The Relationship Between Core Self-Evaluations with Life Satisfaction and Positive and Negative Affect among Students

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Abstract: The purpose of this study was to investigate the relationship between core self-evaluations with life satisfaction and positive and negative affect among students. In this descriptive correlational study, 180 students in the academic year of 2012-13, were selected. The questionnaire of positive affect and negative affect, life satisfaction and core self-evaluation scale were used. Results of regression analyzes revealed that among boys, positive and negative affect can explain 13% of the variance in core self-evaluations and core self-evaluations can predict 21% of the variance in their life satisfaction. Among girls, in positive and negative affect can explain 42% of the variance in core self-evaluations; and core self-evaluations can predict 11% of the variance in their life satisfaction. Results of structural equation modeling showed that the model adequately fit the data and there was a significant differences between male and female subjects. Results showed a significant positive relationship between positive affect and life satisfaction and core self-evaluations; also there is a significant negative relationship between negative affect and satisfaction with life and core self-evaluations. Girls are more emotional than boys and much more positive and negative emotions can affect their assessment and girls’ life satisfaction was lower than boys.

Key words: Core self-evaluations • Life satisfaction • Positive affect • Negative affect

INTRODUCTION

Researches among adults demonstrated that the most determining factor for the person's welfare (life satisfaction) is a personality [1]. People's mental welfare is a general term for referring to subject matters such as life satisfaction, happiness, having positive emotions and lack of negative emotions. It is anticipated that cognitive and emotional dimensions of people mental welfare have a positive relationship with each other, since both dimensions care about one's evaluation of life; in addition cognitive and emotional dimensions have a strong relationship with each other, in general [2].

Mental welfare has two main components: cognitive and emotional. The cognitive component demonstrates perception of life satisfaction. In other word, life satisfaction is responsible for happiness aspect of cognitive components [3]. Emotional component includes positive and negative affection of individuals [4]. Having a positive evaluation of an individual's life is required for mental welfare. Positive emotions and affections result in satisfaction, commitment, interest and meaningfulness of life [5]. In order to have a high level of mental welfare, an individual’s positive affections should overcome his negative affections and his cognitive judgment about the quality of life should be positive [6].

Two fundamental dimensions which widely define emotional experiences have been recognized as positive and negative affection. Individuals with high positive affection, are filled with energy, enthusiasm and have pleasant interactions; but individuals with high negative affections are anxious, have unpleasant interactions and nervous attitudes. In the same way, literature review reveals that neuroticism and extraversion relate to life satisfaction. Neurotic individuals experience more negative life events than others, since they are exposed to the situations that negative affections are raised, because they pay special attention to negative stimuli. On the contrary, extravert individuals look for special occasions, more friends and more social interactions [7-9].

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Individuals, who have positive emotions, often are happy, stress-free, full of energy and have a good relationship with others; but those who have negative emotions, constantly experience sorrow, exhaustion and failure. In order to deal with these negative emotions, they should reduce their worries and concerns, control their anger and the most important thing is that they deal with these negative emotions without any harm to themselves [10].

An individual has a high mental welfare if he has a high level of life satisfaction frequently experiences positive emotions and rarely experience negative emotions [11]. Examples of positive affections are being lively, happy, joyful, having a comfortable and relaxed feeling. Examples of negative affections are being sad, despondent, nervous and aggressive. Lack of positive emotion does not necessarily mean that negative emotion does exist [12]. There is a positive and meaningful relationship (p<0.01) between mental welfare and positive affections [13]. There is also a negative and meaningful relationship (p<0.01) between mental welfare and negative emotions. Their research result revealed that there is a positive relationship between student’s mental welfare and positive affections. In a way that when students positive affections increase, their mental welfare increases and when their negative affections increase, their mental welfare decreases. These researches depict a complex relationship between welfare and probability of reaching personal goals. People’s judgment about probability can be defined in this way that they will succeed in reaching their goals which are related to their life satisfaction. The probability of successfulness has a negative relationship with lower negative affection. In other words, individuals with lower negative affection are more optimistic about the success of their affair [13].

Extraversion and neuroticism have a strong relationship with positive and negative affections, respectively. Individuals with high positive affections are those who are full of energy, optimismand enjoy their life; while individuals with low positive affections are lethargic, impatient and low-spirited. Individuals with high negative affections, generally feel anxious, fear and nervous; while individuals with low negative affections, generally feel cool and are calm and contented people. Positive affections associated with being social, humanitarian behaviors, precision in tasks and appropriate decisions; while negative affections are connected with complaints, failure and anxiety [14].

It has been regularly shown that neuroticism and extraversion are used to predict the components of individual mental welfare. Neurotic individuals tend to be anxious, become upset easily, moody or depressed. While extravert individuals tend to be sociable, optimistic, affable, full of energy, active, contented and rapturous. In addition extravert individuals are more likely to experience life positive events and neurotic individuals experience life negative events. It has been reported that personality traits can explain 39 percent of individual mental welfare variance [15]. Investigations revealed that happy people tend to have greater social rewards, better results, more capabality deal with stress, better immune system, more corporation, social behavior and to contribute to charity and have longer life than those who are not happy. Extraversion predicts high level of positive affections and neuroticism predicts high level of negative affection [17].

Particularly, it seems that extraversion influences individual welfare, since extraversionpositivityis associated with positive affections and result in more positive emotional reactions, while neuroticism negatively is more associated with negative emotions and reactions [18]. Having positive feelings about one during the school years, have relationship with having more communication with other students and dealing with problems. It seems that extraversion and neuroticism are considered as important characteristics for prediction and life satisfaction measurement. Yet results show that girls report less positive affections than boys and also girls have more negative affections than boys [17]. Recent researches revealed that intra-cognitive features such as locus of control [20] and self-efficacy [21] relate to the welfare measurement (life satisfaction) [1].

Dewitt’s research results showed that implicit positive affections are associated meaningfully with core self-evaluation ($r=0.22, p<0.05$) and evident positive affections are associated meaningfully with core self-evaluation ($r=0.35, p<0.01$) and also evident negative affections are associated with core self-evaluation, both negatively and meaningfully ($r=-0.48, p<0.01$) [22].

Core self-evaluation model proposed by Judge et al. consists of four components: self-esteem, generalized self-efficacy, locus of control and neuroticism [26]. Self-esteem is a value that an individual considers for oneself. Generalized self-efficacy considers one’s evaluation of his capabilities for aggregations of motivation, cognitive resources and determination of the course of actions which are necessary for controlling life events.
In other words, generalized self-efficacy, refers to the individual's perception of one's capabilities in order to deal with the necessities of life. Locus of control refers to the individual belief for controlling life events. If one accepts responsibility for one's life events, one is in the position of locus of control and If one treats them as the result of nature or due to the chance, one will be in the outer containment position, which this issue is connected to the individual's self-esteem for controlling life events. And finally, the last core self-evaluation component is neuroticism which focuses on the negative aspects and is correlated with negative affections and has a negative relationship with job and life satisfaction [24].

There is a positive and meaningful relationship between positive affections and core self-evaluation ($r=0.72$); there is a negative and meaningful relationship between negative affections and core self-evaluation ($r=-0.62$); and also there is a positive and meaningful relationship between core self-evaluation and life satisfaction ($r=0.54$) [25].

Core self-evaluation is a fundamental hypothesis that individuals have about themselves and their actions in the world. Several studies have regarded the relationship of core self-evaluation and job satisfaction [26]. Judge and Bono have done a meta-analysis study which 169 independent correlations about the relationship between four traits of self-evaluation and job satisfaction are examined. When four traits were assembled as a measurement scale, generally core trait had correlation with job satisfaction ($r=0.37$) [27]. So this structure should be associated with individual's life satisfaction. In support of this argument, research results showed that core self-evaluation is positively and meaningfully connected to the individual life satisfaction among three various models [23].

**MATERIALS AND METHOD**

Current research applied a correlation type of descriptive research methodology. The population of this study is B. A student studying in the academic year of 2012-2013. Three faculties of educational sciences, engineering and art are chosen among these three faculties, 180 participants are chosen by a simple random. The sample size criterion is the least sample size for correlated studies which is 100 participants [28]. After gathering questionnaires and removing incomplete ones, 150 questionnaires are chosen and final sample size became 150 participants.

**Measurement Instruments:**

**Positive and Negative Affection Scales (PANAS):**

This scale is a 20-items instrument which has been designed by Watson, Clark and Tellegen in order to measure two mood dimensions, positive and negative affections [29]. Each subscale consists on 10 items. Items consist of five-degree scale from 1=very little to 5=too much which are ranked by the examinee. The results confirm the validity and reliability of these instruments which was done through confirmatory factor analysis and structural equation model and Cronbach Alpha coefficient has reported 0.85 for both scales [30]. In this research final coefficient of both positive and negative affective subscales through Cronbach coefficient method were 0.69 and 0.80, respectively (Table 2).

**Satisfaction with Life Scale (SWLS):**

This scale has been designed by Diener et al. to measure life satisfaction [31]. This scale has five items and these items are located on a five-degree scale from 1=very low, not at all, to 5=very high which are ranked by the examinee. In a study, results of factor analysis of life satisfaction have been reported to be ideal [32]. Final coefficient has been reported 0.86 by using Cronbach's coefficient method [33]. In this study final coefficient of this scale through Cronbach coefficient method was 0.82 (Table 2).

**Core self-evaluation scale (CSE):**

This scale consists of 12 items which has been designed by Judge et al. [34]. These items are written in a way that encompasses evaluation of self-esteem, control over the environment and have competence for success and emotional adjustments. Grading on the Likert scale of five degrees ranges from completely disagree to strongly agree and higher scores indicate higher self-evaluation. In this scale items are graded reversely; 2, 4, 6, 8, 10, 12. Judge et al. investigated validity of the scale by using exploratory confirmatory factor analysis techniques; results indicated the existence of a general factor greater than 1 [34]. By using exploratory factor analysis, it has been revealed that self-esteem, generalized self-efficacy, locus of control and nervousness are composed of a factor called core self-evaluation [35]. Permanency of this scale has been reported 0.84 by using the Cronbach coefficient [37]. In this study, permanency coefficient by using Cronbach Alpha method was 0.77 (Table 2).
RESULTS

Descriptive results of this study include demographic variable such as student gender, field of study and their average. Total number of participants were 150 which consists of 77 boys and 73 girls and 51/3% were male students and 48/7% were female ones. The participants had been chosen from the faculty of educational studies, engineering and art which have devoted orderly 34/2, 34/2 and 31/5 percent of all students of the university.

Positive affection variable mean and standard deviation for males were 35/34 and 6/43, respectively. Negative affection variable mean and standard deviation for males were 30/44 and 7/54, respectively and for females were 32/45 and 7/54, respectively. Core self-evaluation variable mean and standard deviation for males were 40/88 and 6/85, respectively and for females were 39/90 and 6/21, respectively. Life satisfaction mean and standard deviation for males were 21/26 and 6/31, respectively and for females were 22/38 and 6/24, respectively.

The goal of the current study is the examination of the relations between core self-evaluation with life satisfaction and negative and positive affection among Birjand university male and female students. So in this regard, first of all, the matrix between variables was created. The results of this analysis are shown in Table 1. Results showed that correlation coefficients between life satisfaction and core self-evaluation and research variables vary from 0/19 to 0/39 and the most correlation (r=0/39) which is positive and meaningful at 0/01 level.

In addition, the correlation coefficient between positive affection and core self-evaluation is positive (r=0/27) and meaningful at 0/01 level and correlation coefficient between negative affection and core self-evaluation is negative (r=-0/36) and meaningful at 0/01 level.

In order to examine for mentioning relationships more accurately and also examine the predictive power of positive and negative affection and core self-evaluation variables in both male and female groups, regression analysis is applied. In the first regression, positive and negative affection were considered as predictor variables and core self-evaluation as criterion variable. As it is demonstrated in table 2, positive affection variable predicts male’s core self-evaluation positively (β=0/26) and negative affection variable predicts male’s self-evaluation negatively and meaningfully (β=-0/32).

Also positive and negative affection demonstrates male’s core self-evaluation variance 13%, totally. In this regard, F is estimated 5/70 which is meaningful at 0/01 level.

In the second regression, core self-evaluation was considered as a criterion variable. As it is demonstrated in the table 2, core self-evaluation variable predicts male’s life satisfaction positively and meaningfully (β=0/45). In addition, core self-evaluation explains male’s life satisfaction variance totally 21%. F is estimated 19/41 which is meaningful at 0/01 level.

Table 1: matrix of correlation between research variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Positive affection</th>
<th>Negative affection</th>
<th>Core Self-evaluation</th>
<th>Life satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive affection</td>
<td>34/86</td>
<td>6/43</td>
<td>(0/69)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative affection</td>
<td>31/42</td>
<td>7/58</td>
<td>.187*</td>
<td>(90/80)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core self-evaluation</td>
<td>40/40</td>
<td>6/55</td>
<td>.272**</td>
<td>-.362**</td>
<td>(0/77)</td>
<td></td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>21/81</td>
<td>6/28</td>
<td>.198*</td>
<td>-.199*</td>
<td>.391**</td>
<td>(0/82)</td>
</tr>
</tbody>
</table>

* * sig. 0/01
* sig. 0/05

() Cronbach Alpha coefficient is shown in parentheses.

Table 2: Core self-evaluation regression on positive and negative affection

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standard deviation</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>R</th>
<th>R²</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys Positive affection</td>
<td>0/11</td>
<td>.026</td>
<td>2/38</td>
<td>0/02</td>
<td>0/36</td>
<td>0/13</td>
<td>5/70</td>
<td>0/005</td>
</tr>
<tr>
<td>Boys Negative affection</td>
<td>0/10</td>
<td>-.32</td>
<td>-2/86</td>
<td>0/005</td>
<td>0/36</td>
<td>0/13</td>
<td>5/70</td>
<td>0/005</td>
</tr>
<tr>
<td>Girls Positive affection</td>
<td>0/089</td>
<td>.45</td>
<td>4/88</td>
<td>0/000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls Negative affection</td>
<td>0/076</td>
<td>-.53</td>
<td>-5/76</td>
<td>0/000</td>
<td>0/65</td>
<td>0/42</td>
<td>25/25</td>
<td>0/000</td>
</tr>
</tbody>
</table>
Table 3: Life satisfaction regression on core self-evaluation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standard deviation</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>R</th>
<th>R²</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>boys Core self-evaluation</td>
<td>0.09</td>
<td>0.45</td>
<td>4.40</td>
<td>0.000</td>
<td>0.45</td>
<td>0.21</td>
<td>19.41</td>
<td>0.000</td>
</tr>
<tr>
<td>girls Core self-evaluation</td>
<td>0.11</td>
<td>0.34</td>
<td>3.02</td>
<td>0.003</td>
<td>0.34</td>
<td>0.11</td>
<td>9.14</td>
<td>0.003</td>
</tr>
</tbody>
</table>

Table 4: Model Fitting Indexes

<table>
<thead>
<tr>
<th>Fitting criteria</th>
<th>Obtained fitting of both identical groups</th>
<th>Obtained fitting of two different groups</th>
<th>Good fit*</th>
<th>Acceptable fit*</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMIN/DF</td>
<td>0.96</td>
<td>1/10</td>
<td>1 ≤ χ²/df ≤ 2</td>
<td>2 ≤ χ²/df ≤ 3</td>
</tr>
<tr>
<td>P</td>
<td>0.45</td>
<td>0.35</td>
<td>0.05 &lt; p ≤ 1</td>
<td>0.01 ≤ p ≤ 0.05</td>
</tr>
<tr>
<td>NFI</td>
<td>0.92</td>
<td>0.95</td>
<td>0.95 ≤ NFI ≤ 1</td>
<td>0.90 ≤ NFI &gt; 0.95</td>
</tr>
<tr>
<td>TLI</td>
<td>1.01</td>
<td>0.97</td>
<td>0.95 ≤ TLI ≤ 1</td>
<td>0.90 ≤ TLI &gt; 0.95</td>
</tr>
<tr>
<td>CFI</td>
<td>1.00</td>
<td>0.99</td>
<td>0.97 ≤ CFI ≤ 1</td>
<td>0.95 ≤ CFI &gt; 0.97</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.00</td>
<td>0.02</td>
<td>0 ≤ RMSEA ≤ 0.05</td>
<td>0.05 &lt; RMSEA ≤ 0.08</td>
</tr>
</tbody>
</table>

In the third regression, positive and negative affection are considered as predictor variables and core self-evaluation as criterion variable. As it is demonstrated in table 3, positive affection variable predicts female’s core evaluation positively (β=0.45) and negative affection predicts the female’s core self-evaluation negatively and meaningfully (β=-0.53).

Also, positive and negative affection explains female’s core self-evaluation variance totally 42%. F is estimated 25/25 which is meaningful at the 0.01 level. In the fourth regression, core self-evaluation is considered as a predictor variable and life satisfaction as criterion variable. As it can be seen in table 3, core self-evaluation predicts female’s life satisfaction positively and meaningfully (β=0.34). Also core self-evaluation explains life satisfaction variance totally 11%. F is estimated 9/14 which is meaningful at the 0/01 level.

AMOS 18 software was used to evaluate variables relationships of structural model for two groups of females (model1) and males (model2). To examine these models, maximum likelihood method was used and to examine the applicability of these models, χ² was used as fitting index. Since, because of sample size and number of structural relationship, χ² is increased, other indexes were used additionally in order to reach satisfactory results. Additional indexes used for this case are Chi-square to degrees of freedom (CMIN/DF), Norm Fit Index (NFI), Tucker-Lewis index (TLI), Comparative Fit Index (CFI) and root mean square error of approximation (RMSEA). Table 4 results (obtained from fitting two different groups) indicate that two models of male and female students are appropriate and meaningfully different, because the ratio of chi-squared degrees of freedom is less than 2 (χ² = 1/10), P value is more than 0/05, NFI, TLI and CFI indexes are more than 0/95 and RMSEA is less than 0/05.

DISCUSSION

The aim of the current research is to examine the relationship between core self-evaluation and life satisfaction and positive and negative affection among Birjand male and female students. To reach the goal, three questionnaires of positive and negative affection scale [29], life satisfaction scale [31] and core self-evaluation scale [34] were used. The significance of the results is that no research has been conducted so far in the field of direct influence of positive and negative affection on student’s core self-evaluation and its influence on life satisfaction. In this regard, it is revealed that there is a positive and meaningful relationship between student’s positive affection and core self-evaluation and life satisfaction; and also there is a negative and meaningful relationship between students negative affection and core self-evaluation and life satisfaction.

Positive relations among these three variables showed that the students more positive affections result in more attitude toward their personalities and abilities and as a result, they evaluate themselves better and this satisfaction results in life satisfaction. Negative relations indicate the opposite.

Also results showed that there is a stronger relationship between negative affection and core self-evaluation and it is more influenced by negative affections than positive ones. To justify these results, student’s positive and negative affections were examined according to their gender and results of regression analysis revealed that among male group, positive and negative affection can predict 13% of their self-evaluation variance and core self-evaluation predict 21% of their life satisfaction variance. But in female group, regression results showed
that, just like male group, positive and negative affections can explain their self-evaluation variance, but the amount of this explanation is almost three times than male group; it means that 42% of the variance. But contrary to the male group, core self-evaluation can only explain 11% of the variance of female student life satisfaction.

**CONCLUSION**

These results indicate that girls are more emotional than boys and positive and negative affections can influence their self-evaluation. But the reason for girls for their life satisfaction is that they underestimate their own abilities in comparison to boys; and assume that life satisfaction is influenced by other factors. Boys, contrary to the girls, affections have little influence on their ability evaluation, because they have a more positive image about themselves, have stronger self-esteem, so they have the better life satisfaction than girls.

To confirm regression and correlation results, a model was designed for both groups and was evaluated by modeling structural formulas and the results revealed that the female coefficients are meaningfully different from male coefficient. The current study findings are in the same direction with other various research findings [1], [2], [10], [11], [13], [16], [36-42]. For mentioned findings show the significance of these findings very well, because in an academic environment such as university, students who have more positive core self-evaluation toward themselves, have higher life satisfaction and one who is satisfied with his life will suffer less from disease such as stress, anxiety, frustration, suicide, performance decrease, etc. The results of this study showed that girls are exposed to such risks and classes and trainings should be considered by university personnel in charge to enhance girl’s self-esteem and self-efficacy.

**REFERENCES**


