

The Relationship between Critical Thinking and Iranian EFL Learners' Reading Comprehension Ability

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Received for publication: 01 December 2015.

Accepted for publication: 17 February 2016.

Abstract

The present research was aimed to investigate the relationship between critical thinking and reading comprehension ability among EFL learners at Payame Noor University (PNU) of Rasht. For this purpose, 125 PNU students were selected by employing Cambridge English Language Assessment Test as the sample of this research. Then Lauren Starkey Critical Thinking Test including 30-multiple choice item was conducted to the participants to distinguish critical and uncritical learners. Significant correlation found between these two major variables through employing Spearman Non-Parametric Correlation Coefficient. The findings of the current study can have theoretical and practical implications for improving EFL learners ability in reading comprehension.

Keywords: Critical Thinking, Reading Comprehension, Distance Learning, EFL Learners

Introduction

As Paul (1985) asserted critical thinking movements has widespread impact on day-to-day life of human beings. Having critical eyes into different issues is very important and imperative due to the crucial role and effect of this concept on various English skills and abilities.

According to Paul and Elder (2001) critical thinking is " that mode of thinking about any subject, content or problem in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them" (P.1).

Based on Facione (1990), " we understand critical thinking to be purposeful, self regulatory judgement which results in interpretation of the evidential, conceptual, methodological or contextual considerations upon which the judgement is based. Critical thinking is essential as a tool of inquiry. As such, critical thinking is a liberating force in education and a powerful resource in one's personal and civic life" (P.3).

Chastain (1998) defines reading as a process dealing with activating background knowledge and experience with the relevant knowledge and related skills of language to achieve to commute the intended meaning and comprehend text thoroughly.

Statement of the Problem

Having been studied at PNU educational system, the researchers were completely familiar with the shortcomings and demerits of this system such as lack of enough time to teach and cover all the materials in the class, limited number of sessions, no frequent review and delayed feedback which are the characteristics of distance learning. By experiencing these problems, the researchers attempt to propose a way in order to reduce the difficulties regarding learning English and more specifically reading comprehension. There are lots of English graduated students who are not able to

comprehend a text easily. So, being critical thinker can be very imperative between PNU students due to the above mentioned shortcomings. In such a context, those who can comprehend a text faster by thinking deeply, infer the meaning from surface structure and distinguish different types of texts logically are more successful. Therefore the current study sought to promoting reading comprehension skill at Rasht PNU context.

Research Question and Hypothesis

Q. Is there any relationship between critical thinking and reading comprehension ability of English students at Rasht PNU?

H. There is no relationship between critical thinking and reading comprehension ability of English students at Rasht PNU?

Literature Review

The idea of teaching critical thinking skills in EFL context was influenced by communicative approach in 1950s, emphasizing the importance of using language not merely learning about language. Nowadays, having critical views into various issues, lead language learners to be mastered and proficient and supported the idea of utilizing critical thinking skills and procedures along with curriculum (Kabilan, 2000).

According to Chastain (1988) reading is a passive and receptive skill because the speaker or writer does not manipulate any messages in order to communicate or convey the desired meaning. The reader just receive a message and in this case is a sort of decoding skill.

Based on Collins (1993), L2 learners need to use their reading and thinking skills simultaneously by their exposure to different contexts. In order to comprehend the text and promote learning and communicating processes, they have to be a critical thinker. In other words, they need to think deeply, go beyond surface of the meaning, examine ideas, catch the relevant ideas and come to logical and reasonable solution especially in challenging circumstances and facilitate the complex interaction between different parts and types of texts.

As Alderson (2005) states there are two reading approaches: bottom-up (data-driven processing) and top-down (conceptually-driven processing). He notes " bottom-up approaches are serial model where the readers begin with the printed words, recognize graphic stimuli, decode them to sounds, recognize words and decode meaning" (P.16). The second process is called top-down which takes its psychological impress from the Gestalt or holistic approach of learning which is called psychological theory. In top-down theories, the readers' background knowledge and experience influence and adjudge comprehension, not just the context or words (Goodman, 19986 as cited in Lally, 1998).

Methodology

Reading comprehension skill as one of the fundamental and important abilities of English learners is extremely imperative especially in TEFL. There are lots of graduated English students who cannot comprehend a text or obtain the main idea of the specific passage. Due to these problems, this study aimed at investigating the possible relationship between critical thinking and reading comprehension skill.

Setting

This study was conducted at Guilan PNU with the distance learning system of education. The subjects were originally from Guilan state with the same notional and cultural backgrounds.

Participants

The population of the present study were about 200 EFL students learning English at Rasht Payame Noor University (PNU). Based on Morgan (1970) table, the sample size was 132 English students. Both genders involved and selected randomly.

Design

This study is a quantitative and data-led research which concerns determining the correlation between critical thinking and reading comprehension ability. The specific research design was correlational due to lack of treatment or comparison group.

Instruments

In order to figure out the correlation between these two major variables, the following instruments were implemented:

1. *Cambridge English Language Assessment*. In order to test the students' reading comprehension ability.

2. *Lauren Starkey (2010) Critical Thinking Test*. This test consists of 30-multiple choice item was applied in order to determine critical and uncritical thinkers.

Data Collection Procedure

In order to find out the possible relationship between critical thinking and reading comprehension skill, the following steps were applied: First, Cambridge English Language Assessment was performed to check the homogeneity of the participants. Then Lauren Starkey Critical Thinking Test including 30-multiple choice item were used to figure out critical and uncritical thinkers. Finally, in order to determine the possible relationship between the above mentioned variables, a correlational statistics was employed.

Data Analysis Procedure

As it has already been mentioned, this research was conducted to find out the relationship between critical thinking and reading comprehension ability. Based on the obtained data and due to dealing with non normal distribution, Spearman non-parametric method was applied. A series of tables and figures generated through this method, were defined the relationship between two major variables. To obtain and analyze the data, SPSS software was employed.

Results

Descriptive Statistics

To examine correlation between critical thinking and reading comprehension ability, at first step normality test was applied to figure out whether distribution is normal or not. Then based on obtained data, the relevant correlation coefficient was used.

Before dealing with Normality Test by using Kolmogorov-Smirnov Test the researchers examined histogram of critical thinking and reading comprehension variables.

According to histograms 1 and 2, there have been little skewness on the right hand of statistical distribution of Critical Thinking and Reading comprehension test and it revealed that most of English students obtained high scores on these tests. In order to figure out the exact probability of normality, the results of Kolmogorov-Smirnov test reported as in Table 1.

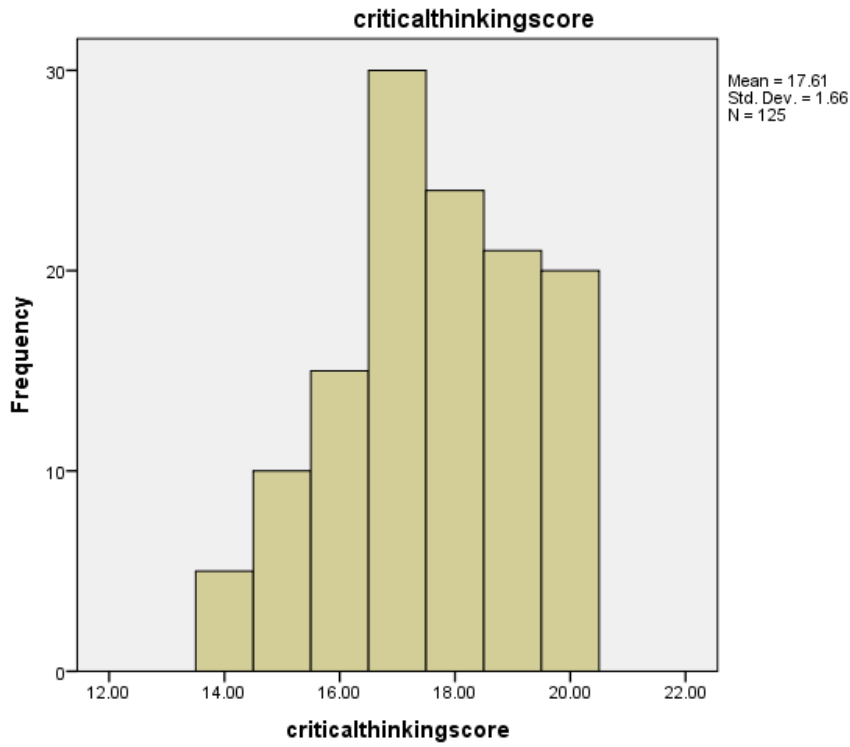


Figure1: Histogram of Critical thinking

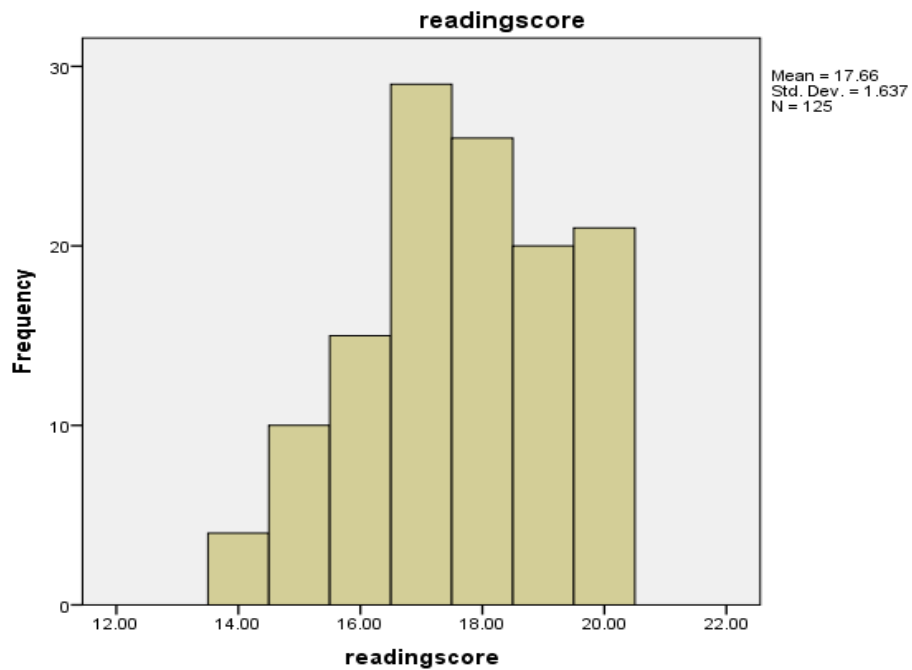


Figure2: Histogram of Reading comprehension

Table 1: Probability of Normality

variable	Observation	Kolmogorov-Smirnov Test(KS)	Significant Level	Result
Critical Thinking	125	1.421	0.035	Non Normal
Reading Comprehension Ability	125	1.366	0.048	Non Normal

According to the results, probability of normality for critical thinking and reading comprehension ability are not acceptable respectively (KS=1.421, Sig. < 0.05, KS= 1.366, Sig. < 0.05). So, based on the above mentioned data and results (non normality of variables), Spearman Non-Parametric Method was used to examine the correlation between two variables.

Correlation Analysis

In this part, before examining the correlation between two variables, take a look at scatter graph of them would be effective. The scattering pattern of spots has been mentioned by locally smoothing in the following graph. It revealed that by increasing the critical thinking levels, the reading comprehension skill substantially improved. So, the significant correlation between critical thinking and reading comprehension skill can be predicted.

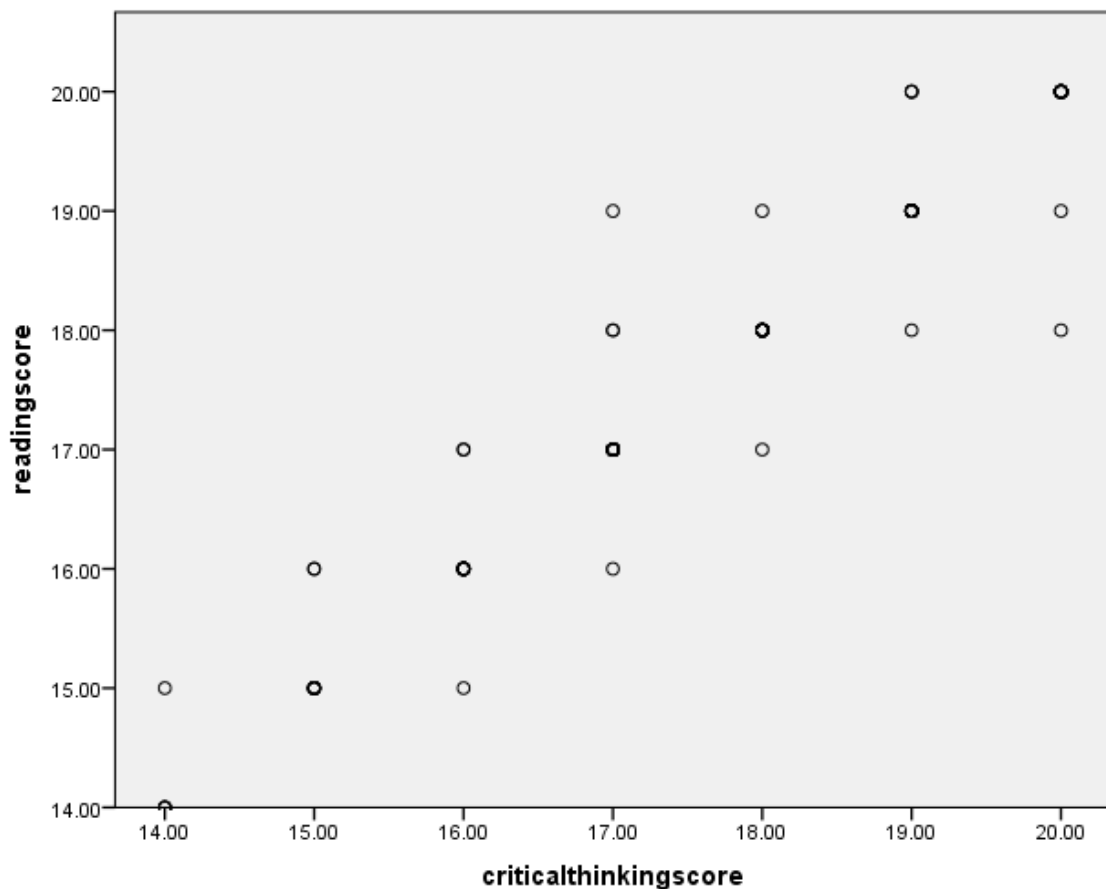


Figure 3: Scattering Graph of Reading Comprehension Ability against Critical Thinking

In the following table the results of Spearman Correlation Coefficient between the above mentioned variables have been stated.

	Index	Reading Comprehension Ability
Critical Thinking	Spearman Correlation Coefficient	0.964
	Significant Level	0.000

Based on the results, there is strong correlation coefficient (0.964) between two continuous variables which is statistically significant. Therefore, the hypothesis of the study (there is no relationship between critical thinking and reading comprehension skill of PNU English students) was rejected ($r= 0.964$, $\text{sig.} < 0.05$).

Conclusion

Based on the results of the current study, the correlation index ($r= 0.964$, $\text{Sig.} < 0.05$), is statistically significant which support the strong positive correlation between critical thinking and reading comprehension ability.

Based on Facione (1992) there is a significant correlation between critical thinking and reading comprehension; " Improvements in one are paralleled by improvements in other" (P. 18).

Paul (2004) emphasizes the interrelation and interdependence of critical thinking and reading comprehension. He notes that by thinking about a specific concept, the one can reflect his/her point of view on it means that by thinking about how to comprehend a text, the learner can better and faster understand the text.

Kurland (2000) asserted that higher-order thinking and cognition are essential in order to comprehend different types of texts and problem solving process respectively. Based on him, " we do not simply read the words; we read ideas, thoughts that spring from the relationships of various assertions" (P.2).

Although, there were strong connection and relationship among the present study and the above mentioned researches, the current study is different due to its focus on Rasht PNU with distance learning educational system and its special merits and demerits. In spite of the findings from different studies, there are some limitations that maybe the researcher is not able to control them. One of these factors can be the sample size and it was less than the required one based on Morgan (1970) table. The reason was related to the students' final examinations, bring the questionnaire after deadline and etc.

To sum up, being critical thinker is very important imperative due to its special impact and influence on different language skills who major in English. The results of present studies supported the idea that utilizing critical thinking in different English skills would be in high significant.

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