

# Investigating the Relationship Between Intrapersonal Intelligence of EFL Learners and Their Critical Thinking

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## Abstract

The purpose of this present study was to investigate the relationship between intrapersonal intelligence of EFL learners and their critical thinking. Multiple intelligences involve nine types and one is intrapersonal intelligence. Intrapersonal intelligence refers to the ability to understand the concept of oneself and awareness of fears, attendance, and information about life decision making. In educational settings, the central aim of an education system is learning to think. Critical thinking is an active, intellectual process where the individual will observe, analyze and reflect on new knowledge and integrate it into their current understanding. To fulfill this objective, the research was conducted with 50 female students studying in Grade Three at Hazrate Masome high school in Farashband. To evaluate the students' intrapersonal intelligence, a questionnaire consisting of 10-items from Smart Cubes Test was administered. A critical thinking questionnaire adapted from Naieni (2005) which was given to the participants based on Honey's (2004) critical thinking questionnaire was employed. The results showed no significant relationships between intrapersonal intelligence of students and their critical thinking.

**Keywords:** Intrapersonal intelligence, Critical thinking, EFL learners.

## 1. Introduction

All learners differ from each other in learning a second language and an important factor among different factors which is related to learning second language successfully is intelligence that an individual possesses. Intelligence is an issue that sometimes causes differences between people. Intelligence is an inborn feature of individuals. According to Gardner's view (1999), intelligence is "neurological actions and it accepts encoding system to transform information" (p.16). Intelligence is a biological concept that is affected by culture, motivation and experience of life (Gardner, 1993). In 1983 Howard Gardner introduced The theory

of multiple intelligences provides a point of view that is a variant to the traditional intelligence assessments utilized by school psychologists for nearly a hundred years. Multiple intelligences involve nine types such as linguistic, logical mathematical, musical-rhythmic, bodily-kinesthetic, spatial, naturalist, interpersonal, intrapersonal, and spiritual intelligence. In the present study, an intelligence which is beneficial and applicable is intrapersonal intelligence. Howard Gardner finds that this Intelligence is a base to our functioning. The Intrapersonal Intelligence was not an important item in the standard education system, nor in the world at large for a long time. However, now this type of intelligence is useful within marketing, sales, leadership and other business practices. Human beings cannot do their works without this Emotional Intelligence.

Successful people have a combination of skills. Intrapersonal intelligence provides some opportunities in the development of classroom especially writing. According to Gardner, developing intrapersonal intelligence produces an emerging self. Gardner refers to intrapersonal intelligence as the “sense of self” (p. 124), and as developing the “internal aspects of a person” (p. 4-6). Gardner explains, “The core capacity at work here is access to one’s own feeling life – one’s range of affects or emotions: the capacity to label them to enmesh them in symbolic codes, to draw upon them as a means of understanding and guiding one’s behavior”.

Cherry (2014) states that Intrapersonally-intelligent people: a) Are good at analyzing their strengths and weaknesses, b) Enjoy analyzing theories and ideas, c) Have excellent self-awareness, d) Clearly understand the basis for their own motivations and feelings (P.8). Students with this intelligence strength have a strong sense of self and do well working alone. They are in touch with their own feelings and are good at reflection. Activities an intrapersonal learner would enjoy include: working alone, setting goals, meditating, and choosing which activity to complete. (Nicholson-Nelson, 1998).

### **1.1 Critical Thinking**

Critical thinking is an important issue in solving problems and decision making. This item has setting in educational system which is widely accepted by learners that learning to think is an essential purpose of formal schooling and activities. Ennis et al. (2005), pointed out that critical thinking is as a reasonable and reflective thinking that emphasizes on deciding what to believe or do. According to Ennis (2011) critical thinking is the ability to think clearly and rationally. "Critical thinking is the ability to analyze facts, generate and organize ideas, defend opinions, draw inferences, evaluate arguments and solve problems" (Chance, 1986, p.6).

"Critical thinking is a way of reading that demands adequate support of one's beliefs and an unwillingness to be persuaded unless support is forth coming" (Tama, 1989, p.64).

Critical thinking is the best understood as the ability of thinkers to take charge of their own thinking. This requires that they develop sound critical and standards for analyzing and assessing their own thinking and routinely use those criteria and standards to improve its quality (Paul and Elder, 1997).

According to Facione (1990), "we understand critical thinking to be purposeful, self-regulatory judgment which results in interpretation of the evidential, conceptual, methodological, or contextual considerations upon which that judgment 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).

Many EFL/ESL researchers have concentrated on the identification of learners or students features or characteristics and the results of the conclusions and process of learning. Dewey (1933) pointed out that the main aim or goal of education is that the learners learn how to think. 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.

If a learner wants to become a better critical thinker, it has necessities. It is clear that improving critical thinking effects on social learners and various classes of society. Based on critical thinker theorists, critical thinking is a noticeable method that teachers can use them to help students or learners to be able to decide, plan and apply their abilities. They are able to think logically.

A student who read a text and decide to think it critically, this reading which a part of four skills, centered on psychological perspective in which the reader utilizes her or his background knowledge, prior knowledge of language structure, context and cultural back ground for making a sense and interpreting a text (Hall, 1989). Moreover, reading in a foreign language based on facing ignorant features of L2 can be anxiety-provoking to some learners (Saito, Garza, & Horwitz, 1999); it shows success of fluent and competent L2 readers in challenging situations that may be related to their level of critical thinking ability and flexibility.

Also, Chafee (1988) expressed that critical thinkers try hardly and purposefully and in order to explain and improve and optimize their perception, it explores the world carefully. According to Lai (2011), critical thinkers have an ability to analyze arguments and discussions, assess and make decision (Ennis,

1985; Facione, 1990; Halpern, 1997, cited in Lai, 2011). It shows that these learners are thinker critically. In terms of given arguments, students who think critically, can suggest and analyze information which is related to their ability to conclude them recognizably. Historically, Elder (1996) maintained CT is the key to EI. She believed that "CT is the only plausible vehicle by which we could bring intelligence to bear upon our emotional life" (p. 5).

## 2. Literature Review

Review of literature was used to show the studies based on intrapersonal intelligence and critical thinking. In this case, (Li, Zhang, Wang & Wang, 2013) revealed the intrapersonal intelligence of 192 middle school students who play role palying game (RPG) by questionnaire. The results shows that RPG effects on intapersonal intelligence positively and it use factors such as age, frequency of playing game and RPG type. It determined that Role-playing game could help improving students' intrapersonal intelligence, and appear some suggestions about the development of RPG and students' intrapersonal intelligence in the future. This research decorated a new approach of developing middle school students' multiple intelligences in the current educational environment.

According to Shearer (2009) stated the exploring the relationship between intrapersonal intelligence and university students' career confusion: implications for counseling, academic success, and school-to-career transition. The participants of this esearch were 82 students enrolled in three consecutive semesters of a Career Exploration course at a large midwestern state university. Participants were 47 women and 35 men; 41 of these students were freshmen, 35 were sophomores, 3 were juniors, and 3 were seniors. Approximately 10% of the students were African American and the remainder were Caucasian. Half of all students at this university are reported to be first generation college attendees. Approximately 5% of the participants were nontraditional, older students. The results indicated that intrapersonal intelligence is related to clarity of career planning and decision making and career confused students who are at risk for dropping out of school. They have uniqe multiple intelligence. A process approach to MI-inspired career evaluation can be done with undecided students and indecisive students and those who are more intensive and personal assistance.

Burris and Garton (2007) investigated the effect of instructional strategy on critical thinking and content knowledge: using problem-based learning in the secondary classroom. The resulting sample (n = 140) consisted of 77 students in the problem-based learning treatment group and 63 students in the supervised study treatment group. Analysis of covariance indicated a treatment effect on critical thinking ability and content knowledge.

According to Fahim and Koleini (2014) suggested the relationship between critical thinking ability of Iranian EFL learners and their speaking skills. This research illustrated that there is a strong relationship between the ability to think critically and speak skillfully. The findings of the present study showed that critical thinking could develop as a core academic skill so that multiple educational outcomes are accomplished by learners. When English language classrooms are concerned, teachers should ask some questions which need challenge in order to raise learners' critical awareness.

Ghanizadeh and Moafian (2011) who declared Critical Thinking and Emotional Intelligence: Investigating the Relationship among EFL Learners and the Contribution of Age and Gender, their results reach a conclusion that age and gender did not attend the relationship between CT and EI. Also, it was found that neither age nor gender played any significant roles in learners' level of EQ.

Critical Thinking and Iranian EFL Students' Listening Comprehension is a view of Zare, Behjat & Abdollahzadeh in 2013. This research referred to the conclusion or results which showed that there is a considerable implication to enhance language performances and learning based on critical thinking.

### **3. Method**

In order to find the relationship between two variables of this study, it used two intrapersonal and critical thinking questionnaires. There were all native speakers of Persian. The study used a quantitative method of analyzing the variables of the research. It uses a correlational way that tries to show the degree of overlapping between student's intrapersonal intelligence and their critical thinking.

#### **3.1 Participants**

Participants of this research were 50 third-grade students at Hazrat Masome high school. Their age ranged between 16-17 years old. The students did not have any English study experience at school.

#### **3.2 Instruments**

To study the level of student's intrapersonal intelligence, researcher used questionnaire adapted from 10-items from Smart Cubes Test. Since students could not understand the intrapersonal intelligence questionnaire, it was translated into Persian. Naieni (2005) was employed. The scale was originally developed by Peter Honey (2000). It was beneficial for Iranian EFL learners. Its reliability had high consistency 0.86 (Naieni, 2005) and it administered with 5-point Likert scale. Following that, questionnaires were collected to analyze data.

#### 4. Results and discussion

In order to answer the first research question and to find the relationship between intrapersonal intelligence and critical thinking of students, Pearson correlation was carried out. This table shows the relationship between them.

##### *Descriptive and Inferential*

Table 1 *correlations between intrapersonal intelligence and critical thinking*

Intrapersonal intelligence	Pearson correlation	.325
	Significance	0.08
	Number	50
Critical thinking	Pearson correlation	.325
	Significance	0.08
	Number	50

This table shows the Pearson product-moment correlation which was applied to the data. According to this table, the correlation coefficient between the two variables is .32 at the significant P-value is  $P > 0.05$ . This implies that there is not a strong significant relationship between two variables. So, the researcher concluded that students who have high level of intrapersonal intelligence have not high level of critical thinking, and the relationship is negative.

The present study is in line with other researches such as ( Kamali and Fahim, 2011; Fahim and koleini, 2014). They reported a significant relationship between critical thinking and reading abilities of learners. This research finds a research which is related to the relations between types of intelligence and critical thinking. It is Ghanizadeh and Mofian,s (2011) study. The findings of the study indicated that there was a significant relationship between EFL learners' CT and their EI. It was also found that there was a significant relationship between EFL learners' CT and the eleven components which compose the total EQ test as follows: CT and 1) Emotional Self-Awareness ( $r = 0.224, p < .05$ ), 2) Assertiveness ( $r = 0.225, p < .05$ ), 3) Self-Regard ( $r = 0.293, p < .05$ ), 4) Empathy ( $r = 0.328, p < .05$ ), 5) Interpersonal-Relationship ( $r = 0.335, p < .05$ ), 6) Social Responsibility ( $r = 0.342, p < .05$ ), 7) Problem Solving ( $r = 0.266, p < .05$ ), 8) Flexibility ( $r = 0.346, p < .05$ ), 9) Stress Tolerance ( $r = 0.311, p < .05$ ), and 10) Optimism ( $r = 0.329, p < .05$ ), but the present research reach a results that there is not significant relationship between intrapersonal intelligence and critical thinking.

## 5. Conclusion

The aim of this study was to evaluate and examine the relations between learner, intrapersonal intelligence and their critical thinking. Therefore, it shows that does this type of intelligence effect on EFL learner's critical thinking. In this case, intrapersonal and critical thinking questionnaires were administered and the data was collected to analyze it. It administered that there is not significant relationship or correlation between two variables.

The result suggests that progressing level of intrapersonal intelligence of learners cannot reinforce their critical thinking belief. It also revealed that other researchers can discover the relations between critical thinking with other types of intelligence and they may have significant and no significant relations. Analyzing level of intelligence types and critical thinking based on other items such as psychological constructs such as self-esteem can be explained.

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