of the employed analysis, the assumptions related to the fourth research question are checked when the initial research questions are already answered.

#### *Linear Relation between Each Pair of Variables and Homoscedasticity*

For checking the linearity of relations, a multiple scatterplot was created (Figure 1).

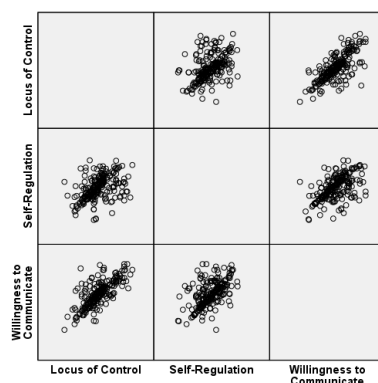


Figure 1. Multiple scatterplot of locus of control, self-regulation, and willingness to communicate

The inspection of this scatterplot indicated that the existing relations among the variables are of a linear nature. Noticeably, U-shaped or curvilinear patterns of distribution do not exist. As a result, the assumption of linearity of relations is met. Besides, as the score distributions are not funnel-shape, the assumption of homoscedasticity is satisfactorily met.

#### **Normality of the Distributions**

For checking the normality of the distributions, the kurtosis and skewness ratios were initially calculated. Thence, the distribution histograms and Normal Q-Q Plots were inspected. Finally, the Kolmogorov-Smirnov test was used (Table 1).

TABLE 1.  
TESTS OF NORMALITY OF THE SCORES

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Locus of Control	.076	222	.004	.987	222	.041
Self-Regulation	.039	222	.200*	.993	222	.346
Willingness to Communicate	.029	222	.200*	.996	222	.861

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

According to this table, the normality of distribution is only supported for self-regulation and willingness to communicate scores. Therefore, the correlational research questions which included locus of control (research questions two and three) were answered using a non-parametric test.

#### **Answering the Three Initial Research Questions**

##### **The First Research Question**

The first research question was answered by running Pearson's product-moment correlation coefficient. The results are presented in Table 2.

TABLE 2.  
PEARSON'S CORRELATION BETWEEN SELF-REGULATION AND WILLINGNESS TO COMMUNICATE

		Self-Regulation	Willingness to Communicate
Self-Regulation	Pearson Correlation	1	.540**
	Sig. (2-tailed)		.000
	N	222	222
Willingness to Communicate	Pearson Correlation	.540**	1
	Sig. (2-tailed)	.000	
	N	222	222

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

As reported, there existed a significant positive relationship between self-regulation and willingness to communicate,  $r = .54$ ,  $n = 222$ ,  $p < .01$ . This signified a large effect size (99% confidence intervals: 0.406 to 0.651; Cohen, 1988).

##### **The Second Research Question**

For answering this question, the Spearman rank order coefficient of correlation was employed (Table 3).

TABLE 3.  
SPEARMAN'S CORRELATION BETWEEN SELF-REGULATION AND LOCUS OF CONTROL

		Locus of Control	Self-Regulation
Spearman's rho	Locus of Control	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	222
	Self-Regulation	Correlation Coefficient	.480**
		Sig. (2-tailed)	.000
		N	222

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

As reported, there existed a significant positive relationship between self-regulation and locus of control,  $\rho = .48$ ,  $n = 222$ ,  $p < .01$ . This signified a medium-to-large effect size (99% confidence intervals: 0.336 to 0.602; Cohen, 1988).

##### **The Third Research Question**

For answering this question, the Spearman rank order coefficient of correlation was run (Table 4).

TABLE 4.  
SPEARMAN'S CORRELATION BETWEEN LOCUS OF CONTROL AND WILLINGNESS TO COMMUNICATE

			Locus of Control	Willingness to Communicate
Spearman's rho	Locus of Control	Correlation Coefficient	1.000	.728**
		Sig. (2-tailed)	.	.000
		N	222	222
	Willingness to Communicate	Correlation Coefficient	.728**	1.000
		Sig. (2-tailed)	.000	.
		N	222	222

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

As reported, there existed a significant and positive correlation between locus of control and willingness to communicate,  $\rho = .728$ ,  $n = 222$ ,  $p < .01$ . This signified a large effect size (99% confidence intervals: 0.636 to 0.799; Cohen, 1988).

Hitherto, it was concluded that both locus of control and self-regulation are significantly and positively associated with willingness to communicate. Consequently, answering the fourth research question turned out to be legitimate.

#### ***Preliminary Analyses Pertinent to the Fourth Research Question***

For answering the last research question, it was needed to run a multiple regression analysis. Prior to that, some pertinent assumptions needed to be checked; as suggested by Tabachnick and Fidell (2007), they are:

1. The size of the sample pool
2. The nonexistence of multicollinearity
3. Observing normality
4. The nonexistence of outliers

The first assumption was met according to the criterion suggested by Tabachnick and Fidell (2007;  $222 > 66$ ). For checking the second assumption, the Tolerance value and VIF value were calculated (Table 5).

TABLE 5.  
TOLERANCE AND VIF VALUES

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Locus of Control	.824	1.213
	Self-Regulation	.824	1.213

According to the reported results, the Tolerance values are higher than .1. Also, the VIF values are smaller than 10. Consequently, multicollinearity seemed to be nonexistent in this data. Thence, the Normal Probability Plot (P-P) was created, suggesting no major deviation from normality. Moreover, the scatterplot of standardized residuals indicated that residuals were rectangularly distributed. At the end, the Mahalanobis distance values were checked for inspecting the existence of outliers. As the results reported, the largest Mahalanobis value was 10.4 which is below the critical level. This suggested the nonexistence of outlier cases.

#### ***The Fourth Research Question***

The last research question was answered running a standard multiple regression (Table 6).

TABLE 6.  
MODEL SUMMARY – R AND R SQUARE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.777 <sup>a</sup>	.604	.600	9.886

a. Predictors: (Constant), Self-Regulation, Locus of Control

b. Dependent Variable: Willingness to Communicate

The obtained results indicated that the  $R^2$  value is 0.604. This is to say that 60.4 percent of the variance in willingness to communicate is explained by this model (Cohen, Cohen, West, & Aiken, 2003). Furthermore,  $f^2 = 1.5252$  indicated that the effect size is large.

Table 7 presents the ANOVA results ( $F(2, 219) = 166.732$ ,  $p = 0.0005$ ) which turned out to be significant. Therefore, it was concluded that the model significantly predicts EFL learners' willingness to communicate, self-regulation, and locus of control.

TABLE 7.  
REGRESSION OUTPUT: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32588.821	2	16294.410	166.732	.000 <sup>a</sup>
	Residual	21402.491	219	97.728		
	Total	53991.312	221			

a. Predictors: (Constant), Self-Regulation, Locus of Control

b. Dependent Variable: Willingness to Communicate

In Table 8, the Standardized Beta Coefficients are reported. According to the presented values, it was concluded that both locus of control and self-regulation make a statistically significant unique contribution to the equation as their Sig. values are less than .05.

TABLE 8.  
REGRESSION OUTPUT: COEFFICIENTS

Model		Unstandardized Coefficients		Standardized Coefficients	T	Significance	Part Correlations
		B	Std. Error	$\beta$			
1	(Constant)	-48.051	5.999		-8.010	.000	
	Locus of Control	.760	.058	.615	13.132	.000	.559
	Self-Regulation	.077	.013	.282	6.020	.000	.256

Comparing the  $\beta$  values indicated that locus of control has the largest  $\beta$  coefficient ( $\beta = 0.615$ ,  $t = 13.132$ ,  $p = 0.0005$ ). This is to say that locus of control makes the strongest statistically significant unique contribution to predicting willingness to communicate. Therefore, it was concluded that locus of control could more significantly predict willingness to communicate scores of the participants. This is also to say that locus of control is more positively affected by high levels of willingness to communicate. Self-regulation qualified as the second significant predictor of willingness to communicate scores ( $\beta = 0.282$ ,  $t = 6.02$ ,  $p = 0.005$ ). Finally, inspecting the Part correlation indicated that locus of control uniquely explains 31.25 percent of the variance in willingness to communicate ( $.559 \times .559 = .3125$ ).

#### IV. DISCUSSION

Regarding the questions posed in this research and based on the results of the statistical analyses, various degrees of correlation were found among the three variables of this study. The aim of this study was to investigate the relationship among EFL learners' locus of control, self-regulation, and their willingness to communicate. To begin with, the first research question of the study attempted to systematically inspect the relationship between EFL learners' self-regulation and willingness to communicate. The results of the Pearson's product-moment correlation coefficient indicated that there was a significant and positive correlation between self-regulation and willingness to communicate,  $r = .54$ ,  $n = 222$ ,  $p < .01$ .

The observed correlation between self-regulation and willingness to communicate scores is supported by the results of Heidari Soureshjani's (2013) study in which the impact of willingness to communicate and self-regulation on EFL learners' oral presentation performance was investigated. Moreover, Heidari Soureshjani (2013) reported that willingness to communicate is the better predictor of oral presentation performance in comparison to self-regulation; this provides a tacit support for the significance of willingness to communicate, the main variable of concern in this study, in L2 learning.

Observing a significant relationship between self-regulation and willingness to communicate in this study is also in line with that of Nosratinia and Deris (2015) who investigated the relationship between self-regulation and willingness to communicate among EFL learners. It is worth mentioning that in comparison to the instrument which was used in this study, Nosratinia and Deris (2015) used the Self-Regulation Questionnaire devised by Brown, Miller, and Lawendowski (1999) as the questionnaire of self-regulation. Similarly, the result of their study showed a significant and positive correlation between these two variables,  $\rho = .56$ ,  $n = 520$ ,  $p < .05$ .

The systematic inspection of the relationship between self-regulation and locus of control among EFL learners was the concern of the second research question. The results of running a Spearman rank order coefficient of correlation indicated a significant and positive correlation between EFL learners' self-regulation and locus of control,  $\rho = .48$ ,  $n = 222$ ,  $p < .01$ . This finding was broadly consistent with the results of previous researches by Nicholas (1994) and Suleiman Nejad (2000) who found significant and positive correlation between these two variables.

Moreover, this finding provides a systematic support for the argument that individuals with internal locus of control are more self-regulated (Schneider, Friend, Whitaker, & Wadhwa, 1991). Therefore, it seems reasonable to assume that EFL learners with internal locus of control may feel more responsibility for their own learning and be more relied on their internal factors. However, this result is opposed to the findings of the study by Haji Ahmadi (2013) which showed no statistically significant relationship between EFL learners' self-regulation and locus of control,  $\rho = .07$ ,  $n = 172$ ,  $p = .361 > .05$ . A justifiable explanation for the inconsistent findings of these two studies is that these two variables, self-regulation and locus of control, do not operate similarly in all contexts and for all learners (Schneider et al., 1991).

The third research question focused on the relationship between EFL learners' locus of control and willingness to communicate. In order to carry out this task, the Spearman rank order coefficient of correlation was run, results of which indicated a significant and positive correlation between EFL learners' locus of control and willingness to communicate,  $\rho = .728$ ,  $n = 222$ ,  $p < .01$ . As no previous studies were found to explore the relationship between locus of control and willingness to communicate, this particular result could not be directly compared with other studies; however, observing this relationship seemed reasonable, considering the answers given to the two initial research questions.

Having observed a significant and positive relationship between willingness to communicate, on one hand, and self-regulation and locus of control, on the other hand, it was sensible to compare and study the way self-regulation and locus of control predict EFL learners' willingness to communicate. Subsequent to checking the preliminary assumptions, the researcher ran a standard multiple regression. The obtained results led the researchers to conclude that locus of control has the largest  $\beta$  coefficient ( $\beta = 0.615$ ,  $t = 13.132$ ,  $p = 0.0005$ ). In other words, locus of control makes the strongest statistically significant unique contribution to predicting willingness to communicate. Needless to say, the findings suggest that there is a considerable overlap between willingness to communicate and locus of control as two mental constructs. The major implications of the findings are discussed in the following section.

## V. CONCLUSION

This study was an attempt to systematically inspect the way locus of control, self-regulation, and willingness to communicate interact with one another among EFL learners. Moreover, it was attempted to compare locus of control and self-regulation in terms of predicting willingness to communicate. The main function of language is assisting individuals in communicating information and ideas with other language users (Lightbown & Spada, 2013; Mitchell & Myles, 2004, Zaker, 2015).

It is believed that self-regulation is a key factor in shaping learners' motivational states and efforts in communication (Zimmerman, 2000). Answering the first research question confirmed that self-regulation and willingness to communicate are in a significant direct relationship. Therefore, it seems reasonable to argue that the development of self-regulation can be considered a significant measure to develop willingness to communicate among EFL learners (Nosratinia & Deris, 2015), and finally improve their speaking ability (Aregu, 2013). Locus of control was another inspected variable in this study. Answering the second research question systematically confirmed that self-regulation and locus of control are positively associated. Consequently, a systematic support is provided for the argument that EFL learners' locus of control can be one of the concerns when attempting to develop self-regulation among EFL learners (Pintrich, 2000; Zimmerman, 2002).

As discussed earlier, through answering the third research question of the study, it was systematically confirmed that locus of control and willingness to communicate are significantly and positively correlated. As a result, it is sensible to argue that through developing EFL learners' locus of control, we can expect higher levels of willingness to communicate, and vice versa (Findley & Cooper, 1983). However, as both self-regulation and locus of control were reportedly in a direct relationship with willingness to communicate, it seems to be of high value to educational policy makers, teacher trainers, curriculum developers, and teachers to realize between locus of control and self-regulation which one has a higher pedagogical potential; answering the last research question indicated that locus of control is the best predictor of EFL learners' willingness to communicate. As a result, special attention needs to be paid to locus of control as one of the most helpful and motivating factors in developing EFL learners' willingness to communicate and, consequently, their L2 speaking ability.

Considering the findings of this study and in order to benefit from the capacity of locus of control in developing L2 learning, English teachers should recognize learners' personality as to which class of locus of control, i.e. internal or external, is more dominant in them. Basically, learners with internal locus of control rely on their own ability to do the tasks; they do not depend on outside factors influencing their success. On the other hand, learners with external locus of control depend their lives on outside factors, e.g. fate, good days, and the like. Knowing about learners' locus of control, the English teachers may develop the willingness to communicate of EFL learners through motivating their beliefs about their control over what happens to them (Jarvis, 2005). More specifically, EFL teachers should try to encourage learners to accept the responsibility of their learning. Another important role of EFL teachers in this regard is that they should create a stress-free situation inside the classroom in which students feel relaxed and motivated to participate in the activities of communication. Also, EFL teachers must facilitate EFL learners' independence through providing the necessary knowledge and instruments.

From another perspective, not only EFL teachers, but also EFL learners are responsible to facilitate their own learning process (Fahim & Zaker, 2014). Therefore, the results of the present study have implications for language learners as well. Being familiar with locus of control and improving the level of self-regulation in a learning context, students can have positive views of themselves as learners and positive attitudes toward language learning as well (Mahjoob, 2015). Having such a feeling propels EFL learners to speak and communicate more in English (Mahjoob, 2015). EFL learners should also attempt to create a positive and friendly learning atmosphere by being supportive and friendly toward the teacher and their classmates (Shuell, 1988). In such a class, learners feel free to participate in

activities, ask and answer questions, and also cooperate with other learners. Finally, EFL learners should reflect on their own abilities, develop their internal locus of control, and be more independent and self-regulated.

EFL syllabus designers are providers of a great portion of the language tasks and activities (Nosratinia & Zaker, 2014). Presently, many of the course books are concentrated on the linguistic aspects of language learning, and they fail to tap learners' potential for other aspects (Tomlinson, 2013). Therefore, EFL syllabus designers should consider learners' individual differences such as their locus of control, self-regulation, and willingness to communicate. They should attempt to welcome learners' unique abilities and independence through providing open-ended tasks as well as establishing a balance between individual and group tasks and activities. Finally, EFL syllabus designers and curriculum developers can give explicit and implicit explanation and instruction on locus of control and self-regulation so that EFL teachers and learners are provided with powerful devices for developing locus of control, self-regulation, and, consequently, willingness to communicate.

Finally, considering the focus of the present study and the inevitable limitations which were faced, other studies are recommended to explore some of the connected avenues and untouched areas. These recommendations are listed hereunder:

a) While the present study focused on the way willingness to communicate is predicted by self-regulation and locus of control, other studies may take and compare other internal, personality, cognitive, and metacognitive factors into account as the predictor variables.

b) This study was conducted among undergraduate EFL learners; other studies can be conducted on participants with other educational backgrounds or even EFL learners whose major is not English.

c) The interrelationship among the variables of this study could be investigated among EFL teachers while analyzing the impact of their self-regulation and locus of control on the quality of their learners' willingness to communicate.

d) In order to increase the validity and reliability of the results and interpretations, it is possible to replicate this study employing some qualitative measures.

e) The implemented sampling strategy in this study was convenience sampling. Therefore, other researchers are suggested to employ random sampling methods in order to make the findings more valid and defensible.

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