

The Study of Main and Interactive Effects of Attachment Dimension and Basic Personality Characteristics in Borderline Traits

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Article information	Abstract
<p>Article history: Received: 17 Dec 2011 Accepted: 26 Jan 2012 Available online: 24 Oct 2012 ZJRMS 2012; 14(10): 38-42</p> <p>Keywords: Borderline personality Attachment style Personality Psychotic features Neuroticism</p> <p>*Corresponding author at: Department of Payam-e-noor University E-mail: a_mohammadzadeh@pnu.ac.ir</p>	<p>Background: There are models of the development of personality disorders which include individual differences in attachment relationships as causal factors contributed in explanation of these phenomena. The dimensional view of personality disorders represents these conditions as extreme variants of normal personality continua. This study investigated main and interactional effects of attachment styles and personality traits in relation to borderline characteristics.</p> <p>Materials and Methods: The current study was conducted in expo fact context. Randomly selected 603 participants (134 male & 469 female) from Tabriz Payam-e-Noor, Tarbait Moallem of Azarbaijan and Sarab Payam-e-Noor university students took part in this research. Participants answered to Borderline Personality Inventory (BPI), Eysenck Personality Questionnaire Revised, Short form (EPQ-RS) and Adult Attachment Inventory (AAI). Data were analyzed using two way analysis of variance method.</p> <p>Results: Results indicate main effects of attachment styles and personality traits, so, individual with ambivalent insecure attachment experience more intensity of borderline traits than individual with avoidant insecure and secure attachments. Individual with high psychoticism and neuroticism traits experience more intensity of borderline characteristics than individual with extraversion personality traits. Also, there are no interactional effects of attachment styles and personality traits in relation to borderline characteristics.</p> <p>Conclusion: These findings reiterate contribution of childhood risk factors in developing borderline personality disorder, especially in children with emotionally vulnerability.</p> <p>Copyright © 2012 Zahedan University of Medical Sciences. All rights reserved.</p>

Introduction

Borderline Personality Disorder (BPD) is the general pattern of instability in interpersonal relationships, self-image, emotions, impulsivity, suicidal behavior, chronic absurdity feelings, transient Stress related dissociative and paranoid symptoms, usually starting at the beginning of adulthood, manifesting itself in different forms [1]. Although the prevalence of borderline personality disorder is reported to be 2 to 4 per cent of the population, the distribution of such borderline traits is much more extensive, with borderline personality disorder being the most prevalent of all personality disorders [2, 3].

BPD emerges from transactions interpersonal factors with biological vulnerabilities and specific environmental influences. In addition, the development of BPD occurs within an invalidating developmental context. This invalidating environment is characterized by intolerance toward the expression of private emotional experiences, in particular emotions that are not supported by observable events (there is no obvious reason for emotion) [4]. According to dimensional model and trait approach in personality, psychotic-like borderline personalities considered as a manifestation of exaggerated personality fundamental traits that can considered as a disorder [5].

Although it is now widely accepted that cognitive accounts supplement traditional biological models in explaining the etiology of mental illnesses, few approaches acknowledge developmental factors that may predict psychopathological experiences [6, 7] Accordingly, some models of the development of psychotic symptoms are presented that individual differences in attachment is considered as causal factors in explaining these phenomena [8]. Seems that etiological approaches of personality disorders change their emphasizes from intrapersonal characteristics to interpersonal variables progressively [9].

One of the main concepts of developmental approaches is that evolutionary experiences with primary caregivers and significant others not only provides a basis for his own personal feelings, but also affect the methods that they use for solving challenges and developmental issues [10]. Attachment theory is one of the best models for understandings adaptive and maladaptive ways through which people are faced with multiple developmental challenges in life [11]. Bowlby, the main attachment theorist, on the basis of observed mother-child characteristics in different situations came to the conclusion that child- caregiver close relationships are

responsible in regulating children's emotional and behavioral experiences. One of the basic concepts of attachment theory is internal working model. According to Bowlby, internal working models are formed as psychological equivalents of the quality of these relationships in context of infant-mother interaction. Facilitating the ability to code interactions, correct prediction of others' behaviors, (significant others), and feeling, thinking and their behavior in response to it, are the main actions of these models.

Based on the attachment approach, the failure in this process is a cause of personality disorders (including borderline personality). Previous studies have shown that some attachment styles (ambivalent & avoidant styles) can predict some variances of borderline personality, but a review of previous studies indicates that although the insecure attachment styles have an important role in defining the borderline personality, the effect of its interaction with the fundamental personality traits has been received less attention [12].

Accordingly, the main issue is to study that does fundamental personality traits and multiple dimensions of attachment styles have a contribution in shaping borderline traits, or there is an interactive relationship between the two in explaining these characteristics. Achieving in research purposes leading to knowledge about psychosis-like characteristics in line of dimensional model of psychosis that in addition to the basic level, may help to clinicians that with the knowledge to deal with this disorder, by explaining some developmental and interpersonal aspects of borderline personality, in applied level. Because of this relationship leads to greater knowledge about the developmental and maintenance factors of borderline personality, and this in turn led to the appropriate diagnosis, prevention and even treatment of borderline personality disorder.

Materials and Methods

The research is an *ex post facto* study. The statistical population of the research comprised of male and female undergraduate students in Tabriz and Saraab branches of Payam e Noor, and Azarbayjan universities in the academic year 1389-90. 603 people out of this statistical population were selected using multi-stage random sampling method and the Morgan Sampling Table, and then tested. After choosing the right classes, the researcher first introduced himself to the students and told them about the research objectives.

The subjects were then given the questionnaires. To observe the research ethics and the rights of subjects, it was stated that taking the exam was all voluntary, and it was noted both verbally (before the exam), and written (a sentence placed above the question sheets) that: (The information asked for is only for research purposes. To ascertain security, you needn't write down your names or other private information. Only the 'sex' box has to be checked.) also, participants were announced as the thanks of their participation, those who wish to be notified of

their test results can write your name or nickname of the questionnaire so researchers notify them of the results. As far as the execution of the two questionnaires was concerned, it was decided that half the subjects took the Borderline Personality Scale first, for the other half to begin with the attachment and personality questionnaire. This was to neutralize the probable impacts of the order in which the questionnaires were completed. The study questionnaires were: A- Borderline Personality Inventory (BPI): This Scale is made by Leichsenring in order to assess borderline personality traits in clinical and non-clinical samples and will be answered as yes/no [13]. BPI is based on Kernberg's concept of borderline personality organization as well as diagnostic criteria of borderline personality disorder in DSM-IV.

The BPI contains subscales for assessing identity diffusion, primitive defense mechanisms, reality testing and fear of intimacy. Internal consistency and one-week test-retest reliability of it have reported high in several studies (Cronbach's alpha from 0.68 to 0.91 and test-retest reliability from 0.73 to 0.89). BPI concurrent validity coefficients in Iran coincided with the borderline personality scale and construct validity is reported favorable. The test-retest reliability for total scale and identity diffusion, primitive defense mechanisms, reality testing and fear of intimacy subscales is obtained 0.80, 0.63, 0.74, 0.66 and 0.62 respectively [14].

B- Eysenck Personality Questionnaire- Revised (EPQ-RS): This questionnaire measured personality dimensions, neuroticism (emotional stability/emotional instability), extraversion (extraversion/introversion) and psychoticism in the age range 16-70 years. In addition to the mentioned components, this questionnaire has a scale for measuring lie. EPQ-RS is 48 item questionnaires that answered in yes / no format. Bakhshipour and Bagherian Khosroshahi reported Cronbach's alpha reliability coefficient in Iran 0.77, 0.74, 0.52 and 0.61 for extraversion, neuroticism, psychoticism and lie scales, respectively [15].

Test-retest reliability coefficients were reported by the major creators also has been desirable. Concurrent validity of the EPQ-RS scales in Iran investigated by Bakhshipour and Bagherian Khosroshahi using simultaneously administration with the NEO questionnaire. The correlation between the extraversion, neuroticism, psychoticism scales with equivalent scales of NEO questionnaire is calculated 0.70, 0.72 & 0.32 respectively, that indicate good reliability, given the existing structure.

C- Adult Attachment Inventory (AAI): This scale that made by Hazen and Shaver is one of the most widely used tools in attachment styles assessment [16]. This questionnaire has 15 items and each of secure, avoidant and ambivalent attachment styles are five items. Its scoring is the fifth option, between zeros to four. Questions 1 to 5 assessing secure attachment, 6 to 10.

Avoidant attachment and 11 to 15 anxious/ambivalent attachment styles. Hazen and Shaver have reported test-retest and internal consistency coefficient reliability of the questionnaire 0.81 and 0.78 respectively. In Iran, these coefficients for the whole test and secure, avoidant, and

ambivalent attachment styles have been reported 0.75, 0.83, 0.81 and 0.77 respectively [17]. Concurrent validity of this scale through the implementation of the structured interview for assessing attachment styles is calculated 0.80, 0.87, 0.84 and 0.79 respectively [17].

Results

Descriptive characteristics of participants according to gender are shown in table 1. The average scores in the research variables (borderline traits, attachment styles and basic personality characteristics) are summarized in table 2. To investigate the interactive effects of attachment dimension and basic personality characteristics in borderline traits two way analysis of variance was used.

Before using parametric two way analysis of variance tests, homogeneity of variance were used for data analysis. Levine test showed that the equality of variance assumption is approved ($p=0.38$, $F=1.06$). Table 3 summarized the results of this section.

According to table 3, two-factor analysis of variance: represents a significant effect of attachment dimension in explaining borderline traits ($p>0.0001$), also significant effect of basic personality characteristics in explaining borderline traits ($p>0.0001$). Interactive effects of attachment dimensions and personality traits in explaining borderline traits is not significant ($p=0.18$)

In order to determine significant differences between the three groups of attachment styles and personality traits in borderline traits, Scheffe multiple comparison test was used, which results are shown in tables 4 and 5.

The results of multiple comparison test indicated that borderline traits mean difference changes is significant between secure-ambivalent attachment styles, but not significant among avoidant-ambivalent insecure attachment styles. Also, results of multiple comparison test indicated that borderline traits mean difference changes is significant between psychoticism-extraversion and neuroticism-extraversion, but not significant among psychoticism-neuroticism.

Table 1. Descriptive characteristics of participants according to gender

Sex	N(%)	Mean±SD
Male	134 (22.2)	23.93±7
Female	469 (77.8)	24.28±5.83
Total	603 (100)	24.21±6.08

Table 2. The average scores in the research variables

Variable	Mean±SD
Borderline	13.98±3.59
Psychoticism	3.01±1.35
Extraversion	8.18±2.41
Neuroticism	7.11±2.97
Secure attachment	9.8±3.5
Avoidant attachment	6.8±3.19
Ambivalent attachment	7.55±3.84

Table 3. Interactive effects of attachment dimension and basic personality characteristics in borderline traits

Source	Sum of square	df	Mean of square	F	p-Value
Attachment dimension	1155.5	2	577.52	10.02	0.001
Personality traits	5791.72	2	2895.86	50.29	0.001
Interaction	281.05	3	93.68	1.62	0.18
Error	27121.75	471	57.58	-	-
Total	125157	479	-	-	-

Table 4. Scheffe multiple comparison test in personality traits

Personality traits	Mean difference	p-Value	
Psychoticism	extraversion	6.92	0.001
	neuroticism	1.17	0.80
Extraversion	psychoticism	6.92	0.001
	neuroticism	8.09	0.001
Neuroticism	psychoticism	1.17	0.80
	extraversion	8.09	0.001

Table 5. Scheffe multiple comparison test in attachment styles

Attachment styles	Mean difference	p-Value	
Secure	Avoidant	-1.13	0.08
	Ambivalent	-6	0.001
Avoidant	Secure	2.18	0.08
	Ambivalent	3.81	0.004
Ambivalent	Secure	6	0.001
	Avoidant	3.81	0.004

Discussion

The purpose of this study was to investigate main and interactional effects of attachment styles and personality traits in relation to borderline characteristics. Results indicate main effects of attachment styles and personality traits, so, individual with ambivalent insecure attachment experience more intensity of borderline traits than individual with avoidant insecure and secure attachments. Individual with high psychoticism and neuroticism traits experience more intensity of borderline characteristics than individual with extraversion personality traits.

Of personality disorders, borderline personality disorder is more applicable to pathological attachment theory [12]. Borderline personality have also received research attention in terms of identifying attachment difficulties in a person's early life. It seemed that borderline personality symptomatology thought be related to ambivalent forms of attachment insecurity.

Ambivalent insecure attachment style in the present study also showed the highest correlation with borderline traits. People show most insecurity in ambivalent attachment patterns, sometimes to be near their mother in childhood, and then they avoided contact with her, sometimes they treating in conflicting ways at the same time. Confusion, anxiety and depression are more characteristics of people with ambivalent insecure attachment. Most of them often have a childhood history of neglect and abuse [1].

On the other hand Individuals with borderline personality disorder may display affective and mood instability: Periods of acute depression, anxiety or anger occur repeatedly without apparent cause. Individuals with borderline personality disorder have a pattern of unstable

and intense relationships; they may switch quickly from idealizing other people to devaluing them. With unstable mood and self-concept and interpersonal, tend to Impulsive self-mutilating behavior including self-injury and suicide behavior.

Research suggests that people with borderline personality disorder often have a childhood history of trauma or emotional negligence, resulting in psychological fragility, unstable personality and more insecure attachment style [18]. However, recently it has been suggested that clinical symptoms of this disorder is likely to experience serious communication problems, In fact borderline personality disorder is explained better with terms of oscillation in attachment than traditional forms of insecure attachment [19]. Some studies related to chaotic oscillations of attachment in borderline personality disorder have suggested that the disorder is due to major problems in adjusting the interpersonal distances, which in turn stems from the conflict between fear of abandonment and dominance [12].

According to the relationships of psychoticism and neuroticism with borderline personality, results of this study is consistent with research that is based on three and five-factor model have shown that borderline traits are associated with neuroticism and sometimes psychoticism [20]. In this regard, some researchers have recently reported that many types of abnormal behavior may be an exaggeration in normal personality traits [21]. In other words, based on dimensional approach, many pathological forms of personality placed at the end of the continuum of normal personality than get away completely from the normal personality [22]. In the proposed model, there is basic relationship with neuroticism and borderline traits, neuroticism tend to assess the experience of emotional distress [23]. Since the emotional distress is emotional symptoms of borderline personality, so this section of findings (high borderline traits in individuals with high neuroticism) seems justified. Also the association of borderline personality and psychoticism that include behaviors patterns such as a lack of intimate friends, restricted affect, lack of empathy and non-compliance with norms and violence, is in line of Eysenck conception's from psychoticism [24].

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Based on that, social behavior is the main characteristics. Despite criticism of the Eysenck psychoticism's theory because of measuring antisocial behavior [25] than specific symptoms of psychosis, however, finding confirms the relations of psychosis-like trait and basic psychoticism in line of Eysenck's theory.

Although, according to study no significant interaction was found among attachment styles and basic personality characteristics in borderline traits, that indicate that these two variables statistically different impacts on the formation of borderline traits, but it seem that co-existences of high neuroticism/psychoticism and ambivalent attachment style, which indicate the intertwined effects of nature (basic personality characteristics) and nurture (attachment styles), have a role in its formation. Therefore, this section of the findings requires further investigation controlling interfere or modulating variables as possible as. In addition, the results of this study emphasized on the role of childhood psychosocial risk factors in formation of borderline personality disorder syndromes in children who are emotionally vulnerable.

The main limitation of this study was low frequency of psychoticism in comparison with other fundamental personality traits that may be affected the results. Therefore, interpretation of findings shall be made with regard to limitation

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Authors' Contributions

All authors had equal role in design, work, statistical analysis and manuscript writing.

Conflict of Interest

The authors declare no conflict of interest.

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