



The Relationship among Self-Efficacy Beliefs, Self-Directed Learning, and Critical Thinking: A Case of Advanced EFL Learners

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Abstract

The present study was an attempt to investigate the relationship among self-efficacy belief, self-directed learning, and critical thinking among advanced EFL Learners in a private language institute in Bandar Abbas, Iran. Sixty Iranian EFL students who were chosen based on their performance in a TOEFL PBT from among 80 EFL learners to shape the participants of the study. The participants received a validated copy of Honey s'(2004) critical thinking questionnaire, a standard copy of Self-Directed Learning Readiness Scale (SDLRS) developed by Guglielmino (1977), and The General Self-Efficacy Scale (GSE), which has been validated by Schwarzer and Jerusalem (1995). The findings of the present study revealed that firstly, there was a significant relationship between self-directed learning and self-efficacy belief of Iranian EFL learners. Secondly, the results revealed that there was a significant relationship between critical thinking and self-efficacy belief of Iranian EFL learners, and thirdly, it was revealed that there was a significant relationship between critical thinking and self-directed learning of Iranian EFL learners. Findings of the present study could be used by material developers, English teachers, and EFL learners in the EFL and ESL context.

Keywords: self-efficacy belief, self-directed learning, critical thinking, learner autonomy

INTRODUCTION

Learning a foreign language has always been dependent on various factors. Although the process of learning foreign languages may appear straight forward, when one looks deeper s/he may notice something that there is no clear reason to that. For example, some students are not good at other subjects; however, they can learn a foreign language, namely all four skills, easier than others who are good at many other subjects. Or, some learners don't put that much time for learning a language, but they are more successful than some other students that put a lot of effort on it. There are divergent reasons for these differences among students. Learning a language involves some perplex mental processes, like aptitude, self-confidence, self-efficacy, having different levels of motivation, learners' different cognitive styles, and plenty of some other

factors. These problems are those problems that most learners, specially the advanced ones are sometimes facing with.

Self-Efficacy Belief (Bandura, 1993, as cited in Haddoune, 2012) as generative capability and Self Directed Learning (Long, 1989, as cited in Francis & Flanigan, 2012) as well as Critical Thinking (Dewey, 1933) as learning strategies have been studied by researchers in the Second Language Acquisition (SLA) and English Language Teaching (ELT). Bandura (2002) argued that perceived self-efficacy contributes to cognitive development and functioning and operates as an important contributor to academic development of the learner. In this respect he asserted that students' beliefs of their efficacy to organize their own learning and to handle academic activities show their level of motivation, aspirations, and academic accomplishments. Zimmerman, Bandura, and Martinez-Pons (2010) argued that there is a high correlation between the goals students set in advance and what they perceive in the classroom. They asserted that if learners set high goals for themselves, the direct and indirect impact of students' perceived academic self-efficacy would be great on academic achievements. Also, Zimmerman et al. (2010) presented that the students' aspiration can be her belief in her academic efficacy. Hosseini Fatemi and Vahidnia (2013) argued the association between Iranian EFL learners' motivation and self-efficacy and presented that "there exists a significant association between EFL learners' self-efficacy and their intrinsic motivation" (p.79). They also asserted that among subscales of motivation, a motivation is negatively related to students' self-efficacy. Generally, it is believed that low achievement of EFL learners is related to their low aptitude. Intellectual abilities may be important in the process of language learning but other factors may also be involved. Affective variables, as Wei (2007) supports, are important predictors of second language performance and play an important role in developing second language skills.

Sometimes the learners put a lot of effort and time in learning a foreign language; however they are not successful enough. That is why they may lose their motivation after a while because they don't know where the root of the problem is. Especially those who are going to post-graduate abroad may even give it a second thought and it can tarnish their future consequently. Being aware of cognitive and learning styles of the learners, teachers can be of great assistance. The primary purpose of the current study was to throw light on the possible relationship among three main constructs of language learning. In fact, this study aimed to investigate whether any relationship existed among one's belief about his/her ability and one's control over his/her learning as well as one's critical thinking and analytic ability. In another sense, the present study tried to identify whether or not self-directed learning, self- efficacy belief, and critical thinking could play a significant role in leading advanced EFL learners to a successful second language proficiency level. To do so the present research was designed to explore the significant points in this regard.

RESEARCH QUESTIONS AND HYPOTHESES

Considering the research purpose and the problems stated above the following research questions were formulated.

- **Q1:** Is there any statistically significant relationship between self-efficacy belief and self-directed learning among EFL advanced learners?
- **Q2:** Is there any statistically significant relationship between critical thinking and self-efficacy belief among EFL advanced learners?
- **Q3:** Is there any statistically significant relationship between critical thinking and self-directed learning among EFL advanced learners?

Considering the above cited research questions the following null hypotheses were presented.

- **H₀₁:** There is no statistically significant relationship between self-efficacy belief and self-directed learning among EFL advanced learners.
- **H₀₂:** There is no statistically significant relationship between critical thinking and self-efficacy belief among EFL advanced learners.
- **H₀₃:** There is no statistically significant relationship between critical thinking and self-directed learning among EFL advanced learners.

METHOD

Participants

The EFL Iranian participants taking part in the present study were 60 EFL Iranian students who were studying English at the advanced level in a private Language Institute in Bandar Abbas. Both male and female students participated in the current study and their age ranges from 18 to 30 years old. These subjects were opted based on the results of their performance on the standardized paper based TOEFL (for advanced level). Firstly, this proficiency test was administered to 80 advanced students and those whose scores were one standard deviation above and below the mean score were selected to serve as the participants of the present study. This ensured if the learners knew enough English and could answer the questions in the Questionnaires appropriately.

Procedure

At first 80 advanced EFL students studying English in a language institute in Bandar Abbas received a standardized paper based TOEFL. The test was given to the participants and those who were scored 1 Standard Deviation (1SD) below and above the mean were asked to take part in the study. The participants were both males and females with the age range of 18-30. The selected learners received the three questionnaires of Critical Thinking Test, Self-Directed Learning Readiness Scale, and The General Self-Efficacy Scale (GSE). The data were collected and analyzed via SPSS software; version 21, and then reported and checked against the research questions of the study.

Design

The present study enjoyed an Ex post Facto Design, which according to Lammers and Badia (2005) is a non-experimental research technique in which the groups are compared based on some dependent variables. The reason is that, based on Hatch and Lazaraton (1991), there was no treatment involved in the study, nor was the study concerned with the learning process the participants might have gone through as a significant factor. No control was implemented over the effect of independent variables of the study (self-efficacy belief, self-directed learning, and critical thinking) on the dependent variable (learners' language proficiency level). None of the variables of the study were manipulated to cause changes, either. What was of paramount importance then was the type and strength of the connection between variables of the study; therefore an Ex Post Facto Design was the appropriate design for the accomplishment of the purpose of the study (Field, 2009). Considering that in this study results of some questionnaires and imperial investigation of an observable phenomenon were being dealt with and the correlation between the variables was considered as statistical analysis the research was a quantitative one.

Data Analysis

The data collected were analyzed via employing the following analyses:

1. The assumption of normality was measured through the ratio of the value of skewness and kurtosis over their respective standard errors to see if the ratio of the scores were normal and if they could meet the normality assumption and they were within the range of ± 2.58 (Field, 2013).
2. Descriptive statistics was used to calculate the mean and standard deviation of the TOEFL test which was used. Also the reliability of TOEFL test used was calculated through running KR-21.
3. Pearson correlation was conducted to analyze data to indicate the relationship among self-efficacy belief, self-directed learning, and critical thinking among Advanced EFL learners. Also the reliability, and construct validity of the questionnaires used were calculated through running KR-21 and factor analysis, respectively and compared with the reported ones in the literature.

RESULTS

This study aims at investigating the relationships between self-efficacy beliefs, self-directed learning, and critical thinking of EFL advanced Learners. As the study is of the relationship type, based on Creswell (2013) the Pearson correlation should be employed to calculate this relationship. Hence, Pearson correlation coefficient was run to probe the research questions posed in this study.

The main assumption of the Pearson correlation is normality of data. As displayed in Table 1 below the ratios of skewness and kurtosis over their standard errors were lower than ± 2.58 . Thus the assumption of normality was met (Filed, 2013).

Table 1. Testing the Normality Assumptions

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Critical Thinking	60	.061	.241	-.161	.478
Self-directed Learning	60	-.595	.241	-.122	.478
Self-Efficacy	60	-.036	.241	-.561	.478

Note. The ratios of skewness and kurtosis were compared against ± 2.58 due to the large sample size.

Analysis of Research Question 1

Is there any statistically significant relationship between self-efficacy belief and self-directed learning among EFL advanced learners?

A Pearson correlation was run to find the relationship between self-efficacy belief and self-directed learning among EFL advanced learners and the results showed that there was a significant relationship between self-directed learning and self-efficacy belief of Iranian EFL learners ($r(58) = .81$, $P < .05$ representing a large effect size). Thus, the first null-hypothesis as “there is no statistically significant relationship between self-efficacy belief and self-directed learning among EFL advanced learners” was rejected.

Table 2. Pearson Correlation; Self-Efficacy with Self-directed Learning

Self-Directed Learning	Self-Efficacy	
	Pearson Correlation	.813**
	Sig. (2-tailed)	.000
	N	60

Analysis of Research Question 2

Is there any statistically significant relationship between critical thinking and self-efficacy belief among EFL advanced learners?

A Pearson correlation was run to find the relationship between critical thinking and self-efficacy belief among EFL advanced learners and the results revealed that there was a significant relationship between critical thinking and self-efficacy belief of Iranian EFL learners ($r(58) = .87$, $P < .05$ representing a large effect size). Thus, the second null-hypothesis as “There is no statistically significant relationship between critical thinking and self-efficacy belief among EFL advanced learners” was rejected.

Table 3. Pearson Correlation; Self-Efficacy Belief with Critical Thinking

Critical Thinking	Self-Efficacy	
	Pearson Correlation	.872**
	Sig. (2-tailed)	.000
	N	60

Analysis of Research Question 3

Is there any statistically significant relationship between critical thinking and self-directed learning among EFL advanced learners?

A Pearson correlation was run to find the relationship between critical thinking and self-directed learning and the results showed that there was a significant relationship between critical thinking and self-directed learning of Iranian advanced EFL learners ($r(58) = .80$, $P < .05$ representing a large effect size). Thus, the third null-hypothesis as “there is no statistically significant relationship between critical thinking and self-directed learning among EFL advanced learners” was rejected.

Table 4. Pearson Correlation of Self-Directed Learning with Critical Thinking

	Self-Directed Learning	
Critical Thinking	Pearson Correlation	.800**
	Sig. (2-tailed)	.000
	N	60

DISCUSSION

The findings of the present study revealed that firstly, there was a significant relationship between self-directed learning and self-efficacy belief of Iranian advanced EFL learners. Secondly, the results revealed that there was a significant relationship between critical thinking and self-efficacy belief of Iranian advanced EFL learners, and thirdly, it was revealed that there was a significant relationship between critical thinking and self-directed learning of Iranian advanced EFL learners. Therefore, it could be concluded that there is a significant relationship among self-efficacy belief, self-directed learning, and critical thinking of advanced EFL Learners in a private language institute in Bandar Abbas city. All of these findings are in line with the findings of other researchers recorded in the literature:

The first finding of the study asserts the positive relationship between EFL learners' self-directed learning and self-efficacy belief. This study is in line with Sharifi and Ahangary's (2015) study on the correlation between Iranian advanced EFL learners' self-regulation capacity and their self-efficacy. Having run the correlations analysis, the results revealed that there was a significant correlation between participants' emotional intelligence and their self-regulation capacity. Broadbent and Poon (2015) also found that self-directed learning strategies and academic achievement in online higher education learning environments have a significant relationship.

Bonyadi, Nikou, and Shahbaz (2012) in their study concerning the relationship between EFL learners' self-efficacy beliefs and their language learning strategy use, found that self-efficacy belief can be defined as any strategy that requires students to judge their own language abilities or language performance. Magogwe and Oliver (2007), in their study concerning the relationship between self-efficacy and self-directed learning argued that accurate self-directed learning may lead learners to more efficacies to perform a task.

The second finding of the study suggests a positive relationship between learners' self-efficacy belief and their critical thinking ability. In this regard Zheng, Young, Brewer, and Wagner (2013) examined the effect of self-efficacy belief on school students' achievement in math and English, as the courses needing critical thinking, at the beginning and end of school year. The results of their study indicated that self-efficacy was a strong predictor of math and English achievement and critical thinking enhancement. Lai and Gu (2011) presented that there is a high correlation between achievement-related self-system factors in relation to children's critical thinking. In line with the previous research on the relationship between critical thinking and self-efficacy, Nemat Tabrizi and Jafari (2015) found that significant relationships between critical thinking and reading comprehension at elementary, intermediate and advanced levels. Also they found that there were significant relationships between self-efficacy and reading comprehension at elementary, intermediate and advanced levels, and thirdly, there were significant relationships between critical thinking and self-efficacy at elementary, intermediate and advanced levels. Clarke (2014) also asserts that self-efficacy belief accompanied with critical thinking and second language reading ability are highly connected as learners with high self-efficacy and critical thinking ability enjoy better reading ability compared to the learners with low self-efficacy or low critical thinking ability.

CONCLUSION

The findings of the present study revealed that firstly, there was a significant relationship between self-directed learning and self-efficacy belief of Iranian advanced EFL learners. Secondly, the results revealed that there was a significant relationship between critical thinking and self-efficacy belief of Iranian advanced EFL learners, and thirdly, it was revealed that there was a significant relationship between critical thinking and self-directed learning of Iranian advanced EFL learners. Therefore, it could be concluded that there is a significant relationship among self-efficacy belief, self-directed learning, and critical thinking of advanced EFL learners.

According to the present study findings, a significant relationship was found between self-directed learning and self-efficacy belief of Iranian advanced EFL learners. This finding is in line with the previous findings in the literature pertained to the relationship between EFL learners' self-directed learning, critical thinking, and self-efficacy belief (Barkley, 2006; Bonyadi, et al., 2012; Broadbent & Poon, 2015; Elder, 2007; Lai, 2013; Lai & Gu, 2011; Magogwe & Oliver, 2007; Meshkat & Hassanzade, 2014; Nemat Tabrizi & Jafari, 2015; Naseri & Zaferanieh, 2012; Sadeghy & Mansouri, 2014; Sharifi & Ahangary, 2015; Zheng, et al., 2013), one can conclude that learning styles such as self-efficacy belief, learning strategies such as self-directed learning and critical thinking are in close connection and positive correlation for the advanced EFL learners.

The present study demonstrated that there is a significant positive correlation between critical thinking, self-efficacy belief, and self-directed learning of Iranian advanced EFL learners. EFL learners need to know native like vocabularies, grammatical points, and preferences, dictions, and the like for a native like performance and a large bulk of such

information could be well developed through employing critical thinking and self-directed learning. Therefore, according to the results of the present study, some implications for teaching and learning can be suggested. The present findings could be employed by second language teachers to make the learners more aware of what they are dealing with.

REFERENCES

- Bachman, L. F., & Palmer, A. (2010). *Language assessment in practice*. Oxford: Oxford University Press.
- Bandura, A. (2002). Selective moral disengagement in the exercise of moral agency. *Journal of Moral Education*, 31(2), 101-119.
- Barkley, R.A. (2006). *Attention deficit hyperactivity disorder: A hand book for diagnosis and treatment* (3rd ed). New York: Guilford.
- Broadbent, J., & Poon, W. L. (2015). Self-regulated learning strategies & academic achievement in online higher education learning environments: A systematic review. *The Internet and Higher Education*, 27, 1-13.
- Chou & W. Chen (Eds.), *Self-directed learning and web-based learning environment* (pp.124-136). Pennsylvania: The Pennsylvania State University.
- Clarke, J. (2014). *Self-esteem, self-efficacy and dual processing in magic tricks: I know how you did that*. M.A thesis. Dublin Business School, School of Arts, Dublin, Ireland.
- Creswell, J. W., & Creswell, J. W. (2013). *Qualitative inquiry and research design :choosing among five approach*. Los Angeles: SAGE Publications.
- Dewey, J. (1933). *How we think*. Boston: Health and Company.
- Elder, L. (2007). *A brief conceptualization of critical thinking*. Retrieved January 10, 2015 from <http://www.criticalthinking.org/pages/defining-criticalthinking/410/>.
- Field, A. (2009). *Discovering statistics using SPSS*. Los Angeles: Sage Publications Limited.
- Field, A. (2013). *Discovering statistics Using IBM SPSS statistics* (4th ed.). London: SAGE Publications.
- Francis, A., & Flanagan, A. (2012). Self-directed Learning and Higher Education Practices: Implication for student Performance and Engagement. Mountain Rise, the International *Journal of the Scholarship of Teaching and Learning*, 7(3), 2-2.
- Guglielmino, L. M. (1977). *Development of the self-directed learning readiness scale*.
- Hatch, E. M., & Lazaraton, A. (1991). *The research manual: Design and statistics for applied linguistics*. New York: Newbury House Publishers.
- Honey, P. (2004). *Critical thinking questionnaire*. Retrieved from <http://www.PeterHoneyPublication.com>.
- Honey, P. (2005). *Critical thinking questionnaire*. Retrieved from <http://www.readingrockets.org/article/c67/?start>.
- Hosseini Fatemi, A., & Vahidnia, F. (2013). Self-efficacy and Motivation among Iranian EFL Learners: An Investigation into their Relationships. *International Journal of English Language Education*, 1(3), 79-91.
- Lai, C., & Gu, M. Y. (2011). Self-regulated out-of-class language learning with technology. *Computer Assisted Language Learning*, 24, 317-335.
- Lammers, W. j., & Badia, P. (2005). *Fundamental of Behavioral Research*. California: Thomson and Wadsworth.

- Long, H. B. (1989). Self-directed learning: Emerging theory & practice. Norman, Oklahoma: Oklahoma Research Center for Continuing Professional and Higher Education. Retrieved January 12, 2012, from ccnmtl.columbia.edu/projects/pl3p/Self Directed%20Learning.pdf
- Maggie Su, M.H., & Duo, P.C. (2010). EFL learners' language learning strategy use as a predictor for self-directed learning readiness. *The Journal of Asia TEFL*, 7(2), 153-176.
- Meshkat, M., & Hassanzade, A. (2014). Effect of self-Directed learning on the components of reading comprehension. *Research in Applied Linguistics*, 4(2), 1-13.
- Naseri, M., & Zaferanieh, E. (2012). The relationship between reading self-efficacy beliefs, reading strategy use and reading comprehension level of Iranian EFL learners. *World Journal of Education*, 2(2), 64-75.
- Nemat Tabrizi, A. R., & Jafari, M. (2015). The relationship among critical thinking, self-efficacy, and Iranian EFL learners' reading comprehension ability with different proficiency levels. *Academic Research International*, 6(2), 412-427
- Oakley, G. (2011). The assessment of reading comprehension cognitive strategies: Practices and perceptions of Western Australian teachers. *Australian Journal of Language and Literacy*, 34(3), 279-293.
- Prat-Sala, M., & Redford, P. (2010). The interplay between motivation, self-efficacy, and approaches to studying. *British Journal of Educational Psychology*, 80(2), 283-305.
- Rostami, A. (2014). *The effect of self-directed learning on Iranian intermediate EFL learners' reading strategy ability*. Master Thesis, Science & Research Branch, Islamic Azad University, Tehran, Iran.
- Sadeghy, A. R., & Mansouri, A. (2014). The relationship between learners' goal orientated and self-regulated learning and their endorsement of L2 learning strategies. *International Journal of Language Learning and Applied Linguistics World (IJLLALW)*, 5(2), 574-593.
- Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston (Ed.), *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). UK: Windsor.
- Sharifi, M., & Ahangary, S. (2015). On the correlation between Iranian EFL learners' self-regulation capacity and their self-efficacy. *Modern Journal of Language Teaching Methods (MJLTM)*, 5(1), 342-2350.
- Wei, M. (2007). The Interrelatedness of Affective Factors in EFL Learning: An Examination of Motivational Patterns in Relation to Anxiety in China. *TESEL-Ej*, 11, 1-23.
- Zheng, D., Young, M. F., Brewer, R. A., & Wagner, M. (2013). Attitude and self-efficacy change: English language learning in virtual worlds. *CALICO journal*, 27(1), 205-230.
- Zimmerman, B. J., Bandura, A., & Martinez-Pons, M. (2010). In recent years, there has been a growing interest in students' self-regulation. *SAGE Directions in Educational Psychology*, 1(3), 231-242.