The Study of the Relationship between Depression and Emotional Intelligence among the Students of Zabol University of Medical Sciences in 2014

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Abstract

This study aimed to answer the question that what is the relationship between depression and emotional intelligence among the students of Zabol University of medical sciences in 2014?

This study is descriptive-correlational that examined 294 students of Zabol University of medical sciences in 1393 by using stratified random sampling. Bar-On emotional intelligence questionnaire and Beck depression questionnaire were used to collect data. Pearson correlation coefficient and regression were used for data analysis. The obtained results show that there is a significant relationship between emotional intelligence and depression. On the other hand, there is a significant relationship between emotional intelligence with the variables (gender, major satisfaction, type of faculty, and place of living) and depression with the variables (gender, major satisfaction, father's education and type of faculty).

Keywords: emotional intelligence, depression, students, university of medical sciences, Zabol

1. Introduction

Depression is a type of mood that involves different aspects of life (Foot, 1983). On the other hand, this disease can have a negative effect on cognitive processes, memory, attention, motivation, interest in academic activities, the relationship of students with professor and self-confidence can lead to Academic failure (Asadi, 2001). The studies inside the country show that among 300 students under study, 31/7% of them had a degree of depression. (Kheyrabadi et al., 1997)

Since the components of emotional intelligence and their education is significantly effective in the increase of mental health, the symptoms of mental diseases can be reduced by teaching these components. (Esmaili, Ahadi, & Shafi Abadi, 2008). The term emotional intelligence was raised for the first time by Salovey and Mayer in 1990 as a form of social intelligence. Their primary model of emotional intelligence included 3 areas of: 1) evaluation and expression of emotions. 2) Adjustment of emotions in ourselves and others. 3) The use of emotion. (Zare Khur Mizi, 2008) and the people who have high emotional intelligence have a better ability to cope with stress (Salovey et al., 1995). In the studies of Bar-On and Ghorbani, the relationship between emotional intelligence and mental health was studied and confirmed (Baron, 2000; Ghorbani, 2000). The cornerstone of success is high emotional intelligence in addition to appropriate intelligence quotient. And its advantage to intelligence quotient is that learning emotional intelligence begins from the birth and continues during the whole life (Soltanifar, 2007). Researchers with the increase of emotional behavioral problems, from low self confidence to anxiety and depression in adolescents and young people, believe that teaching the required skills in the field of emotional intelligence to students is essential. These teachings will lead to the increase of more Conformity and probability of success even in cases of facing risk factors (Gloeman, 1998).

The background of emotional intelligence can be searched in the ideas of Wexler while explaining non-cognitive aspects of general intelligence. Wexler attempted to measure the non-cognitive and cognitive aspects of general intelligence together. His efforts in this field can be found in the use of subtests of image adjustment and

comprehension and understanding that comprise two main parts of his test. In subtests of understanding and comprehension, social adjustment and in image adjustment the recognition of social situations is examined. The studies conducted by Sips et al. (1987) show that there is a significant correlation between understanding and images and indicators of social intelligence of California personality questionnaire (Sharifi, 1996).

Depression is a disaster that can affect our thoughts, mood, feelings, and behavior, physical and mental health. All of us sometimes deal with emotions and sickness. This feeling is considered as a part of our natural feelings. But depression is a stable mood state of sadness and the obvious decrease of some or all activities that continue most of the time or almost every day and can affect different aspects of life (Kuhi Habibi, 2010).

According to recent studies, depression is seen in almost throughout the world and all cultures and social classes. Depression in women is two times more than men. According to the raised hypotheses, the reasons of this difference are hormonal differences, problems related to pregnancy and birth delivery and the difference of mental-social tension. Major depression may begin in the childhood and aftertime. Also, the prevalence of depression among the divorced couples is more than the married ones. Recently, depression has increased among the people below 20 years old (Kuhi Habibi, 2010).

About half of the patients who have the first period of major depression, have had symptoms of depression before the recognition of this period. Thus, if the symptoms are recognized and treated soon, a complete period of depression can be prevented. The treatment duration of depression is at least 3 months. Stopping the use of medicine before 3 months causes the return of symptoms. Major depression is not a benign disorder and is mainly Chronic and most of the times relapse. But the patients who are under treatment by doctors and have appropriate and strong friendships and social performance and their disease starts at higher age will have less relapse (Kuhi Habibi, 2010).

In another study, Sepehrian studied the effect of emotional intelligence skills on the ways to cope with mental pressure in adolescents in Urmia. First, Parker - Endler test was performed on experimental groups. Then, these groups participated in the training classes of emotional intelligence. The test was performed again and data analysis showed that teaching emotional skills has been effective. (Gloeman, 2003) Another study was conducted by Zarean et al entitled the relationship between emotional intelligence and problem solving approaches with general health in Faculty of Education and Psychology of Tabriz University. In this study, emotional intelligence tests (MSEIS), problem solving styles and general health (GHO-28) were performed on 69 first year students of education and psychology in two turns. The results showed that emotional intelligence has significant correlation with general health and two problem-solving styles of confidence and tendency and has negative correlation with problem solving styles of helplessness and controlling. Thus, there is a significant relationship between emotional intelligence and problem solving styles with general health (Sepehrian, 2007).

2. Research Objectives

Main objective: To determine the relationship between depression and emotional intelligence among the students of Zabol university of medical sciences.

Sub objectives: 1) To determine the mean score of emotional intelligence of students in terms of demographic variables. 2) To determine the mean score of depression of students in terms of demographic variables. 3) To determine the relationship between the emotional intelligence score and depression score of students.

3. Research Questions

1. Is there a relationship between the emotional intelligence score of students and demographic variables?

2. Is there a relationship between the depression score of students and demographic variables?

3. Is there a relationship between the depression score and emotional intelligence score of students?

4. Research Methodology

This study is correlational that was performed as cross-sectional. Its statistical population was comprised of all students of Zabol University of medical sciences in 2014. Sample size was determined 294 subjects by using Morgan table. In the present study, sampling was done by stratified random method with an appropriate allocation. The population is comprised of students in faculties of medical sciences, pharmacy, nursery and midwifery, paramedical and health of Zabol University of medical sciences and each faculty is considered one floor. Data collection was done through the standard questionnaires of Bar-On emotional intelligence score and depression in the form of a questionnaire including 3 sections of demographic information, questions of depression assessment and emotional intelligence. The section of emotional intelligence assessment includes 90 questions. After data collection, the information was described in the form of mean, standard deviation,

frequency and percent by using SPSS19 software. Also, the information was analyzed using independent T-test, analysis, one-way variance, Pearson correlation coefficient (in case of normal data distribution) and multi regression. $p<0/05$ is considered as the significance level.

5. Research Findings

The first research question is that is there a relationship between the emotional intelligence score of students and demographic variables? It was answered as:

Table 1. The comparison of emotional intelligence mean with the variables: gender, marital status, level of education, absence and presence of parents, and major satisfaction

			Number	Mean	Standard deviation	p-value
Emotional intelligence	Gender	Man	109	301/73	39/28	0/000
		Woman	185	319/49	36/54	
	Marital status	Single	62	306/67	38/89	0/152
		Married	232	314/56	38/28	
	Level of education	Bachelor	200	314/12	39/37	0/431
		PhD	94	310/31	36/57	
	Presence of father	Yes	289	312/87	37/88	0/912
		No	5	314/80	71/56	
	Presence of mother	Yes	293	313/09	38/40	0/883
		No	1	308/3	0	
	major satisfaction	Yes	270	314/36	38/72	0/029
		No	24	296/50	31/95	

According to the above table, the assumption of the equality of variances (p-value $>0/05$) was accepted according to Levene test and according to independent T test, a significant relationship was observed between emotional intelligence with gender and major satisfaction (p-value $<0/05$) so that, the emotional intelligence mean in girls wash higher than boys. Also, the emotional intelligence mean was more in the students who were satisfied with their major there was no significant relationship between emotional intelligence and marital status, level of education and the absence or presence of parents. (p-value $>0/05$)

Table 2. The comparison of emotional intelligence mean with the variables of parents' education, faculty and place of living

Variable			Number	Mean	Standard deviation	p-value
Emotional intelligence	Father's education	Literacy	34	298/70	35/66	0/137
		Primary school	19	316/15	52/97	
		Middle school	44	311/31	35/60	
		Diploma	76	316/69	38/52	
		Associate degree	49	321/34	43/69	
		Bachelor and higher	72	309/97	31/75	
	Mother's education	Literacy	31	318/74	45/60	0/475
		Primary school	48	305/35	36/20	
		Middle school	51	311/29	37/45	
		Diploma	72	315/66	41/90	
		Associate degree	35	319/88	40/35	

Variable		Number	Mean	Standard deviation	p-value
Faculty	Bachelor and higher	57	309/75	30/74	
	Nursing and Midwifery	76	313/22	33/97	
	Health	72	306/76	39/50	
	Paramedical	52	325/61	44/35	
	Medical sciences	40	316/07	28/66	0/048
	Pharmacy	54	306/05	41/22	
Place of living	Dormitory	264	312/68	37/98	
	Home (with family)	25	323/52	38/75	0/02
	Rental house	5	271/40	41/33	

According to the above table and according to one-way analysis of variance a significant relationship was seen between emotional intelligence and type of faculties and place of living. (p-value <0/05) According to Tukey ad hoc test it was found that emotional intelligence among the students of paramedical faculty is more than the other faculties. Also, the students who lived at home with their families had higher emotional intelligence than the other students. But there was no significant relationship between emotional intelligence and parents' education. (p-value>0/05)

The second question of this study is that is there a relationship between the depression score of students and demographic variables? It was answered as:

Table 3. The comparison of emotional intelligence mean and the variables: gender, marital status, level of education, absence or presence of parents and major satisfaction

		Number	Mean	Standard deviation	p-value
Gender	Man	109	9/51	8/41	0/022
	Woman	185	11/96	9/46	
Marital status	Single	62	8/85	9/3	0/118
	Married	232	10/84	8/74	
Level of education	Bachelor	200	10/21	8/97	0/561
	PhD	94	10/86	8/71	
Presence of father	Yes	289	10/4	8/84	0/804
	No	5	11/4	1/01	
Presence of mother	Yes	293	10/36	8/84	0/678
	No	1	11/0	0	
Major satisfaction	Yes	270	9/93	8/45	0/002
	No	24	15/87	11/65	

According to the above table, the assumption of the equality of variances (p-value >0/05) was accepted according to Tukey ad hoc test and according to independent T test, a significant relationship was observed between depression with gender and major satisfaction. (p-value <0/05) So that, the depression mean in girls wash higher than boys. Also, the depression mean was more in the students who were not satisfied with their major There was no significant relationship between depression and marital status, level of education and the absence or presence of parents. (p-value >0/05)

Table 4. The comparison of depression mean and the variables: parents' education, faculty, and place of living

Variable		Number	Mean	Standard deviation	p-value
Depression	**Father's education**				
	Literacy	34	12/76	7/56	
	Primary school	19	13/15	12/02	
	Middle school	44	8/34	8/45	0/01
	Diploma	76	9/72	8/47	
	Associate degree	49	7/77	7/30	
	Bachelor and higher	72	11/4	9/51	
	Mother's education				
	Literacy	31	10/61	7/52	
	Primary school	48	12/4	10/67	
	Middle school	51	9/13	8/45	0/141
	Diploma	72	9/76	8/60	
	Associate degree	35	8/08	7/26	
	Bachelor and higher	57	12	9/26	
	Faculty				
	Nursing and Midwifery	76	10/22	9/16	
	Health	72	12	9/62	
	Paramedical	52	7/73	7/15	0/026
	Medical sciences	40	8/82	6/74	
	Pharmacy	54	12/37	9/71	
	Place of living				
	Dormitory	264	10/56	8/88	
	Home (with family)	25	8/64	9/03	0/56
	Rental house	5	11/60	9/04	

According to the above table and according to one-way analysis of variance a significant relationship was seen between emotional intelligence and type of faculties and place of living. (p-value <0/05) According to Tukey ad hoc test among the students whose father's level of education was primary was higher than the other students. Also, the students of pharmacy faculty had higher depression than the other faculties. But there was no significant relationship between depression and the education of mother and place of living. (p-value n>0/05)

The third question is that is there a relationship between the depression score and emotional intelligence score of students?

Table 5. The relationship between emotional intelligence, depression and age

N= 249		emotional intelligence	depression	age
emotional intelligence	Pearson correlation coefficient	1	- 0/584	-0/105
	p-value		0/000	0/072
Depression	Pearson correlation coefficient		1	0/195
	p-value			0/001
age	Pearson correlation coefficient			1
	p-value			

According to the above table and Pearson correlation coefficient test, there was a significant and reverse relationship between emotional intelligence and depression. (p-value <0/001, r-0/584). The higher is emotional

intelligence, the less will be the level of depression, However, there was no significant relationship between age and emotional intelligence. (p-value> 0/05) There is a significant relationship between depression and age. (p-value<0/05) This relationship is positive and direct. The higher is age, the higher will be depression.

6. Discussion and Correlation

The purpose of this study was to examine the relationship between depression and emotional intelligence among the students of Zabol University of medical sciences in 1393. According to the table 15-4, it was found that there is a significant and reverse relationship between emotional intelligence and depression. (P-value<0/001) The higher is emotional intelligence, the less will be depression, the present study is consistent with the studies of Movroli et al 2001, ** et al 2005, Liaor et al 2003, Siaruchi et al 2001 and Angela 2009. According to the conducted studies on emotional intelligence and depression, it can be said that the weak function of emotions may lead to behavioral problems like depression. A significant relationship was observed between emotional intelligence and the variables of gender, major satisfaction, type of faculty, and place of living. About the variable of gender, the study results showed that emotional intelligence mean in girls was higher than boys. Khalili in his study on the employees of a business company in Malasia found that men have higher emotional intelligence than women. This difference between men and women was due to the better relation management of men. (Khalili, 2011) In a review conducted by Naqavi and Redzuan, the review of different studies was consistent with the present study and indicated the fact that the emotional intelligence of girls is more than boys. According to these researchers, since we expect girls to express their emotions and feelings and also consider "not expressing emotions" in boys as a male behavior. This difference emerges in emotional intelligence. Thus, the relationship between higher emotional intelligence and female gender can be due to the type of the behaviors of parents, people and society (Naqavi, 2011).

While in the study of Samari and Tahmasbi, no significant relationship was observed between the emotional intelligence score of girls and boys with the average age of 21/65 and in the other words, girls and boys enjoy similar emotional intelligence while facing daily problems and works (Samari, 2007) may be due to the fact that the people with high emotional intelligence are more willing to have high levels of major satisfaction because they are more Compatible in the assessment and adjustment of their specific feelings than the people with less emotional intelligence. The other result of this study shows the significant relationship between emotional intelligence and place of living. So that, the students who lived at home with their families had higher emotional intelligence than the other students, since most of the emotional intelligence skills can be created through teaching and learning, emotional intelligence is more among the students of paramedical faculty than the other faculties. Perhaps this finding shows that the other faculties rely on cognitive intelligence than emotional intelligence for more success.

On the other hand, there was no significant relationship between the emotional intelligence score of students and the variables of age, father's education, mother's education, level of education and marital status. About the relationship between emotional intelligence and age, most students were in the range 19-21 and significant difference could be seen in case of higher ages. The results of the study of Ghofrani Kalishi et al that examined the relationship between emotional intelligence and demographic terms among the students of nursery in Tehran University of medical sciences are consistent with the results of the present study. (Ghofrani Kalishmi, Ashqali, Farahani, Jamshidi Orak 2014)Unlike the results of the present study in Derksen et al., 873 people at the age range of 19-84 years were evaluated. The results indicated the fact that the higher is the age of people, the higher will be emotional intelligence. The higher score of emotional intelligence is in ages of 35-44 years and then it decreases in higher ages. (Derksen, 2002) In the study of Fariselli et al, there is a very little relationship between emotional intelligence and age and these researchers believe that there may be people with less age that have emotional intelligence. But there are people with less age who have high emotional intelligence due to work conditions and level of education. (Fariselli, 1995) On the other hand, a significant relationship was seen between the depression score of students with age, gender, job satisfaction, father's education and type of faculty. (p-value <0/05) About the relationship between emotional intelligence and gender, the present study showed that depression mean in girls was more than boys. The result was consistent with the study of Atefeh Zand (2001) that identified the effect of depression on the academic performance of Shirazi students and showed that girls have more depression than boys. Madah (2000) in a study conducted on teachers of Tehran showed that depression in women is more than men. Another study by Falahati 1991 on 608 Tehrani students showed that the prevalence of depression in women is more than men. Another study by Bagheri 1994 on the students of Ali Abad KAtul shows that in the study group depression in girls is more than boys. In another study by Firoozi, 1997 on 670 workers of Kerman Copper Corporation showed that depression in men is less than women. Unlike the present results, a research on the students of the United States shows that gender has little effect on the level

of depression. This study refers to the high tendency to commit suicide in male students than female students. (Regeth & Lewis, 1995) The result of this study is consistent with the study of Tahmasbi pour and Kamangiri (Husseini, 2011). About age, the present study showed that there is a direct and positive relationship between depression and age. The higher is age, the higher will be depression. Since the study people had limited range of age and most people were 19-23 years old, this result does not have enough validity. On the other hand, the study results show that depression was more among the students who were not satisfied with their major. These results are consistent with the study of Salehi (2002) that aimed to examine the relationship between job satisfaction and mental health of the women working in Jihad of Construction headquarters. In the study of Dustdar Tousi 1997 that aimed to examine the mental health of students in teacher training centers of Mazandaran province, it was found that there is a relationship between job satisfaction and the dimensions of mental health. Kal et al 1994 in a study showed that the people with a type of depression have less self confidence, more senselessness and less job satisfaction.

The results of this study showed that there is a significant relationship between emotional intelligence and depression. On the other hand, among the variables of this study a significant relationship was observed between emotional intelligence with the variables: gender, major satisfaction, type of faculty, place of living and depression with the variables: age, gender, major satisfaction, father's education and type of faculty.

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