The Role of Defense Styles and Defense Mechanisms in the Prediction of Borderline Personality Features in Non-clinical Samples

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Abstract

Introduction: The purpose of this research was to investigate the role of defense styles and defense mechanisms in the prediction of borderline personality features in non-clinical samples.

Methods: The study uses a descriptive-correlative design. For this purpose, 378 students were selected through random cluster sampling from Arak University (181 males and 197 females). They were asked to answer the Questionnaire of Style Defense and Borderline Personality Scale. Then, the correlation and regression analyses were employed.

Results: The results indicated that the features of borderline personality were significantly and positively correlated with neurotic and immature defenses, and there was no significant relationship between features of borderline personality and mature defenses. Regression analysis showed that immature defenses could predict borderline personality features. The results also revealed that five defenses (acting out, autistic fantasy, splitting, passive aggression and displacement) could predict borderline personality features.

Conclusion: Based on the present study results, it can be concluded that immature defenses predicted higher levels of features of borderline personality.

Keywords: Features of Borderline Personality, Defense Styles, Defense Mechanisms

Introduction

The term Borderline Personality Disorder (BPD) refers to a psychiatric condition characterized by unstable interpersonal relationships, fear of abandonment, difficulties in emotion regulation, feelings of emptiness, chronic dysphoria or depression, as well as impulsivity and heightened risk-taking behaviors [1]. This disorder is often diagnosable in both clinical and non-clinical samples. Research shows that BPD is accompanied with intense performance disorder, high rate of suicide and high costs for society [2] and usually starts at the beginning of adulthood, and manifests itself in different forms [3].

Although the prevalence of borderline personality disorder is reported to be 2 to 4 percent of the population, the distribution of such borderline traits is much more extensive. Borderline personality disorder is the most prevalent personality disorder [3].

Currently, the causal mechanisms of this disorder affecting 0.5 to 5.9 % of the population [4] are completely unknown. However, genetic factors, traumatic childhood events and neurobiological change are central to its etiology [5].

Several promising psychosocial treatments are suggested for BPD [6,7], but the treatment of these patients is still challenging due to its chronic course, high lethality, extensive comorbidity, and negative impact on treatment. It is especially important that the mental health community understands BPD. One of the endangering factors is defense

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mechanisms that can play a crucial role in maintaining the presence of pathological and adaptive personality function [8].

Defenses are considered as a model of basic emotions, and people use them to compromise negative emotions in life styles [9]. The field of personality assessment is widely informed by studies on DMs. In fact, a vast scientific literature explains the organization and

function of personality in the light of defense patterns adopted by individuals. From a psychoanalytic perspective, personality styles and organizations are strongly associated with specific defense patterns [10].

Cramer defines defense mechanisms as constructs acting as a counterforce against the push of the drives for discharge [11]. Defense mechanisms refer to unconscious mental mechanisms directed against both internal drive pressures and external pressures, especially those threatening self-esteem or the structure and the selfintegration. They develop according to predictable sequences with the child maturation, are a part of normal personality function, can lead to psychopathology, if one or more are used excessively; they are distinguishable from one another [10].

In a number of studies, it is identified that individuals' physical and mental health are significantly related to their defense mechanisms. Mature defenses such as humor and altruism are related to physical heath and psychosocial adaptability. Furthermore, immature defenses such as denial and projection are associated with personality disorders, depression and drug abuse. Thus, the hypotheses suggesting that immature defenses associated with personality immaturity indices, and mature defenses which are associated with health and personality adaptability indices, are supported by several studies [12-16].

It seems that formulation of defense mechanisms appears to be continuously developed in the field of research and empirical studies, and its unconscious operation is manifested in a psychopathology condition or in normal function. As studies have indicated, defense mechanisms are related to personality disorders such as BPD and anti-social disorder [14], and emotional problems such as depression and anxiety [17].

A number of cross-sectional studies have shown that borderline patients significantly achieve higher scores in immature defenses than other patients with II-axis disorders [18-20]. In this direction, many researchers confirm that BPD is relevant to the seven defense mechanisms that Kernberg [21] has suggested, namely omnipotence, idealization, devaluation, initial projection, dissociation, and lack of repression. Some others also have suggested that BPD is associated with acting out, passive-aggression, segregation, rationalization, and relative absence of reaction formation.

Cramer, in examining the relation between defense mechanisms and personality disorders, showed that BPD was associated with denial and the disorders of anti-social personality, narcissism and persona with denial and projection [22]. Hibbard and Porcerelli also showed that BPD was positively associated with denial, and negatively related to identification. Preniak et al. also explain that how the profile of defense mechanisms can be useful in distinguishing BPD and the disorder of anti-social personality [14]. In addition, Perry et al. showed that defenses predicted the highest variance in borderline and the lowest variance in schizotypal personality disorder, suggesting that dynamic factors played the major role in borderline and the minor in schizotypal personality [21].

Despite the centrality of defenses in psychodynamic theories, empirical research has had slow growth in this regard. Therefore, considering the importance of defense mechanisms in diagnosing, treating and even preventing from personality disorders, especially BPD, the present research aims to investigate the relation between defense styles and mechanisms and borderline personality features in non-clinical samples.

Method

The study uses a descriptive-correlative design. An informed consent was obtained from all the participants of the study. The protocol was approved by the local ethical committee of Arak University. A group of 400 university students from Arak University with an average age of 23.21 years (SD = 4.53) was selected through multiphase cluster sampling and then was included in the study.

To control the fatigue effect, and the sequence of the tests, the order of scales and questionnaire was balanced across the participants. The data obtained from ten participants were omitted due to their incomplete answer sheets, that of 12 participants because of invalid answers (i.e. choosing more than one answer for some items). The data obtained from 378 participants were analyzed using Pearson correlation and regression analyses. To collect the data, the following instruments were utilized:

Borderline personality traits scale: Borderline personality traits scale is part of the questionnaire of schizotypal traits and borderline personality traits scale created by Claridge and Broks; the scale is answered by yes/no responses [23]. Yes receives one, and No receives zero. Mohammad Zadeh, Goudarzi, Taghavi, and Molazadeh by complying edited version of this test with the criteria of recognition and statistical guide and (DSM-IV 20) have introduced 20 articles assessing three elements of disappointment (7 articles), impulsivity (7 articles) and dissociative symptoms and stress-related paranoid (6 Articles). The reliability coefficients were reported by re-test in four weeks for the total scale of borderline personality 0/84 and despair subscales 0.53, impulsivity 0.72 and analytical and paranoid symptoms related to stress 0.50. Coefficient alpha for the total scale is 0.77 and for subscales of despair is 0.64, and for impulsivity 0.58 and symptoms analysis and stress-related paranoid is 0.57 [24]. In the present study, the alpha coefficient for the total scale is obtained 0.75.

Defense Style Questionnaire: This questionnaire was made on the bases of hierarchy of defense styles by Andrews, Singh and Bond [25]. It includes 40 questions ordered on a 9-point Liekrt scale ranging from 'strongly agree' to 'strongly disagree'. The scale assesses defense mechanisms at three levels: neurotic, matured, and immature. Face validity of the scale is reported to be 0.74 [26]. Correlation coefficient between factors for mature, neurotic and immature was 0.97, 0.94 and 0.95, respectively. Internal consistency of the Persian version for the factors has been reported to be 0.75, 0.73, and 0.74 respectively [26]. In the present study, the alpha coefficient for the total scale is obtained 0.84.

Results

A preliminary analysis of the data was conducted to ensure the compliance of the assumptions for regression analysis (inter-correlation among variables).

Table 1 provides an overview of the mean, standard deviation and inter-correlation of borderline personality features and defense style in this study.

As Table 1 shows, no significant correlation exists between borderline personality features and mature defense style, but a positive significant correlation (P<0.01) exists between borderline personality features and immature and neurotic defense styles (P<0.01). In other words, individuals with higher borderline personality features, use mostly immature and neurotic defense styles.

Table 2 shows the results of multivariate regression

analysis to predict borderline personality features based on the defense styles.

As observed, only the immature defense style has had a significant contribution in predicting borderline personality features, explaining 19% of the variance of borderline personality features.

Table 3 provides an overview of the mean, standard deviation and inter-correlation of borderline personality features and defense mechanism in this study.

As Table 3 shows, a significant positive correlation exists between all the mechanisms of immature defense style and borderline personality features except rationalization. A significant positive correlation exists between the defense mechanisms of neurotic style and borderline personality features except reaction formation. In addition, among the defense mechanisms of mature style, anticipation and sublimation are positively and significantly related to borderline personality features, but no significant correlation exist between the two defense mechanisms of humor and repression and borderline personality features.

Table 4 multivariate shows the results of regression analysis predict borderline to personality features the defense based on mechanisms.

Table 1 Moon	standard doviation	and inter corr	alation of Bordarlin	e personality features	and defence style
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Variables	М	SD	1	2	3	4
1. Borderline personality features	7.26	4.30	1			
2.Mature defense style	43.43	8.12	0.10	1		
3.Immature defense style	121.65	19.21	0.44**	0.33**	1	
4.Neurotic defense style	43.36	7.48	0.30**	0.47**	0.61**	1
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^{**}P<0.01

Table 2. Results of multivariate regression analysis (stepwise method) for predicting borderline personality features through defense

	styles					
Regression progress steps	Entered variables	В	β	t	adjusted R2	F
Step one	Immature defense style	0.10	0.44	9.25**	0.19	90.78**

**P<0.01

Table 3. Mean, standard deviation and the correlation coefficients of borderline personality features and mechanism of defense

_	Immature defense style						Neurotic defense style			Mature defense style										
Variables	Rationalization	Projection	Denial	Omnipotence	Devaluation	Acting out	Dissociation	somatization	Autistic fantasy	splitting	Passive-aggression	displacement	Pseudo-altruism	Reaction formation	Intellectualization	undoing	Suppression	Sublimation	Humor	Anticipation
borderline personality features	0.07	0.25**	0.14**	0.19*	0.10*	0.38**	0.17**	0.25**	0.32**	0.31**	0.25**	0.26**	0.19**	0.09	0.23**	0.28**	-1.01	0.15**	0.03	0.11*

**P<0.01

Table 4. Results of multiple regression analy	sis (stepwise method) for predicting borderline p	personality features through defense styles

Regression progress steps	Entered variables	В	β	t	adjusted R ²	F
Step one	Acting out	0.59	0.38	7.96**	0.14	63.46**
Chara truc	Acting out	0.49	0.31	6.46**	- 0.19	44 24++
Step two	Autistic fantasy	0.28	0.23	4.64**	0.19	44.24**
	Acting out	0.46	0.29	6.05**	_	33.85**
Step three	Autistic fantasy	0.24	0.19	4.00**	0.21	
	splitting	0.19	0.16	3.27**	_	
	Acting out	0.41	0.26	5.31**		27.59**
Stop four	Autistic fantasy	0.24	0.19	4.02**	0.22	
Step four	Splitting	0.17	0.13	2.82**	0.22	
	Passive-aggression	0.22	0.13	2.67**	_	
	Acting out	0.36	0.23	4.54**	_	
	Autistic fantasy	0.23	0.18	3.77**		
Step five	Splitting	0.14	0.11	2.37*	0.23	23.05**
	Passive-aggression	0.18	0.10	2.20*	_	
	displacement	0.15	0.10	2.01*	_	

**P<0.01, *P<0.05

Table 4 shows the results of multiple regression analysis to predict borderline personality features based on the defense styles. The results indicate that to predict borderline personality features, regression is conducted in five steps. The variables of acting out, autistic fantasy, splitting, passive-aggression and displacement are entered into the equation in order, explaining totally 23% of the changes of borderline personality features.

Discussion

The purpose of the present research was to determine the role of defense styles and mechanism in predicting borderline personality features in non-clinical samples. The results indicated the existence of a significant positive correlation between immature and neurotic defense styles and borderline personality features, and immature defense style significantly predicted borderline personality features. These results are in consistent with those obtained by [10, 13, 14, 18].

The above mentioned issue is consistent with this common view concerning the associations between maturation of defense mechanisms and psychopathologies. In individuals with psychiatric disorders, defense styles are immature and inadaptable, and the defense styles of the non-clinical population are more mature [15]. Defense mechanisms, in fact, distort reality and the distortion rate of reality in immature and neurotic defenses is higher than in mature ones. As the rate of cognitive distortion of a defense is higher, the rate of conscious awareness is reduced, and consequently less effort is made to confront with cognitive distortion [27]. Thus, defense mechanisms change our conscious cognition, reducing our awareness of conflicts [28]. Therefore, defense mechanisms especially less mature mechanisms would be a barrier to understand reality in individuals, negating their logical and effective defense and reducing their insight and self-discovering capacity.

In addition, the research results indicated that the defense mechanisms of acting out, autistic fantasy, splitting, passive-aggression and displacement significantly predicted the change of borderline personality features. These results are approximately inconsistent with those obtained by Zanarini et al. [19]

that refer to the three defense mechanisms of acting out, emotional hypochondriasis and negation as the significant predictors of the BPD diagnosis. The possible explanation of this inconsistency is employing different tools to measure defense styles, since Zanarini et al. [19] employed an 88-question questionnaire of defense styles and added three other questions to this questionnaire to evaluate the DM of emotional hypochondriasis.

The predictors in this model fit very well with Kernberg's early descriptions of borderline personality. Specifically, acting out is considered as one of the most representative modalities of borderline function [6]. Therefore, it is plausible that people with high levels of disinhibition may act impulsively due to their difficulty in integrating internal representations, reflecting on experience, and verbalizing feelings when they face stress and disturbing emotions. Indeed, Freud had earlier specified that acting out was a repetitive impulsive behavior acted upon by the individual for communication difficulties [10].

Acting out represents a central DM in borderline personality, indicating a tendency to an immediate discharge of feelings or impulses for the inability to endure them and reflect on the painful circumstances determining them.

According to Kernberg's view, the organization of borderline personality is created to deal with conflicts as a stable form of a pathological ego structure [29]. From a clinical perspective, in individuals with borderline personality organization, specific and nonspecific manifestations of ego weakness prevail that its consequences are identity disorders, use of splitting and other primitive defense mechanisms, problems in controlling impulse, tolerance of anxiety. Splitting plays an important role in the psychopathology of BPD. Splitting results in emotional responses and intense behaviors and can result in changing explosive mood as one of the main features in BPD.

In fact, the primitive defense mechanisms of borderline personality built around interpersonal dependency and self-directed aggression [30] are associated with the main features of borderline personality organization, namely emotional instability and the instable model of individual performance so that emotional instability is related to the

defense mechanisms of splitting, projection, acting out, passive-aggression, negation and autistic fantasy. Furthermore, impulsive aggression and instable interpersonal relationships are associated with the DM of acting out [31].

Conclusion

Respecting the research literature concerning psychopathology and defense styles and mechanism, it is important to note that this study is among the first studies measuring the relation between these two constructs in the Iranian culture. Thus, according to the importance of identifying the fundamental mechanism of particular personality structures to prevent and treat personality disorders effectively, the results of the present research can effectively contribute to the identification of BPD.

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