

The Relationship between Emotional Intelligence and Mental Health in Humanism College Students at IAU, Qaemshahr Branch, Iran

Neda Esmacili¹, Ezzatallah Baloui Jamkhaneh²

¹Department of Humanism, Qaemshahr Branch, Islamic Azad University, Qaemshahr, Iran

²Department of Statistics, Qaemshahr Branch, Islamic Azad University, Qaemshahr, Iran

ABSTRACT

The purpose of this study is to investigate the relationship between emotional intelligence and mental health of high school students in Islamic Azad University of Qaemshahr. This study is a descriptive-survey research and the method of data collection is library study and questionnaires. Statistical population of research includes 3672 people and statistical sample includes 350 people of students, of which %56.6 are women and %43.4 are men. Descriptive and inferential statistics were applied to analyze data using SPSS. Bar-On Emotional Intelligence and the Goldberg and Hillier's mental health (GHQ-28) questionnaires were used to measure emotional intelligence and mental health, respectively. Results from Spearman correlation coefficient test showed a significant relationship between emotional intelligence and mental health for both groups of men and women. Findings showed that there is significant relationship between components of emotional intelligence and mental health of mention groups (men, women, totally).

KEYWORDS: Mental health, Emotional intelligence, GHQ-28

INTRODUCTION

The concept of Emotional Intelligence (EI) or sometime referred to as EQ, started from the discipline of psychology in the early 1920's and 1930's, when Thorndike was exploring the arena of "social intelligence" and viewed it as a single concept (Goleman, 1995). Thorndike (1920) conceptualized social intelligence as the ability to understand and manage men and women, boys and girls, to act wisely in human relations.

Emotional intelligence was originally recognized as having its roots in the concept of social intelligence (Thorndike, 1920; Salovey & Mayer, 1990; Goleman, 1995). Later, researches provided evidence that the two concepts actually represent interrelated components of the same construct (Salovey & Mayer, 1990; Bar-On et al., 2003; Lane & McRae, 2004). Consequently, this broad construct was accurately referred to as "emotional-social intelligence" (Bar-On, 2006). Based on historical reference, traits such as the capacity to navigate through and to adapt to one's own environment and the possession of social and emotional "skills" are important not only to basic survival, but have implications in the areas of relationships, work, school, and emotional and mental health (Goleman, 1995; Salovey & Mayer, 1990). Gardner (1983) in his theory of multiple intelligences, classified intelligence into 2 categories: namely, interpersonal and intrapersonal intelligences. He described interpersonal intelligence as the ability to understand other people, what motivates them, how they work, and how to work cooperatively with them. He identified teachers, politicians, sales persons, clinicians and religious leaders as individuals who are likely to have high degree of interpersonal intelligence. Intrapersonal intelligence is a correlative ability turned inward. It is a capacity to form a veridical model of oneself and to be able to use that model to operate effectively in life (Angadi, 2008). Peter Salovey and John Mayer in 1990, the basic concept of his theory for the first time as "Emotional Intelligence" published. Golmen, The most famous a person who in the field done a lot of studies and emotional intelligence can be defined: emotional intelligence is a skill that its owner can handle their morals trough self-awareness and improve by self-management, their impact understand by empathy and through relationship management behave in a way that raise your morale and others (Faghirpour et al., 2011). Emotional intelligence is defined as the ability to understand feelings in self and others, and to use these feelings as informational guides for thinking and action (Salovey & Mayer, 1990). Later, these authors revised their definition of emotional intelligence, the current characterization now being the most widely accepted. Emotional intelligence is thus defined as: The ability to perceive emotion, integrate emotion to facilitate thought, understand emotions, and to regulate emotions to promote personal growth (Mayer & Salovey, 1997). Bar-on (1997) believed that emotional intelligence is "a set of non-cognitive abilities, motivations and skills effective in the ability to deal successively with the demands, requirements, and environmental pressures". The five components of Bar-On's emotional

intelligence are generally includes: intrapersonal emotional intelligence, interpersonal intelligence, the power of adaptability, stress management and general mood (Ghorbanshiroudi, 2011).

Bar-On (1997, 2000) put great emphasis on social as well as emotional aspects of the concept that influence behavior and are measured by the combination of self - report (Bar-On, 1997a) and multi-rater assessment (Bar-On & Handly, 2003). Bar-On describes five composite scales-comprising 15 subscales (viz., self regard, emotional self awareness, assertiveness, self-actualization, empathy, social responsibility, interpersonal relationship, independence, optimism, happiness stress tolerance, impulse control, reality testing, flexibility and problem solving). In the definition of WHO, mental health is regarded as one of the needed factors for general health. According to the experts of this organization, health is a status of well-being of body, mind, and society, not only for the lack of disease (Boldero & Fallon, 1995). Kaplan and Sadock (1993) define the mental health as “a condition of well-being and the feeling in person when can come to terms with society, and personal situation and social features are satisfying for him/her”. In general, psychologists believe that mental health is created when people have proper and appropriate behavior with their society; and it can be said that: not only dose mental health mean being away from problems and mental diseases, but being well-adapted to one’s environment and interacting with round people and community, and therefore, having interest and passion for life (Ghorbanshiroudi, 2011). Schutte et al. (2007) concluded that better health status is associated with higher emotional intelligence. Agstolenda et al. (2006) showed a differential effect of the EI components in stress and health. Banihashmian et al. (2010) showed that there is a positive relationship between general health and emotional intelligence and head masters that had high emotional intelligence, have general health. Fakhri et al. (2012) indicated that there is a positive relationship between general health and emotional intelligence.

Emotional intelligence and mental health are important concepts of psychology that recently they have been enter in management field. Recent research indicates that EI play an important role in managing mental health. In this study was measured the relationship between this two concepts and them components. Also role of gender was evaluated in the mean score of emotional intelligence and mental health.

Basic components of EI

5 meta-factors of the conceptual model of emotional intelligence and its 15 sub-factors duo to Bar-On are as follows:

1-Intrapersonal (self-awareness and self-expression): This meta-factor of emotional-social intelligence comprises Self- Regard, Emotional Self-Awareness, Assertiveness, Independence and Self-Actualization. It determines how in touch we are with our emotions and feelings, our ability to feel good about ourselves, and to feel positive about what we are doing in our lives and with their lives. People who have high intrapersonal capacity are emotionally self reliant, are able to express their feelings, and are strong and confident in conveying their opinions and beliefs.

2- Interpersonal (social awareness and interaction): This meta-factor of emotional-social intelligence comprises Empathy, Social Responsibility and Interpersonal Relationship. It relates primarily to social awareness, skills and interaction. This meta-factor is, essentially, concerned with our ability to be aware of others’ feelings, concerns and needs, and to be able to establish and maintain cooperative, constructive and mutually satisfying relationships.

3- Stress Management (emotional management and control): This meta-factor comprises Stress Tolerance and Impulse Control. This component of emotional intelligence relates primarily to emotional management and control and governs our ability to deal with emotions so that they work for us and not against us. People who are adept in this area are able to withstand and effectively cope with stress without losing control.

4- Adaptability (change management): This meta-factor of emotional intelligence comprises Reality Testing, Flexibility and Problem Solving as defined below. This meta-factor relates primarily to change management i.e., how we cope with and adapt to personal and interpersonal change as well as change in our immediate environment. It determines how successful we are able to cope with daily demands by effectively ‘sizing up’ and dealing with problematic situations. People who have a high capacity for adaptability are typically flexible, realistic and effective in understanding problematic situations and competent at arriving at adequate solutions.

5- General Mood (self-motivation): This meta-factor of emotional intelligence comprises Optimism and Happiness. This meta-factor is closely associated with self-motivation. It determines our ability to enjoy ourselves, others and life in general, as well as influences our general outlook on life and overall feeling of contentment. People who are adept in this facilitator of emotional intelligence are typically cheerful, hopeful, positive, well motivated and know how to enjoy life.

Research hypotheses:

The researchers was interested in knowing whether there is a relationship between emotional intelligence (scale, meta-factors and sub-factors) with mental health scale and sub-scales. Also the researchers have measured the scores of all variables. Therefore research hypotheses presented as follows:

- 1- There is a relationship between emotional intelligence and mental health of students
- 2- There is a relationship between emotional intelligence and mental health of male students
- 3- There is a relationship between emotional intelligence and mental health of female students
- 4- There is a significant difference in emotional intelligence between male and female students.
- 5- There is a significant difference in mental health between male and female students.
- 6- There is a significant difference in meta-factors of emotional intelligence between male and female students.
- 7- There is a significant difference in ranking of meta-factors emotional intelligence
- 8- There is a significant difference in ranking of sub-scales mental health

RESEARCH METHODOLOGY

This study is a descriptive-survey research. The statistical population of the current research includes 3672 students of Islamic Azad University – Qaemshahr Branch (Humanism College) in the year 2012. Sample size has obtained 350 persons using Krejcie and Morgan Table. In this research, stratified sampling method has been used. Conceptual model of research is as follows:

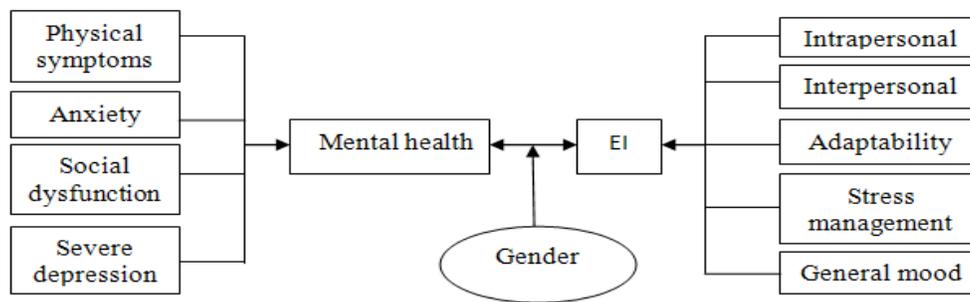


Figure1. Conceptual model of research

Research Tools

The following questionnaires are used for gathering the required data in this study to measure the concerned variables.

1. Bar-On’s emotional intelligence questionnaire

The Bar-On’s 90-item scale is used for measuring emotional intelligence in this study. This test was adapted from Bar-On’s 117-question test which was standardized by Rahele Samoui and colleagues (2002) in Iran. This questionnaire includes 5 meta-factors of emotional intelligence and its 15 sub-factors. The test responses are also set on a 5-degree scale on a Likert range (totally agreed, agreed, somewhat agreed, disagreed and totally disagreed), and grading system is performed from 5 to 1 (5: totally agreed and 1: totally disagreed), and some questions are conducted with negative or reverse content in 5 grading system (1: totally agreed and 5: totally disagreed). The results obtained from Bar-On’s scale standardization showed that the test has good validity and reliability. In the above-mentioned scale standardization in Iran, the scale reliability coefficient on 90 questions based on Cronbach’s alpha is 0.93. The 90-item scale reliability of Bar-On’s EI by Cronbach’s alpha was calculated 0.90 in this research.

2. GHQ-28 questionnaire

For evaluation of mental health, the scaled General Health Questionnaire-28 (GHQ-28) was used (Goldberg and Hillier, 1979). The questions of this questionnaire were analyzing the mental condition of participant in the last 1 month and include symptoms of abnormal thoughts and feeling and aspects of observable behavior and stresses on the situation of here and now. This questionnaire consists of four sub-scales and each sub-scale consists of 7 questions. Questions 1 to 7 were related to physical symptoms sub-scale, 8 to 14 were related to anxiety/insomnia sub-scale, 15 to 21 were related to social dysfunction sub-scale and 22 to 28 were related to severe depression sub-scale. The method of answering the questions was according to 4 degree Likert which varies from 0(better than usual) to 3(worse than usual). The score of test is varied between 0 to 84 and its score-cut is 23. It means that if the

score of every one become more than 23, mental health will have disorder. In this sample, the internal reliability of the GHQ was 0.79 (Cronbach's alpha).

Research finding

Descriptive statistics

Table 1 presents the mean and standard deviations of EI and its factors. A perusal of Table 1 reveals that the mean score of EI is 3.4925, 3.5090 and 3.4798 in the general case and in male and female groups respectively. Consequently, we can be said that female students score more than male students score.

Table 1: Mean and standard deviation of EI and its factors in groups

	Total		Male		Female	
	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
Emotional Self-Awareness	3.5133	.55598	3.4594	.57735	3.5547	.53681
Assertiveness	3.1890	.55876	3.1919	.49417	3.1869	.60491
Self-Regard	3.7657	.59154	3.8805	.54672	3.6776	.61060
Self-Actualization	3.6586	.57377	3.6590	.57522	3.6582	.57410
Independence	3.4271	.65766	3.4572	.58980	3.4040	.70595
Intrapersonal	3.5108	.44942	3.5296	.43833	3.4963	.45833
Empathy	3.9919	.53351	3.9276	.55349	4.0412	.51362
Interpersonal Relationship	3.9000	.56804	3.7248	.51727	4.0345	.56979
Social Responsibility	4.0681	.45775	3.9715	.49715	4.1423	.41113
Interpersonal	3.9867	.40183	3.8746	.38338	4.0727	.39531
Problem Solving	3.6386	.51829	3.6787	.45879	3.6077	.55889
Reality Testing	3.1876	.59235	3.1173	.56960	3.2416	.60513
Flexibility	3.0543	.59466	3.0636	.54182	3.0471	.63350
Adaptability	3.2935	.45885	3.2865	.40630	3.2988	.49638
Stress Tolerance	3.0943	.67415	3.2621	.54476	2.9655	.73435
Stress Tolerance	2.9176	.84794	2.9956	.82522	2.8577	.86225
Stress Management	3.0060	.67864	3.1288	.59174	2.9116	.72588
Optimism	3.6605	.62606	3.7730	.56854	3.5741	.65524
Happiness	3.6705	.62155	3.6776	.50737	3.6650	.69787
General Mood	3.6655	.53764	3.7253	.43358	3.6195	.60258
Emotional intelligence	3.4925	.39329	3.5090	.35426	3.4798	.42125

Table 1 shows that the stress tolerance has lowest score among sub-factors in the general case and in male and female groups. The highest score belongs to the social responsibility among sub-factors in the general case and in male and female groups. The highest score in the meta-factors of emotional intelligence belongs to the interpersonal intelligence in the general case and in male and female groups. The stress management has lowest score in the general case and in male and female groups among meta-factors.

Table 2: Mean and standard deviation of mental health and its sub-scales in groups

Gender		Physical symptoms	Anxiety	Social dysfunction	Severe depression	Mental health
Female	Mean	6.5051	7.5051	6.8939	4.5859	25.4899
	Standard deviation	3.94730	4.18208	2.65893	4.62944	13.10277
Male	Mean	5.8487	6.9145	7.6974	5.2368	25.6974
	Standard deviation	4.59161	4.73670	3.54356	5.39283	15.90328
Total	Mean	6.2200	7.2486	7.2429	4.8686	25.5800
	Standard deviation	4.24536	4.43462	3.09559	4.97845	14.36480

Table 2 shows that scores of physical symptoms and anxiety of females are more than males. It means that female students have more disorder in sub-scales. But in general score of mental health of female students (25.4899) is less than score of men. It means that mental health status of female students is better. Table 2 and 3 show that the mean score of the GHQ is 25.58 for students, with 177 individuals (%51) of them falling in the abnormal range, and 173 individuals (%49) in the normal range of mental health.

Table 3: Frequency distribution of students

	Normal (score of GHQ < 23)		Abnormal (score of GHQ > 23)	
Female students	87	% 44	111	% 56
Male students	86	% 57	66	% 43
Total	173	% 49	177	% 51

Inferential Findings

The collected data were analyzed with Spearman's correlation to investigate relationships among "emotional intelligence variable and mental health variable" and them components.

First hypothesis: There is a relationship between EI and mental health of students.

Null hypothesis: There is not a relationship between EI and mental health of students

Alternative hypothesis: There is a relationship between EI and mental health of students

$$\begin{cases} H_0 : \rho = 0 \\ H_1 : \rho \neq 0 \end{cases}$$

Table 4: Significant test of coloration coefficient between EI and mental health

	Physical symptoms	Anxiety	Social dysfunction	Severe depression	Mental health
Emotional Self-Awareness	-.343(**)	-.400(**)	-.345(**)	-.282(**)	-.408(**)
Assertiveness	-.219(**)	-.291(**)	-.257(**)	-.221(**)	-.280(**)
Self-Regard	-.401(**)	-.421(**)	-.341(**)	-.387(**)	-.459(**)
Self-Actualization	-.431(**)	-.467(**)	-.504(**)	-.528(**)	-.566(**)
Independence	-.409(**)	-.444(**)	-.323(**)	-.452(**)	-.487(**)
Intrapersonal	-.479(**)	-.544(**)	-.469(**)	-.491(**)	-.586(**)
Empathy	-.145(**)	-.227(**)	-.180(**)	-.163(**)	-.214(**)
Interpersonal Relationship	-.130(*)	-.138(**)	-.306(**)	-.176(**)	-.209(**)
Social Responsibility	-.156(**)	-.265(**)	-.228(**)	-.153(**)	-.234(**)
Interpersonal	-.188(**)	-.267(**)	-.312(**)	-.217(**)	-.284(**)
Problem Solving	-.445(**)	-.375(**)	-.301(**)	-.397(**)	-.458(**)
Reality Testing	-.332(**)	-.396(**)	-.349(**)	-.427(**)	-.433(**)
Flexibility	-.284(**)	-.417(**)	-.372(**)	-.374(**)	-.415(**)
Adaptability	-.443(**)	-.499(**)	-.424(**)	-.497(**)	-.549(**)
Stress Tolerance	-.380(**)	-.509(**)	-.267(**)	-.479(**)	-.487(**)
Stress Tolerance	-.438(**)	-.526(**)	-.270(**)	-.430(**)	-.501(**)
Stress Management	-.470(**)	-.580(**)	-.295(**)	-.506(**)	-.557(**)
Optimism	-.334(**)	-.387(**)	-.420(**)	-.324(**)	-.429(**)
Happiness	-.311(**)	-.392(**)	-.379(**)	-.458(**)	-.453(**)
General Mood	-.382(**)	-.461(**)	-.469(**)	-.458(**)	-.520(**)
Emotional intelligence	-.492(**)	-.620(**)	-.497(**)	-.571(**)	-.648(**)

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 4 shows that the correlation coefficient is -0.648 between emotional intelligence and mental health of students. According to the fact that alpha is (0.05) more than sig, so the null hypothesis has been rejected and research hypothesis is verified, namely there is a meaningful relation between EI and mental health of students. Also this table shows that relationship between components of emotional intelligence and components of mental health of students are meaningful.

Second hypothesis: There is a relationship between EI and mental health of male students.

Null hypothesis: There is not a relationship between EI and mental health of male students.

Alternative hypothesis: There is a relationship between EI and mental health of male students.

Table 5: Significant test of coloration coefficient between EI and mental health (male students)

	Physical symptoms	Anxiety	Social dysfunction	Severe depression	Mental health
Emotional Self-Awareness	-.465(**)	-.637(**)	-.485(**)	-.324(**)	-.581(**)
Assertiveness	-.452(**)	-.454(**)	-.364(**)	-.265(**)	-.456(**)
Self-Regard	-.422(**)	-.533(**)	-.375(**)	-.407(**)	-.512(**)
Self-Actualization	-.429(**)	-.541(**)	-.551(**)	-.543(**)	-.603(**)
Independence	-.565(**)	-.523(**)	-.381(**)	-.557(**)	-.618(**)
Intrapersonal	-.598(**)	-.713(**)	-.589(**)	-.536(**)	-.727(**)
Empathy	-.185(*)	-.351(**)	-.335(**)	-.189(*)	-.313(**)
Interpersonal Relationship	.140	.007	-.436(**)	-.004	-.075
Social Responsibility	-.236(**)	-.489(**)	-.423(**)	-.278(**)	-.417(**)
Interpersonal	-.141	-.387(**)	-.529(**)	-.241(**)	-.374(**)
Problem Solving	-.556(**)	-.497(**)	-.422(**)	-.548(**)	-.607(**)
Reality Testing	-.379(**)	-.393(**)	-.382(**)	-.350(**)	-.432(**)
Flexibility	-.297(**)	-.403(**)	-.445(**)	-.470(**)	-.452(**)
Adaptability	-.530(**)	-.556(**)	-.515(**)	-.585(**)	-.640(**)
Stress Tolerance	-.485(**)	-.500(**)	-.350(**)	-.525(**)	-.558(**)
Stress Tolerance	-.425(**)	-.471(**)	-.281(**)	-.307(**)	-.452(**)
Stress Management	-.552(**)	-.563(**)	-.355(**)	-.463(**)	-.591(**)
Optimism	-.110	-.372(**)	-.491(**)	-.233(**)	-.337(**)
Happiness	-.156	-.283(**)	-.352(**)	-.306(**)	-.324(**)
General Mood	-.173(*)	-.403(**)	-.509(**)	-.338(**)	-.406(**)
Emotional intelligence	-.506(**)	-.685(**)	-.632(**)	-.539(**)	-.698(**)

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 5 shows that the correlation coefficient is -0.698 between emotional intelligence and mental health of male students. According to the fact that alpha is (0.01) more than sig, so the null hypothesis has been rejected and research hypothesis is verified, namely there is a meaningful relation between emotional intelligence and mental health of male students. Also this table shows that relationship between components of emotional intelligence and components of mental health of students are meaningful except some of them.

Third hypothesis: There is a relationship between EI and mental health of female students.

Null hypothesis: There is not a relationship between EI and mental health of female students

Alternative hypothesis: There is a relationship between EI and mental health of female students

Table 6: Significant test of coloration coefficient between EI and mental health (female students)

	Physical symptoms	Anxiety	Social dysfunction	Severe depression	Mental health
Emotional Self-Awareness	-.283(**)	-.228(**)	-.209(**)	-.227(**)	-.283(**)
Assertiveness	-.052	-.171(*)	-.179(*)	-.184(**)	-.159(*)
Self-Regard	-.388(**)	-.329(**)	-.354(**)	-.402(**)	-.444(**)
Self-Actualization	-.434(**)	-.408(**)	-.464(**)	-.518(**)	-.550(**)
Independence	-.323(**)	-.395(**)	-.272(**)	-.370(**)	-.398(**)
Intrapersonal	-.392(**)	-.423(**)	-.402(**)	-.459(**)	-.497(**)
Empathy	-.144(*)	-.137	-.036	-.140(*)	-.146(*)
Interpersonal Relationship	-.395(**)	-.281(**)	-.133	-.263(**)	-.334(**)
Social Responsibility	-.136	-.115	-.030	-.043	-.103
Interpersonal	-.285(**)	-.219(**)	-.079	-.190(**)	-.246(**)
Problem Solving	-.352(**)	-.277(**)	-.247(**)	-.300(**)	-.356(**)
Reality Testing	-.302(**)	-.421(**)	-.288(**)	-.459(**)	-.437(**)
Flexibility	-.253(**)	-.429(**)	-.343(**)	-.315(**)	-.395(**)
Adaptability	-.374(**)	-.469(**)	-.352(**)	-.432(**)	-.489(**)
Stress Tolerance	-.282(**)	-.533(**)	-.291(**)	-.503(**)	-.476(**)
Stress Tolerance	-.440(**)	-.587(**)	-.281(**)	-.515(**)	-.558(**)
Stress Management	-.401(**)	-.608(**)	-.293(**)	-.544(**)	-.559(**)
Optimism	-.474(**)	-.387(**)	-.409(**)	-.421(**)	-.513(**)
Happiness	-.422(**)	-.482(**)	-.385(**)	-.578(**)	-.580(**)
General Mood	-.503(**)	-.493(**)	-.449(**)	-.561(**)	-.620(**)
Emotional intelligence	-.499(**)	-.594(**)	-.418(**)	-.601(**)	-.645(**)

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 6 shows that the correlation coefficient is -0.645 between emotional intelligence and mental health of female students. According to the fact that alpha is (0.01) more than sig, so the null hypothesis has been rejected and research hypothesis is verified, namely there is a meaningful relation between EI and mental health of female students. Also this table shows that relationship between EI and components of mental health of students are meaningful.

Fourth hypothesis: There is a significant difference in EI of male and female students.

Null hypothesis: There is not a significant difference in EI of male and female students.

Alternative hypothesis: There is a significant difference in EI of male and female students.

Table 7: T-test for equality of means of male and female students (emotional intelligence)

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig.
Emotional intelligence	Equal variances assumed	6.289	.013	-.688	348	.492
	Equal variances not assumed			-.704	345.078	.482

Table7 shows that sig is 0.482. According to the fact that alpha is (0.01) less than sig, so the null hypothesis has not been rejected, namely there is not a significant difference in emotional intelligence of male and female students.

Fifth hypothesis: There is a significant difference in mental health of male and female students.

Null hypothesis: There is not a significant difference in mental health of male and female students.

Alternative hypothesis: There is a significant difference in mental health of male and female students.

Table 8: T-test for equality of means of male and female students (mental health)

		Levene's Test for Equality of Variances		T-test for Equality of Means		
		F	Sig.	t	df	Sig.
Physical symptoms	Equal variances assumed	2.207	.138	1.436	348	.152
	Equal variances not assumed			1.408	297.535	.160
Anxiety	Equal variances assumed	.876	.350	1.236	348	.217
	Equal variances not assumed			1.216	302.709	.225
Social dysfunction	Equal variances assumed	7.652	.006	-2.423	348	.016
	Equal variances not assumed			-2.336	270.944	.020
Severe depression	Equal variances assumed	4.677	.031	-1.213	348	.226
	Equal variances not assumed			-1.189	297.254	.235
Mental health	Equal variances assumed	4.062	.045	-.134	348	.894
	Equal variances not assumed			-.130	289.187	.896

Table 8 shows that sig is 0.896. According to the fact that alpha is (0.01) less than sig, so the null hypothesis has not been rejected, namely there is not a significant difference in mental health between male and female students.

Sixth hypothesis: There is a significant difference in meta-factors of EI between male and female students.

Null hypothesis: There is not a significant difference in meta-factors of components EI between male and female students.

Alternative hypothesis: There is a significant difference in meta-factors of EI between male and female students.

Table 9: T-test for equality of means of male and female students (meta-factors of EI)

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig.
Intrapersonal	Equal variances assumed	.285	.594	-.687	348	.493
	Equal variances not assumed			-.691	331.729	.490
Interpersonal	Equal variances assumed	.179	.673	4.707	348	.000
	Equal variances not assumed			4.726	329.718	.000
Adaptability	Equal variances assumed	7.910	.005	.248	348	.805
	Equal variances not assumed			.254	346.545	.799
Stress Management	Equal variances assumed	11.320	.001	-3.002	348	.003
	Equal variances not assumed			-3.083	346.722	.002
General Mood	Equal variances assumed	8.545	.004	-1.831	348	.068
	Equal variances not assumed			-1.909	346.632	.057

Table 9 shows that interpersonal means of male and female students and stress management means of male and female students have meaningful deference. Also it shows others meta-factors means of male and female students that have not meaningful deference.

Seventh hypothesis: There is a significant difference in ranking of meta-factors of EI.

Null hypothesis: There is not a significant difference in ranking of meta-factors of EI.

Alternative hypothesis: There is a significant difference in ranking of meta-factors of EI.

Table10: Mean rank of meta-factors of EI

	Mean Rank
Intrapersonal	3.14
Interpersonal	4.45
Adaptability	2.18
Stress management	1.64
General mood	3.59

Table 11: Fridman test

N	350
Chi-Square	702.705
df	4
Asymp. Sig.	.000

Table 11 shows that sig is 0.000. According to the fact that alpha is (0.01) more than sig, so the null hypothesis has been rejected, namely there is a significant difference in ranking of meta-factors of EI. Ranking of meta-factors of EI is as follows:

Table 12: Ranking of meta-factors of EI

Emotional intelligence	Rank
Stress management	1
Adaptability	2
Intrapersonal	3
General mood	4
Interpersonal	5

Eighth hypothesis: There is a significant difference in ranking of sub-scales of mental health

Null hypothesis: There is not a significant difference in ranking of sub-scales of mental health

Alternative hypothesis: There is a significant difference in ranking of sub-scales of mental health

Table 13: Mean rank of sub-scales mental health

	Mean Rank
Physical symptoms	2.36
Anxiety	2.87
Social dysfunction	2.90
Severe depression	1.88

Table 14 : Fridman test

N	350
Chi-Square	169.226
df	3
Asymp. Sig.	.000

Table 14 shows that sig is 0.000. According to the fact that alpha is (0.01) more than sig, so the null hypothesis has been rejected, namely there is a significant difference in ranking of components of mental health. Ranking of sub-scales of mental health is as follows:

Table 15: Ranking of sub-scales of mental health

components of mental health	Rank
Social dysfunction	1
Anxiety	2
Physical symptoms	3
Severe depression	4

Conclusions

The present investigation was conducted to explain the relationship between of EI and mental health scale and its sub-scales. After analyzing the data, it was found that the hypotheses 1, 2 and 3 are supported, i.e., the EI negatively correlates with the mental health scale and sub-scales (EI and mental health ($r=-0.648$), EI and physical symptoms ($r=-0.492$), IE and anxiety ($r=-0.62$), EI and social dysfunction ($r=-0.497$), EI and severe depression ($r=-0.571$)). The findings of the present study indicate that there is not significant difference in EI between male and female students and mental health between male and female students. But there is significant difference in social dysfunction, interpersonal and stress management between male and female students. Also finding of the present research showed that there is significant difference in ranking of sub-scale of mental health and ranking of sub-scale of mental health is as 1-social dysfunction, 2- Anxiety, 3- Physical symptoms, 4- Severe depression from worst to

best. Ranking of meta-factors of EI is a 1- Stress management, 2- Adaptability, 3- Intrapersonal, 4- General mood, and 5- Interpersonal from worst to best.

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