Original Article

The role of emotional schema dimensions in predicting borderline personality features

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Abstract

Borderline personality disorder is the most common personality disorder which is known by a variety of dysregulations in cognitive, behavioral, emotional and interpersonal relationships. The main characteristic of borderline personality disorder is emotional instability. In predicting the characteristics of borderline personality disorder many factors play a role. The aim of this study was to investigate the role of emotional schemas in predicting features of borderline personality. The present study was a descriptive-correlational one in which 462 was selected through availability sampling. To collect the data, Borderline Personality Scale (STB) and Emotional Schemas (LESS-II) were used. Also, stepwise multivariate correlation and regression methods were used to analyze the data. The results revealed that emotional schemas of control, blame, comprehension, agreement, extreme rationality, mental rumination, duration and validation predict changes in borderline personality traits. These results have practical implications in preventing the symptoms of this disorder as well as performing clinical interventions in the field of emotional schema therapy for patients with borderline personality disorder.

Introduction

Borderline personality disorder is one of the most common psychiatric disorders (Kring, Johnson, 2018) about which many books and articles have been written, but the disorder is less well-known. The prevalence of this disorder among the general public is between 1.6-5.9% and among outpatients about 10% and among psychiatric hospitalized patients about 20% (American Psychiatric Association, 2013) and the range of this disorder among clinical populations with personality disorders from 30-60% (Mahmoud Alilou & Sharifi, 2013). Classification Guide DSM-5 (American Psychiatric Association, 2013) admitted to borderline personality disorder as the pervasive pattern of instability in interpersonal relationships, self-concept, and emotions characterized by impulsivity and begins early youth. Borderline personality disorder is characterized by a heterogeneous system of signs that this system of signs contains problems in interpersonal,

cognitive, behavioral and emotional dimensions (Rosenthal & colleagues, 2008). The main characteristic of individuals With BPD is mood instability.it seems that these patients are in a crisis all the time. Like the other personality disorders, with cognitive, emotional and interpersonal symptoms BPD leaves negative effects on the individual's daily functions. (Halchin & Whitbourne, 2013). In cluster B personality disorders, emotional regulation as the main characteristic has been proposed, and borderline personality disorder is a prototype among the cluster B personality disorders.

Recent approaches to the role of emotion regulation as a maladaptive approach in response to experiencing emotional turmoil include inability to control Behaviors, difficulty in using emotions, misbehavior such as self-harm, and throwing things. As generalized emotional dysregulation is a multidimensional structure and includes lack of awareness, understanding and acceptance of emotions, lack of access to consistent strategies for adjusting the intensity or duration of emotional responses,

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reluctance to experience emotional disturbances, and lack of control behaviors of time is an experience of emotional turmoil (Gratz & Roemer, 2004). Many theorists believe that emotional dysregulation plays a central and important role in the etiology and evolution of borderline personality disorders that increases emotional instability (Glenn & Klonsky, 2009) and defects in emotion regulation in patients with borderline personality disorder cause other problems such as emotional instability, cognitive dysregulation, interpersonal problems, and behavioral problems that in regard of follow-ups we can consider emotional disorder as a maintenance and continuity mechanism of borderline personality disorder (Stepp & Co, 2014).

Emotional dysregulation is the inability to respond flexibly and manage emotions. Although this definition seems simple but it includes significant differences in the studied phenomena of emotional dysregulation in the borderline patient. Some researchers focus on emotional sensitivity, some on emotional intensity or emotional stability and some on emotional vulnerability. Despite the complexity of this structure, this is not surprising. One way to understand these distinct approaches is to consider emotional dysregulation as a process, a combination of multiple interactive elements, not as a final step. (Werner & Gross, 2010).

Emotional schema models by focusing on emotion and evaluating and interpreting them by the individual, the future path of emotion determines whether to Move to the path of pathology or disappear due to the fleeting excitement. Emotional schema model is a cognition model of emotion in oneself and others. In this model, schemas provide interpretation, evaluation, assignment, and other cognition reviews of excitement as well as emotion regulation strategies that may or may not be effective. Leahy believes that emotional disorders often result from a person's assessment and interpretation of their feelings and the strategies used to deal with them.

Emotional schema model indicates that people differ in how they conceptualize their emotions or in other words, people have different schemas about their emotions (Leahy, 2015). These schemas reflect the way people experience emotions and it is believed that they seek to arouse unpleasant emotions about the appropriate plan for acting or how to act against such emotions that they have in mind. In Leahy's emotional schema model when experiencing an unpleasant emotion, a set of strategies and interpretive processes are used. The first step during appearance of an emotion is paying attention to that emotion. The second step in Leahy's model is cognitive and emotional avoidance of excitement. This avoidance can occur both natural and sickly, break, having fun, racquet, drugs and alcohol, and so on. The special value of the emotional schema model is that it directly targets conceptualization and strategies of patient about unpleasant emotions which are the main problem in borderline personality disorder. (Leahy, 2019). Emotional schemas are involved in wide range of disorders such as anxiety, depression, chronic anxiety, substance abuse, relationship disorders, and

personality disorders. The emotional schema model suggests that when an emotion is evoked or inferred, interpretations, reactions, and confrontation strategies or emotion regulation will determine whether the emotion persists, disappears, or diminishes. This is exactly the problem patients with borderline personality disorder are involved in this issue. They use interpretations, evaluations and strategies that they always increase and intensify emotion (Leahy, 2015). Specific emotional schemas in some disorders have more power about predicting. In another study by Leahy (2012), guilt, rumination, control and approval are the best predictors of Depression patients in a back depression quiz. Also, in another study by Leahy (2011) on predicting the role of emotional schemas in marital satisfaction, the results showed that emotional schemas of affirmation, blame, high values, and simplistic view toward emotions, ability to understand and acceptance play a role in marital satisfaction. Also Leahy (2018) in examining the power of predictability of alcohol dependence in MCMI emotional schemas confirm, high values, simplistic view of emotion, blame, agreement and Numbness respectively had the highest predictive power. In the field of personality disorders using the dimensions of personality disorders MCMI-III the People who scored high on avoidant, dependent, and borderline personality had a more negative attitude toward their emotions. While people with higher scores on narcissists and hysterics had a more positive attitude toward their emotions, and contrary to expectations, people with high scores on obsessive-compulsive disorder had a positive attitude toward emotions. In narcissistic people schemas less emotion of guilt or shame, less mental expression and rumination, and more values are seen (Leahy, 2010). Higher scale performers on the border personality dimension in the MCMI-III schemas obtained include comprehensible, ruminant, approval, numbness, and blame, simplistic view of emotion, control, values and rationality were obtained. People who score higher on the borderline personality believe that their emotions are incomprehensible, have a mental inclination, they get less approval, they feel numb, they blame others for their feelings, and they blame complex emotions. They endure hardships, they believe their emotions are out of control, they do not know their emotions are related to their values, and they place less emphasis on logic.

Emotional schema model is a new approach that has done limited research in this field. Research only in this area, subscales of Millon questionnaire have been used. Undoubtedly the study of relationships between schemas Emotional and psychological consequences are an important research area that can be used as intervention strategies. And provide important treatment to the relevant field. Emotional dysregulation as the core of the symptoms of borderline personality disorder can play a role in reducing or exacerbating other symptoms. If we achieve the role of emotional schemas in prediction and continuity, disorder therapists can target patients' emotional schemas. Hence the present study the role of

emotional schemas was in predicting borderline personality traits in the nonclinical population.

Method

Participants

The present study is a correlational and cross-sectional study. The statistical population of the present study is the general population of Khoy city that for this purpose, 464 people should be completed by available sampling in cyberspace. After preparing the questionnaire On Google Forms, they were sent to 30 different people who were culturally, economically, educationally and gender different. Then each of them were asked to send the link of questionnaire to 20 other people to sample the general population, and the researcher should not act in a purposeful and partial sample selection. Criteria of entry include age between 18-35 years, suitable insight for answering, at least third grade of middle school education and exit criteria were drug use, illnesses like severe psychological disorders such as schizophrenia and impaired fact-finding. After collecting data using the SPSS software data were statistically analyzed by multivariate regression analysis using stepwise method.

Instrument

Leahy Emotional Schemas Questionnaire (LESS)

This scale is prepared to determine beliefs and attitudes toward emotion in individuals. The Emotional Schema Scale is designed to measure 14 schemas that include verification, comprehensibility, guilt and shame, simplistic view of emotions, higher values, control, striving to be rational, length of period, agreement, acceptance of emotions, mental rumination, expression of emotions and blame. This scale has 50 items with Using a 5-point Likert scale graded from strongly disagree (zero) to strongly agree (four) (Leahy, 2002). Leahy (2011) reported the internal consistency of this scale using Cronbach's alpha coefficient as 0.81.

In Iran, Khanzadeh et al., (2013) examined the factor structure and psychometric properties of this questionnaire and they obtained a 37-point scale with a Likert scale. The reliability of this scale through retesting at two-week intervals for the total scale is 0.78 and its internal consistency is reported to be 0.81 using Cronbach's alpha. Also between different emotion schemas the highest reliability coefficient with 0.73 was related to emotional self-awareness and the lowest one with 0.59 was related to emotion acceptance schema. Also, the validity of this questionnaire was evaluated by the convergence validity of BAI and BDI questionnaires that the highest correlation between emotional schemas with depression related to the schema of approval and mental rumination is with r=0.38 and the lowest of them r=0.09 is related to the schema of the attempt to be

logical. Also, the highest coefficient Correlation with anxiety is related to emotional schema of higher values with r=0.33 and the lowest of them is related to expressing emotions with r = -.05.

Borderline Personality Scale (STB)

Borderline Personality Scale, is made in Oxford and based on DSM-III criterion and was re-examined in 2001. This exam includes unstable interpersonal patterns such as ambiguity and emotional control problems and measures borderline characteristics in normal individuals based on continuity model. Mohammadzadeh et al., (2005) adapted this scale to DSM-IV-TR and researched its psychometric properties in Iranian society that good results were obtained. This scale contains 18 items that answered as yes/no. The yes answer gets a score of one and the no answer gets a score of zero. When matching Scale with DSM-IV-TR criterions, 6 more items were added from morphology psychology texts to cover define of DSM-IV-TR about borderline personality disorders. Therefore, the scale is 24 items to which items 24 to 129 have been added.

Jackson and Klaridge (2001) reported that the test reliability coefficient for this scale is 0.61 and the alpha coefficient is 0.80 for this scale and the simultaneous validity of this scale with the Neuroticism and Psychoticism Scale has been reported of 0.64 and 0.44. In factor analysis of the Iranian version of this scale, 4 items were removed and 20 items have formed the final questionnaire. This questionnaire has three factors of frustration with 7 questions, impulsivity factor with 7 questions and the factor of dissociative and paranoid symptoms which are related to stress include 6 items. Internal consistency coefficient with Cronbach's alpha for the whole questionnaire is 0.77 and for the subscales of despair were 0.64, impulsivity was 0.58, and the paranoid and stress-dependent symptoms were 0.57 (Mohammadzadeh et al., 2005). Simultaneous validity of this questionnaire has been done using Eising (EPQ-R) personal questionnaire. The results showed that the borderline personality scale is correlated with the neuropsychiatry and psychopathy scales EPQ-R respectively are 0.64 and 0.29. While it has no significant relationship with the scales of extraversion and lying

Results

In Table 1, the average and standard deviation of the dimensions of emotional schemas, the total score of borderline personality traits plus its sub-scales including frustration, impulsivity, and signs of decay, as well as Pearson correlation fines between Dimensions of Emotional schemas and borderline characters are mentioned. As shown in Table 1 All dimensions of emotional schemas are significantly different except emotional expression and extreme rationalization with borderline personality traits. As a matter of fact, between the emotional schema of approval, ability to understand, control, agree, accept, simplistic attitude to emotion, high values are negatively related to borderline

personality traits and between emotional schema, guilt and shame, numbness, duration, rumination. There is a significant positive relationship between subjectivity and blame with borderline personality traits (see Table 1) with average and standard deviation of dimensions of emotional schemas and borderline personality traits and dimension correlation coefficients emotional schemas with borderline personality traits (n=462).

In the next step to investigate the role of emotional schemas in explaining borderline personality traits we used multiple regression analysis in a step-by-step manner. To use the regression model, first its defaults were examined that is why the camera/Watson test to check the error independence, a linear test with two tolerance indices. And variance inflation factor (VIF) and Kolmograph-Smirnov test and skew index to check the normality were done.

In predicting borderline personality traits from the dimensions of emotional schemas Numerical values of the camera/Watson test (1.87) has been obtained which indicates the independence of errors.

Table 1. Descriptive index of variables and correlations between them

VARIABLE	MD	SD	BP
Validation	8.35	2.24	-0/35**
comprehension ability	9.42	2.38	-0/42**
guilt or shame	5.06	2.19	0/43**
simplistic view	8.76	1.94	-0/10*

high values	8.48	2.14	-0/13**
control	8.76	2.52	-0/48**
numbness	4.96	2.29	0/31**
Extreme rationality	8.38	2.41	-0/08
duration	6.11	1.94	0/31**
agreement	6/23	1/86	-0/30**
acceptance	7.94	1.87	-0/13*
mental rumination	6.92	2.59	0/41**
expression	7.65	2.23	0/02
blame	6.30	2.60	0/42**
total signs of BP*	4.55	3.75	

*p<0/05   **p<0/01 ***BP=borderline personality

To check that the data are normal, the Kolmograph-Smirnov test was used, the result of this test was 0.23, which is significant at the level of P<0.01 that the hypothesis of normal data is ruled out that the significance of this test occurs too much in the high sample size, so for review The tilt test was used, the value obtained was 0.91, which is between 1 and +1, which can be assumed to be normal.

The alignment index indicates that there is no multiple alignment between the predictor variables and the results are reliable. The results of Table 2 also show that among the emotional schemas, control schemas, blame, perception, agreement, rumination, rationality, duration and approval with 38% variance explained, Predicts the boundary personality traits.

Table 2. Statistical characteristics of stepwise regression Dimensions of emotional schemas and borderline

STEP	PRIDICTIVE VARIABLE	R	R²	DF	F	T	B	beta	IM	VIF
First	Control ability	0/47	0/22	462,1	133/10	-11/65	-0/72	-0/48	1	1
second	Control	0/53	0/28	461,2	89/17	-8/37	-0/55	-0/37	0/82	1/23
	Blame					5/89	0/37	0/26	0/82	1/23
Third	Control	0/56	0/31	460,3	69/92	-6/29	-0/43	-0/29	0/71	1/40
	blame					4/92	0/31	0/21	0/78	1/28
	Comprehensibility					-4/83	-0/34	-0/21	0/76	1/32
Forth	Control	0/57	0/33	459,4	56/50	-6/20	-0/42	-0/28	0/71	1/41
	blame					4/74	0/30	0/20	0/78	1/28
	comprehensibility					-3/71	0/27	-0/17	0/70	1/43
	agreement					-3/33	-0/23	-0/14	0/86	1/17
Fifth	Control	0/59	0/34	458,5	47/81	-5/39	-0/37	-0/25	0/67	1/49
	blame					3/45	0/23	0/16	0/68	1/46
	comprehensibility					-3/44	-0/25	-0/16	0/69	1/45
	agreement					-3/08	-0/21	-0/13	0/85	1/18
	rumination					2/96	0/20	-0/14	0/67	1/48
Sixth	Control	0/60	0/36	457,6	42/94	-5/26	-0/36	0/24	0/67	1/49
	blame					3/80	0/25	0/17	0/68	1/47
	comprehensibility					-2/73	-0/20	-0/12	0/66	1/51
	agreement					-3/54	-0/24	-0/14	0/83	1/20
	rumination					-3/52	0/24	0/16	0/66	1/52
	rational					-3/54	-0/21	-0/13	0/91	1/09
seventh	Control	0/61	0/37	456,7	38/06	-4/32	-0/31	-0/21	0/61	1/64
	blame					3/64	0/24	0/16	0/67	1/48
	comprehensibility					-2/79	-0/20	-0/13	0/66	1/51
	agreement					-3/54	-0/24	-0/14	0/83	1/20
	rumination					3/36	0/23	0/15	0/65	1/53
	rational					-3/36	-0/20	-0/13	0/91	1/09
	duration					2/44	0/19	0/10	0/82	1/22
eighth	Control	0/62	0/38	455,8	34/04	-4/06	-0/29	-0/19	0/60	1/66
	blame					3/22	0/21	0/15	0/65	1/53
	comprehensibility					-2/45	-0/18	-0/11	0/65	1/54
	agreement					-3/20	-0/22	0/13	0/82	1/22
	rumination					3/37	0/23	0/15	0/65	1/54
	rational					3/18	-0/19	-0/12	0/91	1/10
	duration					2/29	0/18	0/09	0/82	1/22
	approval					2/07	-0/15	-0/09	0/76	1/31

Discussion

In the present study, the role of emotional schema dimensions in predicting borderline personality traits in the non-clinical population was investigated.

The results showed that there is a significant relationship between emotional schemas and borderline personality traits. From the dimensions of Emotional schemas, affirmation, comprehensibility, simplistic attitude to emotion, values, control, agreement, acceptance have a negative and significant relationship with borderline personality traits and emotional schemas related to rumination, guilt and shame, blame, Numbness, duration, had a positive and significant relationship with borderline personality traits. These results are in line with the findings of Leahy et al., (2011)

The results of the present study showed that the emotional schemas of control, perception, guilt and shame, approval, blame, duration, Predict the agreement and rationality of borderline personality traits, which is consistent with Leahy's (2011) study. Lehi in his regression study on the dimensions of emotional schema with borderline personality traits showed 9 schemas including mental rumination, understandable being, affirmation, numbness, blame, simplistic attitude to emotion, control, vain values and rationality as predicting traits of borderline personality, that 6 of these obtained schemas in Leahy's research were also present in this study. Common schemas with Leahy research include mind rumination, control, affirmation, comprehension, rationality and blame. In the present study along with these 6 schemas, duration and agreement schemas also played a role in predicting the symptoms Borderline-characters. In explaining this finding, we can say that according to the model of emotional schemas, people with borderline personality believes that their emotions are uncontrollable and will get out of control if emotions arise. Blame others for experiencing their feelings, believe their emotions are incomprehensible, less people experience such emotions, rumble, have less emphasis on logic, and receive less approval. And will last for a long time, which will interfere with the individual's functions, thus they will experience more symptoms of borderline personality (Leahy, 2015).

In other words, the negative content of emotional schemas and negative beliefs about emotion will directly lead them to borderline personality traits. (Leahy et al., 2011). It is the concept of emotional stability and predictability in which patients predict that unpleasant and even pleasant long-term emotions will continue longer than they expected (Leahy et al., 2011). On the other hand, if one believes that others accept their emotions (affirmation) or their emotions have meaning (comprehensibility), instead of trying to suppress they will try to accept the emotions and thus the possibility of developing mental disorders will be reduced. (Leahy & partners, 2011).

Also in the Greenberg emotion therapy model, emotion is considered as a form of information processing, that because of it the person experiences the meaning of events. (Greenberg, 1998) believes that emotional schemas with using emotional content of meanings or cognitions constitute an organizing structure. Based on the model of emotional schemas about how people conceptualize emotions and how do them act (how to act when unpleasant emotions are aroused) influences experiencing emotions (Leahy, 2002). In this regard, the present study shows that people who they have positive emotional schemas such as perception and affirmation in the other words they have healthier underlying beliefs and deal effectively with Exciting events, subsides, the symptoms of the disorder do not appear or appear less severely. Also people who have Negative schemas such as blame, guilt, and shame deal inappropriately with emotional experiences that in borderline personality disorders these inappropriate patterns of dealing with emotional experiences is prominent. In the present study, it was found that the Emotional schema of blame plays a role in predicting borderline personality traits, which is consistent with studies of Niedtfeld and colleagues (2010), Arntz and Veen (2001), and Meyer Pilkonis and Beavers (2004).

In this regard, Saduk and Zadok (2014) suggest that people with borderline personality tend to know the others as malicious people and cause of their negative emotions. Discredited childhood environment and disturbed family relationships are involved in the problems of these patients and lead to misinterpretation of the intentions and behaviors of those around. On the other hand, the existence of paranoid signs in these people indicates the tendency is to blame and be suspicious of those around you. Also ruminant emotional schema with Borderline personality traits has a positive relationship that the results of the present study in line with Thomas (2010) and Selby, Anestis, Bender and Joiner (2009) researches, that indicates a direct relationship between mental rumination and borderline personality traits. In general, it can be said that emotional schemas can play a role in predicting borderline personality traits that the results have been in line with the only research in this field. Using the model of emotional schemas, the same crises and the same emotions in each person can lead to different consequences. Hence in Boundary personality disorders case-conceptualizations, role of emotional schemas can be emphasized in case of application and therapy programs for Boundary personality disorders for considering the role of emotional schemas.

Conclusion

In general, it can be said that emotional schemas can play a role in predicting borderline personality traits that the results have been in line with the only research in this field. Using the model of emotional schemas, the same crises and the same emotions in each person can

lead to different consequences. Hence in boundary personality disorders case-conceptualizations, the role of emotional schemas can be emphasized in case of application and therapy programs for Boundary personality disorders for considering the role of emotional schemas.

The limitations of this study include the cross-sectional nature of the study, in which scientific conclusions are difficult, but we should keep in sight that solidarity is rooted in causality and in fact causality requires solidarity (Sadeghpour, Mohammadkhani & Hassani, 2015). Another limitation of the present study due to the needed high volume of sample population, research is done on non-clinical population, and in future research, it is better to do the present research on the clinical population as well and other tools should be used along with the questionnaire as a self-assessment tool.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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