Predicting the Mental Health Based on Attachment Styles in High School Students

Ali Mostafaei1, Davood Ghaderi2 and Mohiadin Mohammadkhani3

1Department of Psychology, Payame Noor University, PO BOX 19395-3697, Tehran, I.R. Iran.
2Department of Psychology, Sarab Branch, Islamic Azad University, Sarab, Iran.
3Department of Psychology, Payame Noor University, PO BOX 19395-3697, Tehran, I.R. Iran.

http://dx.doi.org/10.13005/bbra/2329

(Received: 14 July 2016; accepted: 20 August 2016)

In today’s world mental health is an important phenomenon and can affect physical health and normal daily functioning. Identify the factors influencing it helps to control the negative factors affecting it. This study was conducted aimed to predict mental health based on attachment styles in high school girl students. This study is descriptive and correlational (predictive). The population consisted of all High school girl students that were enrolled in the academic year 2014-2015 in the city of Mahabad. 250 students were randomly selected. To collect the data, attachment questionnaire Collins and Reid and mental health questionnaire (SCL-90-R) was used. Data analyzed with software SPSS-21 and using stepwise regression. The results showed that all three styles: secure attachment, ambivalent and avoidance are able to predict mental health. These three components simultaneously can explain 53 percent of variance of mental health. In explaining of lack of mental health, the role of secure attachment style is more than other components (-0.498). The role of component ambivalent attachment style (0.352) and the style of avoidant (0.158), respectively second and third.

Key words: Secure attachment, ambivalent, avoidant, mental health.

One of the most important features of human is the ability to form interpersonal relationships and maintain it. This relationship that is absolutely necessary for each of us to survive, reproduction, love, jobs and so on take different forms. Most satisfying relationships will be done with family, friends and relatives. These mental-emotional cycle of relationships, takes place through the emotional bond called attachment. Attachment theory is a psychological model that attempts to describe the dynamics of long-term and short-term interpersonal. However, “attachment theory is not formulated as a general theory of relationships. It addresses only a specific facet”: how human beings respond within relationships when hurt, separated from loved ones, or perceiving a threat (Fraley, Shaver, 2000). Essentially, attachment depends on the person’s ability to develop basic trust in their caregivers and self (Levy, Terry, Michael, 2014).

In infants, attachment as a motivational and behavioral system directs the child to seek proximity with a familiar caregiver when they are alarmed, with the expectation that they will receive protection and emotional support. Four different attachment classifications have been identified in children: secure attachment, anxious-ambivalent attachment, anxious-avoidant attachment, and disorganized attachment. In the 1980s, the theory was extended to attachment in adults. Four styles of attachment have been identified in adults: secure, anxious-preoccupied, dismissive-avoidant and fearful-avoidant. These roughly correspond to infant classifications: secure insecure-ambivalent, insecure-avoidant and disorganized/disoriented. Two main aspects of adult attachment have been studied. The organization and stability of the
mental working models that underlie the attachment styles is explored by social psychologists interested in romantic attachment.

Developmental psychologists interested in the individual’s state of mind with respect to attachment generally explore how attachment functions in relationship dynamics and impacts relationship outcomes. The organization of mental working models is more stable while the individual’s state of mind with respect to attachment fluctuates more. Some authors have suggested that adults do not hold a single set of working models. Instead, on one level they have a set of rules and assumptions about attachment relationships in general.

Mental health is a level of psychological well-being, or an absence of a mental disorder; it is the “psychological state of someone who is functioning at a satisfactory level of emotional and behavioral adjustment”. From the perspective of positive psychology or holism, mental health may include an individual’s ability to enjoy life, and create a balance between life activities and efforts to achieve psychological resilience.

According to various studies, mental health is affected by different aspects of emotional, cognitive and personality (Ashuri, Vakili, Ben-Saeed, Novei, 2010; Rajaei, Bayazi, Habibi Pour, 2010). People attached insecure due to psychological problems much more benefit from health care, and attachment have a predictive role in utilizes of mental health services (Meng, Arcy, Adams, 2015). Kaya (2010) showed that factors such as age, psychological characteristics of siblings, economic status and personal characteristics of parents are involved in the attachment and his longitudinal study showed that insecure attachment style of nursing students decreased over time. Self-esteem, life satisfaction and hope also play a role in predicting mental health (Rezaei, Bayani, Shariat-Nia, 2015). It seems that an early childhood relationship with their care due to subsequent psychological security that provides mental health is an important factor. According to Bowlby, attachment relationships always exist and are active throughout the cycle of life; so attachment bonds in adulthood life are important and influential on the activities of adult life.

The results of many researches, confirms the continuity of attachment to the life cycle (Rahimian-Boger, Asgar-Nejad, Rahimi-Nejad, 2009). People secure, avoidant, and ambivalent, apply completely different strategies for regulating emotions and emotional information processing transactions (Mikulincer, Shaver, 2004). Two major factors that have been related to psychopathology are the Capacity for emotional regulation and attachment style (Dozier, Stovall-McClough, & Albus, 2008; Campbell-Sills, Ellard, & Barlow, 2014). Insecure attachment styles, formed in childhood, set patterns of maladaptive strategies for maintaining relationships with others that involve the regulation of emotional distress (Dozier et al., 2008). Attachment theory (Bowlby, 1982; Cassidy & Shaver, 2008) offers frameworks for understanding how Internalized working models of relationships affect the development of self. Mental representations of the self and beliefs in the availability of significant others influences cognitive appraisals of personal and interpersonal experiences and creates patterns emotional and behavioral functioning that underscore well-being and mental health (Bretherton & Munholland, 2008). Secure and insecure attachment styles have been associated with mental health and psychopathology respectively. Attachment styles have been studied in relationship to psychopathology in children and adults (DeKlyen & Greenberg, 2008; Dozier et al., 2008; Mikulincer & Shaver, 2007), psychotherapy (Leiberman & Zeanah, 1999; Slade, 2008), couples and family therapy (Byng-Hall, 1999; Johnson, 2008), adolescent development (Allen, 2008) and adult romantic relationships (Feeney, 2008).

The direct connection between attachment styles and emotional regulation processes has been described (Mikulincer & Shaver, 2008). Intense emotions such as fear or anxiety will be aroused in response to psychological threat (i.e., abandonment, rejection). In such moments, an individual’s attachment system is activated usually leading to the primary attachment strategy which is seeking proximity to a stable and supportive attachment figure. The security from an attachment figure can be in the form of a real person or an internalized mental representation (i.e., image, memory, and schema) from a past or current relationship (Mikulincer &
The absence of a real or internalized attachment figure and/or the uncertainty of such a figure’s availability for support will increase the intensity of emotions thus leading to a greater need for emotional regulation.

Secondary attachment strategies involve the hyper-activation or the deactivation of attachment behaviors and correspond to Anxious and Avoidant insecure attachment styles respectively. Insecure attachment strategies have been described “along the dimension of attempts to minimize or maximize the expression of attachment needs” (Dozier et al., 2008) and are related respectively to externalizing and internalizing clinical disorders due to the direction of attention away or toward conflicted emotional states in the self and caregiver relationship. The Avoidant and Anxious attachment styles involve strategies to regulate emotions through dismissive or preoccupied focus on internal affect.

Unlike individuals with secure attachments who are generally capable of reducing anxiety and feeling safe in response to threats, insecurely attached individuals must contend with greater emotional arousal, a relatively more extensive history of unavailable attachment figures, and less effective strategies for attaining security.

The results showed that among attachment styles, only ambivalent insecure style could predict mental health (Sedigh-Arfaei, Rahimi, Ghashoumi, 2014). Insecure attachment styles, ambivalent and avoidance negatively and significantly predict social adjustment. In addition, the relationship between insecure attachment styles, emotional intelligence and social adjustment is a mediating role (Sapers, Khoshabakhth, Golzar, 2014). According to the results, attachment style has important role in predicting of mental health in adulthood. The study of female college students has shown that there is a significant relationship between attachment style, anxious or resistant neuroticism (Teimouri, Bakhsh, 2009). Also, it is reported that students have secure attachment, experience feelings of happiness higher than students with insecure attachment (Mani, 2003). Besharat and Shalchi (2008) showed that there is positive correlation between secure attachment with emotion and problem-focused coping styles, while have a negative correlation with negative emotion-focused style.

Considering the importance of adolescence and youth, and also the issue of mental health in students conduct research in understanding the role of attachment in mental health is important. Therefore, this study will be conducted to determine the share of each of attachment styles in predicting the mental health of female students. The main question that each of the attachment styles (secure, ambivalent and confused / avoidant) have what role in predicting of the mental health in female students?

### MATERIALS AND METHODS

The research method is descriptive and correlational (predictive). The study population consisted of all female high school students in the city of Mahabad who are enrolled in the academic year 2014-2015. The population is all high school girl and pre university students (3334 students) by multi-stage cluster sampling method were chosen. By default probability of loss due to lack of satisfaction to participate in research or incompletely filled questionnaire 312 persons were entered the study and 250 completed questionnaires were returned.

Attachment Questionnaire Collins and Read: The scale contains three subscales, each composed of six items. The three subscales are CLOSE, DEPEND, and ANXIETY. The CLOSE scale measures the extent to which a person is comfortable with closeness and intimacy. The DEPEND scale measures the extent to which a person feels he/she can depend on others to be available when needed. The ANXIETY subscale measures the extent to which a person is worried about being abandoned or unloved.

Average the ratings for the six items that compose each subscale as indicated below.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLOSE</td>
<td>1 6 8* 12 13* 17*</td>
</tr>
<tr>
<td>DEPEND</td>
<td>2* 5 7* 14 16* 18*</td>
</tr>
<tr>
<td>ANXIETY</td>
<td>3 4 9 10 11 15</td>
</tr>
</tbody>
</table>

* Items with an asterisk should be reverse scored before computing the subscale mean.

Cronbach’s alpha coefficient in 3 samples of undergraduates:

<table>
<thead>
<tr>
<th></th>
<th>Close</th>
<th>Depend</th>
<th>Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>n 173</td>
<td>.81</td>
<td>.78</td>
<td>.85</td>
</tr>
<tr>
<td>n 130</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n 100</td>
<td>.82</td>
<td>.80</td>
<td>.83</td>
</tr>
</tbody>
</table>
SCL-90-R

The SCL-90-R includes three global index scales and nine symptom scales that were based on factor analysis and that include diagnostic-specific and non-specific symptoms. The symptom scales include the Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism scales. The SCL-90-R index scales include the Positive Symptom Total, Positive Symptom Distress Index, and Global Severity Index. All SCL-90-R scale scores are calculated using gender-specific normative data that adjust for the higher rates of self-reported symptoms for females than males (Derogatis, 1994). SCL-90-R index and symptom scale scores are represented as $T$-scores, with a mean of 50 and a standard deviation of 10. Higher $T$-scores reflect greater number and/or severity of patient self-reported symptoms. We defined a “clinically significant” or “elevated” scale score to be a $T$-score of 63 or higher, based on recommendations of the SCL-90-R author (Derogatis, 1994).

RESULTS

In this research, secure attachment styles, ambivalent and insecure as predictor variables, and mental health was chosen as the dependent variable. Using step-by-step the most important factors affecting mental health of subjects in order of priority, were studied.

According to Schedule 1 the amount of $F$ in three steps is equal to 0.0001, Could be claimed that the above test is significant at a confidence Table 1. Results of Stepwise regression model based on predictive variables of mental health secure attachment, avoidant, and ambivalent

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>R</th>
<th>$R^2$</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1839927.18</td>
<td>058</td>
<td>0.34</td>
<td>1</td>
<td>1839927.18</td>
<td>1469.34</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>310548.42</td>
<td></td>
<td></td>
<td>248</td>
<td>1252.21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2150475.6</td>
<td></td>
<td></td>
<td>249</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Regression</td>
<td>1957136.4</td>
<td>065</td>
<td>0.42</td>
<td>2</td>
<td>978568.2</td>
<td>1250.17</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>193339.2</td>
<td></td>
<td></td>
<td>247</td>
<td>782.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2150475.6</td>
<td></td>
<td></td>
<td>249</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Regression</td>
<td>1964791.7</td>
<td>073</td>
<td>0.53</td>
<td>3</td>
<td>654930.6</td>
<td>867.67</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>185683.87</td>
<td></td>
<td></td>
<td>246</td>
<td>754.81</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2150475.6</td>
<td></td>
<td></td>
<td>249</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: mental health  
b. Predictors: (Constant), secure attachment  
c. Predictors: (Constant), secure attachment, ambivalent  
d. Predictors: (Constant), secure attachment, ambivalent, avoidant

Table 2. Results of regression coefficients for the prediction of mental health

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Standardized</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>111.008</td>
<td>15.966</td>
<td>6.953</td>
</tr>
<tr>
<td></td>
<td>Secure</td>
<td>-8.841</td>
<td>.842</td>
<td>-4.98</td>
</tr>
<tr>
<td></td>
<td>ambivalent</td>
<td>818</td>
<td>.783</td>
<td>.352</td>
</tr>
<tr>
<td></td>
<td>Avoidant</td>
<td>2.948</td>
<td>.926</td>
<td>.158</td>
</tr>
</tbody>
</table>

a. Dependent Variable: mental health
level of 0.99. Results showed that in the first model, secure attachment style had the highest share in predicting mental health. The effect of regression was estimated $F = 1649.34$ which at level 0.01 with degrees of freedom (2, 248) is significant. Correlation coefficient of this variable with mental health is 0.58 and predicts 34 percent of the variance of mental health. In the second model, after secure attachment styles, ambivalent attachment has been entered into the equation. The regression effect of two variables secure attachment and insecure estimated $F=1250.17$ that is significant at level 0.01 with degrees of freedom (2, 247). The correlation coefficient of two variables with mental health is 0.65 and predicts 53 percent of the variance mental health. Entry of ambivalent attachment style could increase predict 0.08 percent. The effect of regression three variables secure attachment, avoidant, and ambivalent estimated $F=867.67$, that is significant at level 0.01 with degrees of freedom (2, 246). The correlation coefficient of three variables with mental health is 0.73 and predicts 53 percent of the variance of mental health. Entry ambivalent attachment style could increase predicts 11% higher.

Findings of Table 2 shows that all three models based on the denotative coefficients (beta) and a significant level ($p < .001$) are significant. Therefore, the standard regression equation will be as follows:

\[ \text{Mental health} = (-.498 \times \text{secure}) - (.352 \times \text{ambivalent}) - (.158 \times \text{avoidant}) \]

According to the column standardized coefficients (weight of $\beta$) we can see that the share of component of secure attachment style (-.498) in explaining mental health is more than other styles, and Thereafter, the components ambivalent attachment style (.352) ranked second and then avoidant attachment style (.158) is ranked third. Standardized Beta ($\beta$) offers to evaluate the contribution of each of the variables in the model size in terms of standard deviation. $\beta$ anticipated changes in standard deviation criterion variable to change a standard deviation of predictor variables. So if secure and insecure attachment style one standard deviation increase, we can predict that mental health will increase the size of 0.352 standard deviations.

**DISCUSSION**

Stepwise regression analysis showed that among attachment styles, all three of secure attachment, avoidant and ambivalent have the ability to stay in the regression model, So that these three components simultaneously explain 53 percent of variance in mental health. The share component of secure attachment style (-.498) is higher than other factors in explaining lack of mental health, Thereafter, the component ambivalent attachment style (.352) and avoidant style (.158) Rating the second and third respectively. Research results with the findings of Schmidt, Blank, Bellizzi and Park (2012) is consistent. Their results showed Secure attachment was significantly associated with active coping, positive reframing, and religion, and these were all associated with PTG. Insecure types of attachment and social support variables were unrelated to PTG. Regression analysis suggests that positive reframing and religion as coping strategies may mediate the relationship between secure attachment and PTG. Rahimian-Boger, Asgar-Nejad, Rahimi-Nejad (2009) showed that Secure attachment style have a negative and significant relationship with mental health, and styles avoidant, and ambivalent positive and significant relationship with mental health. Carr, Colthurst, Coyle, Elliott (2013) Showed that high score in dimension of insecure attachment predicts the negatively psychological well-being and mental health. This means that whatever the score of unsecure dimention is lower, well-being and mental health is higher and vice versa. Karreman and Vingerhoets research (2012) showed that secure attachment was associated with higher reappraisal and resilience, partly mediating the effect on well-being. Complete mediation was found for dismissing attachment via higher reappraisal and resilience, and for preoccupied attachment via lower reappraisal and resilience. Remarkably, fearful attachment had indirect positive effects on well-being through higher reappraisal and resilience. Suppression failed to function as a mediator between attachment and well-being.
REFERENCES


