

# Perceived Stress and Coping Strategies among Individuals with Bipolar Affective Disorder and Control Group

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## ABSTRACT

Bipolar Affective Disorder (BPAD) is a recurrent, episodic condition in which individuals face ongoing stress due to the unpredictability of mood episodes. Worry about relapse, disruption in daily life and emotional instability adds to this stress. It is crucial to observe perceived stress and coping strategies for better treatment outcomes in BPAD. **Aim:** To assess and compare the perceived stress and coping strategies in individuals with BPAD and normal Control. **Materials and Methods:** This cross-sectional comparative study was conducted among individuals with bipolar affective disorder (BPAD) receiving treatment from the outpatient department of CIIMHANS, Dewada, Chhattisgarh, India, and normal controls recruited from nearby areas (Tendesara and Kopedih). A total of 50 individuals with BPAD and 50 normal controls were selected using purposive sampling. Data were collected using a socio-demographic datasheet, the Perceived Stress Scale (PSS), and the COPE Inventory to compare stress levels and coping strategies between the two groups. **Results:** Individuals with bipolar affective disorder showed significantly lower use of coping strategies across all domains and reported higher levels of perceived stress compared to normal controls. All coping domains were negatively correlated with perceived stress, indicating that lower coping skills were associated with higher stress levels. **Conclusion:** Individuals with BPAD experience higher stress and maladaptive coping than normal controls. Strengthening coping skills and improving stress management may help enhance emotional stability and overall functioning in this population.

**Keywords:** Perceived stress, coping strategies, bipolar affective disorder.

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## INTRODUCTION

Bipolar Affective Disorder is a chronic psychiatric condition characterized by recurrent episodes of mania, hypomania, and depression. The Global Burden of Disease Study estimated its worldwide prevalence at about 0.7% and sixth leading cause of disability among all illnesses (Ferrari et al., 2016). In India, the reported current prevalence is 0.3%, with a lifetime prevalence of 0.5% (Vajawat et al., 2023). Relapses are common, with rates as high as 71% (Belete et al., 2020). These episodes can disrupt mood, cognition, and daily functioning. They also create ongoing emotional and relationship challenges that make individuals with bipolar disorder more sensitive to everyday stress and in greater need of effective coping strategies (Young et al., 2011).

Perceived stress refers to how individuals interpret and evaluate the demands they face and how capable they feel in managing them (Cohen et al., 1983). It

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reflects not just the presence of stressors but the subjective experience of being overwhelmed. Higher levels of perceived stress have been linked to poorer

psychological outcomes, lower functioning, and an increased likelihood of relapse among individuals with mood disorders (Szmulewicz et al., 2019; Stanislaus et al., 2020). Stressful events also show varying degrees of kindling, meaning their association to mood episodes may weaken as episodes recur over time (Post, 2016). In adulthood, more than 60 % of individuals with BD report experiencing at least one stressful life event in the 6 months preceding a manic or depressive episode (Rybakowski, 2021).

Coping strategies shape how people manage stress and maintain emotional balance. They include problem-focused strategies aimed at addressing the stressor and emotion-focused strategies designed to regulate internal emotional responses (Lazarus & Folkman, 1984). Research suggests that individuals with bipolar disorder tend to rely more on emotion-focused or avoidant coping styles, which are often less effective in reducing distress or preventing relapse (Tohumcu & Çuhadar, 2025). Coping abilities may also shape how stress contributes to the recurrence of mood episodes, a relationship that can be further influenced by neurofunctional and neurostructural changes linked to the disorder's recurrent course (Kapczinski et al., 2008).

Although stress and coping have been widely deliberate in bipolar disorder. Most research focuses only on clinical groups, which makes it hard to determine whether high stress levels and certain coping styles are disorder-specific or reflect general population differences. This gap limits our understanding of how stress and coping interact in BPAD. The present study aims to compare perceived stress and coping strategies in individuals with Bipolar Affective Disorder and control group.

## MATERIALS AND METHODS

The present cross-sectional comparative study was conducted among individuals with bipolar affective disorder (BPAD) receiving regular treatment from the outpatient department of the Central Institute of Mental Health and Neuro Sciences (CIIMHANS), Dewada, Chhattisgarh, and normal controls recruited from neighboring areas (Tendesara and Kopedih). A total of 50 individuals with BPAD and 50 normal controls were selected through purposive sampling. All participants were informed about the purpose of the study, and written informed consent was obtained from those who agreed to participate. The two groups were matched on major socio-demographic variables such as age, gender, education, marital status, family type, and occupation. The Perceived Stress Scale was administered to assess perceived stress, and coping strategies were evaluated using the COPE Inventory.

**Inclusion criteria:** Patients diagnosed with BPAD according to ICD-10 DCR, both the gender, age between 20 to 50 years and episodic at least 2. Normal controls were both the gender, aged between 20 to 50 years.

**Exclusion criteria:** Patients and normal controls with a neurological problem, head injury, intellectual disability, organicity, and history of major physical illness.

## Instruments

**Socio-demographic details:** The socio-demographic details of patients were collected through a specially designed socio-demographic sheet. In this sheet, including variables like age, gender, education, marital status, occupation, and family type were included.

**The Perceived Stress Scale (PSS-10):** PSS is a self-report tool with 10 items designed to assess how unpredictable, uncontrollable and overloaded individuals feel in their daily lives (Cohen & Williamson, 1988). It was developed for use in community settings and assumes that respondents have at least a middle school level of education. Items are rated on a Likert scale from 0 (Never) to 4 (Very often). Scoring involves reverse-coding items 4, 5, 7 and 8, followed by summing all 10 items to obtain the total score (Cohen et al., 1983; Cohen & Williamson, 1988). The scale includes two subcomponents: Perceived Helplessness (items 1, 2, 3, 6, 9, 10) and Lack of Self-Efficacy (items 4, 5, 7, 8) (Taylor, 2015). Previous studies have reported good reliability, with an overall internal consistency of .84, and reliability coefficients of .86 for the Perceived Helplessness subscale and .82 for the Self-Efficacy subscale (Roberti et al., 2006).

**The COPE Inventory:** This scale is a multidimensional scale consisting of 60 items that assess 15 coping factors, with each factor represented by four items. It evaluates various coping mechanisms by asking respondents how they deal with stressful situations. The coping strategies measured include active approaches such as active coping, planning, suppression of competing activities, restraint, instrumental social support and humor, as well as more passive strategies such as emotional support, positive reinterpretation and growth, acceptance, religious coping and denial. Participants indicate how often they use each coping method on a 4-point Likert scale ranging from 1 (I usually do not do this at all) to 4 (I usually do this a lot). The inventory has shown test-retest reliability coefficients between 0.46 and 0.86 (Carver et al., 1989).

## Statistical Analysis

The statistical analyses were done with the help of the statistical package for social sciences version 25.0. The descriptive variables from demography were tested using mean, standard deviation and chi-square. The difference between study variables in both the group was calculated using mean and standard deviation (t-test). Person's correlation was used to see the correlation between perceived stress and coping strategies in individuals with BPAD. The statistical significance was considered to be  $p < 0.05$  for the present study.

## RESULTS

Table 1 reveal the socio-demographic profile of individuals with BPAD and normal controls. The mean age of the BPAD group was 32.32 years ( $SD=5.98$ ), while the mean age of the control group was 34.08 years ( $SD=7.60$ ). A higher proportion of both groups were male, with 68% in the BPAD group and 62% in the control group. In terms of education, participants in both groups were distributed across different levels, with the largest proportion educated up to higher secondary (38% in BPAD and 34% in controls). Most participants in both groups were married, although the BPAD group had a comparatively lower percentage of married individuals (58% in BPAD and 76% in controls). Regarding occupation, most participants were employed in both groups (80% in BPAD and 88% in controls). Nuclear families were majority in both groups, with 74% of the BPAD group and 80% of the control group belonging to such families. Overall, none of the socio-demographic variables showed a statistically significant difference between the groups, as all p-values were above 0.05, indicating comparable characteristics across age, gender, education, marital status, occupation, and family type.

**Table 1: Comparison of socio-demographic details of individuals with BPAD and normal controls.**

Variables		Groups		df	$\chi^2$	p
		BPAD	Normal controls			
		N(%)	N(%)			
Age (Mean $\pm$ SD)		32.32 $\pm$ 5.98	34.08 $\pm$ 7.60	98	1.286 (t)	0.201NS
Gender	Male	34(68.0%)	31(62.0%)	1	0.396	0.529NS
	Female	16(32.0%)	19(38.0%)			
Education	Primary	6(12.0%)	10(20.0%)	4	1.361	0.851NS
	Secondary	10(20.0%)	10(20.0%)			
	High Secondary	19(38.0%)	17 (34.0%)			
	UG	9(18.0%)	7(14.0%)			
	PG	6(12.0%)	6(12.0%)			
Marital Status	Married	29 (58.0%)	38 (76.0%)	1	3.664	0.056NS
	Unmarried	21(42.0%)	12 (24.0%)			
Occupation	Employed	40(80.0%)	44 (88.0%)	1	1.190	0.275NS
	Unemployed	10 (20.0%)	6 (12.0%)			
Family types	Joint	13(26.0%)	10(20.0%)	1	0.508	0.476NS
	Nuclear	37(74.0%)	40 (80.0%)			

N= numbers; %= percentage (100%); df=Degree of freedom; SD=Standard deviation; NS=Not significant.

Table 2 presents the comparison of coping strategies between individuals with bipolar affective disorder (BPAD) and normal controls. Individuals with BPAD showed significantly lower use of positive reinterpretation and growth compared to normal controls ( $t = 4.574$ ,  $p < 0.001$ ). Mental disengagement was also used less frequently by the BPAD group ( $t = 7.228$ ,  $p < 0.001$ ). The BPAD group reported lower levels of focusing on and venting emotions ( $t = 4.117$ ,  $p < 0.001$ ) and used less instrumental social support ( $t = 9.007$ ,  $p < 0.001$ ). Active coping strategies were significantly lower among BPAD participants ( $t = 9.650$ ,  $p < 0.001$ ). Denial was also reported less by the BPAD group ( $t = 9.590$ ,  $p < 0.001$ ). Religious coping showed a significant difference, with BPAD individuals

using it less than controls ( $t = 3.399$ ,  $p < 0.001$ ). Humor was also less common among BPAD participants ( $t = 5.865$ ,  $p < 0.001$ ). Behavioral disengagement was significantly lower in BPAD individuals ( $t = 7.748$ ,  $p < 0.001$ ). Restraint was also used less frequently by the BPAD group ( $t = 6.534$ ,  $p < 0.001$ ). Emotional social support was reported at significantly lower levels in the BPAD group ( $t = 3.982$ ,  $p < 0.001$ ). Substance use as a coping method was also lower in BPAD individuals ( $t = 6.137$ ,  $p < 0.001$ ). Acceptance showed a significant group difference, with lower use among BPAD participants ( $t = 3.598$ ,  $p = 0.001$ ). Suppression of competing activities was also less common in BPAD individuals ( $t = 2.624$ ,  $p = 0.010$ ). Planning was used significantly less by the BPAD group compared to normal controls ( $t = 3.652$ ,  $p < 0.001$ ). Overall, the total coping score was much lower in individuals with BPAD, showing a strong significant difference between the two groups ( $t = 6.960$ ,  $p < 0.001$ ).

**Table-2: Comparison of coping strategies between individuals with bipolar affective disorder and normal control**

Variables	Group (N=100)		t-value	df	p-value
	BPAD Mean±SD	Normal control Mean±SD			
<b>COPE2: Positive reinterpretation and growth</b>	10.14±3.04	12.46 ±1.89	4.574	98	0.000**
<b>COPE2: Mental disengagement</b>	9.20±2.56	12.46±1.89	7.228	98	0.000**
<b>COPE3: Focus on and venting of emotions</b>	10.20±2.73	12.14±1.90	4.117	98	0.000**
<b>COPE4: Use of instrumental social support</b>	8.50±2.77	12.94±2.11	9.007	98	0.000**
<b>COPE5: Active coping</b>	7.94±2.95	12.90±2.12	9.650	98	0.000**
<b>COPE6: Denial</b>	7.18±3.58	12.80±2.07	9.590	98	0.000**
<b>COPE7: Religious coping</b>	11.28±2.59	12.90±2.14	3.399	98	0.000**
<b>COPE8: Humor</b>	9.50±3.38	12.72±1.90	5.865	98	0.000**
<b>COPE9: Behavioral disengagement</b>	8.82±3.06	12.78±1.90	7.748	98	0.000**
<b>COPE10: Restraint</b>	8.88±3.70	12.84±2.16	6.534	98	0.000**
<b>COPE11: Use of emotional social support</b>	10.76±2.58	12.54±1.82	3.982	98	0.000**
<b>COPE12: Substance use</b>	8.62±4.17	12.58±1.84	6.137	98	0.000**
<b>COPE13: Acceptance</b>	10.98±2.66	12.66±1.94	3.598	98	0.001**
<b>COPE14: Suppression of competing activities</b>	11.22±3.05	12.56±1.91	2.624	98	0.010*
<b>COPE15: Planning</b>	10.72±3.01	12.54±1.82	3.652	98	0.000**
<b>Total Coping inventory</b>	143.94±37.68	189.82±27.43	6.960	98	0.000**

N= numbers; *df*=Degree of freedom; *SD*=Standard deviation; BPAD= Bipolar Affective Disorder, \*\*=Significant at 0.01 level; \*=Significant at 0.05 level

Table 3 shows the comparison of perceived stress between individuals with bipolar affective disorder (BPAD) and normal controls. The BPAD group reported a higher level of perceived helplessness ( $19.28 \pm 2.51$ ) compared to normal controls ( $12.26 \pm 4.31$ ), and this difference was statistically significant ( $t = 9.941$ ,  $p < 0.001$ ). Self-efficacy scores were lower in the BPAD group ( $13.06 \pm 1.86$ ) than in the control group ( $5.80 \pm 1.12$ ), showing a strong significant difference ( $t = 23.551$ ,  $p < 0.001$ ). The total perceived stress score was also considerably higher among individuals with BPAD ( $32.34 \pm 3.42$ ) compared to normal controls ( $18.06 \pm 4.82$ ), with a significant group

difference ( $t = 17.083$ ,  $p < 0.001$ ). Overall, the findings indicate that individuals with BPAD experience substantially higher stress levels and lower self-efficacy than normal controls.

**Table-3: Comparison of perceived stress among individuals with bipolar affective disorder and normal control**

Variables	Group (N=100)		t-value	df	p-value
	BPAD Mean±SD	Normal control Mean±SD			
Perceived Helplessness	19.28±2.51	12.26±4.31	9.941	98	0.000**
Self-Efficacy	13.06±1.86	5.80±1.12	23.551	98	0.000**
<b>Total PSS</b>	32.34±3.42	18.06±4.82	17.083	98	0.000**

\*\* Significant at the 0,01 level, SD = Standard Deviation, df = degree of freedom, N = Number

Table 4 shows the correlation between different coping strategy domains and perceived stress among individuals with bipolar affective disorder. Perceived stress showed a significant negative correlation with positive reinterpretation and growth ( $r = -0.734$ ;  $p < 0.01$ ), mental disengagement ( $r = -0.650$ ;  $p < 0.01$ ), and focus on and venting of emotions ( $r = -0.595$ ;  $p < 0.01$ ). Significant negative correlations were also found with instrumental social support ( $r = -0.438$ ;  $p < 0.01$ ), active coping ( $r = -0.520$ ;  $p < 0.01$ ), and denial ( $r = -0.469$ ;  $p < 0.01$ ). Religious coping ( $r = -0.544$ ;  $p < 0.01$ ), humor ( $r = -0.415$ ;  $p < 0.01$ ), behavioral disengagement ( $r = -0.340$ ;  $p < 0.05$ ), and restraint ( $r = -0.369$ ;  $p < 0.01$ ) also showed significant negative relationships with perceived stress. Emotional social support ( $r = -0.355$ ;  $p < 0.05$ ), substance use ( $r = -0.444$ ;  $p < 0.01$ ), acceptance ( $r = -0.547$ ;  $p < 0.01$ ), suppression of competing activities ( $r = -0.429$ ;  $p < 0.01$ ), and planning ( $r = -0.390$ ;  $p < 0.01$ ) were similarly negatively correlated. Overall, higher perceived stress was associated with lower use of all coping strategies among individuals with BPAD.

**Table-4: Correlation between different coping strategies domains and perceived Stress in the persons with Bipolar affective disorder (N=50)**

Variable	Perceived Stress
<b>COPE2: Positive reinterpretation and growth</b>	-.734**
<b>COPE2: Mental disengagement</b>	-.650**
<b>COPE3: Focus on and venting of emotions</b>	-.595**
<b>COPE4: Use of instrumental social support</b>	-.438**
<b>COPE5: Active coping</b>	-.520**
<b>COPE6: Denial</b>	-.469**
<b>COPE7: Religious coping</b>	-.544**
<b>COPE8: Humor</b>	-.415**
<b>COPE9: Behavioral disengagement</b>	-.340*
<b>COPE10: Restraint</b>	-.369**
<b>COPE11: Use of emotional social support</b>	-.355*
<b>COPE12: Substance use</b>	-.444**
<b>COPE13: Acceptance</b>	-.547**
<b>COPE14: Suppression of competing activities</b>	-.429**
<b>COPE15: Planning</b>	-.390**

\*\* Significant at the 0.01 level; \*. Significant at the 0.05 level



## DISCUSSION

The present study reported that individuals with bipolar affective disorder (BPAD) used significantly fewer coping strategies than normal controls across all domains. There was a significant difference in positive reinterpretation, active coping, planning, social support, and other coping dimensions between the two groups. These results are consistent with previous studies indicating that people with bipolar disorder commonly depend on maladaptive coping styles and show reduced engagement in adaptive strategies (Nitzburg et al., 2016; Bridi et al., 2018; Green et al., 2011). Research also highlights broader deficits in behavioral coping skills among this population, including lower levels of active coping, planning, and problem-focused behaviors (Suh et al., 2020; Fletcher et al., 2013). Further studies add that individuals with bipolar disorder are more likely to use ineffective coping methods, which can heighten emotional reactivity and contribute to ongoing mood instability (Tohumcu & Çuhadar, 2025; Bucatoş et al., 2025).

The present study also found that individuals with BPAD experienced significantly higher levels of perceived stress than normal controls, characterized by greater helplessness and lower self-efficacy. These findings are consistent with previous research showing that people with bipolar disorder tend to be more sensitive to stressful events and display heightened emotional reactivity compared to nonclinical populations (Knorr et al., 2021; Parmigiani et al., 2021; Beyer et al., 2008). In a similar direction, Abraham et al. (2014) reported that reduced self-efficacy and increased stress reactivity make individuals with bipolar disorder more vulnerable to emotional dysregulation. Higher perceived stress has also been associated with poorer psychological outcomes and reduced overall functioning among individuals with mood disorders (Szmulewicz et al., 2019; Stanislaus et al., 2020).

The present study also found a significant negative correlation between perceived stress and all domains of coping strategies among persons with BPAD. This means that higher levels of adaptive coping were associated with perceived stress. Previous studies support similar findings. Effective use of coping strategies such as acceptance, planning, and positive reinterpretation can significantly buffer the impact of stress on emotional well-being and self-stigma (Afzal et al., 2024; Au et al., 2019). Similarly, Fletcher et al. (2013) reported that better coping skills are linked to reduced perceived stress and improved mood stability among individuals with mood disorders.

## CLINICAL IMPLICATIONS

The findings suggest that individuals with BPAD would benefit from interventions that strengthen adaptive coping skills and reduce stress vulnerability. Integrating coping skills training, psychoeducation, and cognitive behavioral strategies into routine care may improve self-efficacy and emotional regulation. Regular assessment of stress levels can help clinicians identify early signs of relapse. Encouraging family involvement may also create supportive environments that reduce stress and promote healthier coping. Overall, these approaches can enhance daily functioning and contribute to better long-term stability in individuals with BPAD.

## LIMITATIONS

The study acknowledges several methodological limitations. Firstly, the relatively small sample size restricts the generalizability of the findings, as a larger and more representative sample would strengthen the results. The study was also time-bound, limiting the ability to examine long-term changes in coping strategies and stress levels among individuals with BPAD. Finally, as the study was hospital-based, it included only individuals who were receiving clinical services, potentially excluding those with BPAD in the community who do not seek formal mental health care.

## CONCLUSION

The present study highlights significant differences in coping strategies and perceived stress between individuals with bipolar affective disorder (BPAD) and normal controls. Individuals with BPAD demonstrated lower use of adaptive coping methods and experienced higher levels of stress, marked by greater helplessness and reduced self-efficacy. These findings emphasize the importance of addressing coping deficits and stress vulnerability as part of clinical care for BPAD. Strengthening coping skills, enhancing emotional regulation, and providing supportive psychosocial interventions may improve overall functioning and reduce the risk of relapse. The study contributes valuable insight into the psychosocial challenges faced by individuals with BPAD and underscores the need for comprehensive, long-term management approaches.

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