

## Special Article – Depression in Adults

# The Association of Emotional Intelligence, Empathy and Depressive Symptoms among Emerging Adults

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**\*Corresponding author:** Searight HR, Department of Psychology, Lake Superior State University, 650 W. Easterday Avenue Sault Ste. Marie, Michigan 49783, USA**Received:** December 23, 2019; **Accepted:** January 20, 2020; **Published:** January 27, 2020**Abstract**

The role of Emotional Intelligence (EI) in psychological disorders is a topic of increasing interest. EI has multiple operational definitions and frequently includes understanding and regulating one's own emotions and being sensitive to others' emotional states. EI has previously demonstrated associations with Post-Traumatic Stress Disorder (PTSD) symptoms. The current study examined the association of EI, assessed with the Schutte Self-Report Emotional Intelligence Test (SSEIT) with depressive symptoms, assessed with a slightly modified Beck Depression Inventory (BDI-II). Since some investigators equate EI with empathy, a secondary aspect of this study was to estimate the extent to which these related constructs overlap by examining the association of empathy, assessed with the Multi-Dimensional Emotional Empathy Scale (MDEES) with both EI and depressive symptoms. After completing a demographic questionnaire, 80 participants (22 males, 58 females) completed the SSEIT, BDI-II, and MDEES. Depression was more strongly associated with Emotional Intelligence than with Empathy. Specifically, the EI dimension assessing self-management of emotion was moderately to highly associated with number of depressive symptoms. Emotional self-management also discriminated between Beck's categories of depression severity. Findings suggest that people with higher EI may be more resilient and less likely to develop depressive symptoms.

**Keywords:** Emotional intelligence; Depression; Empathy

## Introduction

Emotional Intelligence is defined as “the capacity to reason about emotions, and use of emotions to enhance thinking” [1]. EI has been associated with interpersonal problem solving and improved social relationships [2]. Recently, there has been interest in applications of EI to organizational behavior and medical education.

However, the interest in EI has led to multiple operational definitions of the construct. One-controversy centers around whether EI is best understood as a skill or a trait. Trait theorists [3-6] focus on emotional self-efficacy while ability theorists [7-9] focus on cognitive-emotional skills, which presumably can be acquired through instruction. Schutte et al. [10] developed a scale, the Schutte Emotional Intelligence (SEIS) that assesses multiple abilities including identification of one's own and others' emotions as well as the skill to regulate affective states.

A second source of controversy is whether EI is simply a form of empathy and as such, is not a new concept. In both the trait and skill models, empathy is often a central component [8,11-13]. Empathy can be defined as “emotional arousal of sympathy in response to the feelings or experiences of others” [14]. It is often characterized as the ability to “put oneself in another's shoes,” or in some way experience the outlook or emotions of another being within oneself [15]. In their definition of EI, Mayer & Salovey [16] emphasize the centrality of empathy and refers to “both emotional appraisal (the ability to accurately identify another's emotions) and emotional expression (the ability to re-experience these emotions oneself)...” [11]. While some investigators have found relatively strong associations between

EI and empathy [7,8], other studies have found the two constructs to be essentially independent of one another.

Several studies have examined the association between EI and psychopathology. EI may have a protective effect on the development of PTSD symptoms after a traumatic experience of interest; EI appears to interact with coping style in influencing response to trauma. Persons higher in EI were most likely to use a monitoring style while those with lower EI scores relied upon a “blunting” strategy [17]. More research that is recent suggest that the association between PTSD symptoms and EI may be mediated by social support [18]. With respect to depressive symptoms, dimensions of EI such as attention to affective experience appear to have positive association while emotional repair offers possible protection against negative mood states [19]. Finally, a common symptom of more severe forms of depression, suicidality, has also been examined as a correlate of EI. In their systematic review, Dominguez-Garcia & Fernandez [20] found that emotional intelligence correlated negatively with suicidal thoughts and behaviors and suggested that emotional intelligence may act as a protective factor against suicide risk. While measures of Schutte, et al.'s [10] model of EI has been found to be associated with global emotional well-being, few students examine the association of this skill-based view of EI and depressive symptoms.

The current study examined the association as EI with depressive symptoms as well as empathy. Since emotional intelligence is typically defined as a multifaceted construct, it is possible that not all aspects of emotional intelligence are associated with psychological distress. Additionally, by employing a multidimensional scale of empathy, the association between empathy and EI could be examined in more

**Table 1:** Descriptive statistics.

Descriptive Statistics		
	Mean	Std. Deviation
<b>Empathy (MDEES)</b>		
Suffering	4.05	0.52
Positive Sharing	4.05	0.56
Responsive Crying	3.14	1.14
Emotional Attention	3.69	0.55
Feel For Others	3.25	0.75
Emotional Contagion	3.75	0.68
<b>Emotional Intelligence (SSEIT)</b>		
Perception of Emotion	3.64	0.58
Managing Owns Emotion	3.69	0.57
Managing Others Emotion	3.74	0.49
Utilization Of Emotion	3.77	0.47
<b>Depression (BDI-II)</b>		
Depression Severity	1.86	0.97

detail with particular attention to the strength of association between EI dimensions and facets of empathy.

## Method

### Participants

The participants consisted of undergraduate students (27.5% male and 72.5% female) from a small Midwestern university with a mean age of 20.29 years; ( $SD=1.54$  years). The university reports the following ethnic/racial composition: White, 79%; Native American, 8%; African-American, 2%; Hispanic, 2%; Asian, 1%.

## Materials

### Schutte Self-Report Emotional Intelligence Test (SSEIT)

The SSEIT is 33-item self-report Likert scale (1=strongly disagree; 5=strongly agree) with grouped into four subscales: Emotion Perception, Utilization of Emotion, Managing Self-Relevant Emotions, and Managing Others' Emotions. Internal consistency reliability of .90 has been reported [10]. Schutte et al. [10] report support for the scale's validity based upon higher scores obtained by females and a positive correlation with the Big five "Openness to Experience" factor.

### Beck Depression Inventory II (BDI-II)

This instrument is a 21-item self-report measure to gather information on an individual's characteristic attitudes and symptoms of depression. This measure is done in multiple-choice format by

**Table 2:** Results of regression equation with BDI score as the dependent variable and SSEIT subscales as independent variables.

	B	Standard Error	Beta	t	Significance
Perception of Emotion	4.93	1.75	.300	2.81	0.006
Managing Own Emotions	-10.05	1.83	-.601	-5.49	0
Managing Other's Emotions	-2.11	2.32	-0.109	-0.91	0.36
Utilization of Emotions	1.49	2.19	0.074	0.68	0.5

numerical values of zero, one, two, and three to indicate severity of depression symptoms. The suicide item was omitted from the BDI-II for this study. The 21-item version has high 1-week test-retest reliability (.93) and internal consistency (coefficient alpha) of .92-.94 depending on the sample. The BDI-II's construct validity is supported by its correlation with the Symptom Checklist-90 (SCL-90) [21].

### Multi-Dimensional Emotional Empathy Scale (MDEES)

The MDEES is a 30-item self-report Likert scale (1=strongly disagree; 5= strongly agree) with six subscales: Empathic Suffering, Positive Sharing, Responsive Crying, Emotional Attention, Feeling for Others, and Emotional Contagion. Internal consistency reliability for the MDEES is reported as .88 [14]. Alloway, Copello, Loesch, et al. [22] suggest the correlation of two of the MDEES subscales with verbal intelligence and the absence of significant associations with nonverbal IQ and memory measures are supportive of the scale's construct validity

## Results

Means and standard deviations for the SSEIT, and MDEES subscales as well as, for the BDI-II are presented in (Table 1).

A significant negative correlation between the SSEIT and BDI was obtained,  $r=-.55$  ( $p<.001$ ). The total scores on the MDEES and SSEIT were positively correlated  $r=.26$  ( $p<.05$ ). The correlation between the MDEES and BDI was small and insignificant ( $r=.19$ )

A linear regression was calculated to predict Depression (BDI score) with the four SSEIT subscales. The resulting regression equation was statistically significant, ( $F(4,74)=11.01$ ,  $p<.001$  with an  $R^2$  of 0.37 (Table 2).

A linear regression equation was calculated to predict Depression (BDI-II) with the MDEES subscales as independent variables. The resulting regression equation was statistically significant, ( $F(6,73)=2.37$ ;  $p=.038$ ) (Table 3).

A MANOVA with BDI-II levels of depression (Minimal Mild, Moderate Severe) as the independent variable and SSEIT and MDEES subscales as dependent variables was significant (Wilks=.436,  $F(33,195.2)=1.93$ ,  $p<.003$ ). Only the SSEIT subscale, Managing Own Emotions, differed significantly between groups.

## Discussion

The current study found that EI, assessed as a skill, exhibited a significant, association with number and severity of depressive symptoms. The regression analyses found that one component of EI, the ability to manage one's own emotions, was most strongly

**Table 3:** Results of regression equation with BDI Score as the dependent variable and MDEES Subscales as independent variables.

	B	Standard Error	Beta	t	Significance
Suffering	3.81	2.71	0.206	1.41	0.164
Positive Sharing	-4.78	2.37	-0.282	-2.02	0.047
Responsive Crying	0.417	1.15	0.5	0.364	0.717
Emotional Attention	-0.701	2.13	0.4	-0.328	0.744
Feel for Others	4.52	2.01	0.354	2.25	0.027
Emotional Contagion	-2.42	1.8	-0.173	-1.34	0.183

associated with depressive symptoms. Together with the ability to accurately “read” emotional states, emotion self-management as a skill [13] may be associated with greater resilience, which in turn, reduces the likelihood of developing psychological distress. Of note, the current study also found that emotional perception was positively associated with depressive symptoms. Our finding is similar to that of Adradilla-Herrer, Tomas-Sabado, and Gomez-Benito [23]. Who found that self-focus on one’s own affective states was positively associated with suicidal ideation? Thus, when EI includes undue preoccupation with monitoring emotions, this form of self-awareness may be deleterious to well-being.

The correlational and regression analyses both, indirectly, lend support to the view that EI is not the equivalent of empathy. While the scores on measures of empathy and EI were moderately correlated, emotional intelligence demonstrated a much stronger association with depressive symptoms. Additionally, while none of the empathy dimensions discriminated between categories of severity of depressive symptoms, the EI skill of emotional self-management did demonstrate a significant relationship. Additionally, EI and Empathy were significantly correlated, the magnitude of the association was relatively modest suggesting that these constructs are relatively independent of one another.

The findings lend indirect support for the use of therapeutic techniques for depressive symptoms such as mindfulness involving recognition, acceptance and disengagement from cognitive and emotional experiences [24-26]. This approach would also address the intense emotional self-focus previously noted.

Limitations of the current study include an ethnically homogeneous and limited age distribution of participants. However, major depressive disorder is believed to be increasing among adolescents and young adults, which may make the implications of the study particularly relevant. As always with descriptive studies of this type, causal relationships cannot be established. Thus, while the pattern impaired self-, management of emotion and depression is significant, the study cannot determine if deficient EI skills are a risk factor or a result of mood disturbance.

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