RELATIONSHIP OF EMOTIONAL INTELLIGENCE AND LIFE SATISFACTION: MEDIATING ROLE OF AFFECTIVITY IN MEDICAL STUDENTS

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Abstract

Present research intended to investigate the mediating role of affectivity in the association between Emotional Intelligence (EI) and life satisfaction. Sample of the study was consisted of N=300 medical students. The ability emotional intelligence scale, positive and negative affectivity schedule, and satisfaction with life scale were used to operationalize the constructs of current study. Results of the present study inveterate the proposed hypotheses as life satisfaction had significant positive relationship with positive affect whereas it was significantly and negatively co-related with negative affect. Meditational analysis revealed that EI had significant indirect effect on satisfaction with life through negative and positive affectivity. This study contributed to the literature of association between emotional intelligence and subjective wellbeing in which both component of subjected wellbeing i.e., cognitive component and affective component were studied.

Keywords: Satisfaction with Life, Positive Affect, Negative Affect, Emotional Intelligence

Introduction

Wellbeing is considered as the key to the development and maintenance of healthy and productive communities. Number of proxies of wellbeing has been established over the years in different countries, like income, education, and life longevity as objective proxies and perceptions and experiences about life as subjective wellbeing. Subjective wellbeing could be divided into two components; first is cognitive component that mentions cognitive evaluation of satisfaction with life; second is affective component that mentions the positive and negative affectivity. Researchers like Diener et al. differentiated that these two components are overlapping but not identical. Usually, the single component of subjective wellbeing like life satisfaction is studied extremely than affectivity, therefore relationship between these two components (cognitive and affective) of subjective wellbeing are not well explained, specially at cultural level. National culture distinguishes such experiences that cause Positive Affect (PA) and Negative Affect (NA) playing an important role in life satisfaction. According to the information approach about affects, judgment of people about satisfaction with their life depends upon their emotional experiences [1-5].

Life satisfaction is defined as a cognitive or judgmental process in which a person makes an ideal standard by which he come to know about his quality of life defined affectivity as the tendency to encounter a specific emotion or tendency to respond to a stimulus in a particular way. Affectivity can be divided into two domains: Negative Affect (NA) and Positive Affect (PA). PA is the tendency of having good feelings such as pleasure, lively, confidence and alertness and negative affect is the propensity to experience bad feelings like anxiety, sadness, and anger. Usually, people are driven to pursue good feelings and evade bad ones. So accordingly, hedonistic standpoint of the good...
life suggests that satisfaction with life is consistently having positive relationship with PA and negative relationship with NA [6,7].

Emotional intelligence is defined as the comprehension of emotions of self as well as other people, understanding these emotions accurately and ability to utilize information accumulated from impression of comprehension [8-10]. In literature, emotional intelligence is explained through two types of models: According to trait models, emotional intelligence is an arrangement of social skills, traits and dispositional behaviours; while according to ability models, emotional intelligence is an arrangement of capacities, for example, the ability to comprehend emotions, to assess and generate feelings and to contemplatively control emotions. Emotional intelligence is the ability of an individual to recognize and comprehend signals that advise self-dictatorial action to create positive affect and avoid negative affect. Individual who has self-knowledge, consciousness of his own emotions, knows his strengths and weaknesses, controls his own emotions, thoughts and activities in a positive and useful way. Many researchers anticipated that ability emotional intelligence has a positive relationship with PA and has a negative relationship between NA [11,12].

Emotions have dynamic role in cognitions about quality of life. Many studies like provided evidence that emotional intelligence is playing role in person’s wellbeing like satisfaction with life. People with greater life satisfaction are more societal, devoted, merciful, innocent, cooperative, enthusiastic, critical, and inspired as well as people with lower life satisfaction are less self-focused, aggressive, and vulnerable to illness [13]. So, we can say life satisfaction is addition of positive emotions of life and reduction of the negative emotions. Many other researchers have documented that emotional intelligence is significant predictor of satisfaction with life [14,15].

Significance of the study is based upon all the evidence discussed above that emotional intelligence and affectivity plays an important role in satisfaction with life of a person [16,17]. Based on existing literature on the relationship between ability emotional intelligence, affectivity and satisfaction with life, we hypothesized that:

H1: Emotional intelligence will have a positive relationship with life satisfaction.

H2: Positive affect will mediate the relationship between emotional intelligence and satisfaction with life.

H3: Negative affect will mediate the relationship between emotional intelligence and satisfaction with life.

Methods

Sample and sampling technique

(N=300) medical students were taken as the convenient sample for the present study. In which (n1=150) participants were male students and (n2=150) participants were female students, with the mean age of 20.8 (SD=1.92) years. Correlational research design was used to conduct this study with survey research method and convenient sampling technique.

Instruments

Emotional Intelligence Scale (EIS). EI were operationalized by ability EIS developed by Wong et al. Scale is consisted on 16 items, with the response rate of 6-Point Likert scale ranging from (strongly disagree=1 to strongly agree=6). Scores of EIS can fluctuate in between 16 to 96. Reliability coefficient of scale in this study was 0.81.

Positive Affect and Negative Affect Schedule (PANAS). To measure PA and NA, PANAS scale was used developed by Watson et al. PANAS is consisted on 20 items, 10 items for PA and 10 items for NA. It was 5-point Likert scale and responses were ranging from (1=strongly disagree to 5=strongly Agree). Scores of the scale can range from 10 to 50 for both positive and negative affect. Reliability of measure in this study was 0.76 for positive affect and 0.80 for negative affect [18].
Satisfaction with Life Scale. To measure satisfaction with life, satisfaction with life scale by Diener et al. was used. Scale is consisted on 5 items with response pattern of 7-Likert scale ranging from 1=strongly disagree, 5=neither disagree nor agree, to 7=strongly agree. Scores of the scale can range from 5 to 35. In present study reliability coefficient of this scale was reported 0.85 [19].

Procedure

A questionnaire booklet was provided to the participants. The students who participated filled the booklet also by giving their demographic information. They were given trust through informed consent that their data will be only used for research purpose. Participants were told that their participation will be completely voluntary and confidential.

Results

After data collection, data was analysed for hypothesis testing. To examine the relationship among emotional intelligence, affectivity and satisfaction with life, Pearson product moment correlation was used. To examine the mediating role of affectivity between emotional intelligence and satisfaction with life, meditational analysis was executed through process macro. The results of the analysis are shown and explained below in Table 1 and descriptions [20-22].

### Table 1. Socio-demographic information of participants (N=300).

<table>
<thead>
<tr>
<th>Demographics</th>
<th>M(SD)</th>
<th>f(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>22.54(4.31)</td>
<td>-</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>150 (50%)</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>150 (50%)</td>
<td></td>
</tr>
</tbody>
</table>

### Table 2. Descriptive statistics and psychometric properties of measures, correlations among study variables (N=300).

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>α</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability emotional intelligence</td>
<td>53.1</td>
<td>8.14</td>
<td>0.81</td>
<td>0.20**</td>
<td>-0.22***</td>
<td>0.57***</td>
</tr>
<tr>
<td>Positive affect</td>
<td>32.27</td>
<td>7.1</td>
<td>0.76</td>
<td>-</td>
<td>-0.14*</td>
<td>0.39***</td>
</tr>
<tr>
<td>Negative affect</td>
<td>24.84</td>
<td>7.55</td>
<td>0.79</td>
<td>-</td>
<td>-0.29***</td>
<td></td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>22.9</td>
<td>5.74</td>
<td>0.85</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*: p <0.05, **: p< 0.01, ***: p< 0.001.

Table 2 showed the results of Pearson product moment correlation among study variables. The findings indicated that ability emotional intelligence has highly significant positive correlation with life satisfaction and positive affect and has a significant negative correlation with negative affect. Positive affect has a significant positive correlation with life satisfaction and negative affect has a significant negative correlation.

### Table 3. Direct and indirect effect of emotional intelligence through positive affect and negative affect on satisfaction with life controlling for gender and age (N=300).

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Predictors</th>
<th>Direct Effects</th>
<th>Indirect Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>95% CI</td>
<td>95% CI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>LL</td>
</tr>
<tr>
<td>PA</td>
<td>Ability EI</td>
<td>0.19***</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>Ability EI</td>
<td>0.33***</td>
<td>0.26</td>
</tr>
<tr>
<td>-------</td>
<td>------------</td>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>SWL</td>
<td>NA</td>
<td>-0.20***</td>
<td>-0.3</td>
</tr>
<tr>
<td>PA</td>
<td>0.23***</td>
<td>0.15</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td>NA</td>
<td>-0.11***</td>
<td>-0.17</td>
</tr>
<tr>
<td></td>
<td>Total indirect effect</td>
<td></td>
<td>0.023^b</td>
</tr>
<tr>
<td></td>
<td>Total effect</td>
<td></td>
<td>0.40***</td>
</tr>
</tbody>
</table>

**Note:** EI: Emotional Intelligence, PA: Positive Affect, NA: Negative Affect, SWL: Satisfaction With Life. *a: Sobel Z test: 3.27; p<0.01; b: Sobel Z test: 2.42; p<0.05. Bold ***: p<0.001.

Table 3 depicted the results of meditational analysis conducted through process macro for SPSS to test the hypothetical model Figure 1. As per Preacher et al. approach, ability emotional intelligence (EI; predictor) predicted positive affect (PA; β=0.19, t=3.91, p<0.001) and negative affect (NA; β=-0.20, t=-3.83, p<0.001) independently. Total effect shows ability emotional intelligence predicted satisfaction with life (SWL; β=0.40, t=11.77, p<0.001) without including both mediators and explained 58.30% variance in satisfaction with life (F (3,296)=50.91, p<0.001).

![Figure 1. Single step multiple mediator model.](image_url)

However, after entering both mediator variables positive affect (a) and negative affect (b) with emotional intelligence as predictor in the regression model, variance explained was 66.51% in satisfaction with life as outcome variable (F (5,294)=46.64, p<0.001); emotional intelligence significantly predicted satisfaction with life (β=0.33, t=10.17, p>0.05), positive affect significantly predicted satisfaction with life (β=0.23, t=6.15, p>0.05), negative affect significantly predicted satisfaction with life (β=-0.11, t=-3.24, p>0.05) [23]. Specific indirect effect (Hayes, 2009) of emotional intelligence through positive affect was significant (β=0.044, CI 0.02 to 0.10, Sobel Z=3.27, p<0.01) and specific indirect effect of emotional intelligence through negative affect was significant (β=0.022, CI 0.01 to 0.06, Sobel Z=2.42, p<0.05); total indirect effect was computed by adding specific indirect effect through positive affect and specific indirect effect through negative affect (specific indirect effect (a) + specific indirect effect (b)=total indirect effect).
was significant ($\beta=0.066$, (CI 0.05 to 0.14)) [24,25].

**Discussion**

Current study was a replication of a study by Extremera et al. which had focused on the link of emotional intelligence, affectivity and satisfaction with life. Present study explained both cognitive (life satisfaction) and affective (positive affect and negative affect) components of subjective wellbeing [26]. Literature on subjective wellbeing explained extensively that emotional intelligence was considered too had a significant positive association with life satisfaction. In the line of these studies current study proposed consistent results, emotional intelligence was correlated significantly and positively with satisfaction with life [27,28]. Correlation of emotional intelligence with satisfaction with life ($r=0.58$, $p<0.001$) was identical as in the study conducted by Foumany et al. Furthermore, positive affect associated significantly and positively; and negative affect was associated significantly and negatively with satisfaction with life, as we know positive affect and negative affect are related to life satisfaction in affect as information processing perspective. Previous studies supported the results concluded by current study that positive affect and negative affect has low to moderate correlation with life satisfaction [29,30].

Present study hypothesized the mediating role of positive affect and negative affect in relationship of emotional intelligence and life satisfaction. This hypothesis was significantly supported by current study as positive affect significantly mediated the relationship between emotional intelligence and life satisfaction as negative affect significantly mediated this relationship [31,32]. Theoretically this mediating role was also discussed and measured in previous studies and supported the results concluded by present research. The results of the study are relevant to the current distressing environment amid COVID-19 [33,34].

In statistical view, this mediating role of positive affect and negative affect in relationship of emotional intelligence and life satisfaction was a single step multiple mediating model as shown in Figure 1. This could be the best explanation of the present study results that this mediating role of positive affect [35] and negative affect in relationship of emotional intelligence and life satisfaction are supported by the theoretical model as previously discussed by Extremera et al. [36-41].

**Implications**

One implication of the current study could be in development of an emotion-focused intervention to enhance the subjective wellbeing of a person.

As emotions have a great impact on the judgment of an individual about his/her quality of life. Thus, emotional intelligence and positive affectivity plays an important role to enhance the subjective wellbeing of an individual. Present study provides deeper inside about the emotional mechanism of the life satisfaction particularly in university students’ population.

**Limitations**

Current study has limitations as well; first is cross-sectional design of present research because we were studying the casual relationship among emotional intelligence and life satisfaction as well as affectivity as previously discussed. Second limitation could be explained in the way that the current study used self-report measures which may be biased due to self-appraisal. Third limitation could be accounted for as the sample of current study has limited characteristics like age, which could not be generalized to others.

**Conclusion**

This study was designed to test the mediating role of affectivity between the relationship of emotional intelligence and satisfaction with life among medical college students.

The results of the study revealed that both positive affect and negative affect partially mediate the relationship between emotional intelligence and satisfaction with life.

The study results have the significance as these explain the underline emotional mechanism of
satisfaction with life. The results provide the evidence of ecological validity of the notion that emotionally intelligent people tend to have satisfaction about life.

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