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A STUDY OF THE RELATIONSHIP BETWEEN CRITICAL THINKING AND THE LEARNING STRATEGIES SELECTED FOR LISTENING BY IRANIAN EFL LEARNERS AT B.A. LEVEL

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ABSTRACT

The present study investigated the relationship between critical thinking ability of Iranian EFL learners at B.A. level and their selected strategies for listening skill and also the effect of gender variable on them. The needed data were gathered through the application of two standard questionnaires. The first one is Watson-Glaser's (1980) critical thinking Appraisal Form a and the second one is Cheng's (2003) 30-item Listening Strategy Scale. The participants of the study were students of either English literature or translation from different classes of freshman, sophomore, junior and senior at Semnan State and Islamic Azad University, Iran. From the total number of 120 students participated in the study, 80 pairs of completed questionnaires were analyzed. After obtaining the raw data, The SPSS software (version 16) was used to change the data into numerical interpretable form. To determine the relationship between critical thinking and listening strategies, Pearson product-moment correlation was used and the correlation coefficient(r) was .53 ($p > .05$). According to the results of Levene's test for equality of variances and t-test for equality of means, no significant relationship was observed between gender and the strategies the students choose for listening improvement via critical thinking ability. Based on the findings of the study, the rate of critical thinking ability seems to play a key role in selecting listening strategies.

Key Words: *Critical Thinking, Listening Strategies*

INTRODUCTION

Everyone thinks; it is our nature to do so. But much of our thinking is biased and partial. Yet the quality of our life and as the result what we do, depends on the quality of our thoughts. So, thinking effectively is an everyday activity. When someone is told and forced to decide about something new, thinking deeply is required and asking how and why, are the first steps of making a good decision process. Life can be described as a sequence of problems that everyone must solve his or her own ones. Thinking is undeniable part of human's life.

Critical thinking has been one of the hottest issues since the times of ancient Greece. Paul *et al.*, (1997) assert that thinking intellectually refers to the teaching practice and vision of Socrates 2500 years ago who discovered that people could not rationally justify their confident claims to knowledge. He established the importance of asking deep questions that probe profoundly into thinking before we accept ideas. His method of questioning is now known as "Socratic Questioning" and is the best known critical thinking teaching strategy. He highlighted the need in thinking for clarity and logical consistency.

Statement of the Problem

One of the skills every learner of a new language is supposed to know is listening ability. This skill has some advantages regarding to other skills: first, this ability occupies a big chunk of the time we spend communicating in the language. Second, it provides input that can be very significant for SLA in general and for the development of the speaking skill in particular. Third, it promotes non-linear processing of language and encourages learners to develop "holistic" strategies to texts. So, making a good decision for choosing an appropriate strategy for listening ability is remarkable here. An appropriate strategy helps more to build this skill well.

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Critical thinking is an everyday activity; whenever we want to make a decision, we go through a thinking process. Critical thinking is about asking questions. Critical thinking issue has been growing rapidly for some years. In each concept we deal with in language learning and teaching the trace of it is very obvious. Moon (2008) asserts that critical thinking and its relationship to the educational process has become a central issue and it is time to explore the term. She adds since critical thinking is a process which is involved in any research activity: it can be considered as a principal concept to education, especially at higher levels, in fact it is fundamental goal of learning.

Research Questions

Q1. Is there any relationship between Iranian EFL learner's critical thinking ability and the learning strategies they select for listening skill?

Q2. Is there any significant effect of gender on selecting listening strategies via critical thinking ability?

Research Hypotheses

H1: there is no relationship between Iranian EFL learner's critical thinking ability and the learning strategies they select for listening skill?

H2. There is no significant effect of gender on selecting listening strategies via critical thinking ability?

Review of Literature

Moon (2008) states that critical thinking and its relationship to the educational process has become a central issue and it is time to explore the term. She believes that since critical thinking is a process which is involved in any research activity: it can be considered as a principal concept in education, especially at higher levels. In fact it is a fundamental goal of learning. Critical thinking is also important in relation to disciplines (e.g. management or social sciences) or professions (e.g. medicine or social work) or master levels and undergraduate levels. That is to say, critical thinking can be considered as an important facilitator of what students expected to achieve at the end of a level in higher education program. For instance, at the higher education level students should have critical evaluation abilities, provide logical and reliable suggestions, and investigation contradictory information; all these capabilities require well-developed way of thinking critically.

There are many reasons that could be given here to support that critical thinking in society is as important as in educational and professional contexts. Moon (2003) states that critical thinking is the actual meaning of being a developed person living in a democratic society or moving toward democratic societies.

Facione (2000) argues that getting good grade or getting started in a good job are but not the main goals of college education. A main purpose, if not the main purpose, of the academic experience is to achieve what people have called a "liberal education". Not liberal in the sense of talking foolish about this and that for no particular purpose but liberal in the sense of "liberating". That is, learners are to be liberated from dependence on professors so that they are no longer just receivers of authority's opinion. In fact, this is exactly what the professors want; students with an amount of capacity to challenge, question, and dissent. They want their students to excel on their own; to go beyond what is currently known, to make their own contribution to knowledge and to society. Being a professor is a curious job, the better you are, less you are needed. Bayer (1995) says that "specialists today appear to agree that critical thinking is the assessing of the authenticity, accuracy and/or worth of knowledge claims and argument's' (p.271).

Smith (1986) stated that in the western countries in the 1950s because of the postwar fears of communism, rapid advancement of technology and strong threats from mass communications like radio and television, teaching critical thinking skills was considered necessary to prepare children to live in a more complex world.

No one would claim that critical thinking is useable across a range of disciplinary areas, but there is little consensus about whether it is a set of generic skills that is used across subject domains like engineering, arts, and science (generalist view) or whether it depends on the subject domain and context in which it is taught (specialist view) (Ennis, 1989). If critical thinking is generic, then it should be taught in specialized courses that focus on critical thinking skills. If critical thinking depends on subject matter, then it should

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be learned by dealing with concrete problems in specific disciplines (Halliday, 2000). Abrami *et al.*, (2008) tried to summarize available empirical evidence for the effects of implicit and explicit instructions on the development of critical thinking skills. The findings of this study indicated the fact that improvement in student's critical thinking skills cannot be a matter of implicit instruction. However, the findings were not uniformly positive and they found some evidence of negative effects. After all they concluded that educators must take steps to make critical thinking objectives explicit in courses and also include them in both pre-service and in-service training and faculty development.

Burk and Williams (2008) also aimed to investigate the effectiveness of teaching critical thinking skills explicitly to eleven- and twelve-year- old students through including critical thinking skills in the curriculum. There were three groups: collaborative, individual, and control groups. In the collaborative group students worked together and in the individual group each student practiced critical skills alone.

The findings of the research showed that when thinking skills were taught explicitly, participants learned them either individually or collaboratively improved in term of critical thinking skills. However, the students practicing the critical thinking skills collaboratively scored slightly higher than the students who practiced critical thinking skills individually.

Birjandi and Bagherkazemi (2010) investigated the relationship between EFL teacher's critical thinking ability and their student-evaluated professional success. To this end, the critical thinking ability of 67 Iranian EFL teachers was measured through the Persian version of Watson-Glaser critical thinking Appraisal. The teacher's professional success was also gauged through the successful Iranian EFL Teacher Questionnaire (SIETQ). The results of correlation and regression analyses showed a statistically significant relationship between the two sets of measures. As Oxford (1993) defined "Listening is a complex problem solving skill" and it is more than just perception of sounds. Listening includes comprehension of meaning bearing words, phrases, clauses, sentences and connected discourse. She also points out that listening is usually a hard skill to master in one's own language and more difficult you find it in second or foreign language." So, learning from the difficulties can help us to diagnose some techniques to overcome them. Anderson and Lynch (1998) mentioned five factors which make listening difficult. First one is the organization of information, second is the familiarity of topic, and third is the explicitness and sufficiency of the information. And the fourth one is the type of referring expressions used, and the last is whether the text describes a static relationship. Another idea about the issues making difficulty for listening was presented by Brown and Yule (1983) as speaker factors, listener factors, the content and support. According to Dunkel (1991; Richard 1983; Ur, 1984; Cited in Brown 2001) these four characteristics of spoken language make listening difficult. However one problem about strategies is that there is still some confusion over their definition, which has varied widely, from broad, almost meaningless definition that could have almost anything to do with language learning-such as that suggested by Wenden (1987) for example to more specific characterizations, as provided by Oxford and Cohen (1992). As the latter point researchers often disagree about whether strategies are conscious or unconscious. Their own conclusion is that 'strategy use involves some degree of conscious awareness on the part of the learner' Oxford and Cohen 1992). In a recent state-of-the-art article on learner strategies, MC Donough (1999), among other recommendations calls for further investigation into the relationship between proficiency and learning strategies in the skill areas, (specially speaking and listening) and a need to flesh out the concept of the skilled learner. It has been argued that awareness of strategies and other variables in learning can have positive influences on language learners listening development (e.g., Bolitho *et al.*, 2003; Victory and Lockhart, 1995; Wilson, 2003)

MATERIALS AND METHODS

Materials

Introduction

Learning strategies are for the most part unobservable, though some may be associated with an observable behavior. For example, a learner could use *selective attention* (unobservable) to focus on the main ideas

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while listening to a newscast and could then decide to *take notes* (observable) in order to remember the information. In almost all learning contexts, the only way to find out whether students are using learning strategies while engaged in a language task is to ask them.

Verbal report data are used to identify language learning strategies because observation does not capture mental processes (Cohen, 1998; O'Malley and Chamot, 1990; Rubin, 1975; Wenden, 1991).

Design of the Study

The design of the study is descriptive correlational which is the correlation between two independent variables.

Participants

All the participants were undergraduate students of either English literature or English translation (freshmen, sophomores, juniors, and seniors). They had taken part in Iran's nation-wide and standard university entrance examination and were passing their educational courses at University. The students were from different cities around Iran mostly from Semnan, North, Northeast and the capital. Their mother tongue was mostly Farsi but some had other dialects of their own region. They were in different age from 18 to 35 male and female. In this study the year of education—first, second, third and fourth – the age and mother tongue and type of University weren't considered as influential variables. Furthermore, no learning disability was observed among the subjects.

Materials

The instruments of this study were two standard questionnaires. The whole questionnaire has three parts. First part is the first page that is specified for participant's personal information like 1. The year of education: freshmen, sophomores, juniors, and seniors. 2. The sex of participants: male and female. 3. Part three is the age of the subjects. 4. In this part which is optional there is a line to write their email address to be informed by the researcher about the result of the research. By the way both questionnaires were written in English and no translation of them used. To evaluate the student's critical thinking ability, The Watson-Glaser Critical Thinking Appraisal (WGCT; Form A) was employed. This test comprises 17 items and consists of 5 sections as follows: Inference. Evaluation, deduction, interpretation, recognition of assumption, and evaluation of arguments and each section starts with a short text. Section one with title of "Inference" has four questions and each question has four options, namely this is true, this is probably true, this is inadequate data to support this statement, this is false and this is probably false. Section two with the title of "Recognition of Assumption" has four questions and each question has two choices "Yes" and "No". Section three and four have the title of "Deduction" and "Interpretation", respectively. Each one has three questions and each question has two choices "Yes" and "No". In section four the title conception of "Evaluation of Argument's" has three questions and each question has two choices "Strong" or "Weak".

In each section, before entering the questions, there is a paragraph which explains that section and describes the type of questions, the participants will encounter in following statements.

The reliability of the Watson-Glaser Scale has been determined based on Cronbach's alpha, which was found to be 0.91. Regarding validity, The Watson-Glaser test enjoys all areas of face, content, criterion, and construction validity (Hajjarian, 2008). The second questionnaire is due to evaluate the strategies that subjects choose so as to improve their listening ability. The questionnaire consists of 30 questions in three parts. First, part A that is due to metacognitive strategies which it is divided into three parts namely, pre-listening planning strategies with three questions, while listening monitoring strategies with four questions, and post-listening evaluating strategies with three questions. Second, part B which is specified for cognitive strategies with three subtests namely, cognitive formal practicing strategies with three questions, bottom-up strategies with four questions and top-down strategies with six questions. Finally, part C is about socio-affective strategies without any subtest with seven questions is the last part of the questionnaire. The questionnaire was adapted from Cheng (2002), and some adjustment was made according to the specific needs. The questions in 120 valid samples were scored on a five-point –likert scale—with 1.Never or almost never true of me, 2. Usually true of me, 3.Somewhat true of me, 4.Usually

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true of me, 5. Always or almost always true of me. In this study the total reliability of the second questionnaire was calculated via Cronbach's alpha, which was found to be 0.83. Regarding validity, Cheng's scale for listening strategies enjoys all areas of face, content, criterion, and construction validity (Cheng, 2002).

Procedure

After the researcher did both questionnaires before administrating them to EFL learners at B.A level, one small modification –changing the word Chinese to word Farsi-they were administered to the participants. Both questionnaires –Watson-Glaser Critical Thinking Appraisal Form a and the other valid questionnaire for listening strategies adapted from Cheng (2002), distributed at the same time. They both attached to each other to be easily used by the subjects. Collection of data was conducted from April to May of 2013. To do so, the researcher after talking to the corresponding teacher of the class attended the classes by the teacher to prevent from any ambiguities, and explained the goals of the study in mother tongue of the students: Farsi. The participants were told that there was no right or wrong answer. On average, the participants responded the Critical thinking questionnaire (17 questions) in 12 and questionnaire of listening strategies in 6 minutes.

About data collection, each question in critical thinking scale had one score, totally 17 scores for 17 questions. And for the questionnaire of listening strategies, as it was designed based on likert-scale format each item was valued from 1 to 5 scores. As can be noted, fortunately there was no question in both questionnaires which didn't work out in Iran socio-cultural context. All the questions were appropriate culturally and socially. As told, 120 participants managed to submit both of their questionnaires which were paired. The first page was specified to the participant's identity information like age, gender, type of university, year of education and participant's email address (optional). From the total number of 120 students, 101 ones submitted their complete questionnaires of "critical thinking" and "listening strategy" with fully filled items. Hence 101 pairs of questionnaires were gathered. Then, according to Morgan Table from the total number of 100 submitted questionnaires, here 101, 80 questionnaires selected randomly, and their data were entered to SPSS software to analysis.

Statistical Analysis

The data were computed through SPSS. Pearson product moment correlation and Leven's test for equality of variance and t-test for equality of mean were used to know about the relationship between two independent variables and the influence of the variable gender on them. Descriptive statistics for critical thinking and total listening strategies are presented in table one and two respectively.

Table 1: Descriptive statistics of critical thinking ability

N	Mean	Median	Mode	Std. Deviation	Variance	Range	Minimum	Maximum
80	8.53	9.00	9	2.27	5.16	11	3	14

Table 1 shows the mean of 8.53, mode and median of 9. These central parameters are to a large extent the same, though the mean is a little smaller in account. In addition, the range of the scores is 11 and variance is 5.16 denoting a small distribution of scores around the mean. That means the participants are not very heterogeneous. The minimum is 3 out of 17 and maximum is 14 out of 17.

Table 2: Descriptive statistics of total listening strategies

N	Mean	Median	Mode	Std. Deviation	Variance	Range	Minimum	Maximum
80	97.54	100.00	100	15.79	249.41	64	63	127

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As it is seen in above table, total listening strategy was dealt with in relation to the statistic features: Mean, Median, Mode, Standard Deviation, Variance, Range, Minimum and Maximum. Normally, the number of participants, N, is equal in all variables.

Inferential Analysis of the Data

Table 3: Correlation between critical thinking and total listening strategies scores

Parameters		Critical Thinking	Total Listening Strategies
Critical Thinking	Pearson Correlation	1	.535**
	Sig. (2-tailed)	80	.000
	N		80
Total Listening Strategies	Pearson Correlation	.535	1
	Sig. (2-tailed)	.000	
	N	80	80

***. Correlation is significant at the 0.05 level (2-tailed)*

A quick look at table 3 reveals that a dramatic positive correlation coefficient ($r=.53, p=.000$) can be observed between participant’s critical thinking and total listening strategies scores. This amount of correlation is significant since the level of significance (Sig.) is .000 which is less than that of the chosen significance level, .05 ($p < \alpha$).

Table 4: Levene’s test for equality of variance and t-test equality of mean

		Levene's Test for Equality of Variances		T-test for Equality of Means				95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Critical Thinking	Equal variances assumed	.284	.596	1.906	78	.060	1.100	.577	-.049	2.249
	Equal variances not assumed			1.882	31.93	.069	1.100	.584	-.091	2.291
Total Listening Strategies	Equal variances assumed	2.455	.121	1.084	78	.282	4.417	4.073	-3.692	12.526
	Equal variances not assumed			1.297	47.22	.201	4.417	3.404	-2.431	11.264

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In addition, the correlation coefficient obtained of this study (.53) exceeds critical values of Pearson product-moment correlation coefficient (.21) with the assigned degree of freedom (80) so the research question one that asked whether there is any relationship between critical thinking ability and total listening strategies is answered here, that is a strong relationship between these two variables. Table 4 is independent t-test. This test is used to analyse the variance of the data gathered. The most important principle in variance analysis is the difference between the means of groups through the evaluating of inter-group and intra- group variance. This table first shows the equality of variance of variables and then it shows the equality of means. For example for the independent variable, critical thinking, first Leven's test for equality of variance is done, as the sig. is larger than 0.05, so variance is the same. Then the equality of means is dealt with. As sig. (first line of each variable) is more than 0.05 so the mean of two variables are the same and equality of means in 95% level is accepted. In sum, it is concluded that gender does not affect all the variables.

Implication

Hitting Community language learning and communicative language teaching, providing any chance to have students think about learning second/foreign language in addition to boosting a sense of solving problem would develop their ability to select the best and easiest way to get their goals. In fact, instructors can increase the logic of selecting the most appropriate strategies for listening by promoting and emphasizing the ability of critical thinking skill. They can make an open environment in which discussion, team work, and reasoning which are the most important issues in critical thinking skill are praised, inferencing and analyzing are complimented and in general, any can make decision appropriately in second/foreign language context. It is presupposed that students do not need to have an in-depth investigation upon the material, responsibility for their learning since they are supposed to echo the voice of the authorities, and ownership of learning. Thus they lose whatever they assume they have gained and as a result, they cannot operationalize their knowledge, or even think of doing so in the real situation. Materials developers can include problem solving tasks in which students can be grouped into small groups and give their challenges and problems to other team members to brainstorm.

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