

The Relationship between Iranian EFL Learners' Self-Regulation and their Ambiguity Tolerance

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Abstract – This study investigated the relationship between Iranian EFL learners' self-regulation and their ambiguity tolerance. To achieve the purpose of the study, 120 EFL learners were asked to participate in this study. They were requested to complete the Self-Regulation Trait Questionnaire and Tolerance of Ambiguity Questionnaire. The results of data analysis supported the theoretical expectation of the relationship between self-regulation and ambiguity tolerance of learners. The conclusions and recommendations derived from the present study should encourage educational psychologists to take benefit of these relationships by taking effective steps for developing EFL students' self-regulation, critical thinking, and ambiguity tolerance.

Keywords: EFL learners, self-regulation, ambiguity tolerance.

I. INTRODUCTION

Regarding the context of learning, self-regulation has been proposed to refer to self-directed processes that give learners the opportunity to transform their mental capabilities into performance skills (Zimmerman, 2008). By increasing learners' ability in a more impressive manner, self-regulation learning can contribute to individuals' perceived competence and expectations for success. It has been proposed that, besides knowing what aspects to improve and how to enhance these aspects, self-regulated learner must be motivated to improve (Zimmerman, 2006).

According to Baumeister and Vohs (2004), procedures that allow individuals to use control over their thoughts, feelings, and actions can be considered as Self-regulation. Procedures that have developed to expand the range and flexibility of human performance and making it possible for human beings to dominate counterproductive responses can be considered as Self-regulation, one needs a sense of self-awareness for self-regulation to occur and, if other people are involved, the capability to deduce the mental state of others (Baumeister, 2005).

Baumeister and Vohs (2004) define "self-regulation" as "the exercise of control over oneself, especially with regard to bringing the self into line with preferred (thus, regular) standards" (P.2). The terms self-regulation and self-control are used interchangeably in the current study, although some researchers make subtle distinctions

between the two concepts. Some researchers use “self-regulation” to refer broadly to goal-directed behaviors, whereas “self-control” may be associated specifically with conscious impulse control (Baumeister & Vohs, 2004). According to Schmeichel and Baumeister (2004), “self-regulation” refers to both the conscious and subconscious alteration of one’s own responses, while “self-control” implies a more deliberate and conscious process of altering one’s responses. In self-regulation, the self acts upon itself to alter its own responses. Regulation of this response is usually initiated with the goal of achieving a desired outcome, such as improving one’s mood or avoiding an undesirable result (Schmeichel & Baumeister, 2004).

Language learning is a subject of having capability to deal with unfamiliar and even vague characteristics of a new language. A person who has such ability to adapt and tolerate can become a successful learner. Furnham (1994) described tolerance of ambiguity as the way an individual (or group) considers and deals with information about ambiguous situations when they face a range of unknown, complex or uncertain cues. Ambiguity tolerance is a variable which is often thought as a one-dimensional scale: "the person with low tolerance of ambiguity may experience stress, reacts prematurely and refuses ambiguous situation. At the other degree of the scale; however, a person with high tolerance of ambiguity deals ambiguous situations/stimuli as desirable, challenging and interesting". Consequently, every one involves in the process of teaching and learning must be aware of the relationship between learners’ personality traits and their academic performance as personality and personality factors play an important and undeniable role in the area of teaching and learning (Eysenck, 1967).

According to Chapelle and Roberts (1986), ambiguity tolerance is “a person’s ability to function rationally and calmly in a situation in which interpretation of all stimuli is not clear” (p. 30). Feelings such as anxiety and uncertainty can be born better by tolerant people. In a sensible way, they will be able to recognize and understand ambiguous situations more sufficiently without rejecting or misrepresenting parts of its intricacy. Tolerant people are likely to expand more adaptive and better synchronized behavior. They can endure the uneasiness of the ambiguous condition long enough as to adjust and create a more suitable and adaptable response to it. It was assumed that in new complex situations, tolerant individuals should act well.

Ehrman (1993) expressed another viewpoint on tolerance of ambiguity. She has distributed a tolerance of ambiguity construct into three separate parts:

- 1) The first part named intake
- 2) The second part named tolerance of ambiguity proper, and
- 3) The third part called accommodation

At the first level, the learner brings new information into his or her mind. In the second level, as described as tolerance of ambiguity proper, it is assumed that intake has happened and at this phase the person has to deal with discrepancy elements, incomplete data or an incomplete system. In the accommodation, which is the third level, distinguishing the

new information is made, in order to change the latter and create new cognitive schemata that did not exist before, priorities are set and finally combination of new information with existing structures occurs.

As Renner (1996) mentioned higher-level thinking skills improve higher-level learning skills leading to academic achievement. And it is said that the major cause of failure is the lack of self-regulation. Underachievers are more involuntary, have lower academic ends, are less accurate in evaluating their capabilities, are more self-critical and less effective about their performance and tend to give up easily than high achievers (Borkowski & Thorpe, 1994). These students are more nervous, have a lower self-esteem, have a higher need for affirmation, and are more easily influenced by extrinsic elements. On the other hand, respecting to such criteria self-regulators are immediately identified in the classroom like: they are self-starters, they are confident, strategic and resourceful, and they are self-reactive to task performance results.

In addition, Rubin (1975) considered the good language learner as one who is often not inhibited and who wants to make mistake to learn and to speak and also one who desires to live with a degree of uncertainty. Brown (2000) defines the ambiguity tolerance as the degree of willing to tolerate ideas or propositions cognitively that act against one's own belief system or structure of knowledge. It is not known whether there is a relationship between foreign language learning and critical thinking, self-regulation and ambiguity tolerance of beginners and advanced learners. This study explores whether learning a language makes difference in learners' self-regulation and ambiguity tolerance.

The main purpose of this study is to empirically examine the hypothesized relationship between EFL learners' self-regulation and ambiguity tolerance. In this study, the researchers set out to investigate these relationships based on theoretical contention as well as empirical studies demonstrating relationship between language learning and critical thinking, self-regulation and ambiguity tolerance of learners. To fulfill the research purpose, the following research question was put forward:

- Is there any relationship between EFL learning and ambiguity tolerance of Iranian EFL learners?

II. METHOD

A. Participants

The participants of the present study were 120 male and female Iranian EFL students between the ages of 18 and 23. All of them had almost similar experience of language learning. These participants were two groups of EFL learners who studied in beginner and intermediate levels in Safir Institute in Tehran. They were selected based on hierarchy of institute. All the participants were studying at different academic fields. No randomization has been done to select the participant for beginner and intermediate to advanced groups.

B. Instruments

The instruments of the study consisted of two questionnaires. They were a) self-regulation questionnaire (Self-Regulation Trait Questionnaire) that was designed by O'Neil and Herl (1998); and b) a tolerance of ambiguity questionnaire (Burner's Tolerance of Ambiguity Scale), developed by Budner (1962). The Self-Regulation Trait Questionnaire consists of 32 Likert-scale questions ranging from almost never, to sometimes, often, and almost always. The scale seeks to measure metacognition and motivation dimensions. Each dimension comprises two sub-scales. Meta-cognition covers the constructs of planning and self-monitoring, and motivation contains effort and self-efficacy. According to Herl (1998), the reliability and validity of the scale have been verified in multiple studies. In this study, the total reliability of the Persian version of the questionnaire calculated via Cronbach's alpha and it proved to be (.67), and to assure its validity some items of the questionnaire were modified or omitted. The Burner's Tolerance of Ambiguity Scale was administered as part of a battery of psychological measures. It consists of 16 items based on a seven-point scale, from 1 (Strongly Disagree) to 7 (Strongly Agree). Budner (1962) testified a test-retest reliability of .85 after two weeks when administered to one of the samples in his study. The internal consistency of a scale is usually considered sufficiently high if estimates of coefficient alpha are above .70, and a recent meta-analysis shows that coefficient alphas of at least .70 are reported in the vast majority of published and unpublished research (Peterson, 1994). In this study Persian version of the questionnaire was used. To assure its validity some items of the questionnaire were modified or replaced. After piloting the AMT questionnaire to students, the Cronbach's Alpha reliability of the questionnaire was reported to be (.69) using the SPSS.

C. Procedures

In order to conduct the study and collect the required data related to the research question, the following procedure was followed. Firstly, in order to eliminate misunderstanding of the items, self-regulation questionnaire and ambiguity tolerance questionnaire were translated into the mother tongue of the participants (Persian) by the researcher. The participants were asked to complete the Self-Regulation Trait questionnaire and Budner's Tolerance of Ambiguity Scale.

III. RESULTS

The normality of the scores of the questionnaires was shown by using one sample Kolmogorov-Smirnov test. The results are presented in Table 1.

Table 1: One-Sample Kolmogorov-Smirnov test of the questionnaires

		Self-Regulation Trait	Tolerance of Ambiguity Scale
	N	120	120
Normal Parameters ^{a,b}	Mean	64.205	74.684
	Std. Deviation	7.843	5.211
Most Extreme Differences	Absolute	.105	.128
	Positive	.101	.090
	Negative	-.105	-.128
Kolmogorov-Smirnov Z		.975	1.085
Asymp. Sig. (2-tailed)		.158	.845

As the Table 1 shows, the most extreme differences between the scores are not significant. The measured significance levels for self-regulation and tolerance of ambiguity were 0.15, and 0.84; they were higher than the assumed level of significance (i.e., 0.05), therefore, it can be concluded that there was no significant difference between the observed distribution of the scores of self-regulation and tolerance of ambiguity and they are normally distributed.

In order to investigate the research question of the study in finding whether there is any relationship between EFL learners' self-regulation and their ambiguity tolerance, the correlation coefficient was measured. The following table shows the correlation coefficient between EFL learning and critical thinking.

Table 2: Correlation coefficient between EFL learners' self-regulation and their ambiguity tolerance

		Self-regulation	Ambiguity Tolerance
Self-regulation	Pearson Correlation	1	.654**
	Sig. (2-tailed)		0.000
	N	120	120
Ambiguity Tolerance	Pearson Correlation	.654**	1
	Sig. (2-tailed)	0.000	
	N	120	120

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

As it can be seen in table 2, there is a significant and positive correlation between the two variables, ($r = .65$, sig (2.tailed) < 0.01), in a way that EFL learners' self-regulation is associated with higher levels of ambiguity tolerance. Therefore, the research question of the study was answered.

IV. DISCUSSION AND CONCLUSION

The primary purpose of this study was to examine the possible relationship between EFL learners' self-regulation and their ambiguity tolerance. This confirms that the progression in EFL learners' ambiguity tolerance may have a positive influence on their self-regulation and vice versa. There were only a limited number of research findings available on this topic in second/foreign language learning. In this study, language learning and the individual characteristics were examined but most of studies focused on individual characteristics and their relation with language learning. Findings of the present study verify preceding L2- related research indicating that self-regulated learners were generally higher achievers and more motivated to achieve educational goals in comparison with their counterparts with less self-regulatory ability (Ee, Moore, & Atputhasamy, 2003; Pajares & Schunk, 2001).

As Kuiper (2002) mentioned the development of self-regulation will be a factor to tolerance of ambiguity, responsibility taking, self-confidence, and self-efficacy augmentation. Naimain, Frohlich, Stern and Todesco (1978) said that the ambiguity tolerance was one of the only two major factors in predicting the achievement of their high schools learners of French in Toronto. Chapelle and Roberts (1986) evaluated the tolerance of ambiguity in learners of English as a second language in Illinois. They achieved those learners with high tolerance for ambiguities were somewhat more successful in certain language tasks.

According to the results of the present study, it appears that the role of language learning also generalizes to EFL contexts and among EFL learners. That is, the more EFL learners learn, the more some of their individual characteristics improve.

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