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EXAMINING THE ASSOCIATION BETWEEN EMOTIONAL INTELLIGENCE WITH DEPRESSION AMONG IRANIAN BOY STUDENTS

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ABSTRACT

The present study sought to examine the association between emotional intelligence and depression in boy students in, Tehran, Iran. The sample size was 188 boy students at the age of 16 to 19 years old were chosen for this study. The Assessing Emotions Scale (AES), and Beck Depression Inventory-II (BDI-II) were filled out by students. The Pearson correlation coefficient and multivariate regression analysis were utilized. The findings showed that a negative association existed between high ability of emotional intelligence with depression and a positive association existed between low ability of emotional intelligence with depres-sion. These results revealed that emotional intelligence was a valuable predictor of depression in adolescents.

Keywords: Emotional intelligence, depression, Iranian, students

INTRODUCTION

In throughout the adolescent period, some adolescents face with difficult experiences. Some difficult experiences contribute to disturbance in psychological and behavioral problems. One of the prevalent disorders during the adolescent period is depression. Changes occur in the adolescent period, such as physical and psychological and hormonal changes (Weller, Kloos, Kang, & Weller, 2006). On the other side, they would find a new social role in societies (Jacka et al., 2010). They have to decide about their academic, occupational and marital affairs that effect on their futures and identities. Also, sexual crisis in an adolescent period makes more challengeable this period for adolescences. (Weller et al., 2006). Therefore, they encounter to varieties of stressors in this period, and one of the widespread reactions to these problems might be depression. In according to the World Health organization, around 350 million individuals suffer from depression in the world (WHo, 2012). Several studies have found that the prevalence of depression in Iranian students varies from 36% to 66% and the prevalence of depression in Iranian varies from 15-25% (Aghakhani et al., 2011; Lotfi, Aminian, Ghomizadea, & Zarea, 2010). World Health Organization estimates depression would become the leading mental-health problem by 2020, if urgent action does not taken (WHO, 2012), and it could contribute to physical and mental disorders, such as cardiovascular disease, atherosclerosis, suicide, anxiety, and depression (Becker-Weidman, Jacobs, Reinecke, Silva, & March, 2010; Seldenrijk et al., 2010). Further, depression is an economic burden for governments, for example estimated the cost of care giving for depressed individuals in the United State was around $9 billion in 2004 (Bronstein et al., 2008; Unützer, 2007). American Psychiatric Association (APA, 2012) defined depression with existing criteria for two weeks on a daily basis diagnosed depression consist of: 1) depressed or irascible mood, 2) loss of happiness in comparison before, 3) change in weight, 4) dysfunction in sleep, 5) disturbance in psycho-motor reaction, 6) loss of energy, 7) sense of worthlessness or extreme guilt, 8) poor concentrating and poor decision making, and 9) thoughts of death with or without a plan or intent. One of the plausible predictor of

depression is low ability of emotional intelligence in adolescents, how individuals exert emotional in response to the stressful condition. Therefore, emotional intelligence plays an important and vital role in adolescent mental health (Marc A Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006; Lloyd, Malek-Ahmadi, Barclay, Fernandez, & Chartrand, 2012). High ability of emotional intelligence associated with better personal and social reactions (Wang & Huang, 2009). Previous studies showed that positive emotional reaction associated with effective problem-solving skills that contribute to better mental health (Downey et al., 2008).

There is a large volume of published studies have shown that individuals high in emotional intelligence reported low levels of depression (Ghorbani & Watson, 2006; Kong & Zhao, 2013; Lloyd et al., 2012; Salguero, Extremera, & Fernández-Berrocal, 2012; Tannous & Matar, 2010). In the same vein, several studies have shown that low ability of emotional intelligence may lead to some behavioral problems in adolescences, such as conduct problems, aggression, rule-breaking, poor academic performance (Davis & Humphrey, 2012a, 2012b; Esturgó-Deu & Sala-Roca, 2010; Tannous & Matar, 2010).

Mayer and Salovey (1993) defined emotional intelligence as a kind of social intelligence, includes the abilities of monitoring one's emotions and other's emotions, and manipulating the information for managing one's thoughts and actions, and regulating emotion in self and others, and utilizing favorable emotions for solving difficulties and obstacles, actively and effectively. Goldenberg, Matheson, and Mantler (2006) reported that individuals high in emotional intelligence effectively manage emotional experiences, and they solve their problems more effective than individuals low in emotional intelligence. In another major study, Schutte et al. (2001) found that individuals with high ability of emotional intelligence better recognize and prevent negative emotions in self and others, and they are more positive, while they engage in depression, because they improve themselves in terms of emotionality. In this regard, Lloyd et al. (2012) showed that people, who got higher scores on emotional intelligence suffer depression lesser than people, who got lower scores in emotional intelligence, and they reported better mental health and well-being. A recent study by Fernandez-Berrocal, Alcaide, Extremera, and Pizarro (2006) examined the association between emotional intelligence, anxiety, and depression among Spanish adolescent students (age 14 - 19). The results revealed that there was a negative association existed between emotional intelligence with depression and anxiety in adolescences. Siu (2009) reported similar findings from Chinese adolescent students about the negative association existed between emotional intelligence with depression, aggression, and behavioral problems.

In this line, the aim of this study examines the association between emotional intelligence and depression in Iranian highschool students. In according to former studies, we hypothesized that:

1. There is a positive association between high ability of emotional intelligence with non-depressive symptoms.
2. There is a negative association between high ability of emotional intelligence and severe depression in Iranian students.
3. There is a significant association between high ability of emotional intelligence and mild and moderate depression in Iranian students.
4. There is a positive association between low ability of emotional intelligence and severe depression in Iranian students.
5. There is a negative association between low ability of emotional intelligence and non-

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Vol. 2 No. 3 August 2013

depressive symptoms.

6. There is a significant association between low ability of emotional intelligence and mild and moderate depression in Iranian students.
7. Low ability of emotional intelligence predicts depression in Iranian students.

METHODS

Participants and Procedure

The sample consisted of 188 high-school students, and their ages were between 16 to 19 years old (M= 17.1, SD=. 93). A random cluster sampling was used. There were 55 high schools in District 11 of Ministry of Education. Six schools were chosen randomly, and one class was chosen from every school. Every student, in these classes, was chosen as a participant for this study. Data collected during one of the regularly scheduled classes. Except of 12 students, other students completed questionnaires; included the Schutte Emotional Intelligence Scale and the Beck Depression Inventory-II (BDI-II) was separately completed by students.

Instruments

Assessing Emotions Scale (AES) created by Schutte based on the model of emotional intelligence developed by Mayer and Salovey (1993) with 33-item assesses characteristics of emo-tional intelligence in self and others. All questions are in the 5-point Likert scales from 1 (strongly disagree) to 5 (strongly agree). Total scores can be calculated by reverse coding items 5, 28 and 33, and then summing all items. The total score is from 33 to 165. The higher score indicates higher ability of emotional intelligence and conversely. AES divided into three sub scales, Ap-praisal of Emotions, Utilization of Emotions and Regulation of Emotions. Schutte et al. (1998) suggested using the total scores of AES rather than scores of sub-scales. The AES had a good internal consistency with α: 0.90 and test-retest reliability was α: 0.87 (Schutte et al., 1998). Sev-eral studies have reported a powerful convergent and divergent validity. (Bastian, Burns, & Nettelbeck, 2005; M.A. Brackett & Mayer, 2003). Besharat (2007) calculated alpha Chronbach 0.88 with a good internal consistency. In our study, the reliability was measured α: .88. Based on their AES scores, adolescents in this study were divided into two levels of emotional intelli-gence – low ability of emotional intelligence (1 to 82.5), high ability of emotional intelligence (Up to 82. 5).

Beck Depression Inventory-II (BDI-II) created by Aaron T Beck & Steer, (1987) with 21 items assess depressive symptoms during the fortnight. All questions are in the 4-point Likert scales from 0 to 3. The BDI-II had a good internal consistency with α: 0.92 (A.T. Beck, Steer, & Brown, 1996), and several studies have reported that BDI-II had powerful construct validity (Arnau, Meagher, Norris, & Bramson, 2001; Osman, Barrios, Gutierrez, Williams, & Bailey, 2007; Osman, Kopper, Barrios, Gutierrez, & Bagge, 2004). In the current study, the reliability of BDI-II was α: 0.80. Based on their BDI-II scores, adolescents in this study were divided into four levels of depressive symptoms – considered normal (1 to 13), mild depression (14 to 21), moderate depression (22 to 30) severe depression (Upto31).

Demographic Survey

Demographic information was collected to measure different features of an individual's back-ground. Participants completed a demographic survey about their age, educational level, and family structure.

RESULTS

Simple frequency analysis was used to present demographic information, included educational levels, family structure, age, and depression in Table 1. As it can be seen from the table1, almost half (44.10%) of all adolescents reported moderate (23.90%) and severe (20.20%) symp-toms of depression and nearly half (55.90%) of adolescents reported mild (27.10%) and minimal (28.70%) symptoms of depression. Nearly two-thirds (79.80%) of adolescents reported their par-ents were alive, and (12.20%) of adolescents were living with one parent, and (8%) of adoles-cents reported their parents were divorced. Participants equally were between junior, sophomore, and senior levels of education nearly (33%). The ages of participants were between 16 to 18 years old equally by (32%) except for 19 years old (6%).

Table1. Demographic information, including education levels, family structure, age, and depression

	Depression				Family Structure			Education levels			Age			
	S	M	Mi	N	Single	Alive	Div	Junior	Sop	Senior	16	17	18	19
n	38	45	51	54	23	150	15	62	62	64	60	60	56	12
%	20.2	23.9	27.1	28.7	12.2	79.8	8	33	33	34	31.9	32	29.8	6.4

S: Severe, M: Moderate, Mi: Mild, N: Normal, n: number, Div: Divorced, Sop: Sophomore

As shown in Table 1, we can see the prevalence of depression at ages 16 to 19 years old at various levels of education and family structure. The most striking result to emerge from the data is that participant's divorced parents either reported moderate depression (4) and severe de-pression (11). Further, in Figure1, it is apparent that rates of depression in adolescents with di-vorced parents were further than single, alive parents.

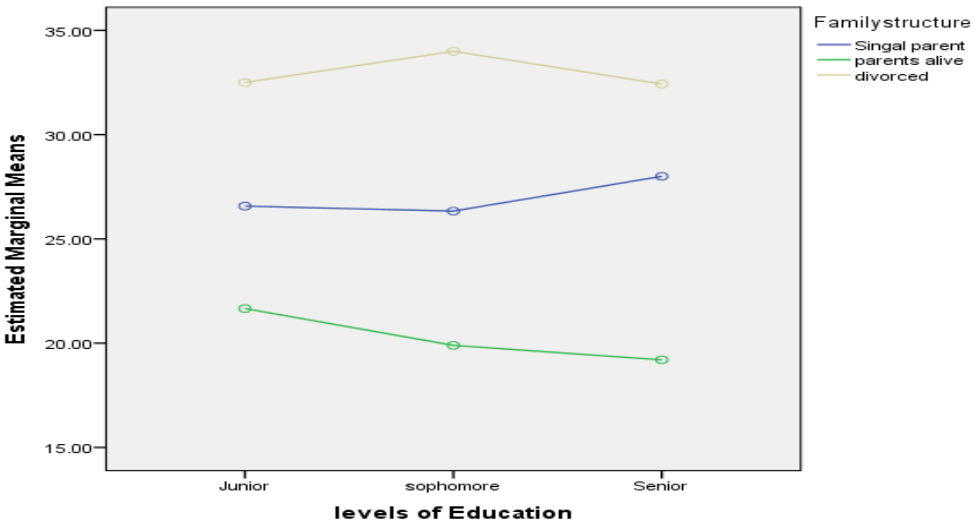

Figure 1. Estimated marginal means of depression

A positive correlation was between low ability of emotional intelligence and moderate and severe depression, r =. 45, (P<0.01) and r=. 53, (P<0.01), respectively (Table 2). A negative association existed between low ability of emotional intelligence with minimal symptoms of de-pression and mild symptoms of depression, r = -. 47, (P<0.01) and r = -. 51, (P<0.01), respec-tively. A significant positive correlation existed between high ability of emotional intelligence with minimal symptoms of depression and mild symptoms of depression, r = .57,

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Vol. 2 No. 3 August 2013

(P<0.01) and r = .41, (P<0.01), respectively. The most interesting in this data was that there was a negative as-sociation between high ability of emotional intelligence with moderate and severe symptoms of depression, r = -0. 56, (P<0.01) and r = -. 61, (P<0.01). These findings are consistent with other studies that showed low ability of emotional intelligence predicted depression (Fernandez-Berrocal et al., 2006; Lloyd et al., 2012; Salguero et al., 2012).

Table.2. Correlation between Emotional intelligence and types of depression

	Minimal Depression	*Mild Depression*	*Moderate Depression*	*Severe Depression*
Low EI	-.472**	-.518**	.455**	.537**
High EI	.572**	.418**	-.562**	-.612**

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

It is apparent in Table 3 that low ability of emotional intelligence had a powerful predic-tor of depression in adolescents (0.82). Conversely; high ability of emotional intelligence nega-tively predicted depression in adolescents (- . 80). Our findings are consistent with Salovey, (2002) showed that emotional intelligence significantly predicted depression in adolescences.

Table 3. Regression results for EI on depression

	B	R2	F	Beta
High EI	-0.801	0.65	86.54	-0.791
Low EI	0.821	0.64	336.33	0.819

a. Dependent Variable: depression

DISCUSSION

Returning to the hypotheses at the beginning of this study, it is now possible to state that there is a powerful association between low ability of emotional intelligence and depression in adolescents. Specifically, higher ability of EI reduced risk of depression and vice versa. The findings of this study are consistent with previous studies (Bastian et al., 2005; Fernandez-Berrocal et al., 2006; Lloyd et al., 2012) . The second major finding was adolescents with di-vorced parents were more depressed than adolescents with alive parents or one of them was dead.

These data recommend that EI may be a valuable predictor of depression in adolescents. Thus, the findings reveal that for every 1-point increase in the EI score, the risk for depression decreased by 8% in a sample of adolescents. If other studies confirm these results, teaching EI as being a useful intervention and preventive strategy for treatment of depression, therefore educa-tional psychologists can treat depression by emotional intelligence training at school. Even other mental health workers can use emotional intelligence training to treat or prevent depression in clients.

Several important limits need to be considered. First, data for this study were collected by using self-report instruments. The self-report instruments might make exaggerated responses; due to social desirability. Therefore, it is better other researchers use other suitable methods for assessing EI, such as direct observation, peer or family member's assessment. Secondly, the par-ticipants of the study belong to high school students in Ministry of Education in Tehran; there-fore, the results cannot be generalized to girls or boys who study at different

levels of education. Also, with regard to the urbanization characteristics and the study was done in Tehran city. It seems the results would be different in the village. Therefore, I suggest that the future study could be done in the village, because of the social and cultural differences between city and vil-lage.

This research has thrown up many questions in need of further investigation. First, it needs to further researches about family structure, and parenting styles with emotional intelligence in adolescents. Second, it needs to research about the role of emotional intelligence in parenting styles and depression in children.

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Vol. 2 No. 3 August 2013

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Vol. 2 No. 3 August 2013

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