

# Emotion Dysregulation in Patients with Major Depressive Disorder and Borderline Personality Disorder

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## Abstract

Emotional dysregulation is a central topic of interest in many clinical studies. It plays a vital role in making or breaking interpersonal and interpersonal relationships in clinical populations as well as healthy controls. This study seeks to investigate the nature, intensity and extensity patterns of emotional regulation in patients diagnosed as major depression (N: 254) and borderline personality disorder (N: 69). By using a one-shot cross sectional purposive sample survey design, this hospital-based study targeted a random sample of subjects from both gender between 18-30 years. Following clinical interviews and diagnosis as per the chosen inclusion and exclusion criteria, participants were recruited based on ICD-10 criteria and after they secured a minimum cut-off score on McLean's Screening Instrument for Borderline Personality Disorder and Hamilton Depression Rating Scale. The selected participants were administered Difficulties in Emotion Regulation Scale and Cognitive Emotion Regulation Questionnaire. Results show significantly high scores on emotion regulation in patients with borderline personality disorder than major depressive disorder ( $p < 0.05$ ). These differences are maintained across all domains except for cognition mediated areas like 'awareness', 'self-blame', 'acceptance', 'rumination', and 'positive refocusing'. Associated variables like gender and marital status appear to influence only some aspects of non-cognitive emotional dysregulation. The findings are discussed along with their implications for therapy in the context of cultural factors unique to Indian settings.

**Key Words:** Emotional dysregulation, Major Depression, Borderline Personality Disorder, Self-Blame, Rumination.

## Introduction

Emotional dysregulation is a term used in mental health settings to refer to emotional responses that are poorly modulated. It may manifest as anger outbursts, acts of aggression or destructiveness against self or others, and can result in a breakdown of interpersonal relationships. Emotional dysregulation is implicated as being at the core of major depressive disorder and borderline personality disorder. It is shown that in psychiatry disorders including anxiety, depression, eating disorder and substance-related disorders most commonly

used strategy out of six strategies (problem solving, reappraisal, acceptance, suppression, avoidance and rumination) was seen for rumination. Avoidance, problem solving and suppression were used with medium frequency where as reappraisal and acceptance used least. <sup>1</sup>

It is shown that individuals having major depressive disorder less differentiated emotional experiences than healthy controls but only for unhelpful emotions.<sup>2</sup> Further, emotion regulation difficulties in female patients with major depressive disorder are found to be greater in comparison to normal healthy controls <sup>3</sup>. Although there is extensive research exploring the relationships between these processes and depression, the research on other unhelpful emotions is sparse.

Based on self-report measures, investigators have identified a triad of emotional functioning-emotion

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dysregulation, distress tolerance, and experiential avoidance in young adult out patients with borderline personality disorder <sup>4</sup>. Emotional reactivity to social rejection and negative evaluation in patients with borderline personality disorder was found to be higher than in comparable healthy controls <sup>5</sup>. Taking these facts into account, our aim is to identify emotion dysregulation in major depressive disorder and borderline personality disorder, and compare emotion dysregulation in major depressive disorder and borderline personality disorder. Also we investigate emotion dysregulation in major depressive disorder and borderline personality disorder in relation to key socio-demographic correlates like gender, marital status, and occupation.

**Material and Method**

The clinical samples were recruited based on the <sup>6</sup>Diagnostic Criteria for Research-10 . 323 participants with the age range of 18-30 were recruited out of which 69 borderline personality disorder and 254 major depressive disorder. Those scored 7 or more on MSI-BPD<sup>7</sup> and HAM-D were included in the study.<sup>8</sup> Patients with intellectual disability, psychosis, bipolar disorder, substance dependence or abuse disorder and presence of any serious physical disease, head injury and neurological disorder. Personal details were collected using a socio-demographic data sheet. There were statements on assuring confidentiality, leaving choice of participation to the respondents, and acknowledging ones willingness or otherwise to participate in the study.

Self report questionnaires such as MSI-BPD and HAM-D were used to screen borderline personality disorder and measure depressive disorder patients <sup>9,10</sup> . Difficulties in Emotion Regulation Scale was used to measure difficulties in emotion regulation difficulties in the following six domains of emotion regulation: Non-acceptance, Goals, Impulse, Awareness, Strategies and Clarity. <sup>11</sup> Similarly cognitive emotion regulation questionnaire was used to measure cognitive emotion regulation difficulties in nine dimensions present in the scale are self blame, blaming others, acceptance, refocus on planning, positive refocusing, rumination, positive reappraisal, putting into perspective and catastrophizing.<sup>11</sup>

**Results**

**(i) Emotion regulation in major depressive disorder and borderline personality disorder:**

Results of comparative overall scores on emotion dysregulation in persons with major depressive disorder and borderline personality disorders show gross difficulties in emotion regulation for both the clinical populations. If the patients with borderline personality disorder (N: 69; Mean: 103.48; SD: 7.72) score in ‘moderate-severe’ range of norms on DERS, the sample with major depressive disorder do not lag much behind (N: 254; Mean: 93.67; SD: 8.60). The same is true for the trends on cognitive emotion regulation between the two groups.

**Table 1: Distribution of Mean Scores and SD across Tests & Conditions**

Tools	Items	Score	BPD (N: 69)	MD (N: 254)	Probability
DERS	36	36-180	103.48 (7.72)	93.67 (8.60)	t: 8.5809; Df: 321; p: 0.0001
CERQ	36	36-180	100.99 (7.32)	95.70 (7.60)	t: 5.1670; Df: 321; p: 0.0001

(KEY: BPD: Borderline Personality Disorder; MD: Major Depression)

**(ii) Domain-wise profiles in emotion regulation between major depressive disorder and borderline personality disorder**

Wherein a domain-wise analysis of score profiles is undertaken on DERS, the patients with borderline

personality disorder consistently score high across all areas except ‘non-acceptance’ (N: 69; Mean Score: 16.28; SD: 2.44) wherein those diagnosed as major depressive disorder score relatively lower (N: 254; Mean Score: 15.15; SD: 1.87).

**Table 2 : Distribution of Mean Scores and SD across Domains on DERS**

Sample	N	NA (6)	G (5)	ID (6)	A (6)	S (8)	C (5)	Total (36)	Probability→
BPD	69	16.28 (2.44)	14.93 (2.20)	20.26 (4.22)	15.14 (1.82)	24.03 (2.89)	13.35 (1.79)	103.48 (7.72)	<0.001; VHS;
MD	254	15.15 (1.87)	14.67 (2.18)	15.88 (3.60)	14.97 (2.20)	20.21 (2.31)	12.90 (1.86)	93.67 (8.60)	<0.001; VHS;
<b>Probability↓</b>		<0.001	<0.001	<0.001	>0.05	<0.001	<0.001		
		VHS	VHS	VHS	NS	VHS	VHS		

[Key: NA: Non-Acceptance; G: Goals; ID: Impulsive Difficulty; A: Awareness; S: Strategies; C: Clarity][Number of items under each domain is given in parenthesis]

Domain-wise comparative analysis of scores on CERQ between the two clinical groups (Table 3) shows that the predominant aspects of cognition involved in emotion regulation that are affected is acceptance, rumination, self-blame, positive reinforcing and refocusing on planning, which are all mostly on the higher side for patients with borderline personality disorder than for those with major depressive disorder.

**Table 3: Distribution of Mean and SD Scores across Domains on CERQ**

Scales	Items	BPD (N: 69)	MD (N: 254)	Probability →
Self-blame	4	14.26 (2.54)	13.69 (2.13)	t: 1.90; p: 0.05; S;
Acceptance	4	16.94 (2.39)	15.98 (1.61)	t: 3.94; p: 0.001; VHS;
Rumination	4	13.41 (1.95)	11.44 (1.89)	t: 7.60; p: 0.001; VHS;
Positive Refocusing	4	13.65 (2.68)	10.66 (2.14)	t: 9.69; p:0.000; VHS;
Refocusing on Planning	4	9.46 (1.82)	9.96 (1.55)	t: 2.25; p: 0.03; S;
Positive reappraisal	4	8.58 (1.631)	8.84 (1.38)	t: 1.32; p: 0.19; NS;
Put into perspective	4	8.30 (1.49)	8.36 (1.55)	t: 0.27; p:0.78; NS;
Catastrophizing	4	9.22 (1.93)	9.33 (1.96)	t: 0.43; p: 0.67; NS;
Other-blame	4	7.49 (1.72)	7.61 (1.36)	t: 0.596; p: 0.55; NS
<b>Probability↓</b>				

(KEY: BPD: Borderline Personality Disorder; MD: Major Depression)

(iii) Distribution of profiles in emotion regulation between major depressive disorder and borderline personality disorder in relation to key socio-demographic variables

Gender wise differences within each clinical condition ( $p: <0.001$ ). The males with borderline personality disorder score significantly high on the domain of 'Impulsive Difficulty' (N: 54; Mean: 20.77; SD: 4.20) than the females in the same group (N: 15; Mean: 18.40; SD: 3.88) ( $p: <0.001$ ). A similar trend is seen also for the patients with major depressive disorder ( $p: <0.001$ ).

Analysis of scores across domains on CERQ between the two clinical populations based on gender variable shows no statistically significant differences except for 'Other-blame' condition. There are statistically significant differences in all the domains on DERS for major depressive disorder as well as borderline personality disorder in relation to three categories of the occupational variable ( $p: <0.001$ ).

On the CERQ, there is a clear pattern of nil significant differences across its nine different scales for patients with borderline personality disorder as compared to significant differences at least with respect to a few sub-scales for those with major depressive disorder in relation to occupational variable. Thus, respondents with major depressive disorder show significant elevation of emotion regulation scores on domains like positive reappraisal, catastrophizing, positive refocusing, refocusing on planning and other-blame tendencies for this variable ( $p: < 0.05$ ). This means that clients with major depressive disorder still hold tendencies to think of pleasant things or experiences, or think of how best to cope with the situation.

The next series of test wise domain analysis was undertaken for the binomial marital variable: married vs. unmarried. There are statistically major differences for distribution of mean scores across all domains on DERS for both groups of sample with major depressive disorder as well as borderline personality disorder in relation to marital variable ( $p: < 0.001$ ). On the CERQ, the distribution of scores across domains shows nil significant differences across all its nine different scales for patients with borderline personality disorder as compared to significant differences in all except one sub scale of catastrophizing sub-scales for those with major depressive disorder in relation to marital variable. Thus,

the married respondents with major depressive disorder show significantly less elevation of scores on the domains of catastrophizing only ( $p: > 0.05$ ). This means that married clients with major depressive disorder maybe receiving sufficient supports to buffer such attribution tendencies to cope with their predicament.

## Discussion

Depression is found to be greatly associated with difficulties in cognitive control and, especially, with difficulties in inhibiting the processing of unhelpful material. Evidence appears to favour greater rumination in borderline personality disorder with also a different course or illness trajectory and treatment pathway as compared to major depressive disorder. It is noted that major depressive disorder can co-occur with borderline personality disorder. Many patients with borderline personality disorder often present depressive symptoms. It is postulated that depressed individuals are characterized by emotional inertia, while individuals with borderline personality disorder are characterised by emotional instability. Both groups have been found using more maladaptive affect regulation strategies than healthy controls<sup>12</sup>. The essential findings in the present study related to high scores on emotion regulation for patients with borderline personality disorder than those with major depressive disorder especially in cognitive related domains 'self-blame,' 'acceptance,' 'rumination,' 'positive refocusing,' and to a lesser extent on 'refocusing on planning' has critical implications for treatment.

Both the clinical conditions appear to be equally affected for emotion dysregulation in the domains of 'putting into perspective', 'positive reappraisal,' 'other-blame' and 'catastrophizing', respectively. Similar trend are reported in previous studies<sup>13,14,15</sup>. Also, patients with borderline personality disorder are found to have poor social problem-solving skills that may disturb their emotion regulation<sup>16</sup>. The high borderline personality disorder individuals demonstrated greater increase in unhelpful emotions, shame and anger in response to the social rejection/ compared with the annoying arithmetic task<sup>17</sup>.

Gender is most frequently discussed variable for emotion dysregulation in clinical conditions. Despite this lay conviction, empirical evidence on gender differences in emotional responding is mixed. A limitation of these studies is that they are all based on self-reports and is

vulnerable to the effects of gender stereotypes. Future studies must distinguish emotional reactivity and emotion regulation. There is also a cultural dimension to emotion regulation that is emerging in this study. Collectivistic cultures as in India, may recommend less expression of emotions for fear of upsetting social harmony<sup>18,19</sup>. Occupation has not emerged as a critical variable for emotion regulation in major depressive disorder and borderline personality disorder in this study. Being in relation or marriages in which one or both partners have borderline personality disorder can be tumultuous, conflict-laden, and dysfunctional. It is likely to be an everyday challenge for persons with major depressive disorder and borderline personality disorder to deal with negative emotions at work. However, more research is required to conclude emphatically on this variable of emotion regulation in these clinical conditions.

### Conclusion

In conclusion, this study sought to inquire the nature, intensity and extensity patterns of emotion regulation in patients diagnosed as major depressive disorder and borderline personality disorder. By using a one-shot cross sectional purposive sample survey design, this hospital-based study targeting a random sample of subjects from both gender between 18-30 years has significantly high scores on emotion regulation in both the clinical populations with marked differences across specific cognition mediated domains and in relation to associated variables like gender and marital status appear to influence only some aspects of non-cognitive emotional dysregulation. These findings have implications for therapy in the context of cultural factors unique to Indian settings.

#### Conflict of Interest statement: Nil

**Ethical clearance-** Taken from IMS and SUM hospital, Siksha O Anusandhan University, K8, Kalinga Nagar, Bhubaneswar-751003, Odisha, India. ethical committee

#### Source of Funding- Self

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