

# The Relationship between Iranian EFL Learners' Emotional Intelligence and Their Performance on TOEFL/PBT

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## **Abstract**

The present study elaborated the relationship between Iranian higher intermediate EFL learners' Emotional Intelligence (EI) and their performance on TOEFL/PBT. Advancement in emotional traits and self-awareness about ones likes and dislikes might increase motivation in learners. Furthermore, most English instructors, who prepare their students for TOEFL test, may emphasize more on their students' EI just as their capabilities in English skills. The participants in this study (104 males and females) were selected from Islamic Azad University (Tehran, Mashhad, and Bojnord Branches), Payam-e-Noor University (Bojnord Branch), Guilan University; Shahid Beheshti University; and Iran University of Science and Technology, regardless of their major, age, and gender. Participants took a TOEFL/PBT and the Bar-On EQ questionnaire. Results indicated a significant and positive relationship between EQ and scores on TOEFL/PBT.

Keywords: Emotional Intelligence (EI), Intelligent Quotient (IQ), Bar-On Questionnaire



## 1. Introduction

The study is inspired by what the researchers believe to be one of the recent and growing areas in learning languages. Compared with Intelligent Quotient (IQ) which has been defined by many scholars since ancient time, Emotional Quotient (EQ) has just been introduced by Daniel Goleman in 1995. Although emotions of human being were the center of attention in other fields such as art and literature, it has just been accepted in the educational environment. Besides, it is not still under use thoroughly and it is not known to all the people.

Emotional Intelligence (EI) has been defined by its father, Goleman (no date) as "...abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to empathize and to hope" (p.34). The current study tries to find any kind of relationship between the total scores of EQ and TOEFL/PBT of a person as well as their subcategories.

## 2. Literature Review

## 2.1 General Scope and History of Intelligence

The concept of intelligent first identified by Spearman (1904) as Dickens (2007) stated:

Spearman (1904) first popularized the observation that individuals who do well on one type of mental task also tend to do well on many others. For example, people who are good at recognizing patterns in sequences of abstract drawings are also good at quickly arranging pictures in order to tell a story, telling what three dimensional shapes drawn in two dimensions will look like when rotated, tend to have large vocabularies and good reading comprehension, and are quick at arithmetic. This pattern of moderate to strong positive correlations across the whole spectrum of mental abilities led Spearman to hypothesize the existence of a general mental ability similar to the common notion of intelligence. (p.1)

According to Schaie (2001), in spite of variety in the definitions for intelligence, most agree that intelligence has to do with the related capacities of: "i.) Learning from experience. ii.) Adapting to ones environment" (p.2). IQ is grounded in various factors; among these, congenital factors were always known as the most important elements. The literature on IQ heritability is huge and controversial. But according to Schaie (2001) IQ is innate. He adds:

Heritability in IQ has been estimated between 0.50 and 0.72 (= 50% - 72% of variability is due to genes). The best evidence comes from twin studies (i.e. Bouchard, 1984) – IQ of identical twins reared apart (even in very different circumstances) correlate almost as high as those of identical twins reared together-Honzik (1957) showed almost no correlation between IQ of adopted children and IQ of their adoptive parents. (p.4)

Despite the importance of heredity, environmental conditions are made a big change in IQ scores. "Children reared under conditions of little human contact can show huge improvements (30-50 IQ points) after being placed in normal environments" (ibid, p.4).



# 2.2 Conceptualization of Emotional Intelligence

Akers, Miller, Fraze, and Haygood (2004) believe emotional intelligence is a psychological construct not easily defined. However, Goleman (1995), cited in Akers et al. (2004) defined emotional intelligence as simply "a different way of being smart" (p.84).

According to Lynn (2002) emotional intelligence clarifies why, in spite of equal intellectual capacity, training, or experience, the people's advancement are not the same.

Some aspects of emotional intelligence are explained by Lynn (2002). The first one is self-awareness and control, which comprises two separate skills. The self awareness component means intimate and accurate knowledge of one's self and one's emotions. Besides, it means understanding and predicting one's emotional reactions to situations.

Another aspect explained by Lynn (2002) is empathy. Empathy is the potentiality to understand how others perceive situations. It involves knowing the feeling of people toward a particular set of events or circumstances.

Thirdly, social expertness is explained by Lynn (2002). Social expertness is the ability to make genuine relationships and connections with other people which are based on an assumption of human equality. This component allows people to genuinely express emotions, even conflict, in order to build rather than destroy relationships.

The fourth component of emotional intelligence in Lynn (2002) opinion is personal influence can inspire others through example, words, and deeds. This person can lead others by way of social expertness. "Personal influence is the ability to read situations and exert influence and leadership in the desired direction" (ibid, p.4).

Last but not the least, mastery of vision is the fifth component of EI in Lynn's view (2002). "Mastery of vision requires that the individual has the ability to set direction and vision guided by a strong personal philosophy" (ibid, p.4). One potent with this ability can communicate and articulate with passion regarding direction and vision. "This talent serves as the inner compass that guides and influences one's actions. This inner compass also provides resilience and strength to overcome obstacles" (ibid, p.4).

## 2.3 IQ vs. EI; which one is More Crucial?

According to Lynn (2002), "Each day, both in our personal and business lives, opportunities and challenges present themselves. It is EI that enables us to recognize and move toward the opportunity. And it is EI that enables us to meet even the toughest of life's challenges" (p.2).

Although emotional intelligence has been considered more crucial than IQ by its pioneer, Daniel Goleman, recent studies stresses on the combination of both of them. "Recent findings in emotional intelligence support the concept of confluent education, which holds that effective learning develops in the interaction of cognitive and emotional domains" (Akers et al., 2004, p.87). Consequently Rouhani (2008) stated that the controversial issue of the importance of EI or IQ may be lead to a mixture of them.



# 2.4 Notion of Language Proficiency

Stern (1983), cited in Consolo (2006), held that being proficient in a language means having mastery in four fields. He adds:

Proficiency means the actual performance of a learner in a given language, and it involves the mastery of (a) the forms, (b) the linguistic, cognitive, affective and sociocultural meanings of those forms, (c) the capacity to use the language with focus mainly on communication and minimum attention to form, and (d) the creativity in language use. (p.7)

# 3. Research Question and Hypothesis

To fulfill the purpose of this study, the following question is raised:

Is there any positive or negative relationship between Iranian higher intermediate EFL learners' Emotional Intelligence (EI) and their performance on TOEFL/PBT?

In order to investigate the above-mentioned research question, the following null hypothesis is formulated:

There is not any significant relationship between Iranian higher intermediate EFL learners' Emotional Intelligence (EI) and their performance on TOEFL/PBT.

## 4. Method

## 4.1 Participants

To conduct this study, the researchers examined the correlation of scores of TOEFL (PBT) and EI questionnaire of 104 participants. The level of English ability of these people was higher intermediate and they were both male and female adults. In order to find the higher intermediate subjects, an Oxford placement test was given to some university students, regardless of their major, gender, and age. The samples were selected from Islamic Azad University, Tehran, Mashhad, and Bojnord Branches, Payam-e-Noor University, Bojnord Branch, Guilan University, Shahid Beheshti University, and Iran University of Science and Technology. Subsequently, a TOEFL (PBT) and an EI questionnaire were given to those who were in higher intermediate level.

## 4.2 Instrumentation

To collect the required data for the present study, these instruments were employed:

- (A) Oxford Placement Test. It consists of 50 grammar questions and it was taken from the Web.
- (B) TOEFL/PBT Test. It was from the latest published Longman Complete Course for the TOEFL test available in the market which was in 2001. It has been taken from the post-test of this book.
- (C) Bar -On Emotional Quotient Questionnaire. This questionnaire was started to be written by Bar-on in 1980. It consists of 117 questions and 15 sub-categories, which was



performed on 3831 people in 6 countries to estimate its reliability and validity. Since the questionnaire had several repeated items causing dullness, exhaustion and unwillingness to complete, it was reduced to 90 items. Also, to make sure the Iranian participants fully understand the content, it was translated into Persian. These 90 questions were divided into 15 subcategories that each deals with one aspect of humans' emotions. According to Ghods (2006) the reliability and validity of this 90-question questionnaire was estimated in Esfahan.

## 4.3 Procedure

At the beginning, a placement test was given to the participants for choosing the higher intermediate ones. Since the TOEFL test is got from the Longman complete course for the TOEFL test, its reliability had to be estimated. Therefore, first it was given to 30 subjects as the pilot group. The result confirms it as a reliable test. After homogenizing the subjects, and estimating the reliability of the TOEFL test, the TOEFL/PBT test was given to them, which took 115 minutes. Finally, a Persian written EI questionnaire in was given to the participants. The data gathered from these two scores (TOEFL test and EI questionnaire) were analyzed for each person. First, the TOEFL score of each subject compared with his/her EI score. Then, the correlation of scores of each one of the TOEFL sub-categories was figured out with each one of the scores of EI sub-categories.

## 5. Results and Discussion

The TOEFL test and Bar-on EQ questionnaire were administered to find their probable relationship. Tables 1 and 2 illustrate descriptive statistics for this analysis.

Table 1. Descriptive Statistics of TOEFL and Its Components

	N	Min.	Max.	Mean	SD	V	Skewness		Kurtosis	
							Statistic	Std. Error	Statistic	Std. Error
Listening	104	22	65	50.72	10.506	110.378	-0.454	0.237	-0.911	0.469
Reading	104	33	67	56.63	7.188	51.671	-0.873	0.237	0.986	0.469
Structure	104	28	59	49.58	5.462	29.839	-1.184	0.237	2.251	0.469
Total TOEFL	104	277	633	523.11	66.719	4451.405	-0.856	0.237	0.866	0.469

As it is shown in Table 1, the highest amount of standard deviation among TOEFL components is for listening (SD=10.506) and the least amount is for structure (SD=5.462).

Moreover, Table 2 reveals that, the highest standard deviation among the components of EI questionnaire is for impulsive control (SD=5.128) and the least is for happiness (SD=2.794). The least standard deviation belonged to happiness which shows that similar responses given to this item. In other words, most participants showed similar feelings towards happiness.

Pearson correlation was run to find the relationship between the Iranian higher intermediate EFL learners' EI and its subcategories and their performance on TOEFL/PBT.



Table 2. Descriptive Statistics of EI and Its Components

Skewness Kurtosis										
	N	Min	Max.	Mean	SD	V	Statistic	Std.Error	Statistic	Std.Error
Assertiveness	104	9	30	20.74	4.917	24.175	-0.242	0.237	-0.534	0.469
Empathy	104	14	30	25.18	4.244	18.015	-0.493	0.237	-0.643	0.469
Emotional Self-awareness	104	14	30	24.02	4.120	16.971	-0.584	0.237	-0.201	0.469
Flexibility	104	11	30	22.62	3.822	14.608	-0.419	0.237	0.796	0.469
Happiness	104	19	30	24.31	2.794	7.807	0.101	0.237	-0.835	0.469
Impulse Control	104	9	30	19.63	5.128	26.292	0.465	0.237	-0.075	0.469
Independence	104	9	30	23.05	3.465	12.007	-0.478	0.237	1.890	0.469
Interpersonal Relationship	104	15	30	24.06	4.203	17.667	-0.372	0.237	-0.758	0.469
Optimism	104	15	30	24.13	3.705	13.729	-0.235	0.237	-0.696	0.469
Problem Solving	104	17	30	23.80	3.331	11.095	0.111	0.237	-0.771	0.469
Social Responsibility	104	19	30	25.55	2.933	8.600	-0.469	0.237	-0.555	0.469
Reality Testing	104	12	30	21.77	4.243	18.004	-0.177	0.237	-0.252	0.469
Self-Actualization	104	16	30	24.56	3.259	10.618	-0.488	0.237	0.409	0.469
Self-Regard	104	14	30	22.81	4.143	17.167	-0.380	0.237	-0.544	0.469
Stress Tolerance	104	10	30	20.91	3.880	15.051	-0.310	0.237	0.760	0.469
EI Total	104	242	411	347.13	34.917	1219.205	-0.432	0.237	-0.115	0.469

Table 3. Pearson Correlation TOEFL/PBT with EI

		Total TOEFL
EI Total	Pearson Correlation	.739
	Sig. (2-tailed)	.000
	N	104

The R value of .73 [(r=.739, P = .000 < .05)] indicates that there is a statistically significant relationship between the two variables. Thus, the null-hypothesis as no significant relationship between the students' performance on TOEFL/PBT and EI is rejected. Table 4 reveals the relationships between the components of the TOEFL/PBT and EI.



Table 4. Pearson Correlation Components of TOEFL/PBT and EI

		LISTENIN	READING	STRUCTUR
	Pearson Correlation	0.194	0.477	0.337
Assertiveness	Sig. (2-tailed)	0.048	0.000	0.000
	N	104	104	104
	Pearson Correlation	0.473	0.498	0.450
Empathy	Sig. (2-tailed)	0.000	0.000	0.000
1 7	N	104	104	104
	Pearson Correlation	0.426	0.801	0.708
Emotional Self-awareness	Sig. (2-tailed)	0.000	0.000	0.000
	N	104	104	104
	Pearson Correlation	0.131	0.353	0.192
Flexibility	Sig. (2-tailed)	0.186	0.000	0.051
J	N	104	104	104
	Pearson Correlation	0.135	0.408	0.306
Happiness	Sig. (2-tailed)	0.171	0.000	0.002
11	N	104	104	104
	Pearson Correlation	0.097	-0.001	-0.052
Impulse Control	Sig. (2-tailed)	0.325	0.992	0.600
1	N	104	104	104
	Pearson Correlation	0.133	0.408	0.213
Independence	Sig. (2-tailed)	0.179	0.000	0.030
1	N	104	104	104
	Pearson Correlation	0.396	0.594	0.600
Interpersonal Relationship	Sig. (2-tailed)	0.000	0.000	0.000
	N	104	104	104
	Pearson Correlation	0.198	0.516	0.440
Optimism	Sig. (2-tailed)	0.044	0.000	0.000
•	N	104	104	104
	Pearson Correlation	0.247	0.559	0.448
Problem Solving	Sig. (2-tailed)	0.012	0.000	0.000
-	N	104	104	104
	Pearson Correlation	0.307	0.677	0.616
Social Responsibility	Sig. (2-tailed)	0.002	0.000	0.000
•	N	104	104	104
	Pearson Correlation	0.259	0.733	0.632
Reality Testing	Sig. (2-tailed)	0.008	0.000	0.000
	N	104	104	104
0.10 A 11	Pearson Correlation	0.321	0.781	0.680
Self-Actualization	Sig. (2-tailed)	0.001	0.000	0.000



	N	104	104	104
	Pearson Correlation	0.375	0.802	0.722
Self-Regard	Sig. (2-tailed)	0.000	0.000	0.000
	N	104	104	104
	Pearson Correlation	0.143	0.505	0.340
Stress Tolerance	Sig. (2-tailed)	0.147	0.000	0.000
	N	104	104	104
	Pearson Correlation	1	0.493	0.576
Listening	Sig. (2-tailed)		0.000	0.000
	N	104	104	104
	Pearson Correlation	0.493	1	0.869
Reading	Sig. (2-tailed)	0.000		0.000
	N	104	104	104
	Pearson Correlation		0.869	1
Structure	Sig. (2-tailed)	0.000	0.000	
	N	104	104	104

As the results in Table 4 reveal, it can be concluded that reading section of the TOEFL/PBT has positive and significant relationships with almost all of the components of the EI. Just one component of EI has a negative and non-significant relationship. The highest correlation coefficient is between the reading and self-regard [(r = .802, P = .000 < .05)]. This high correlation indicates a high relationship between reading and self-regard. The lowest correlation is between reading and impulse control [(r = .001, P = .992 > .05)]. This index shows almost no relationship existing between reading and impulse control.

Moreover, as illustrated in Table 4, listening section of the TOEFL/PBT is positively correlated to all components of EI, four of which are statistically significant. The highest positive correlation is between listening and empathy [(r = .473, P = .000 < .05)]. The correlation index does not reveal a high relationship between listening and empathy. In other words, the correlation coefficient between listening and empathy can be generalized to all people and not just to the participants of this study. The lowest correlation is between listening and impulse control [(r = .097, P = .325 > .05)]. The low correlation shows almost no relationship between listening and impulse control.

Finally, the results in Table 4 show that the structure section of the TOEFL/PBT has positive relationship with almost all components of the EI. It has only one negative and non-significant relationship with the components of the EI. The highest correlation is between structure and self-regard [(r = .722, P = .000 < .05)]. As the results indicate, the correlation between structure and self-regard can be generalized to all people. The lowest correlation is between structure and impulse control [(r = .052, P = .600 > .05)].

## 6. Conclusion

Having the same IQ, one with higher emotional skillfulness is more successful in his or her tasks.



The present study confirms the positive relationship between emotional intelligent abilities and its subcategories with TOEFL/PBT. Moreover, the researchers found self-regard and empathy as the most influential components in ones achieving higher TOEFL score since they had the most significant correlation amount for all parts of TOEFL/PBT. On the contrary, impulse control has the lowest non-significant relationship with all of the components of TOEFL/PBT.

The results of this study can give some hints to educational scholars to put more time on providing reading materials, films, and other instructional materials for personal growth of the students in general and language learners in specific.

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