

## A Comparative study of self-esteem and perceived stress in patients with schizophrenia and bipolar affective disorder

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### Abstract:

**Background:** Bipolar affective disorder (BPAD) and schizophrenia (SCZ) are heterogeneous psychiatric disorders with distinct as well as overlapping clinical features. Extensive research evidence implicates stress in the aetiology of both illnesses. The present study aimed to attempt a comparison of self-esteem and perceived stress in SCZ and BPAD patients who are in remission

**Materials and Methods:** it's a cross-sectional study and used a convenient sampling method. The study location is Government hospital for mental care, Visakhapatnam. The study consists of 60 participants, of which 30 participants are patients with schizophrenia, and 30 participants are patients with bipolar disorder. Subjects were evaluated using a Semistructured proforma for sociodemographic data, and Rosenberg self-esteem Scale to assess self-esteem, perceived stress scale to assess perceived stress. Results were analyzed Statistically.

**Results:** The results showed a statistically significant difference in perceived stress among schizophrenia and bipolar disorder patients. Self-esteem was not found to vary between the groups.

**Conclusion:** Results suggest that perceived stress is more among the patients of schizophrenia when compared to bipolar disorder patients whereas self-esteem remains the same among both the groups indicating that the psychological characteristics of an individual significantly affect stress-related processing which concerns the emotional, physiological and cognitive state of an individual.

**Keyword:** Schizophrenia, Bipolar affective disorder, self-esteem, Perceived stress.

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### I. Introduction

The psychological characteristics of an individual significantly affect stress-related processing. Several studies have focused on the relationship between self-esteem and stress. Specifically, studies have reported that individuals with low self-esteem displayed limited coping resources and increased perceived stress (PS)<sup>1</sup>. Bipolar affective disorder (BPAD) and schizophrenia (SCZ) are heterogeneous psychiatric disorders with distinct as well as overlapping clinical features. Extensive research evidence implicates stress in the aetiology of both illnesses. Patients report high-stress levels (psychosocial, chronic stress) than healthy controls- Pruessner et al. .2011<sup>2</sup>. Furthermore, stressful life events increase the risk for both SCZ and BPAD and trigger relapse in SCZ and BPAD. Self-esteem (SE) is an essential component of psychological health. Previous research indicates that lowered self-esteem frequently accompanies psychiatric disorders<sup>(3-7)</sup>. It has been suggested that low self-esteem is an etiological factor in many psychiatric conditions, especially in SCZ, BPAD and suicidal individuals<sup>8</sup>. Self-esteem also plays some role in the quality of life for psychiatric patients<sup>9</sup>. However, the nature of the relationship between lowered self-esteem and psychiatric disorders remains uncertain. The present study aimed to attempt a comparison of self-esteem and perceived stress in SCZ and BPAD patients who are in remission.

### II. Aims And Objectives

To compare self-esteem and perceived stress in patients with schizophrenia and BPAD patients.

#### OBJECTIVES:

1. To rate self-esteem among schizophrenia and BPAD patients.
2. To rate perceived stress among schizophrenia and BPAD patients.
3. To compare the relationship between self-esteem and perceived stress among schizophrenia and BPAD patients.

**HYPOTHESIS:** Diagnosis of schizophrenia is not associated with lowered self-esteem and increased perceived stress when compared to bipolar disorder.

### III. Material And Methods

**Study Design:** Observational cross-sectional study

**Study location:** Government hospital for mental care, Visakhapatnam, Andhra Pradesh, India

**Study duration:** May to July 2019

**Sample size:** 60 patients

**Subjects and selection method:**

The study was carried out on the patients attending a tertiary care hospital OPD (Government hospital for mental care) Visakhapatnam. Sixty patients -30 each of schizophrenia and BPAD who are in remission and fulfilling inclusion criteria were enrolled in the study. Patients were diagnosed according to ICD-10 DR criteria following detailed assessments. This study is a cross-sectional study and used a convenient sampling method.

**Inclusion criteria:**

1. Age group 18-60 years
2. Patients diagnosed with schizophrenia and BPAD according to ICD 10 DR criteria.
3. Patients who gave valid written, informed consent

**Exclusion criteria:**

1. Patients who do not give valid consent.
2. Patients with comorbid psychiatric illness.
3. Patients with epilepsy, intellectual disability and developmental disorders.
4. Patients with substance dependence disorders.

**Procedure methodology:**

Individuals who fulfilled inclusion criteria were taken into the study after taking valid informed consent from them. The sample was collected for over three months. At the screening, individuals completed sociodemographic proforma, Rosenberg self-esteem scale and perceived stress scale.

**Study tools:**

1. Semistructured questionnaire for sociodemographic data and illness variables.
2. ICD 10 classification of mental and behavioural disorders
3. Rosenberg self-esteem scale<sup>10</sup>—A 10 item scale answered using a 4 point Likert scale format ranging from strongly agree to disagree strongly. Scores between 15 -25 are considered average.
4. Perceived stress scale<sup>11</sup> – this scale consists of 10 questions which ask about feelings and thoughts of the patient during the last month .scores on the PSS can range from 0 -40 with higher scores indicating higher perceived stress. ( 0-13 –LOW , 14-26 – MODERATE ,27-40 –HIGH )

**Statistical analysis:** Data analysis was performed using the SPSS software version 23. descriptive statistics were used for comparison of sociodemographic data, and Pearson correlation and analysis of variance tests were used. RSES(a measure of self-esteem) and perceived stress were considered as dependant variables, and SCZ and BPAD were considered as independent variables.

### IV. Results

AGE & OCCUPATION-The mean age was found to be 38.58 yrs& 36.7 % were unemployed, and the scores did not show any significant statistical difference with age and occupation.

**TABLE 1:** Comparison of mean age among groups

DIAGNOSIS	Mean	N	Std. Deviation
schizophrenia	35.7000	30	10.12729
bipolar	41.4667	30	13.34356
Total	38.5833	60	12.09887

GENDER-males constitute 53.3% and females-46.7% .Male and female patients in both groups had the same SE (18.72 & 18.82). SCZ(FEMALES>MALES) patients reported higher PS than BPAD patients (15.4 compared to 13.53)- the significant statistical difference was found between the two groups (f- 11.720, p< 0.001)

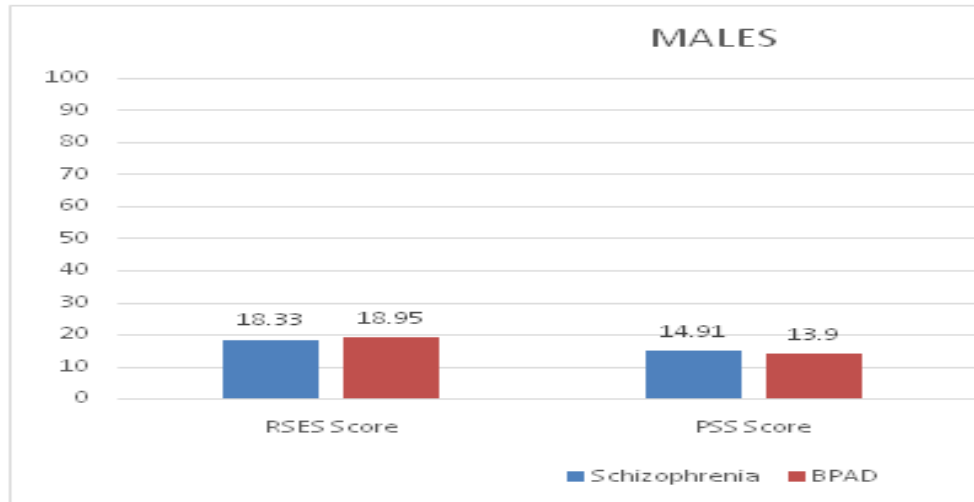


Figure 1: Comparison of mean scores in the male gender

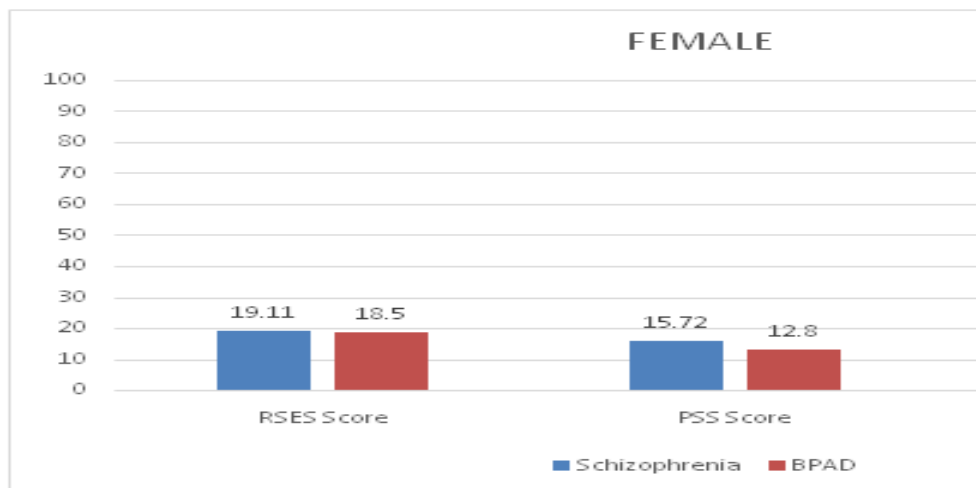
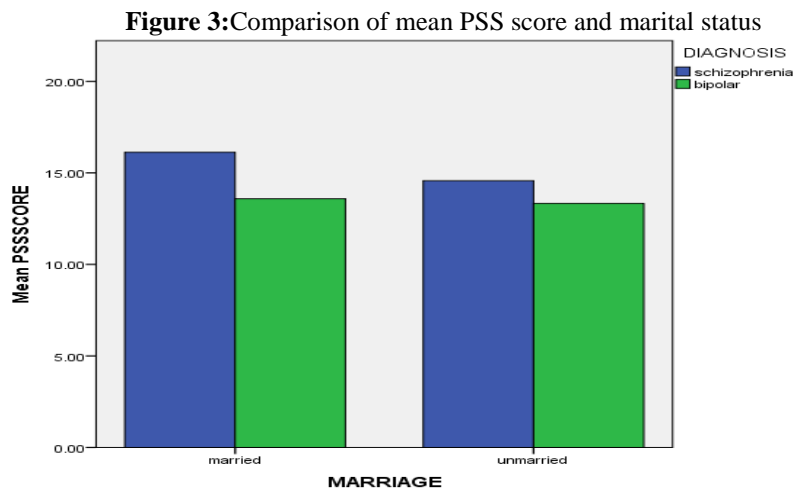


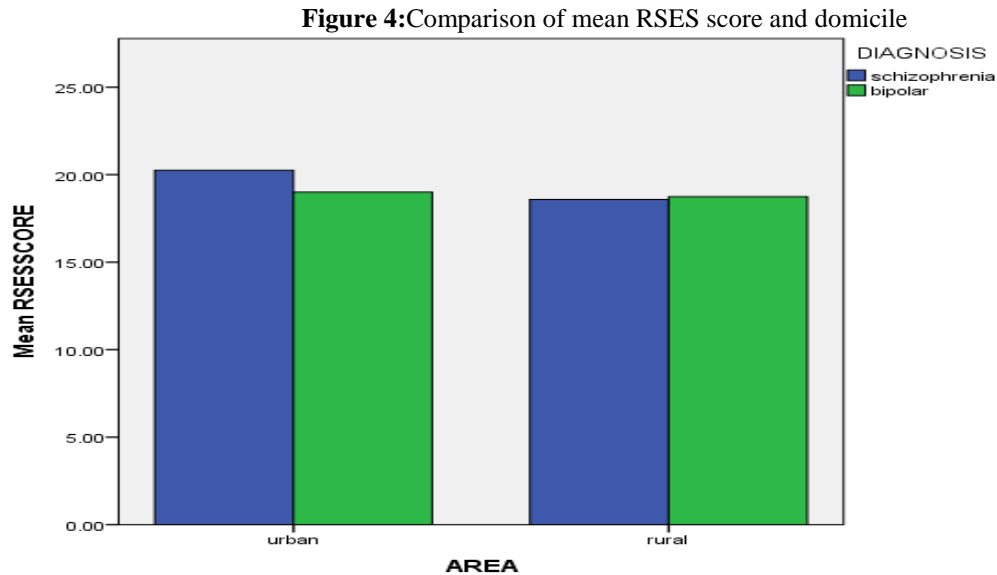
Figure 2: Comparison of mean scores in female gender

EDUCATION- 21.7% was illiterate. Patients  $\geq$  graduate level had significantly higher self-esteem and lower PS scores(PSS) than other groups.

MARITAL STATUS – 66.7% were married. PSS are significantly higher among married SCZ patients than compared to others.



AREA – the majority are from a rural background(81.7%). SE is found to be higher among SCZ patients in an urban area than compared to other groups.



The results of ANOVA on RSES indicated no statistically significant differences between the self-esteem of two groups (scz and BPAD). Both SCZ and BPAD groups had approximately the same level of self-esteem (average self-esteem – with mean scores of 18.88 & 18.80)

**ANOVA**

**TABLE -2:** Comparison of mean RSES scores among SCZ & BPAD

R\_SE\_SCALE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.000	1	.000	.000	1.000
Within Groups	297.600	58	5.131		
Total	297.600	59			

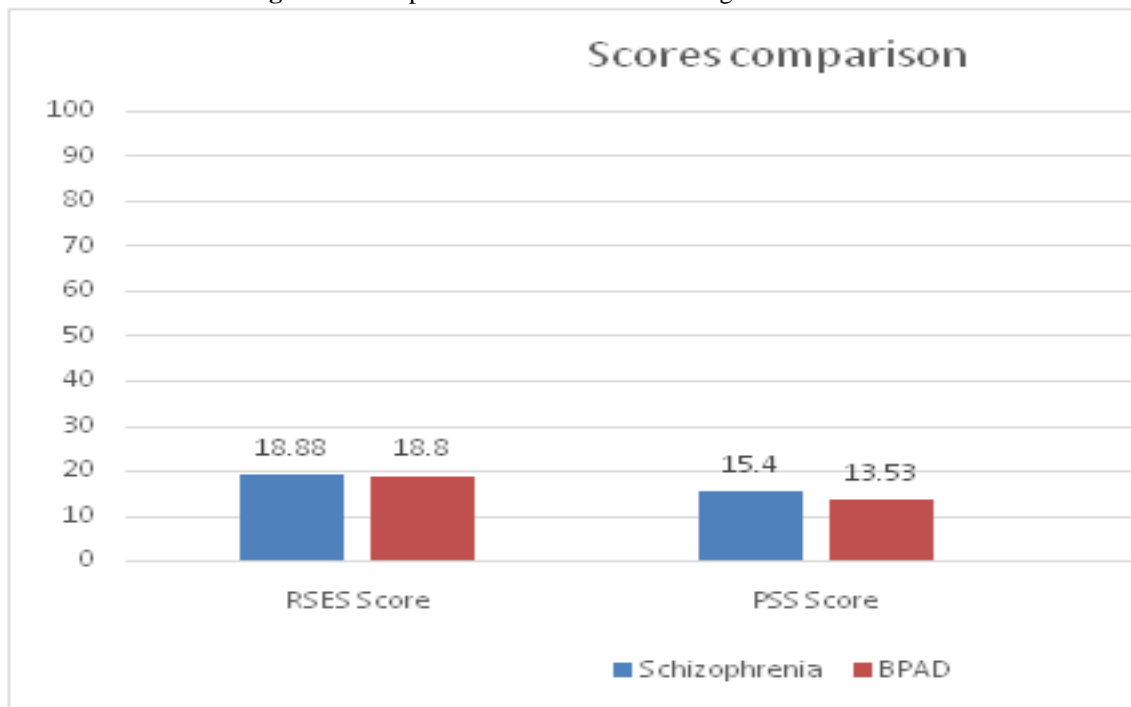
Perceived stress between BPAD and Schizophrenia was compared by using Analysis of Variance, and there was found to be statistically significant variance  $F=11.720$ ,  $p=0.001$

**TABLE-3:** Comparison of mean PSS scores among SCZ & BPAD

PS\_SCALE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	52.267	1	52.267	11.720	.001
Within Groups	258.667	58	4.460		
Total	310.933	59			

**Figure-5:** Comparison of mean scores among SCZ & BPAD



Schizophrenia patients reported higher perceived stress than BPAD patients (15.4 compared to 13.53)- the significant statistical difference was found between the two groups ( $f= 11.720, p < 0.001$ ) Self-esteem among BPAD and Schizophrenia was not found to vary with a mean of 18.80 in both groups.

**TABLE-4:** correlation between SE & PS

		PS_SCALE	R_SE_SCALE
PS_SCALE	Pearson Correlation	1	-.179
	Sig. (2-tailed)		.172
	N	60	60
R_SE_SCALE	Pearson Correlation	-.179	1
	Sig. (2-tailed)	.172	
	N	60	60

Correlation between SE and PS using Pearson correlation was not found to be statistically significant ( $r=-0.179$ , with  $p\text{-value} = 0.172$ )

**TABLE -5:** Comparison of total mean scores among SCZ & BPAD

DIAGNOSIS		RSESSCORE	PSSSCORE
schizophrenia	Mean	18.8000	15.4000
	N	30	30
	Std. Deviation	1.98963	2.02740
bipolar	Mean	18.8000	13.5333
	N	30	30
	Std. Deviation	2.51067	2.19299
Total	Mean	18.8000	14.4667
	N	60	60
	Std. Deviation	2.24590	2.29566

## **V. Discussion:**

Although current diagnostic system classifies BPAD and SCZ as distinct disorders, the substantial overlap is evident on both the clinical and the biological/genetic level ( Neale and Sklar 2015 )<sup>12</sup>. The present study investigated whether SE and PS vary between the SCZ and BPAD. SE is an abstract concept which has a composite nature. Available measurements of SE usually measure different components of this global entity. For example, RSES used in the present study estimates the global entity of the SE primarily. There is limited research about SE and PS of psychotic patients.

Although one large study has suggested that low self-esteem may be a risk factor for the development of psychosis<sup>13</sup>, In the present study, patients with SCZ & BPAD had the same average level of SE, and there was no significant statistical difference found between these disorders. The present study does not support previous findings that no differences exist in perceived stress between SCZ and BPAD (Fabian et al. .study)<sup>14</sup>. This difference between the disorders may be due to etiological differences in medication/genetic risk/biological/psychosocial factors).

The present study supports those previous findings that psychotic disorders had intermediate levels of self esteem<sup>15</sup>. However, the degree of lowering of SE in psychiatric patients varied with diagnostic groups. So in line against the hypothesis –low scores in BPAD might have been attributed to etiological differences, illness onset, duration, medication. To our knowledge, no previous study has investigated the or compared SE and PS in SCZ and BPAD. The comparison was made only in psychiatric disorders vs normal controls in the earlier studies. Alternatively, these findings may be attributable to etiological differences.

## **LIMITATIONS:**

1. Results cannot be generalized as the Sample size is small.
2. male and female subjects are not in equal number.
3. Convenience sampling method.

## **VI. Conclusion:**

Results suggest that perceived stress is more among the patients of schizophrenia when compared to bipolar disorder patients whereas self-esteem remains the same among both the groups indicating that the psychological characteristics of an individual significantly affect stress-related processing which affects the emotional, physiological and cognitive state of an individual.

## **FUTURE DIRECTIONS:**

It is essential to study the self-esteem and perceived stress of psychotic patients in a larger sample such that the results can be generalized

## **References:**

- [1]. Jong-Sun Lee<sup>1</sup>, Eun-Jeong Joo<sup>3</sup> & Kyeong-Sook Choi<sup>2</sup> Perceived Stress and Self-esteem Mediate the Effects of Work-related Stress on Depression Stress Health (2012) Wiley Online Library (wileyonlinelibrary.com)© Daejeon 302-799, Korea
- [2]. Pruessner M, Iyer SN, Faridi K, Joobor R, Malla AK. Stress and protective factors in individuals at ultra-high risk for psychosis, first-episode psychosis and healthy controls. *Schizophr Res.* 2011;129(1):29–35. Epub 2011/04/19.
- [3]. Clinebell HJ: Understanding and counselling the alcoholic through religion and psychology. Abingdon Press: Nashville. 1968
- [4]. Battle J: Relationship between self-esteem and depression. *Psychol Rep.* 1978, 42: 745-746.
- [5]. Baird P, Sights JRL: Low self-esteem as a treatment issue in the psychotherapy of anorexia and bulimia. *J Couns Develop.* 1986, 64: 449-451.
- [6]. Robson PJ: Self-esteem - A psychiatric view. *Br J Psychiatry.* 1988, 153: 6-15.
- [7]. Taylor DN, Pilar JD: Self-esteem, anxiety, and drug use. *Psychol Rep.* 1992, 71: 896-898.
- [8]. Overholser JC, Adams DM, Lehnert KL, Brinkman DC: Self-esteem deficits and suicidal tendencies among adolescents. *J Am Acad Child Adolesc Psychiatry.* 1995, 34: 919-928.
- [9]. Ruggeri M, Bisoffi G, Fontecedro L, Warner R: Subjective and objective dimensions of quality of life in psychiatric patients: a factor analytical approach: The South Verona Outcome Project 4. *Br J Psychiatry.* 2001, 178: 268-275.
- [10]. Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- [11]. Cohen, S., Kamarck, T. and Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 386-396.
- [12]. Neale BM, Sklar P. Genetic analysis of schizophrenia and bipolar disorder reveals polygenicity but also suggests new directions for molecular interrogation. *Curr Opin Neurobiol.* 2015;30:131-138. doi:10.1016/j.conb.2014.12.001
- [13]. Krabbendam L, Janssen I, Bak M, Bijl RV, de Graaf R, van Os J: Neuroticism and low self-esteem as risk factors for psychosis. *Soc Psychiatry Psychiatr Epidemiol.* 2002, 37: 1-6.
- [14]. Streit F, Memic A, Hasandedić L, et al. Perceived stress and hair cortisol: Differences in bipolar disorder and schizophrenia. *Psychoneuroendocrinology.* 2016;69:26-34. doi:10.1016/j.psyneuen.2016.03.010
- [15]. Peter H Silverstone and mahnazsalsali Low self-esteem and psychiatric patients: Part I – The relationship between low self-esteem and psychiatric diagnosis- *annals of general hospital, psychiatry* 2003;2:2