

THE RELATIONSHIP BETWEEN CRITICAL THINKING AND READING ABILITY OF EFL UNIVERSITY STUDENTS IN IRAN

Mansoor Fahim¹, Hossein Aghaalikhani²

1- Islamic Azad University, Science and Research Branch, Tehran, Iran

2- Department of English Language, Buinzahra Branch, Islamic Azad University, Buinzahra, Iran

ABSTRACT: There is a general consensus that critical thinking can be influential in almost every occupation due to its association with the abilities such as problem solving and decision making. This research was conducted to investigate the relationship between EFL university students' critical thinking and their reading comprehension ability. The objective was to find out whether critical thinking ability has any significant relationship with reading comprehension ability or not. To carry out the study, the researchers administered the Peter Honey Critical Thinking Questionnaire". Besides, the students answered TOFEL reading comprehension test. The results showed that there is a statistically significant correlation ($R= 0/413$, $n=44$ and $P < 0/005$) between EFL university students' critical thinking and their reading comprehension ability. In other words you can say with improving and enhancing critical thinking, students' reading ability will improve.

KEYWORDS: Critical Thinking, Reading comprehension, EFL university students.

INTRODUCTION

Critical thinking is an important and vital topic in modern education. The purpose of teaching critical thinking in the science or any other discipline is to improve the thinking skills of the students and better prepare them to succeed in the world. Since the 1990s, developing critical thinking skills and critical disposition in undergraduate students have been set as a primary goal in higher education. In hope that students can function well within society, evaluate the validity of information available, make better personal, business or leadership decisions, scholars and educators (Halpern, 1998; Tung and Chang, 2009) have advocated that developing critical thinking skills are essential to help students "know how to learn and how to think clearly" (Halpern, 1998) and "make purposeful judgments about what to believe or what to do" (Facione et al., 2000). Critical thinking is based on reflective thinking that is focused on interpreting, analyzing, and evaluating information, arguments and experiences with a set of reflective attitudes, skills, and abilities to guide thoughts, beliefs and actions (Ruggiero, 1989).

At university level, critical thinking skills are essential abilities in using intellectual tools by which one appropriately assesses thinking (Masduqi, 2011). In this case, by utilizing critical thinking skills, students can use the intellectual tools that critical thinking offers – concepts and principles that enable them to analyze, assess,

and improve thinking. They will be able to work diligently to develop the intellectual virtues of intellectual integrity, intellectual humility, intellectual civility, intellectual empathy, intellectual sense of justice and confidence in reason.

To put it briefly, critical thinking skills are self-improvement in thinking through intellectual tools that assess thinking (The Critical Thinking Community, 2009). Critical thinking ability is not something inborn; so it can be taught to the learners (Schafersman, 1991). It is a skill that can be improved and boosted by practice Wood, (2002) and Schafersman, (1991). The heartbeat of critical thinking is the longing to know-to understand how life works. Birjandi and Bagherkazemi, (2010) states that the concept of critical thinking has entered the field of language education from L1 and already made its mark. However, he is skeptical as to whether it can be taken on faith, and believes language educators should consider its applicability to the field carefully and cautiously. He states four reasons for this speculation:

Critical thinking may be more on the order of a non-overt social practice than a well-defined and teachable pedagogical set of behaviors; (b) critical thinking can be and has been criticized for its exclusive and reductive character; (c) teaching thinking to nonnative speakers may be fraught with cultural problems; and, (d) once having been taught, thinking skills do not appear

to transfer effectively beyond their narrow contexts of instruction.

CRITICAL THINKING DEFINED

A plethora of definitions of critical thinking can be found in the literature, all culminating in Mizner's famous sentence: "I respect faith, but doubt is what gets you an education" ([Birjandi and Bagherkazemi, 2010](#)). According to [Schafersman, \(1991\)](#) Critical thinking means correct thinking in the pursuit of relevant and reliable knowledge about the world. Another way to describe it is reasonable, reflective, responsible, and skillful thinking that is focused on deciding what to believe or do. In the same line, [Levy, \(1997\)](#) defines critical thinking as an active and systematic cognitive strategy to examine, evaluate, understand events, solve problems and make decisions based on sound reasoning and valid evidence.

In simpler terms, Paul and Elder assert that critical thinking involves first discovering the who, what, when, and how of things. They redefine critical thinking as "self-directed, self-discipline, self-monitored and self-corrective." Thinking about thinking, or mindful thinking about ideas, is a necessary component of critical thinking. [Facione, \(1990\)](#) defined critical thinking as, "purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations...". This complex definition suggests that the practice of critical thinking is not entered into with ease.

2.1. Critical thinking and reading comprehension ability

Reading plays a key role in almost every course of study. Yet many students do their reading in an unfocused way. This can often lead to poor results ([Wallace, 2004](#)). [Long, \(1992\)](#) showed that reading strategy checklist can be used as a cooperative learning program to increase reading comprehension, develop critical thinking skills, improve written communication skills, and enhance whole class discussions. The goal of reading instruction is to help learners use text decoding skills and background knowledge to comprehend written language. Adult English learners should become aware of strategies they can use to decode English words, syntax, and text structures. Teachers who are aware of the best strategies for individual learners can help learners apply them. Readers who focus on accurate reading to the detriment of comprehension can be given comprehension questions as part of pre-reading activities to

help them focus on understanding the important meanings in the texts they read. Learners who do not pay sufficient attention to accuracy in reading can engage in activities that encourage accurate letter and word discrimination, such as pre-reading exercises in which they orally read lists of words taken from the text and segment them into syllables and sounds. [Malmir and Shoorcheh, \(2012\)](#) point out critical thinkers have got different attributes which makes no difference what definition you use for critical thinking. These features help us distinguish them from uncritical thinkers. Here are some of those characteristics of a critical thinker:

- Asks relevant questions to the issue
- Assesses arguments which are made
- Admits a lack of understanding
- Has a sense of curiosity
- Analyses the interpretations and claims made
- Analyses the problems
- Is eager on finding new solutions
- Is a careful listener and is able to give appropriate feedback
- Does not jump to conclusions before all the facts have been collected
- Looks for proof
- Rejects incorrect or irrelevant information
- Compares beliefs and opinions with facts that come against them
- Formulates the central ideas that are involved.

Three important purposes of reading critically are:

- ♦ to provide evidence to back up or challenge a point of view
- ♦ to evaluate the validity and importance of a text/ position
- ♦ to develop reflective thought and a tolerance for ambiguity

The relationship between critical thinking and reading comprehension of texts with unfamiliar vocabulary items was examined by [Fahim and Pezeshki, \(2011\)](#). They found that learners with higher critical thinking ability and resilience had better performance on reading texts with unknown words. Finally, [Fahim and Pezeshki, \(2011\)](#) investigated the impact of teaching critical thinking skills on reading comprehension of Iranian EFL learners. Using debate in the classroom as a kind of critical thinking activity, the researchers administered a validated reading comprehension test and a standard critical thinking appraisal test to the participants. After the treatment, the results showed that teaching critical thinking skills

could enhance readers' reading comprehension ability.

METHODOLOGY

3.1. Participants

The subject pool consisted of 44 sophomore students randomly selected in Shiraz Islamic Azad University, completing an English translation course who were homogeneous in terms of their language proficiency. The participants were both male and female students.

3.2. Instrumentation

TOEFL Reading Comprehension Test: First, the TOEFL reading comprehension test (1996) was used in order to find out the learners' reading comprehension ability. The test was composed of 50 multiple-choice items and students were expected to answer them in 45 minutes. The test is a standard test and its reliability and validity is approved. However, for the purpose of this study, the researchers piloted it on a group of 130 Iranian EFL learners in the context of Iran and the Cronbach's alpha was 0.88.

3.3. The Critical Thinking Questionnaire

The critical thinking questionnaire has 30 multiple-choice items, with item options ranging from 1 to 5 was administered to determine participants' critical thinking ability. The test-taker is asked to judge the potential conclusions to the presented data.

RESULTS AND DISCUSSION

According to the statistical methods used in this research study in order to investigate the hypothesis assumptions compliance is essential. Assumptions that were examined in this study include:

1. The distance or pseudo- distance data level: The data level for each variable, when the SPSS for estimating the parameters used, there should be the minimum distance or pseudo- distance ,therefore in this research distance data has been used. So these assumptions were met.
2. Data normality: The test Kolmogorov - Smirnov was investigated and the results are reported in the following table.

Table 1: Kolmogorov - Smirnov test for normality of study

Research variables	Statistic variables Kolmogorov - Smirnov	Sig.
Critical Thinking	0.707	0.700
Reading ability	1.21	0.102

Due to the significance level for testing normality of the variables in table (1), a greater amount of self-regulation and critical thinking

error level is considered 0/05, so the population of research is normally distributed.

4.1. Three: Linear correlations between variables

4.1.1. Linear variables

To check this assumption using SPSS software partitioning through fragmented plot, standardized regression waste was investigated and show in Figure 1 has been determined that there is no deviation from linearity.

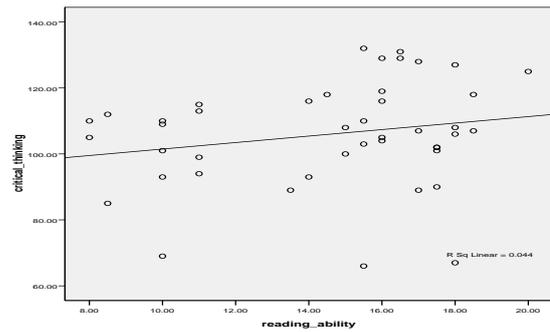


Figure 1: The scatter plot variables

4.2. Research Hypothesis

There is a significant relationship between critical thinking and reading ability of EFL university students. Pearson's correlation coefficient was used to test the hypothesis that the data are presented in table (2).

Table 2: Exploring the relationship between critical thinking and reading

		VAR00001	VAR00002
VAR00001	Pearson correlation	1	0.413
	Sig.(2-tailed)		0.005
	N	44	44
VAR00002	Pearson correlation	0.413	1
	Sig.(2-tailed)	0.005	
	N	44	44

According to table 2, the range of critical thinking and reading ability of EFL university students, there is a statistically significant correlation (R= 0/413, n=44 and P < 0/ 005). In other words we can say with improving and enhancing critical thinking, students' reading ability will improve. However, the correlation is not a large significant, but there is a positive correlation between these two variables. The results of previous researches indicate that there is a large positive significant relationship between teaching critical thinking and reading comprehension ([Hosseini et al., 2012](#)). The findings of the present study indicate that, positive relationship was found between Iranian ELF students' critical thinking and their reading ability. The findings of this research are in line with [Fahim and Pezeshki, \(2011\)](#). This study investigate the students' present level of critical

thinking and their present level of reading comprehension without any pre-planned instruction of these two variables. Taking the definition of reading comprehension by Durkin, "intentional thinking during which meaning is constructed through interactions between text and reader", this construction of meaning during reading is "a complex merger of skills, prior knowledge and text mediated by the language skills, motivation and interest of the reader", which according to [Robinson, \(2006\)](#) "covers the full spectrum of Bloom's taxonomy in critical thinking including knowing facts, understanding concepts, application, analysis, synthesis, and evaluation". Thus the above claim has been crystallized in the significant improvement of experimental group in reading comprehension. As it can be seen critical thinking and comprehension both are cognitive abilities having cognitive skills in common so that improving the first can contribute to the improvement of the other reading comprehension.

CONCLUSION

The study has discussed the relationship between critical thinking and EFL university students' reading comprehension. The findings of this study showed that there is a positive relationship between reading comprehension and Critical Thinking. Making inferences, getting the main idea and reaching to the conclusions based on details, assumptions, arguments and premises are common to both reading comprehension and critical thinking processes. The pedagogical implications in this research correspond with what the following scholar believes in. [Waters, \(2006\)](#) persuaded that applying and using critical thinking activities that different levels of language proficiency in English language classrooms can increase learners' level of thinking and simultaneously they help language learners to grasp the main meaning of the text.

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