



## ORIGINAL ARTICLE

# The comparison of EQ and academic achievement of the girl and boy psychology students of Islamic Azad University of Andimeshk

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### ABSTRACT

*In this study, the EQ and academic achievement of girl and boy students of psychology field of Islamic Azad University of Andimeshk are compared. The study sample of this study is including 100 girls and boy students of Islamic Azad University of Andimeshk unit and it was selected by stratified method. The study analysis was done by SPSS software. The results of the analysis showed that there is significant difference between EQ and academic achievement of girl and boy students of psychology. There is a significant difference EQ and academic achievement among the girl and boy students of Islamic Azad University of Andimeshk unit.*

**Keywords:** EQ, Academic achievement, Psychology, Andimeshk

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### INTRODUCTION

The theorists of EQ believe that there is main difference between IQ and EQ. IQ tells us what we can do while EQ tells us what we can do. IQ is our ability for learning, logical thinking and abstract thinking while EQ tells us how we can use IQ to be successful in life [1]. After the publish of EQ book in 1995 by Daniel Goleman, EQ was taken into attention extensively. It can be said that the first academic work (indirectly) was about EQ and it was started by Gardner work in 1983. Gardner believed that besides the intelligences that are evaluated by IQ tests, there are other intelligences including the understanding and regulating the emotions and ability of management of relations. He called these intelligences as intra-personal intelligence and inter-personal intelligence.

By generalization of EQ, this concept achieved success in school and work place. These reports are combination of emotionalism and scientific-based issues. It was believed that a dominant part of personality improves one's chance to achieve his goals. EQ is a set of capabilities improving the coping up with the needs and social desires. The capabilities are including: The recognition ability, understanding and expressing one's feelings, the ability of recognition and communicate with others, coping up with the emotions and control them and the ability to be adjusted to the social changes and solving the problems. The EQ attribute model is consisting of five dimensions: Intrapersonal, interpersonal, adaptability, stress management and mod [1]. There are special skills in each of the dimensions referring to EQ.

Goleman as one of the theorists of EQ said: "EQ is consisting of three parts: 1- The ability of identification of one's feeling and others, 2- Self-motivation and motivation of others, 3- Self and others management. He also divided EQ dimensions into two main sections: 1) The individual capabilities that are consisting of subcomponents of self-awareness and self-management and 2) The social competence or capability based on social awareness and organizing ability of one's relations. Goleman presented two types of definitions of EQ. One definition was presented in 1995 as EQ is the set of capabilities as self-motivation, resistance to failures, impulse control, self-mood regulation and empathy. The second definition was developed in 1998 as EQ is the capacity of one's and others feeling recognition, self-motivation and emotions management [2]. Baron defined EQ as the skill, talent and cognitive ability to cope up with the environmental pressures. On the other hand, Goleman believed that EQ is including internal and external elements. The internal elements include self-awareness, self-conception, autonomy and self-actualization and determination capacities. The external elements include interpersonal relations, empathy and responsibility. EQ is the capacity of one's to accept the realities, flexibility, the ability of solving the

emotional problems, the ability to cope with the stress and impulse [3]. Despite the model of Baron, Goleman model is focused on how the cognitive and personality factors determine the success in work places.

Mayer & Salovey referred to four main components of EQ as: Emotion perception (recognition and entering verbal and non-verbal information to emotional system), facilitating thinking by emotion (using emotions as a part of cognitive process as creativity and problem solving), emotional recognition (e.g. cognitive processing of emotion and knowledge acquired about one's feeling or others feeling), emotional management in one's or others. EQ is defined from other dimension as the capacity of perception, expression, recognition and application and management of emotions in one's or others [4]. The term EQ was first raised by Wien Pin in 1985 but it was developed mostly by Daniel Goleman [5]. The majority of the studies were conducted in this regard by Mayer & Salovey in 90s. They found that capacity of perception and emotions' understanding is a new factor in people personality. Mayer & Salovey model defined EQ as the capacity of understanding emotional information and reasoning during emotion. They divided EQ capabilities into four groups as: The ability of understanding the self and others emotion, the ability of using emotions to facilitate thinking, the ability of understanding the emotions meaning, the ability of management of the emotions. One of the vital needs for the infants and children is learning the instruments, true understanding of emotional manifestations. They use emotional knowledge to move in the social world. The scientists believe that EQ is the ability of regulating the emotions, their perception and expressing it and these abilities can be developed in the life [6].

#### Academic achievement

Academic achievement is used as one of the indices of progress in educational system and success of the students to take a definite course or the students' success to learning the textbooks. The opposite is academic failure and it is one of the problems of educational system and is shown by various methods as the failure of the students to achieve the academic levels goals, failing, leaving the school early, wandering and skipping the school [7]. The academic achievement is of great importance in achieving a job and various levels of job. The importance of academic achievement is considered from another aspect. Any educational system is evaluated by the experts to achieve the best results and eliminate the shortcomings in educational processes and optimal use of the inputs and the products of the educational systems are the students with some features and academic achievement can be used as one of the most important criteria to evaluate the efficiency of educational systems [8].

#### The criteria of academic achievement

Regarding the academic achievement criteria, we can say academic achievement is defined via various methods with different criteria. One of the criteria is the average of students in an academic term or an academic year. Another criterion is defining the academic achievement score of the students in classroom. Another method is using the scores of the textbooks over a year and the final criterion is determining the academic achievement over some years or one academic period [9]. Various factors affect educational output (academic achievement) and these factors are divided into four groups:

An individual and family, educational institution, educational system and social-cultural environment. These factors besides affecting each other are affected by each other and are consisting of some various components [10].

### STUDY POPULATION AND SAMPLE

The study population was the girl and boys of psychology of Azad University of Andimeshk and they were studying in academic year 2010-2011. The study sample was 100 people. There were 50 girls and 50 boys and random sampling was used to select them.

### STUDY METHODOLOGY

This study is comparative. In the present study, the researcher has the data of EQ and academic achievement of the girl and boy students of psychology in Azad University of Andimeshk town. This study is used to investigate the difference between EQ and academic achievement of the girls and boys in psychology of Azad University of Andimeshk town. The measure of the study is questionnaire. The EQ questionnaire is including 30 questions 5- choices. After obtaining the permissions and defining the sample members and coordination with the authorities, in accordance to the previous planning, the researcher visited the Islamic Azad University of Andimeshk town and after communicating and reduction of the sensitivity of the subjects about the questionnaires and the reasons of selecting them, the required explanations were presented from the researcher about completing the questionnaires and the subjects completed the questionnaires. The subjects were required to ask about any ambiguities in the questionnaire and ask the researcher to give more explanations. Finally, the researcher was thankful of the collaboration of the students.

## RESEARCH MEASURE

The study measure was Trait Emotional Intelligence Questionnaire of Petrides & Furnham.. The validity of the construct of the questionnaire was investigated by its designers and its single factor was supported by explorative factor analysis. The internal consistency coefficient with Cronbach's alpha in the initial sample was 202 with 86%. In the study done by Salkofski et al., [11] the internal consistency coefficient by Cronbach's alpha for total scale was 89%. This questionnaire is a self-assessment scale. Its main form is consisting of 144 articles and 15 subscales. The applied form in the present study is consisting of 30 articles and each question in a 7-item scale is ranging completely agree 1 to completely disagree 7. The scoring of items 2-4-5-7-8-10-12-13-14-16-18-22-25-26-28 is inverse.

## RESULTS

Table 1- The frequency distribution and the percentage of the age of girl and boy students of Azad University of Andimeshk

Age	Absolute frequency	Frequency percentage	Relative frequency Percent	Cumulative frequency percent
Below 20 years old	4	4.0	4.0	4.0
20-29	88	88.0	88.0	92.0
30-39	8	8.0	8.0	100
Total	100	100.0	100.0	

As shown in Table 1, age 20-29 had the highest frequency (88 people) about 88.0% were below 20 years and lowest frequency (4people) was about 4.0%.

Table 2- The frequency distribution and the percent of education of girl and boy students of Azad University of Andimeshk

Education	Absolute frequency	Frequency percentage	Relative frequency percent	Cumulative frequency percent
Associate	46	46.0	46.0	46.0
BA	54	54.0	54.0	100.0
Total	100	100.0	100.0	

As shown in Table 2, BA students had highest frequency (54 people) about 54.0% and associate student had the lowest frequency (46 people) about 46.0% of the sample.

Table 3- The frequency distribution and percentage of academic achievement of the girl and boy students

Academic achievement	Absolute frequency	Frequency percentage	Relative frequency percent	Cumulative frequency percent
10-13	17	17.0	17.0	17.0
13-16	47	47.0	47.0	64.0
16-19	31	31.0	31.0	95.0
Above 19	5	5.0	5.0	100.0
Total	100	100.0	100.0	

As shown in Table 3, 13-16 average had the highest frequency (47 people) about 47.0% and average 19 and above had the lowest frequency (5 people) about 5.0% of the sample.

The findings of the study hypotheses

First main hypothesis:

There is a difference between EQ of the girl and boy students of psychology of Azad University of Andimeshk town.

Table 4- Independent t test for significance of the difference of the mean of EQ scores of boy students of psychology of Azad University of Andimeshk town

Variable	N	Mean	SD	Mean difference	Degree of freedom	t-test	Significance level
Boy students	62	316.80	35.5	13.87	98	1.98	0.04
Girl students	38	330.68	31.8				

The results of Table 4 showed that as calculated t-test 1.98 with significance level 0.40 is smaller than error level 0.05, H0 is rejected and the test is significant.

The main second hypothesis

There is a difference between academic achievement of the girl and boy students of psychology field of Azad University of Andimeshk town.

Table 5- Independent t-test for significance of the difference of the mean of the academic achievement scores of the boy students of psychology of Azad University of Andimeshk Town

Variable	N	Mean	SD	Mean difference	Degree of freedom	t-test	Significance level
Boy students	62	14.87	2.2	0.233	98	0.486	0.06
Girl students	38	15.10	2.4				

The results of Table 5 showed that as calculated t-test 0.486 with significance level 0.6 is bigger than error level 0.05, H0 is not rejected and the test is not significant.

Sub-hypotheses of the study

First sub-hypothesis

There is an association between EQ and academic achievement of the boy students of psychology of Azad University of Andimeshk town.

Table 6- The descriptive statistics table between EQ and academic achievement of the boy students of psychology of Azad University of Andimeshk town

Variable Descriptive indices	Mean	SD	N
EQ	330.68	31.87	38
Academic achievement	15.10	2.47	38

As shown in Table 6, the mean and SD of EQ were 330.68, 31.8 and academic achievement was 15.10 and 2.4.

Table 7- Pearson correlation of EQ and academic achievement of the boy students of psychology of Azad University of Andimeshk town

	EQ of the boy students of psychology of Azad University of Andimeshk town				
	Correlation coefficient	Significance level	Error level	N	Test results
Academic achievement	0.424	0.008	0.05	38	H <sub>0</sub> rejected

The Pearson correlation test ( $r=0.424$ ) between EQ and academic achievement of the boy students of psychology of Azad University of Andimeshk town was significant at the level 0.05 and  $H_0$  is rejected and the test is significant and as it is positive, there is a direct relationship.

Sub-hypothesis 2

There is an association between EQ and academic achievement of the girl students of psychology of Azad University of Andimeshk town.

Table 8- The descriptive statistics table between EQ and academic achievement of the girl students of psychology of Azad University of Andimeshk town

Variable Descriptive indices	Mean	SD	N
EQ	316.80	35.50	62
Academic achievement	14.87	2.23	62

As shown in Table 8, the mean and SD of EQ were 316.80, 35.50 and academic achievement was 14.87 and 2.2.

Table 9- Pearson correlation of EQ and academic achievement of the girl students of psychology of Azad University of Andimeshk town

	EQ of the girl students of psychology of Azad University of Andimeshk town				
	Correlation coefficient	Significance level	Error level	N	Test results
Academic achievement	0.136	0.2	0.05	62	$H_0$ accepted

The Pearson correlation test ( $r=0.424$ ) between EQ and academic achievement of the girl students of psychology of Azad University of Andimeshk town was not significant at the level 0.05 and  $H_0$  is not rejected and the test is not significant and there is no association.

The third sub-hypothesis

There is an association between EQ and academic achievement of the girl and boy students of psychology of Azad University of Andimeshk town.

Table 10- The descriptive statistics table between EQ and academic achievement of the girl and boy students of psychology of Azad University of Andimeshk town

Variable Descriptive indices	Mean	SD	N
EQ	322.08	34.67	100
Academic achievement	14.96	2.31	100

As shown in Table 10, the mean and SD of EQ were 322.08, 34.6 and academic achievement was 14.96 and 2.3.

Table 11- Pearson correlation of EQ and academic achievement of the girl and boy students of psychology of Azad University of Andimeshk town

	EQ of the girl and boy students of psychology of Azad University of Andimeshk town				
	Correlation coefficient	Significance level	Error level	N	Test results
Academic achievement	0.248	0.01	0.05	100	$H_0$ rejected

The Pearson correlation test ( $r=0.248$ ) between EQ and academic achievement of the girl and boy students of psychology of Azad University of Andimeshk town was significant at the level 0.05 and  $H_0$  is rejected and the test is significant and as it is positive, the direct relation is accepted.

## DISCUSSION AND CONCLUSION

The first hypothesis of the study: There is an association between EQ and academic achievement of the girl and boy students of psychology of Azad University of Andimeshk town. As is shown in Table 4, the mean and SD of EQ was 322.08 and 34.6 and academic achievement was 14.96 and 2.3. The Pearson correlation test ( $r=0.248$ ) between EQ and academic achievement of the girl and boy students of psychology of Azad University of Andimeshk town was significant at the error level 0.05 and null hypothesis is rejected. The test is significant and as it is positive and direct relation is accepted. It can be said that the increase of EQ of the girl and boy students leads to the increase of their academic achievement. Thus, hypothesis 1 is supported (there is an association between EQ and academic achievement of the girl and boy students of psychology of Azad University of Andimeshk town). The second hypothesis of the study: There is a difference between EQ of the girl and boy students of psychology of Azad University of Andimeshk town. The results of Table 9 showed that as calculated t test 1.98 with significance level 0.04 is smaller than error level 0.05, null hypothesis is rejected and test is significant. It can be said that there is a significant difference between the mean of EQ scores of girl and boy students of Azad University of Andimeshk town and this difference is for the benefit of boy students. It means that the boy students had high EQ to the girl students. The third study hypothesis: There is a difference between academic achievement of girl and boy students of psychology of Azad University of Andimeshk town.

The results of Table 9 showed that as calculated t 0.486 with significance level 0.6 is bigger than error level 0.05, the null hypothesis is not rejected and the test is not significant. It can be said that there is a partial difference between the mean of scores of academic achievement of girl and boy students of Azad University of Andimeshk town. But it is not significant statistically, it means that the two groups of girl and boy had similar academic achievement.

First sub-hypothesis: There is an association between EQ and academic achievement of boy students of psychology of Azad University of Andimeshk town. As shown in Table 6, the mean and SD of EQ were 330.68 and 31.8 and academic achievement was 15.10 and 2.4. The Pearson Correlation test ( $r=0.424$ ) between EQ and academic achievement of boy students of psychology of Azad University of Andimeshk town at error level 0.05, the null hypothesis is rejected. The test is significant and as this value is positive, we accept the direct relation. It can be said that the increase of EQ of the boy students was with the increase of their academic achievement. Thus, first sub-hypothesis is supported.

Second sub-hypothesis: There is an association between EQ and academic achievement of girl and boy students of psychology of Azad University of Andimeshk town. As is shown in Table 6, the mean and SD of EQ were 316.80 and 35.50 and academic achievement was 14.87 and 3.2. The Pearson correlation test ( $r=0.136$ ) between EQ and academic achievement of the girl students of psychology of Azad University of Andimeshk town was not significant at error level 0.05. Thus, null hypothesis is not rejected and the test is not significant and there is no relationship. It can be said that EQ of the girl students had no effect in their academic achievement and the second sub-hypothesis is not supported.

## RECOMMENDATION

Based on the role of EQ in academic achievement and academic performance of the students, the followings can be said:

- Doing various evaluations among the students of various fields to evaluate their academic progress
- Doing various tests to evaluate the progress of the students of various fields
- Making the students of various fields familiar with the psychology concepts as intelligence and EQ to know the capabilities better
- Distribution and availability of the books and up to date resources in various fields in University library

The barriers and limitations of the study

The limitations of the study were as:

- The lack of collaboration of some of the students in completing the questionnaire of the present study
- Not giving the total result by some students

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