The Relationship between Critical Thinking and Extensive Reading on Iranian Intermediate EFL Learners

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ABSTRACT: Reading is an indispensable part of human beings life used even after academic studies. To read effectively, critical thinking is of great significance. Critical thinkers can analyze the texts and spot the problematic parts. They even can offer the solutions and therefore involve their own ideas and contribute to the development of science. This study was a correlational one. The purpose of this study was to examine the relationship between extensive reading and critical thinking and to compare the male and female participants score on reading comprehension test. The participants chosen were 40 Intermediate EFL learners in Azad University Rasht Branch. They were given two questionnaires regarding critical thinking and extensive reading passages. Their answers to questions were compared. The purpose was to see whether the participants recognized as critical thinkers by means of involving in dealing with critical thinking questionnaires, performed better in extensive reading. Data were analyzed based on the questionnaires. Results showed the high relationship between the two significant variables. The findings also indicated that there was not a significant difference between the scores of two groups.

Keywords: Extensive Reading, critical thinking, EFL.

INTRODUCTION

Critical thinking is an important and vital topic in modern education. All educators are interested in teaching critical thinking to their students. Many academic departments hope that its professors and instructors will become informed about the strategy of teaching critical thinking skills, identify areas in one's courses as the proper place to emphasize and teach critical thinking, and develop and use some problems in exams that test students’ critical thinking skills. This critical thinking manual has been prepared to inform and aid you to accomplish these things, and it has been kept brief and straightforward so that all faculty members will have the time and opportunity to read it and follow the suggestions it contains.

The purpose of specifically teaching critical thinking in the sciences or any other discipline is to improve the thinking skills of students and thus better prepare them to succeed in the world. 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; it improves memory because we engage more closely with ideas. Critical thinking, a rapidly growing concept in education has stimulated a flood of recent research and publications. Nowadays, critical thinking is one of the major concepts under consideration in education. It has been mostly used for first language education in the United States, but today, its role is second and foreign language learning and teaching is of great importance. Atkinson (1997).

The term "extensivereading" was originally coined by Palmer (1968), to distinguish it from "Intensive reading" - the careful reading of short, complex texts for detailed understanding and skills practice. Extensive reading, however, involves the reading of large amounts of longer, easy- to- understand material, usually done outside the classroom and at each student's own pace and level. Then there was an attempt to explore whether there was any relationship between extensive reading and critical thinking of Iranian EFL learners.
The significance of the present study can be discussed. Critical thinking has received much attention in recent decades. There were various attempts to develop critical thinking. It is assumed as a vital component of education without which not much education will happen. However, it is ignored largely by educators and teachers in Iran, in teaching four skills in general and reading in particular. So, these research questions can be posed:

Is there any relationship between extensive reading and critical thinking? Is there any difference between males and females scores of reading comprehension tests.

**Literature Review**

Over the past twenty years critical thinking has moved from a small corner of the stage in philosophy and the social sciences to front and center. Robert Ennis (1962) had an article with this title "A concept of critical thinking" which is often credited as the starting point for the present interest in critical thinking in the English speaking world.

In his article, He defined critical thinking as "the correct assessing of statements" (Ennis, 1962) and identified several aspects and dimensions of critical thinking. In later publications, he revised his definition to "reasonable reflective thinking that is focused on deciding what to believe or do", arguing that "one must both have the skills necessary to be a critical thinker and the inclination to use these skills" (Ennis, 1987). Higher education experts agree that critical thinking should be included in the undergraduate curriculum.

Watson and Glaser (1980) view critical thinking as being more than a specific set of cognitive skills- rather critical thinking is a composite of skills, knowledge and attitudes. They explain that critical thinking comprises an understanding of the nature of making inferences and generalizations and the skills of being able to consider carefully the logic and accuracy of evidence. They also express the notion that having the ability to think critically is a key element to being fully functional in our modern complex society. For them, critical thinking is a fundamental requirement to being able to actively participate in one's social and political circles.

Critical thinking skills are essential to every aspect of learning. Studies show that the earlier these skills are introduced, the greater a learner's chance for academic success. A child who can think critically will be a better reader, writer, test-taker and learner-both inside and outside of the classroom.

All of our behaviors have some kind of motivations and reasons behind them. Rarely, do we investigate them to see if they are rational or not. Mostly we do the cliché without questioning the origins, whys, assumptions etc. this happens generally in classrooms. We ignore the fact that students are there to improve their cognitive skill by thinking; discipline-based instruction will kill their sense of curiosity and thinking which are crucial for their future. When we allow ourselves to act automatically and uncritically, we not only damage ourselves but also the life of others, thus lose the opportunities for having a happier and a more perfect life.

Most university authorities very seldom embrace the idea that college students need explicit instruction in how to think. It is not that they oppose the action, but it is considered as a misguided effort. For example, Glaser (1984) cited abundant evidence of critical thinking failures in support of his argument that thinking skills are context-bound and do not transfer across academic domains. Glaser and other skeptics were to some extent correct. Better thinking is not a necessary outcome of traditional, discipline-based instruction.

In preparing the students of today for the workplace of tomorrow, we are actually preparing them for the unknown. With technology and science advancing at a rapid rate, what is new today becomes obsolete tomorrow. Thus it becomes more difficult to define what kind of education present day students need for future.

Educationalists predict that what will not become obsolete are critical-thinking skills: "the power to interpret, to be critical and to be able to navigate will be highly-prized attributes in the well-educated person of the twenty-first century"(Newby, 2005).

The term reading is used by people in various ways. Crystal, (1992) defines reading as the recognition and comprehension of written text.

Pearson, (1992) believes that "Reading comprehension and comprehension instruction are highly interactive and reciprocal. The meanings students create for the texts they read are complex negotiations involving an unseen author, a teacher, and an interpretive community of peers."

National Assessment of Educational Progress (NAEP, 2003) suggests that reading literacy encompasses more than just basic of functional literacy- it includes knowing when to read, how to read, and how to reflect on what's been read- in a variety of texts and for a variety of purposes.

Whatever your reasons for reading (excluding any reading for language learning), it is not very likely that you were interested in the pronunciation of the written words, and even less likely that you were interested in the grammatical structures used. You read since you want to get something from the text. As Nutall, (1998) calls it, "we read for a message, but could just as well have been enjoyment, ideas, and feelings. The writer intended something; you know it and want to get that. You are interested in what the writing means". The text provides "bottom-up" information to
MATERIALS AND METHODS

The participants of this research were 60 Intermediate students of Azad University of Rasht branch. They were both female and male and their numbers were not balanced. There were 35 female and 25 male students that after homogenizing, 28 female and 12 male remained.

The materials will be used in this study are Cornell Critical thinking Test (Level X), two Reading comprehension texts (BB and Clean Water Act) which were two stories, Independent T Test, and a Nelson Placement test for the purpose of homogenizing.

Data Collection Procedure

First of all, the researcher started the procedure by asking students to come for some sessions in order to answer the tests. Prior to the process, everything was explained to the participants and they were justified about the study.

At the very beginning, they were told how to answer the questionnaires and reading passages. The participants helped me to a great extent. They were very eager to know the results of their works and even the correct answers to the questions. It took me four sessions for me to collect my data.

The tests were given to all the participants, both the reading passages with their questions and the critical thinking questionnaires. They were given complete instructions on how to answer the questions. Clear guides especially in regard with critical thinking questionnaires. They were provided for the participants. Some of the sample questions were read.
and explained to them to eliminate all the unclear points and they become aware of how to deal with the given questions. The participants were instructed to read passages and answer the questions following those passages.

**RESULTS AND DISCUSSION**

To ensure the homogeneity of the two groups (male and female) in terms of critical thinking and extensive reading, NP test was administered among 60 subjects. Those students whose scores fell within the range of one standard deviation above and below the mean of 28.77 were chosen. Then, it proceed with explaining the findings of the descriptive statistics on measures of critical thinking (measured through Cornell Critical Thinking Test Level X), reading and test achieved by the participants in the two groups, males and females. Next, findings related to the inferential statistics that reveal the differences between the achievements of each group regarding the different tests, will be investigated. The purpose is to see if gender, being male or female, results in a difference in performance.

<table>
<thead>
<tr>
<th>Extensive Reading</th>
<th>Critical Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>0.886**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>40</td>
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<td>N</td>
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**. Correlation is significant at the 0.01 level (2-tailed).

Figure 1. The Graph of the relationship between critical thinking and extensive reading

Figure 2. Bar Graph of extensive Reading
The first analysis indicated the relationship between critical thinking and extensive reading. The Pearson product-moment correlation coefficient was found to be .88 which is relatively high and significant (p-value=0.0<0.01). Also, the Pearson correlation (.88) is higher than the Critical value of the Pearson product-moment correlation coefficient (.39) with degree of freedom (N-1=39). This shows that there exists a positive relationship (highly correlation ship) between the participants’ critical thinking index and their extensive reading comprehension scores.

One feature of an effect size is that it can be directly converted into statements about the overlap between the two samples in terms of a comparison of percentiles. An effect size is exactly equivalent to a ‘Z-score’ of a standard Normal distribution. The effect size of 0.95 means that the score of the average person in the experimental group is 0.95 standard deviations above the average person in the control group. Visualizing these two individuals can give quite a graphic interpretation of the difference between the two effects.

The researcher collected the quantifiable data from participants by means of tests. With regard to the nature of the present investigation which is mainly concentrated on comparing the mean scores of the two groups, the t-test formula is used for describing the significance of the difference between the groups. Considering the 0.95 level of significance and p=.05, the decision making principle is as follows:

a. If the t observed (t-obs.) is more than the t (t-crit.) which is presented in the value table, the null hypothesis is strongly rejected.
b. If the t observed (t-obs.) is less than the t critical (t-crit.) which is presented in the value table, the null hypothesis is supported.

A t test was used in order to explore whether there were differences between male and female groups in terms of their Extensive Reading Comprehension (Table 2).

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extensive Reading</td>
<td>Male</td>
<td>12</td>
<td>5.67</td>
<td>1.723</td>
</tr>
<tr>
<td>Extensive Reading</td>
<td>Female</td>
<td>28</td>
<td>6.64</td>
<td>1.682</td>
</tr>
</tbody>
</table>
The t score (1.67) related to the differences between male and female group students is less than t-critical with df of 38 (2.02) and was found to be non-significant (p > 0.05). (p= .10)
This reveals that there is no difference between male and female group students’ Extensive Reading Comprehension scores.

CONCLUSION

Critical thinking is a skill which is obligatory for all the people to have a better life. It gets more importance when it comes to academic environment. Students and professors are facing new information every day. If they accept new information easily, they cannot have any initiation of themselves. They cannot analyze the material, think about it and understand it. Having a critical evaluation skill is a higher order intellectual skill which should be among the main purposes of a university education. Readers, depending on their field of study, should be able to think deeply about what they are reading, to identify the strengths and weaknesses of the arguments. If this skill does not develop in them, how it is possible to claim the occurrence of changing in students’ behavior.

Critical thinking is also helpful in our personal life. When we think critically, we are evaluating the outcomes of our thought processes- how good a decision is or how well a problem has to be solved. So, in case of problem, people with the skill of critical thinking can have sound solutions. This research is useful to the university students, since, there is not much attention to the way they read. Actually, the process of their learning is ignored largely.

Critical thinking enhances reading comprehension especially that of extensive reading and they read for joy and pleasure. Therefore, the essential changes should be directed towards the improving or developing critical thinking.

REFERENCES

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