

Research Paper

The Pathology of Borderline Personality Disorder Symptomatology in a Nonclinical Sample: The Role of Mental Pain, Cognitive Emotion Regulation, Self-compassion, and Depression



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ABSTRACT

Objectives: Patients with borderline personality disorder (BPD) often develop a certain depression that may be accompanied by “mental pain.” A negative self-concept, aversive chronic emotions, and pervasive helplessness characterize mental pain. This research aims to explore the pathology of BPD symptomatology in a nonclinical sample. Also, the role of mental pain, cognitive emotion regulation, self-compassion, and depression are assessed.

Methods: Following a correlational study, 300 university students were selected via the multi-stage random cluster sampling method. The study data were collected by the personality assessment inventory-borderline features scale, Orbach and Mikulincer mental pain questionnaire, cognitive emotion regulation questionnaire, self-compassion scale (SCS-SF), and Beck depression inventory version 2.

Results: Multiple regression analyses indicated that components of putting into perspective, rumination, loss of control, refocus on planning, catastrophizing, irreversibility, somatic, and isolation ($\Delta R^2=0.507$, $P<0.001$) significantly predicted BPD symptomatology.

Discussion: The results support the biosocial model dimensions in an Iranian context. In addition, it shows a strong association between mental pain, cognitive emotion regulation, self-compassion, depression, and BPD symptoms.

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Highlights

- The main characteristics of borderline personality disorder (BPD) are inconsistency in interpersonal relationships, self-concept, emotions, and impulsivity.
- Two basic components of BPD psychopathology are mental pain and difficulty in emotion regulation.
- Mental pain is a negative sense of self due to losses and trauma.
- High levels of mental pain, depression, negative dimensions of self-compassion, and frequent use of maladaptive cognitive strategies of emotion regulation correlate with the severity of BPD symptoms.

Plain Language Summary

Borderline personality disorder (BPD) is a common personality disorder that causes many problems in important areas of life, such as interpersonal and family relationships. BPD is associated with difficulty in regulating emotion, self-harm behaviors such as suicide attempts and self-injury, impulsivity, and problems in identity structure. BPD may be due to traumatic experiences and maladaptive attachment styles in childhood, interpersonal sensitivity, difficulties in social cognition, and irregularities in emotion regulation. Different factors can play a role in the severity of the symptoms these people experience. This study aims to predict BPD symptoms based on cognitive emotion regulation, mental pain, depression, and self-compassion in a nonclinical sample. The severity of mental pain, depression, and using maladaptive cognitive strategies of emotion regulation such as catastrophizing, self-blame, other blame, and rumination are associated with increased symptoms. Also, the lower the self-compassion components, such as common humanity, self-kindness, and mindfulness, the more severe the symptoms of BPD. Different treatments, such as cognitive-behavioral therapy, dialectical therapy, schema therapy, and mentalization-based therapy, can reduce the severity of symptoms in these people.

Introduction

Borderline personality disorder (BPD) is a disease in which pathological personality traits in negative affect, emotional responsibility, anxiety, depression or separation insecurity, and behavioral features are observed [1].

About 8% to 10% of the patients report self-harm, repeated suicidal thoughts, and suicide symptoms [2]. In addition, BPD reduces effective interpersonal relationships, causes problems in regulating emotional moods, and disrupts cognitive processes needed for memory and learning acquisition [3]. As a result, BPD patients may face problems with psychological, cognitive, and social functioning, which underpin a successful academic experience at the university [4]. Studies have shown the prevalence of BPD among university students between 0.05% and 32.1% [5]. There are different pathologic models for BPD [6, 7]. The models' common components include traumatic experiences and maladaptive attachment styles, interpersonal sensitivity, social cognition difficulties, and emotion regulation irregularities [8].

One of the main features of PBD is the difficulty in emotion regulation [9]. Patients with PBD often experience negative

emotions like jealousy, abandonment, rejection, hatred, anger, loneliness, shame, and guilt [10]. They show inappropriate reactions to emotions, like angry and impulsive outbursts, impulsive behavioral responses, and unstable feelings [11]. Cognitive strategies play an important role in emotion regulation [11]. BPD patients use cognitive strategies of maladaptive emotion regulation (avoidance, suppression, and rumination) more than other mechanisms (acceptance, cognitive reassessment, problem-solving) [12]. Inefficient emotional cognitive regulation can be a feature of PBD [13].

According to several studies, mental pain is the main dimension in the psychopathology of PBD [14]. Mental pain as a subjective experience differs from negative emotions and moods, like anxiety and depression. When a person becomes helpless to meet their basic needs and does not expect predicted changes in the future, these negative emotions can become a more general and chronic experience of intolerable mental pain [15, 16]. Although some BPD diagnostic criteria in DSM-5, including chronic emptiness, emotional instability, and frequent suicidal behavior, indicate increased mental pain, they do not directly indicate BPD-specific mental pain aspects [17]. The adverse emotional problems, severe anger, dissociation, the sense of emptiness, and anxiety linked to

suspiciousness in BPD can result in chronic underlying mental pain (MP) [14].

Self-compassion as a self-regulatory strategy can oppose negative emotions and self-criticism associated with one-self, like shame [18]. Neff has mentioned three components of self-compassion that have inner relationships with each other, including self-kindness versus self-judgment, common humanity experience versus isolation, and over-identification versus mindfulness [19]. A meta-analysis showed that these factors help adaptive self-regulation processes [20]. However, BPD disrupts emotion regulation because it is linked to childhood traumas, neglect, and abuse [21]. “Discredited environments” in childhood affect BPD’s future development in adolescence by preventing emotion regulation and self-compassion development [22]. Self-compassion is not related to BPD symptoms, and improving self-compassion can reduce BPD-related emotional pain [11].

Evidence regarding the adaptive and maladaptive cognitive emotion regulation (CER) strategies in BPD is insufficient. Therefore, this study aims to explore the pathology of BPD, and the results of this study could smooth the way for clinical interventions for affected individuals. Furthermore, recent research findings show that an unreliable environment and difficulties in regulating emotion can provide grounds for depression, mental pain, and feelings of rejection in people with BPD. Therefore, the current study intends to investigate the pathology of BPD in a nonclinical sample based on mental pain, emotional regulation strategies, self-compassion, and depression.

Materials and Methods

Study participants and procedure

This research was a descriptive-correlational study. The study sample consisted of 300 Razi University students (147 men with a Mean±SD age of 22.52±2.95 year) and (153 women with a Mean±SD age of 20.70±1.87 y year). Their age range was 18 to 35 years (mean=21); they were selected using cluster sampling. First, 5 faculties were randomly selected from Engineering, Humanities, and Basic Sciences. Then two classes were randomly chosen from each faculty and participated in the study.

Study measures

BPD symptomatology

The personality assessment inventory-borderline features scale [23] questionnaire contains 24 items scored on a 4-point Likert scale. Its reliability is evaluated using the test retest

method, yielding acceptable results ($r=0.86$) [23]. In addition, it presented appropriate discriminant and convergent validity in clinical and nonclinical samples [24]. A Cronbach α of 0.86 is reported for this scale.

Beck depression inventory version 2 (BDI-II)

This self-report tool contains 21 items intended to evaluate characteristic attitudes and presentations of depression [25]. The values reported for internal consistency of this scale range from 0.73 to 0.92 (mean=0.86) [26]. Garcia-Batista et al. (2018) reported a Cronbach α of 0.80 for the whole BDI-II, 0.78 for the cognitive dimension, 0.77 for the somatic dimension, and 0.70 for the affective dimension [27]. In this study, the Cronbach’s α was 0.90.

Cognitive emotion regulation (CER) questionnaire

Following a self-report design, this 36-item questionnaire intends to evaluate using 9 CER strategies often used by individuals following negative events [28]. Its scoring system is based on a 5-point Likert scale: Never (1) to always (5). Using a sample of general adults, test-retest correlations of subscales ranged from 0.48 (refocus on planning) to 0.65 [29]. In this study, the Cronbach’s α was 0.94.

Orbach and mikulincer mental pain (OMMP)

This 44-item scale evaluates mental pain [15] on a 5-point Likert scale (1=strongly disagree, 2=disagree, 3=agree to some extent, 4=agree, 5=strongly agree). Orbach et al. (2003) reported the Cronbach α coefficients as 0.95 for irreversibility, 0.93 for narcissist wounds, 0.95 for loss of control, 0.85 for freezing, 0.93 for emotional flooding, 0.79 for self-estrangement, 0.80 for confusion, 0.80 for social distancing, and 0.75 for emptiness [15]. Karami et al. [30] reported a Cronbach α 0.96 for the whole OMMP.

Self-compassion scale-short form (SCS-SF)

The scale has 12 items and evaluates the same 6 components of self-compassion as the SCS-LF. Items 1, 4, 8, 9, 11, and 12 are reverse-scored [31]. Nevertheless, in a study performed in Spain on 271 professionals with a mean age of 38.43 years (67.9% women), the Cronbach’s α was reported to be 0.85 for the total SCS-SF, ranging from 0.71 to 0.77 for the 6 subscales, which is an exception [32].

Results

As it can be seen in the Table 1, the Mean±SD of the research variables are given. Independent t-test results showed that there is a difference between male and female students in these components (self-blame, rumina-

Table 1. Mean±SD and comparison of groups using the independent t-test

Variables	Mean±SD			t (P)	The Kolmogorov-Smirnov	
	Male	Female	Total		Statistic	P
BPD symptomatology	81.62±15.78	77.45±12	79.49±14.11	2.58(0.010)	0.114	(0.131)
Depression	30.99±9.57	30.96±9.68	30.98±9.61	0.023(0.98)	0.116	(0.200)
Self-blame	11.10±3.49	12.43±3.29	11.78±3.45	-3.37(<0.001)	0.147	(0.098)
Other blame	9.44±3.04	9.84±3.14	9.65±3.10	-1.13(0.25)	0.125	(0.200)
Rumination	10.87±3.33	12.42±2.64	11.66±3.09	-4.46(<0.001)	0.144	(0.115)
Catastrophizing	10.14±3.20	10.85±3.11	10.50±3.17	-1.95(0.053)	0.148	(0.093)
NCER	41.56±10.56	45.56±9	43.60±9.98	-3.52(<0.001)	0.139	(0.146)
Acceptance	10.90±3.51	12.22±2.97	11.58±3.30	-3.53(<0.001)	0.130	(0.200)
RP	11.80±3.96	13.51±3.01	12.67±3.60	-4.47(<0.001)	0.143	(0.121)
Positive refocus	12.89±4.29	14.83±3.17	13.88±3.88	-4.25(<0.001)	0.141	(0.131)
Positive reappraisal	12.69±4.64	14.24±3.61	13.48±4.21	-3.32(<0.001)	0.158	(0.055)
PIP	12.17±4.31	13.46±3.32	12.83±3.88	-2.88(<0.004)	0.125	(0.200)
PCER	60.46±18.96	68.28±12.73	64.45±16.53	-4.206(<0.001)	0.174	(0.021)
Emptiness	59.35±10.82	61.56±10.11	60.48±10.51	-1.82(0.069)	0.136	(0.164)
EF	26.59±6.38	26.30±5.93	26.44±6.15	0.409(0.68)	0.161	(0.045)
LC	24.23±5.49	25.71±4.14	24.99±4.89	-2.61(<0.009)	0.160	(0.047)
Irreversibility	23.08±5.49	23.26±5.25	23.18±5.36	-0.289(0.77)	0.148	(0.021)
SD/SE	23.57±5.35	24.66±4.28	24.13±4.85	-1.94(0.053)	0.115	(0.181)
Freezing	14.37±3.60	13.26±3.35	13.81±3.51	2.75(<0.006)	0.084	(0.200)
OMPP	171.22±32.09	174.77±29.34	173.03±30.72	-1(0.31)	0.126	(0.092)
Self-kindness	6.48±2	6.71±1.72	6.60±1.86	-1.06(0.28)	0.087	(0.200)
Self-judgment	5.44±2.04	5.64±1.74	5.54±1.89	-0.90(0.36)	0.104	(0.200)
Common humanity	6.48±2.05	6.32±1.75	6.40±1.90	70(0.47)	0.145	(0.026)
Isolation	5.47±1.99	5.43±2.07	5.45±2.03	0.16(.87)	0.130	(0.072)
Mindfulness	6.75±2.06	6.73±1.62	6.74±1.85	0.07(.93)	0.119	(0.145)
Over-identified	5.64±2.14	6.62±1.72	6.14±2	-4.35(<0.001)	0.113	(0.200)

Abbreviations: BPD: Borderline personality disorder; NCER: Negative cognitive emotion regulation strategies; RP: Refocus on planning; PIP: Putting into perspective; PCER: Positive cognitive emotion regulation; LC: Loss of control; EF: Emotional flooding; SD/SE: Social distancing/self-estrangement; OMPP: Orbach and Mikulincer mental pain.

Table 2. Correlations between depression and cognitive emotion regulation strategies with BPD symptomatology

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1												
2	0.32**											
3	0.38**	0.24**										
4	0.30**	0.65**	0.32**									
5	0.40**	0.59**	0.43**	0.60**								
6	0.45**	0.81**	0.63**	0.82**	0.84**							
7	-0.20**	-0.49**	-0.40**	-0.63**	-0.48**	-0.64**						
8	-0.15**	-0.37**	-0.15*	-0.42**	-0.30**	-0.40**	0.52**					
9	-0.12*	-0.42**	-0.13*	-0.49**	-0.32**	-0.44**	0.54**	0.85**				
10	-0.18**	-0.38**	-0.21*	-0.42**	-0.30**	-0.38**	0.55**	0.84**	0.86**			
11	-0.19**	-0.39**	-0.21**	-0.45**	-0.43**	-0.47**	0.63**	0.70**	0.66**	0.78**		
12	-0.28**	-0.47**	-0.22*	-0.54**	-0.41**	-0.53**	0.73**	0.90**	0.90**	0.93**	0.87**	
13	0.25**	0.42**	0.31**	0.51**	0.41**	0.56**	-0.51**	-0.52**	-0.52**	-0.51**	-0.56**	-0.60**

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Abbreviations: BPD: Borderline personality disorder; NCER: Negative cognitive emotion regulation strategies; PCER: Positive cognitive emotion regulation.

**Correlation is significant at 0.01, *Correlation is significant at 0.05.

Note: 1=Depression, 2=Self-blame, 3=Other blaming, 4=Rumination, 5=Catastrophizing, 6=NCER, 7=Acceptance, 8=Refocus on planning, 9=Positive refocus, 10=Positive reappraisal, 11=Putting into perspective, 12=PCER, 13=BPD symptomatology.

tion, negative cognitive emotion regulation, acceptance, refocus on planning, Positive refocus, putting into perspective, positive cognitive emotion regulation, loss of control, freezing and over-identified items).

The results of Table 2 show that there is a positive and significant correlation between BPD symptomatology and depression, self-blame, other blaming, rumination, catastrophizing, and NCER, in addition, there is a negative and significant correlation between BPD symptomatology and Acceptance, refocus on planning, positive refocus, positive reappraisal, putting into perspective, and PCER.

The results of Table 3 show that there is a positive and significant correlation between BPD symptomatology and emptiness, emotional flooding, loss of control, Irreversibility, SD/SE, freezing, ompp, self-judgment, Isolation, and over-identified. In addition, there is a negative and significant correlation between BPD symptomatology and self-kindness, mindfulness, and common humanity.

Table 4 shows a summary of the regression results. Positive cognitive emotion regulation, negative cognitive emotion regulation, mental pain, total score of the self-judgment, isolation and over-identified (SIO) accounted for a significant amount of variance in BPD symptomatology, $\Delta R^2=0.470$, $F_{(4, 295)}=65.425$, $P<0.001$. There was a significant positive relation between a negative cognitive emotion regulation $\beta=0.245$, $P=0.001$, mental pain $\beta=0.185$, $P=0.001$, total score of the self-judgment, SIO $\beta=0.108$, $P=0.05$ and BPD symptomatology, there was also a significant negative relation between positive cognitive emotion regulation and BPD symptomatology, $\beta=0.465$, $P<0.001$.

Table 5 shows a summary regression of the results. Rumination, loss of control (LC), catastrophizing, irreversibility, somatic and isolation accounted for a significant amount of variance in BPD symptomatology, $\Delta R^2=0.507$, $F_{(8, 291)}=37.353$, $P<0.001$. There was a significant positive relation between rumination $\beta=0.115$, $P=0.05$, LC $\beta=0.297$, $P=0.001$, catastrophizing $\beta=0.179$,

Table 3. Correlations between mental pain and self-compassion with BPD symptomatology

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1															
2	0.76**														
3	0.82**	0.71**													
4	0.76**	0.74**	0.73**												
5	0.74**	0.75**	0.65**	0.65**											
6	0.52**	0.59**	0.49**	0.61**	0.44**										
7	0.94**	0.89**	0.87**	0.87**	0.83**	0.66**									
8	-0.31**	-0.34**	-0.35**	-0.26**	-0.13*	-0.24**	-0.31**								
9	0.20**	0.25**	0.23**	0.22**	0.18**	0.23**	0.25**	-0.48**							
10	-0.21**	-0.22**	-0.22**	-0.14*	-0.21**	-0.22**	-0.20**	0.51**	-0.32**						
11	0.26**	0.31**	0.23**	0.23**	0.24**	0.25**	0.30**	-0.36**	0.38**	-0.31**					
12	-0.31**	-0.28**	-0.36**	-0.24**	-0.19**	-0.20**	-0.31**	0.54**	-0.35**	0.50**	-0.41**				
13	0.20**	0.34**	0.11*	0.23*	0.28**	0.35**	0.28**	-0.33**	0.39**	-0.23**	0.47**	-0.32**			
14	0.28**	0.39**	0.24**	0.27**	0.28**	0.36**	0.35**	-0.25**	0.74**	-0.34**	0.79**	-0.45**	0.79**		
15	-0.32**	-0.34**	-0.38**	-0.25**	-0.20**	-0.21**	-0.32**	0.82**	-0.32**	0.81**	-0.42**	0.82**	-0.33**	-0.451**	
16	0.25**	0.28**	0.24**	0.23**	0.30**	0.31**	0.36**	-0.19*	0.25**	-0.25**	0.32**	-0.30**	0.19**	0.23**	-0.25**

Abbreviations: BPD: Borderline personality disorder; OMPP: Orbach and Mikulincer mental pain.

*Correlation is significant at 0.05, **Correlation is significant at 0.01.

Note: 1=Emptiness, 2=Emotional flooding, 3=Loss of control, 4=Irreversibility, 5=SD/SE, 6=Freezing, 7=OMPP, 8=Self-kindness, 9=Self-judgment, 10=Common humanity, 11=Isolation, 12=Mindfulness, 13=Self-judgment, isolation and over-identified (SIO), 15=Self-kindness, mindfulness and common humanity (SMCH), 16=BPD symptomatology.

Table 4. Summary of regression results of total score of the mental pain, CER strategies, self-compassion, depression variables, and BPD symptomatology

Variables	ΔR^2	B	SE	B	t	P	Collinearity Statistics	(DW)	
Step 4 (constant)		99.60	6.72		14.80	<0.001	Tolerance	VIF	
PCER	0.364	-0.397	0.047	-0.465	-8.38	<0.001	0.584	1.712	
NCER	0.442	0.346	0.090	0.245	-3.86	<0.001	0.448	2.234	1.87
OMPP	0.460	0.086	0.024	0.185	3.53	<0.001	0.636	1.573	
SIO	0.470	0.328	0.142	0.108	2.312	<0.05	0.830	1.205	

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Abbreviations: PCER: Positive CER; NCER: Negative CER; OMMP: Orbach and Mikulincer mental pain; SIO: Total score of the self-judgment, isolation, and over-identified.

$P=0.002$, irreversibility $\beta=0.195$, $P=0.005$, somatic $\beta=0.138$, $P=0.006$, isolation $\beta=0.102$, $P=0.05$, and BPD symptomatology, There was also a significant negative relation between putting into perspective (PIP), $\beta=-0.334$, $P=0.001$, Refocus on planning (RP) and BPD symptomatology, $\beta=-0.239$, $P<0.001$.

Discussion

This study aimed to understand the pathology of BPD symptomatology and the role of mental pain, CER, self-compassion, and depression in a nonclinical sample. The Pearson correlation showed a significant association between depression and BPD symptomatology ($P<0.01$). These findings are in accordance with these findings.

Depressive symptoms of BPD are often temporary and caused by interpersonal stress, for instance, following a situation that raises the feeling of rejection, which usually disappears when the relationship is restored. In addition, depressive symptoms of those suffering from BPD may contribute to expressing feelings (e.g. anger, frustration, hatred, helplessness, powerlessness, disappointment), which often cannot be expressed more adaptive. In these cases, “depression” indicates a maladaptive endeavor to communicate unpleasant feelings about a person or condition. In such situations, antidepressant treatment is not effective [33].

In this study, self-blame, catastrophizing, other blame, and rumination strategies presented the strongest associations with BPD. According to the evidence, positive

Table 5. Summary of regression results of the subscales mental pain, CER strategies, self-compassion, depression variables, and BPD symptomatology

Variables	ΔR^2	B	SE	B	t	P	Collinearity Statistics	(DW)	
Step 8 (constant)		114.35	6.12		18.67	<0.001	Tolerance	VIF	
PIP	0.323	-1.212	0.213	-0.334	-5.691	<0.001	0.492	2.032	
Rumination	0.403	0.524	0.263	0.115	1.994	<0.05	0.510	1.959	
LC	0.431	0.854	0.186	0.297	4.600	<0.001	0.108	2.451	
RP	0.467	-0.867	0.224	-0.239	-3.863	<0.001	0.445	2.249	1.94
Catastrophizing	0.478	0.794	0.259	0.179	-3.067	<0.002	0.500	2.001	
Irreversibility	0.488	0.513	0.180	0.195	2.853	<0.005	0.364	2.750	
Somatic	0.498	0.767	0.279	0.138	2.749	<0.006	0.676	1.478	
Isolation	0.507	0.709	0.313	0.102	2.262	<0.05	0.833	1.200	

PIP: Putting into perspective; LC: Loss of control; RP: Refocus on planning.

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strategies such as positive refocus, acceptance and positive reappraisal have been shown to be fewer (or negative) related to BPD. These findings are in accordance with findings of the other researchers [12, 13].

In summary, the pattern of emotion regulation strategy found in BPD in the present research can potentially be explained as a function of the biological vulnerability and an invalidating environment, as theorized by Linehan [34]. The biological vulnerability and invalidating environment appear to be associated with the non-acceptance of emotional experiences and compensatory strategies to avoid, suppress, control, or negate [i.e. self-criticize] their occurrence. This self-invalidation leads individuals with BPD to rely on the environment as a source of information with respect to feelings, emotions, and appraisal [35].

The Pearson correlation showed a significant association between MP and BPD symptomatology ($P < 0.01$) [17, 18]. In explaining these results, we can say that patients with BPD suffer from a spectrum of severe dysphoric disorders, which sometimes result in aversive tension, such as sorrow, rage, shame, terror, panic, chronic feelings of emptiness, and loneliness. These patients can be differentiated from others using the multifaceted emotional pain overall degree [36]. Mental pain is a response to adaptation against repetitive traumatic experiences in childhood, like losing a parent, witnessing violence, parental mental illness, and physical, emotional, and sexual abuse [37].

The Pearson correlation showed a negative association between positive components of BPD and self-compassion ($P < 0.05$). There is also a positive relationship between the negative components of self-compassion and BPD ($P < 0.01$). These findings are in accordance with these findings [11]. In explaining these results, it can be stated that a nonjudgmental, nonpartisan, unconditionally accepting, compassionate attitude can heal our emotional pain by reunifying naturally holistic knowledge and energy, making us more sympathetic toward others without abuse. Communicating authentically, sincerely, compassionately, and empathetically with ourselves empowers us to connect with others in a psychologically healthy and loving way [38]. On the contrary, a good relationship with others allows us to reach inner peace, mainly through neutralizing a false sense of conflict and division between and within the person and relational dimensions of our energy [39].

This study suffers from some limitations. Firstly, it has a self-report design to collect data on self-compassion, psychological pain, depression, and BPD. Secondly, a

nonclinical population investigated the relationship between MP, CER, self-compassion, and depression with BPD symptomatology. Third, the data set comprised predominantly Iranian individuals aged 18-35 years. Finally, the measurement tools were long and may cause participants boredom and affected the study results.

Our research first explored the relationship between mental pain, cognitive emotion regulation, self-compassion, and depression with BPD symptomatology. Future studies should assess the role of mental pain, cognitive emotion regulation, self-compassion, and depression to better understand BPD. Understanding the role of mental pain, cognitive emotion regulation, self-compassion, and depression in BPD in various clinical cases and subgroups indicate the requirement for specific evaluation and treatment methods among these cases. Further studies can evaluate levels of mental pain, cognitive emotion regulation, self-compassion, and depression in females and males with BPD to determine whether significant differences exist.

Conclusion

The authors propose a therapeutic stance to co-exist between major depressive disorder and borderline personality disorder, which can promote reflection on the patient's and others' minds by a psychological approach like cognitive behavior therapy, dialectical behavior therapy, mindfulness, interpersonal psychotherapy, and mentalization-oriented treatment. This reflection may decrease the repetition of the maladaptive ways of behaving, interacting, and thinking, leading to depression and depressive presentation of BPD cases.

Ethical Considerations

Compliance with ethical guidelines

This study was approved after review and presentation in the Ethics Committee of [Kermanshah University of Medical Sciences](#) (Code: IR.KUMS.REC.1396.399) and obtaining written consent to participate.

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Authors' contributions

Conceptualization and design: Mohammad Javad Bagian Kulehmarzi, Moslem Rajabi, Sajad Khanjani and Jafar Sarani Yaztappeh; Analysis and data interpretation:

Mohammad Javad Bagian Kulehmarzi, Moslem Rajabi and Sajad Khanjani; Drafting of the manuscript: Jafar Sarani Yaztappeh, Mohammad Javad Bagian Kulehmarzi, Mohamad Davood Mohebi, and Moslem Rajabi; Critical revision of the manuscript for important intellectual content: Jafar Sarani Yaztappeh, Sajad Khanjani, Mohamad Davood Mohebi, and Moslem Rajabi; Obtaining funding, administrative, technical, or material support, data acquisition, statistical analysis, supervision, and final approval: Mohamad Davood Mohebi and Moslem Rajabi.

Conflict of interest

The authors declared no conflict of interest.

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