The Relationship among EFL Learners' Self-Regulation, Locus of Control, and Preference for Vocabulary Acquisition

Hassan Soleimani[1], Behnam Aghayani[2*], and Narjes Ashari

[1] Associate Professor at Payame Noor University, Iran

[2*] MA in TEFL, Payame Noor University, Iran, (corresponding author), behnamaghayani@yahoo.com

[3] Assistant Professor at Qom Islamic Azad University, Iran

ARTICLE INFORMATION

ABSTRACT

Learning vocabulary has always been a major concern for second/foreign language researchers, and particularly in recent years self-regulation, locus of control and learners' preference for learning have been the focus in the related literature. This study intended to investigate the relationship among EFL learners' self-regulation, locus of control, and preference for vocabulary acquisition. To this end, 116 EFL university students (79 female, 37 male) participated in the study. In order to collect the required data, two questionnaires and one vocabulary levels test were utilized: The ICI to measure learners' locus of control, SRCvoc to measure learners' self-regulation, and VLT to measure learners' vocabulary size. The results reveal that there was a significant relationship between EFL learners' locus of control and preference for vocabulary acquisition. Additionally, the results reveal that locus of control could significantly predict the vocabulary acquisition preference. Furthermore, the findings reveal that: (a) there was no significant relationship between EFL learners' self-regulation and preference for vocabulary acquisition, (b) there was no significant relationship between EFL learners' self-regulation and locus of control, and (c) self-regulation could not significantly predict vocabulary acquisition preference.

1. Introduction

The importance of vocabulary in language learning clearly has been explained by researchers. The major challenge of foreign/second language learning lies in the basics of the lexicon (Singleton, 1999). According to Lewis (2000), "the single most important task facing language learners is acquiring a sufficiently large vocabulary" (p. 8). Moreover, Hunt and Beglar (2005) emphasized that "the heart of language comprehension and use is the lexicon" (p. 24). The researchers have realized the prominent role of vocabulary in foreign/second language learning (Rodriguez & Sadoski, 2000; Gu, 2003; Nation, 2011) in which it plays essential role in

speaking, reading, writing, and listening. Krashen (1989) suggests that "the study of the acquisition of vocabulary and spelling ability can help us understand language acquisition in general" (p. 440). In foreign/second language learning, vocabulary acquisition is one of the important tools for learners and Schmitt (2000) underling the importance of vocabulary acquisition claims that vocabulary is central to foreign/second language acquisition.

According to Zimmerman (1997), "vocabulary is central to language and of critical importance to the typical language learner" (p. 5). Furthermore, "it is universally recognized that vocabulary learning is a fundamental component both of acquisition of one's native language and of learning a foreign language" (Morra & Camba, 2009, p. 156). Hence, vocabulary acquisition is important for learners in the process of foreign/second language learning. One direct aim of this study developed to investigate the EFL learners' preference for vocabulary acquisition. Preference was defined as "relatively stable evaluative judgments in the sense of liking or disliking a stimulus, or preferring it or not over other objects or stimuli" (Scherer, 2005, p. 703). Meanwhile, Schmitt, Schmitt, and Clapham (2001) have introduced the vocabulary level test to measure vocabulary size and they came to conclusion that students' "perceived problems reflect more of a preference for context-dependent items [vocabularies] than any real problem in handling context-independent items [vocabularies], such as those appearing in the Levels Test" (p. 74).

A quick review of researches on self-regulation shows its benefits in the process of learning. Zimmerman (2000) claims that "an essential issue confronting all theories of self-regulation is how this capability or capacity can be developed or optimized" (p. 34). Baumeister, Gailliot, Dewall, and Oaten (2006) conclude that self-regulation is a form of energy which can help individuals behave in an acceptable manner in the society and thus it considered as an important basis for personality. Self-regulation is indispensable in the learning process (Zimmerman, 2008) and as an effective tool improves students' success to achieve a range of proficiency (Zimmerman & Schunk, 2011). Boekaerts and Corno (2005) state that in the learning process the self-regulated learners can act in accordance with what is needed to learn; further they suggested that these actions and the learners' capacity considered as a key aspect of self-regulation. They mentioned that to motivate and encourage learners' self-regulation teachers need opportunities and environments to learn about self-regulation and understand its constructs to adopt strategies according to these constructs and apply it in their teaching. Finkel and Fitzsimons (2011) argue that self-regulation has three components which they are goal setting and initiation, goal operation, and goal monitoring. In turn, these components help individuals to follow their goals, try to change their behavior in order to reach the goals, and they can assess the progress to achieve the goals. In fact, self-regulation deals with issues related to the mind and to self-regulate, a person needs to monitor the progress that led to achieve his/her goals (Boekaerts, Pintrich & Zeidner, 2000; Faber & Vohs, 2011).

Self-regulation utilizes in learning theories (Baumeister & Vohs, 2012) and it facilitates the acquisition of new knowledge and skills as well as vocabulary acquisition (Weinstein, Husman & Dierking, 2000). Self-regulation is helpful for learners to find out opportunities to acquisition and learning; it also leads to learners view the process as systematic (Zimmerman, 1990). In other words, according to Bauer and Baumeister (2011), "self-regulation is a key ingredient that can facilitate individual and cultural success" (p. 79). Moreover, self-regulation is important for controlling mental processes, feelings, and intelligent thinking (Baumeister et al., 2006; Baumeister & Vohs, 2012). Overall, self-regulated learners have characteristics that distinguish them from other learners (Oettingen, Hönig & Gollwitzer, 2000; Zimmerman, 2002).

The concept of locus of control is in common with attribution theory, a theory that can explain the reason of the events (Jarvis, 2005). The construct of locus of control includes two dimensions which treat as internal and external. Individuals with internal locus of control have responsibility for what has happened whereas

individuals with external locus of control believe that responsibility completely rests for a result (Wong & Sproule, 1984). Moreover, Lester (1992) has found the differences between two groups of students; the students that believe in internal locus of control and the students that believe in control by "chance or fate". The former group more motivate to attain achievement by both competitive and cooperative strategies, whereas the latter group more motivate to avoid achievement. Williams and Burden (1997) reported that individuals with internal locus of control (internalizers) have a sense of responsibility for what happens to them in their life, whereas individuals with external locus of control (externalizers) impute the events of their life to the external forces (e.g., luck and fate).

This study associated with locus of control, in this regard Ghonsooly and Elahi (2010) claims that "locus of control is a recent psychological construct which has been treated as influential and important in achieving learning goals as instructional and textual factors" (p. 120). Locus of control as a personality variable has been more important in recent theoretical and applied researches. Furthermore, in acquisition process learners who have high locus of control are more successful than others and they usually seek information about the activities and also their behavior controlled (Stewart, 2012).

2. Literature Review

Ping and Siraj (2012) have investigated the self-regulated learning strategies for vocabulary learning among 38 Chinese EFL learners in Malaysia. The findings showed that learners had low self-regulated learning strategies and it might because of their lack of strategy knowledge. In addition, the results revealed that participants of the study need to increase and develop their self-regulation in vocabulary learning through strategy instruction. Mizumoto (2013b) examined the effects of integrating a self-regulated learning approach on self-efficacy in vocabulary learning among 115 EFL learners in Japan that they were divided into three groups: the treatment group, the contrast group 1, and the contrast group 2. The findings reported that among three groups self-efficacy and vocabulary knowledge increased in the treatment group. In addition, the results showed that self-regulated learning can increase self-efficacy that it in turn contributes to the vocabulary development. In another study, Mizumoto (2013a) explored on the effects of the self-regulated vocabulary learning on self-efficacy among 303 EFL learners in Japan. The participants answered to a self-regulated vocabulary learning questionnaire and then a test of vocabulary administered to measure vocabulary knowledge gained from self-regulated vocabulary learning. The results indicated that self-regulated learning is able to improve and increase self-efficacy and vocabulary knowledge.

Furthermore, Kim and Linan-Thompson (2013) have investigated the effects of self-regulation on science vocabulary acquisition of English language learners (ELLs) with learning difficulties. The results showed that the self-regulation has a positive effect on the acquisition of receptive word definitions, moreover results from expressive oral word definitions revealed that self-regulation strategies enhanced performance of the students. In 2014, Hardi in her doctoral dissertation Assessing Young Learners' Strategic L2 Vocabulary Learning in the Framework of Self-Regulation has examined on more than 400 Hungarian primary school children; all children also were EFL learners. Moreover, she implemented the research by interviews and questionnaires to collect the data. The results of the study revealed that self-regulated learners were young learners in the vocabulary learning process, because they used various vocabulary learning strategies and employed their self-regulating capacity.

Moreover, Hamedani (2013) examined the relationship between self-efficacy and self-regulation in vocabulary acquisition with 132 intermediate EFL learners in Iran. The instruments used to collect data were Vocabulary Levels Test, self-efficacy questionnaire, and Self- Regulation Capacity in Vocabulary Acquisition scale. The researcher found a significant relationship between self-efficacy and self-regulation in vocabulary

acquisition in which these two factors can facilitate the process of vocabulary acquisition. In addition, the results indicated that gender differences have no influence in the relation between them. In another study, Amirian, Mallahi, and Zaghi (2015) investigated the relationship between self-regulation capacity for vocabulary learning and vocabulary size among 90 EFL learners in Iran. The researchers used Self- Regulation Capacity in Vocabulary Acquisition scale (Tseng, Dörnyei & Schmitt, 2006) and a bilingual vocabulary size test (Karami, 2012) as two instruments to gather data. They found that there was no significant relationship between the two variables; however, learners who "felt a more immediate need for vocabulary learning had a better self-regulatory capacity for vocabulary learning as revealed by their questionnaire responses" (p. 40).

Zarei and Hatami (2012) explored on the relationship between self-regulated components and vocabulary knowledge and reading comprehension among 250 Iranian EFL learners. The reading comprehension test, Self-regulation Trait Questionnaire, and 60-item vocabulary test administered to the participants. The researchers used the Persian version of the questionnaire that its reliability was 0.79. The findings of the study showed no significant relationship between self-regulated components and vocabulary knowledge, while there was a positive relationship between self-regulated components and reading comprehension. Moreover, Bohlmann, Maier, and Palacios (2015) conducted a study to investigate bidirectional associations between self-regulation skills and English expressive vocabulary for monolingual English and dual language learners among 250 children in preschool. The findings showed that "early self-regulation skills may play a particularly important role for vocabulary development" (p. 1108). The results also revealed that vocabulary plays a role as a 'leading indicator' for self-regulation in preschool. Ping, Baranovich, Manueli, and Siraj (2015) examined self-regulation in vocabulary learning with 38 Chinese EFL students. They found that "there is a pressing need to enhance learners' self-regulation in learning vocabulary through explicit strategy instruction, which emphasizes cognitive, metacognitive, and motivational aspects of learning" (Abstract section, para. 1).

Monshi Toussi and Ghanizadeh (2012) conducted a study to examine the relationship between locus of control and self-regulation and the moderating role of self-efficacy among 63 EFL teachers. Teacher Self-Regulation Scale, the Teacher Locus of Control Scale, and Teachers' Sense of Efficacy Scale administered as three instruments to gather data. The results showed a significant relationship between teachers' self-regulation and internal locus of control. The findings reported that self-efficacy had no effect on the relationship between self-regulation and locus of control. Furthermore, Rahimi and Askari Bigdeli (2014) examined the relationship between locus of control and vocabulary learning strategies among 74 EFL students. The Rotter's Locus of Control Scale and the Vocabulary Learning Strategies Questionnaire used to collect data. The results indicated that there was an insignificant relationship between EFL learners' locus of control and their use of vocabulary learning strategies. That is, internal or external locus of control have no significant relationship with their perceptions of how vocabulary should be learned (Rahimi & Askari Bigdeli, 2014).

Considering the issues mentioned in the literature, the present study was intended test the following hypotheses:

$H0_1$: There is no significant relationship between EFL learners' self-regulation and their preference for vocabulary acquisition.

$H0_2$: There is no significant relationship between EFL learners' locus of control and their preference for vocabulary acquisition.

$H0_3$: There is no significant relationship between EFL learners' self-regulation and locus of control.

$H0_4$: EFL learners' locus of control does not significantly predict their vocabulary acquisition preference.

$H0_5$: EFL learners' self-regulation does not significantly predict their vocabulary acquisition preference.

3. Method

3.1. Participants

The participants in the present study were 116 EFL university students in the second semester of the academic year 2015-2016. The participants, including both male (N=37) and female (N=79), were from junior and senior students majoring in English Literature and Teaching English as a Foreign Language (TEFL). Because of practicality issues, the participants were selected based on convenience nonrandom sampling. The participants were native speakers of Persian and their age varied from 20 to 30 years old.

3.2. Instruments

To accomplish the present study, the researchers used three main instruments to collect data that they are as follows:

3.2.1. Internal Locus of Control Index (ICI). The researchers used a questionnaire developed by Duttweiler (1984) has developed to measure learners' locus of control. The questionnaire consists of 28 items with 5-point Likert scale format ranging from *rarely* (less than 10% of the time) to *usually* (more than 90% of the time). The range of scores is between 28 and 140 with higher scores indicating higher internal locus of control and lower scores indicating lower external locus of control. The questionnaire was administered without any modifications in its original form. Duttweiler (1984) calculated Cronbach alpha and results showed a coefficient of 0.84 and 0.85. Moreover, Duttweiler (1984) came to conclusion that "the ICI offers researchers an alternative instrument for measuring locus of control that has higher reliability, two apparently stable rotated factors, evidence of convergent validity, and norms for demographic categories from a college population" (p. 218).

3.2.2. Self-Regulating Capacity in Vocabulary Learning' scale (SRCvoc). We used a questionnaire by Tseng, Dörnyei and Schmitt (2006) based on five facets of self-regulation (commitment control, metacognitive control, satiation control, emotion control, and environmental control) to measure learners' self-regulation. The questionnaire contains 20 items that all items involved a 6-point Likert scale ranging from *strongly agree* to *strongly disagree* and the participants were required to mark the best option which reflected their personal vocabulary learning experience. The questionnaire was administered again with no modifications in its original form. Tseng et al. (2006) conducted an internal consistency reliability analysis to determine the reliability of Self-Regulating Capacity in Vocabulary Learning' scale (SRCvoc) and they computed Cronbach Alpha coefficients of five subscales. The results revealed the mean coefficient of 0.77. Therefore, they safely concluded that Self-Regulating Capacity in Vocabulary Learning' scale performed well in terms of reliability and it is a reliable instrument. Furthermore, Tseng et al. (2006) explored the construct validity of the Self-Regulating Capacity in Vocabulary Learning' scale by means of confirmatory factor analysis. The results indicate that "the five subscales discriminated well with one another, producing no empirical redundancy, and the appropriateness of the factor loadings suggests good acceptability of the construct validity of SRCvoc" (p. 91).

3.2.3. Vocabulary Levels Test (VLT). The researchers used a vocabulary level test by Schmitt, Schmitt, and Clapham (2001) to measure learners' vocabulary size. The VLT (Version 2) contains five levels (2000 level word, 3000 level word, Academic Vocabulary, 5000 level word, and 10000 level word) and each level consists of 30 items, with the whole test including 150 items. The VLT was administered without any modifications in its original form. Schmitt et al. (2001) calculated the reliability of the Vocabulary Levels Test (VLT). The Cronbach alpha indicated a coefficient of 0.92 for 2000 level word, 3000 level word, 5000 level word, 10000 level word, and a coefficient of 0.96 for Academic Vocabulary. Schmitt et al. (2001) scrutinized the validity of the Vocabulary Levels Test and they concluded it is a valid test.

3.3. Procedure

To conduct the study, first of all, the researchers sought permission from the professors to visit their classes. In addition, a Telegram channel was created to upload the ICI questionnaire, the SRCvoc questionnaire, and the VLT for the participants. In the next step, we visited the classes and explained the importance of the study for participants and then they were informed about the content and format of the two questionnaires and the VLT on the whole. The students were asked to join in the Telegram channel to complete the two questionnaires and the Vocabulary Levels Test. Furthermore, the participants were assured that their responses and collected information would be remained confidential. One day later, the members of the channel were 152 students. The students were asked to complete the file and send it privately to one of the researchers via Telegram or email. Because the process was time consuming, the deadline to fill in the two questionnaires and the VLT was one day. Out of 152 members of the channel just 116 students completed the file and send it to the researchers. In all the steps, if there was misunderstanding concerning the items in the questionnaires, the researchers explained the concepts in the students' mother tongue (Persian).

4. Results

This study aimed to investigate the relationship among EFL learners' self-regulation, locus of control, and preference for vocabulary acquisition. Specifically, to test the research hypotheses, a series of descriptive and inferential statistics were run.

4.1. Testing the Null Hypotheses

   4.1.1. Testing the null hypothesis 1. The first null hypothesis of the present study was *there is no significant relationship between EFL learners' self-regulation and their preference for vocabulary acquisition.* In order to test the first null hypothesis, the Pearson Product Moment correlation was conducted as a correlational analysis (see Table 1).

Table 1
Correlation between Self-Regulation and Vocabulary Acquisition

		Self-Regulation	Vocabulary Acquisition
Self-Regulation	Pearson Correlation	1	-.01
	Sig. (2-tailed)		.87
	N	116	116
Vocabulary Acquisition	Pearson Correlation	-.01	1
	Sig. (2-tailed)	.87	
	N	116	116

According to Table 1, the Pearson's *r* reveals a negative correlation between two variables. Besides, the Sig. (2-Tailed)
value is greater than the *p* value (.87>.05) and it confirms there was no statistically significant correlation between two variables. It might be concluded that the relationship between EFL learners' self-regulation and their preference for vocabulary acquisition is not significant; accordingly, the first null hypothesis was confirmed.

   4.1.2. Testing the null hypothesis 2. The second null hypothesis of the present study was *there is no significant relationship between EFL learners' locus of control and their preference for vocabulary acquisition.* The Pearson Product Moment was run to test the second null hypothesis. Table 2 displays the results.

Table 2
Correlation between Locus of Control and Vocabulary Acquisition

		Locus of Control	Vocabulary Acquisition
Locus of Control	Pearson Correlation	1	-.19*
	Sig. (2-tailed)		.03
	N	116	116
Vocabulary Acquisition	Pearson Correlation	-.19*	1
	Sig. (2-tailed)	.03	
	N	116	116
*. Correlation is significant at the 0.05 level (2-tailed)			

The Pearson's *r* reveals a negative correlation between two variables. Moreover, the Sig. (2-Tailed) value is less than the *p* value (.03<.05) and it means that there is a statistically significant correlation between the variables. As a result, the relationship between EFL learners' locus of control and their preference for vocabulary acquisition was significant; hence, the second null hypothesis was rejected.

4.1.3. Testing the null hypothesis 3. The third null hypothesis of the present study was *there is no significant relationship between EFL learners' self-regulation and locus of control*. In order to test the third null hypothesis, we applied Pearson Product Moment correlation as a correlational analysis. Table 3 shows the results.

Table 3
Correlation between Self-Regulation and Locus of Control

		Self-Regulation	Locus of Control
Self-Regulation	Pearson Correlation	1	.09
	Sig. (2-tailed)		.33
	N	116	116
Locus of Control	Pearson Correlation	.09	1
	Sig. (2-tailed)	.33	
	N	116	116

As demonstrated in Table 3, the Pearson's *r* is .09 and it implies a positive correlation between the variables. Additionally, the Sig. (2-Tailed) value is greater than the *p* value (.33>.05) and it means that there was no statistically significant correlation between two variables. As a result, it is concluded that the relationship between EFL learners' self-regulation and locus of control is insignificant; therefore, the third null hypothesis was confirmed.

4.1.4. Testing the null hypothesis 4. The fourth null hypothesis of the present study reads *EFL learners' locus of control does not significantly predict their vocabulary acquisition preference*. We carried out a regression analysis and the results are presented in the following tables:

Table 4
Model Summary of Regression Output

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.19a	.03	.03	14.83
a. Predictors: (Constant), Locus of Control				

Table 4 shows that *R* value is .19 which indicates a simple correlation and *R Square* is .03 which indicates the independent variable (locus of control) can explained the total variation in the dependent variable (vocabulary acquisition) that is 3% in this case.

Table 5
ANOVA[b] of Regression Output

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1012.20	1	1012.20	4.60	.03[a]
	Residual	25081.00	114	220.00		
	Total	26093.20	115			
a. Predictors: (Constant), Locus of Control						
b. Dependent Variable: Vocabulary Acquisition						

According to above table, the Sig. value is .03 and it indicates that the statistical significance of the regression model predicts the dependent variable (vocabulary acquisition) significantly well ($p=.03<.05$).

Table 6
Coefficients[a] of Regression Output

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	100.82	4.71		21.38	.00
	Locus of Control	-.17	.08	-.19	-2.14	.03
a. Dependent Variable: Vocabulary Acquisition						

Table 6 demonstrates the standardized beta coefficients which signify the degree to which the predictor variable contributes to the prediction of the predicted variable. Inspection of the Sig. value shows that locus of control is a significant predictor of vocabulary acquisition preference as the Sig. value is less than .05 (.03<.05); accordingly, the fourth null hypothesis was rejected.

4.1.5. Testing the null hypothesis 5. The fifth null hypothesis of the present study reads *EFL learners' self-regulation does not significantly predict their vocabulary acquisition preference*. In order to test the fifth null hypothesis, we conducted a regression analysis. The following tables show the results:

Table 7
Model Summary of Regression Output

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.01[a]	.00	-.009	15.12
a. Predictors: (Constant), Self-Regulation				

According to Table 7, the *R* value is .01 which indicates a simple correlation and *R Square* is .00 which indicates the independent variable (self-regulation) can explained the total variation in the dependent variable (vocabulary acquisition) that is 0% in this case.

Table 8
ANOVA[b] of Regression Output

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.67	1	5.67	.02	.87[a]
	Residual	26087.53	114	228.83		
	Total	26093.20	115			
a. Predictors: (Constant), Self-Regulation						
b. Dependent Variable: Vocabulary Acquisition						

According to above table, the Sig. value is .87 and it indicates that the statistical significance of the regression model does not predicts the dependent variable (vocabulary acquisition) significantly well ($p=.87>.05$).

Table 9
Coefficients[a] of Regression Output

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	93.00	11.83		7.85	.00
	Self-Regulation	-.02	.14	-.01	-.15	.87
a. Dependent Variable: Vocabulary Acquisition						

Table 9 shows that the Sig. value is more than .05 (.87>.05). Further, the regression analysis between the two variables was not met; thus, self-regulation cannot be a significant predictor of vocabulary acquisition preference. Hence, the fifth null hypothesis was confirmed.

5. Discussion and Conclusion

A correlational analysis was run to test the first hypothesis. The findings show an insignificant relationship between EFL learners' self-regulation and their preference for vocabulary acquisition. Accordingly, the findings are not in the line with previous studies (e.g., Bohlmann et al., 2015; Hamedani, 2013; Hardi, 2014; Ping & Siraj, 2012; Kim & Linan-Thompson, 2013; Mizumoto, 2013; Ping et al., 2015). However, they did not investigate the relationship between self-regulation and preference for vocabulary acquisition more specifically, their findings show the effect of self-regulation on vocabulary learning and also indicate a significant relationship between self-regulation and vocabulary. Meanwhile, the findings for the first hypothesis are consistent with previous findings (e.g., Amirian, Mallahi & Zaghi, 2015; Zarei & Hatami, 2012).

Testing the second hypothesis, we found a significant relationship between EFL learners' locus of control and their preference for vocabulary acquisition. Consequently, the findings are not in the line with previous study (e.g., Rahimi & Askari Bigdeli, 2014). More specifically, they investigated the relationship between locus of control and vocabulary learning strategies whereas, the current study investigated relationship between locus of control and preference for vocabulary acquisition.

The finding concerning the third hypothesis show an insignificant relationship between EFL learners' self-regulation and locus of control. Therefore, the findings are in contrast with previous studies including Monshi Toussi and Ghanizadeh (2012). Notwithstanding, they did not investigate the relationship between EFL learners' self-regulation and locus of control more specifically, they investigated the relationship between self-regulation and locus of control among EFL teachers.

Moreover, a regression analysis conducted to test the fourth hypothesis. The findings indicate that EFL learners' locus of control significantly predict their vocabulary acquisition preference. In order to test the fifth hypothesis, the researchers conducted a regression analysis. The findings reveal that EFL learners' self-regulation cannot be a significant predictor of vocabulary acquisition preference.

The present study intended to investigate any probable relationship among EFL learners' self-regulation, locus of control, and preference for vocabulary acquisition. Based on the findings of the current study, it can be concluded that there is a significant relationship between EFL learners' locus of control and preference for vocabulary acquisition. Simply put, the learners who had high ability of the locus of control tended to use higher degree of the vocabulary acquisition. However, based on the findings, there was no significant relationship between EFL learners' self-regulation and preference for vocabulary acquisition. Furthermore, the result of data analysis revealed no significant relationship between EFL learners' self-regulation and locus of control. Additionally, the findings show that locus of control significantly predicted the vocabulary acquisition preference. Besides, the findings revealed that self-regulation might not be a significant predictor of vocabulary acquisition preference.

5.1. Implications of the Study

With regards to the findings of the present study, a significant relationship was found between EFL learners' locus of control and preference for vocabulary acquisition. This result has implications for EFL learners, EFL teachers and instructors, and syllabus designers and material developers. The findings imply that improving locus of control in a learning context involves EFL learners to become more conscious and gives them a sense of control over acquisition process as well as vocabulary acquisition. Moreover, a clear understanding of the relationship between locus of control and preference for vocabulary acquisition can change the EFL learners view toward the importance of learning locus of control. Further, improving locus of control can help the EFL learners to benefit from learning and acquisition processes and they become responsible in their own learning. In this regard, Stewart (2012) states learners who have high locus of control are more successful than others in the acquisition processes. In this study, it was revealed that learners with high ability of locus of control have more preference for vocabulary acquisition.

Besides EFL learners, EFL teachers and instructors can use the findings of the current study. They can motivate and teach their students to understand the importance of locus of control, help them consciously use locus of control, and use it to improve their preference for vocabulary acquisition. In addition, they need to create classroom features that develop and train locus of control for vocabulary acquisition. Furthermore, locus of control training should be emphasized in the EFL teachers' and instructors' work as an effective factor to overcome the challenges of vocabulary acquisition process. On the other hand, the syllabus designers and material developers that have a fundamental role in the language learning process can provide materials that have appropriate contents for EFL learners and teachers. They need to know the incorporation of locus of control and vocabulary acquisition more specifically. Moreover, syllabus designers and material developers are required to provide handbooks that contain guidelines for teaching through locus of control, for EFL teachers and instructors.

5.2. Suggestions for Further Research

Based on the findings of the present study, several recommendations for further research might be as follows:

1. The current study focused on vocabulary acquisition as predicted variable, future studies could take other language skills as predicted variables.
2. This study investigated a relationship between locus of control and preference for vocabulary acquisition, future studies could explore any possible relationship between locus of control and other language skills such as writing, listening, reading, and speaking.
3. In the present study, the participants were delimited with their age range, future studies could carry out the same study among children.

References

Amirian, S. M. R., Mallahi, O., & Zaghi, D. (2015). The relationship between Iranian EFL learners' self-regulatory vocabulary strategy use and their vocabulary size. *Iranian Journal of Language Teaching Research*, *3*(2), 29-46.

Bauer, I. M., & Baumeister, R. F. (2011). Self-regulatory strength. In K. D. Vohs & R. F. Baumeister (Eds.), *Handbook of self-regulation: Research, theory, and applications* (pp. 64-82). New York, NY: Guilford Press.

Baumeister, R. F., & Vohs, K. D. (2012). Self-regulation and the executive function of the self. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 180-197). New York, NY: Guilford Press.

Baumeister, R. F., Gailliot, M., DeWall, C. N., & Oaten, M. (2006). Self-Regulation and personality: How interventions increase regulatory success, and how depletion moderates the effects of traits on behavior. *Journal of Personality*, *74*(6), 1773-1802. doi:10.1111/j.1467-6494.2006.00428.x

Boekaerts, M., & Corno, L. (2005). Self-regulation in the classroom: A perspective on assessment and intervention. *Applied Psychology: An International Review*, *54*(2), 199-231.

Boekaerts, M., Pintrich, P. R., & Zeidner, M. (2000). Self-regulation: An introductory overview. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 1-9). San Diego, CA: Academic Press.

Bohlmann, N. L., Maier, M. F., & Palacios, N. (2015). Bidirectionality in self-regulation and expressive vocabulary: Comparisons between monolingual and dual language learners in preschool. *Child Development*, *86*(4), 1094-1111. doi:10.1111/cdev.12375

Duttweiler, P. C. (1984). The internal control index: A newly developed measure of locus of control. *Education and Psychological Measurement*, *44*(2), 209-221.

Faber, R. J., & Vohs, K. D. (2011). Self-regulation and spending: Evidence from impulsive and compulsive buying. In K. D. Vohs & R. F. Baumeister (Eds.), *Handbook of self-regulation: Research, theory, and applications* (pp. 537-550). New York, NY: Guilford Press.

Finkel, E. J., & Fitzsimons, G. M. (2011). The effects of social relationships on self-regulation. In K. D. Vohs & R. F. Baumeister (Eds.), *Handbook of self-regulation: Research, theory, and applications* (pp. 390-406). New York, NY: Guilford Press.

Ghonsooly, B., & Elahi, M. (2010). Validating locus of control questionnaire and examining its relation to general English (GE) achievement. *Journal of Teaching Language Skills*, *2*(1), 117-143.

Gu, P. Y. (2003). Fine brush and freehand: The vocabulary-learning art of two successful Chinese EFL learners. *TESOL Quarterly*, *37*(1), 73-104.

Hamedani, S. H. H. (2013). The relationship between self-efficacy and self-regulation in vocabulary acquisition of Iranian EFL learners. *Journal of Academic and Applied Studies*, *3*(1), 20-31.

Hardi, J. (2014). *Assessing young learners' strategic L2 vocabulary learning in the framework of self-regulation* (Doctoral dissertation, University of Szeged, Hungary). Retrieved from http://.doktori.bibl.uszeged.hu/2186/1/DISSERTATION_JUDIT_HARDI.pdf

Hunt, A., & Beglar, D. (2005). A framework for developing EFL reading vocabulary. *Reading in a Foreign Language*, *17*(1), 23-59.

Jarvis, M. (2005). *The psychology of effective learning and teaching*. Cheltenham: Nelson Thornes.

Kim, W., & Linan-Thompson, S. (2013). The effects of self-regulation on science vocabulary acquisition of English language learners with learning difficulties. *Remedial and Special Education*, *34*(4), 225-236. doi:10.1177/0741932513476956

Krashen, S. (1989). We acquire vocabulary and spelling by reading: Additional evidence for the input. *The Modern Language Journal*, *73*(4), 440-464.

Lester, D. (1992). Cooperative/competitive strategies and locus of control. *Psychological Report*, *71*, 594.

Lewis, M. (2000). *Teaching collocation: Further developments in the lexical approach*. Hove, UK: Language Teaching Publications.

Mizumoto, A. (2013a). Effects of self-regulated vocabulary learning process on self-efficacy. *Innovation in Language Learning and Teaching*, *7*(3), 253-265.

Mizumoto, A. (2013b). Enhancing self-efficacy in vocabulary learning: A self-regulated learning approach. *Vocabulary Learning and Instruction*, *2*(1), 15-24. doi:10.7820/vli.v02.1.mizumoto

Monshi Toussi, M. T., & Ghanizadeh, A. (2012). A study of EFL teachers' locus of control and self-regulation and the moderating role of self-efficacy. *Theory and Practice in Language Studies*, *2*(11), 2363-2371. doi:10.4304/tpls.2.11. 2363-2371

Morra, S., & Camba, R. (2009). Vocabulary learning in primary school children: Working memory and long-term memory components. *Journal of Experimental Child Psychology*, *104*, 156-178. doi:10.1016/j.jecp.2009.03.007

Nation, I. S. P. (2011). Research into practice: Vocabulary. *Language Teaching*, *44*(4), 529-539. doi:10.1017/S0261444811000267

Oettingen, G., Hönig, G., & Gollwitzer, P. M. (2000). Effective self-regulation of goal attainment. *International Journal of Educational Research*, *33*(7), 705-732.

Ping, A. M., & Siraj, S. (2012). Exploring self-regulatory strategies for vocabulary learning among Chinese EFL learners. *Procedia - Social and Behavioral Sciences*, *47*, 1211-1215. doi:10.1016/j.sbspro.2012.06.802

Ping, A. M., Baranovich, D. L., Manueli, M. K., & Siraj, S. (2015). Promoting self-regulation in vocabulary learning among Chinese EFL learners: A needs analysis. *The Asia-Pacific Education Researcher*, *24*(1), 137-146. doi:10.1007/s40299-013-0166-x

Rahimi, A., & Askari Bigdeli, R. (2014). The relationship between locus of control and vocabulary learning strategies of Iranian EFL learners. *International Journal of Linguistics and Communication*, *2*(2), 165-175.

Rodriguez, M., & Sadoski, M. (2000). Effects of rote, context, keyword, and context/keyword methods on retention of vocabulary in EFL classrooms. *Language Learning*, *50*(2), 385-412.

Scherer, K. R. (2005). What are emotions? And how can they be measured? *Social Science Information*, *44*(4), 695-729.

Schmitt, N. (2000). *Vocabulary in language teaching*. Cambridge: Cambridge University Press.

Schmitt, N., Schmitt, D., & Clapham, C. (2001). Developing and exploring the behavior of two new versions of the Vocabulary Levels Test. *Language Testing*, *18*(1), 55-88.

Singleton, D. (1999). *Exploring the second language mental lexicon*. Cambridge: Cambridge University Press.

Stewart, T. (2012). Undergraduate honors service-learning & effects on locus of control. *Journal of Service-Learning in Higher Education*, *1*, 70-86.

Tseng, W., Dörnyei, Z., & Schmitt, N. (2006). A new approach to assessing strategic learning: The case of self-regulation in vocabulary acquisition. *Applied Linguistics*, *27*(1), 78-102.

Weinstein, C. E., Husman, J., & Dierking, D. R. (2000). Self-regulation interventions with a focus on learning strategies. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 727-747). San Diego, CA: Academic Press.

Williams, M., & Burden, R. L. (1997). *Psychology for language teachers: A social constructivist approach*. Cambridge: Cambridge University Press.

Wong, P. T. P., & Sproule, C. F. (1984). An attribution analysis of the locus of control construct and the Trent Attribution Profile. In H. M. Lefcourt (Ed.), *Research with the locus of control construct: Extensions and limitations* (Vol. 3, pp. 309-360). Orlando: Academic Press.

Zarei, A. A., & Hatami, G. (2012). On the relationship between self-regulated learning components and L2 vocabulary knowledge and reading comprehension. *Theory and Practice in Language Studies*, *2*(9), 1939-1944. doi:10.4304/tpls.2.9.1939-1944

Zimmerman, B. J. (1990). Self-regulated learning and academic achievement: An overview. *Educational Psychologist*, *25*(1), 3-17.

Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13-39). San Diego, CA: Academic Press.

Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal*, *45*(1), 166-183. doi:10.3102/0002831207312909

Zimmerman, B. J., & Schunk, D. H. (2011). Self-regulated learning and performance. In B. J. Zimmerman & D. H. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (pp. 1-12). New York, NY: Routledge.

Zimmerman, C. B. (1997). Historical trends in second language vocabulary instruction. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition: A rational for pedagogy* (pp. 5-19). Cambridge: Cambridge University Press.