Indian Journal of Psychological Science, V-7, No. 1 (013-026) ISSN-0976 9218

The Comparison of Coping resources, Personality styles, Thought and Affective Patterns among Patients with Bipolar Affective Disorder and Schizophrenia

Biswajit Dey Tej Bahadur Singh** Ajay Chauhan****

Abstract

Rorschach psycho-diagnostic test has been well recognized projective test across the globe since long time. Understanding nature of coping resources and underlying personality styles of the severely affected psychiatric patients do not only predict the progress of the disorders but also warrants professionals of their area for management. The aim of the study is to compare coping resources, personality styles and psychopathology between patients with BPAD and schizophrenia by using the Comprehensive System and objective tests in Indian culture. Inpatients hospital based, cross sectional, between group design is used in the research where purposively 15 patients in each group (N=30) are selected following specific inclusion and exclusion criteria at HMH, Ahmedabad. Each patient was assessed with socio-demographic data sheet, clinical ratings, Rorschach test, Coping Check-List by Kiran Rao and Eysenck Personality Questionnaire (Indian adaptation).

The obtained results revealed that patients with bipolar affective disorder (BPAD) have shown significantly more extraversion personality trait and social conformity than patients with schizophrenia. On coping dimensions, BPAD group reveals more usage of positive coping styles in challenging situations whereas, schizophrenia who showed significantly higher on denial and blaming coping which is negative coping style. On Rorschach, BPAD group shows more affective dysregulation and disturbances by giving more number of pure colour, WSumC responses and higher affective ratio Whereas, schizophrenic patients revealed higher on isolation index of Rorschach. Patients with schizophrenia revealed more psychopathology in terms of higher number of special scores.

Key Words: *Schizophrenia, Bipolar Affective Disorder, Coping, Though process, Psychopathology*

About Authors: **Lecturer, Institute of Behavioural Science (IBS), Gujarat Forensic Sciences University (GFSU), Gandhinagar, Gujarat.*
***Professor, Central University of South Bihar, Patna.*
****Medical Superintendent, Hospital for Mental Health (HMH), Ahmedabad, Gujarat.*

Introduction

Need for accurate psychological assessment in the field of mental health has been important and well recognized for various reasons and one of them is better conceptualization of the patients for correct diagnosis and their management. In the evolution of psychological tests, there are many which have been proving them effective for this purpose. One of such tests is Rorschach Inkblot Test. Countering the controversy related to the efficacy of projective tests there has been a well recognized practice in research methodology of applying objective psychological tests and correlating or comparing the findings with projective tests, if possible, but there is still a paucity of comparative data of objective and projective tests in the current literature (Katsounari and Jacobwitz, 2011).

Though there are various indices and variables have been proved to be effective in

eliciting psychopathology and making diagnosis (Jorgensen, Anderson and Dam, 2000; Perry et al. 2003, Dao and Prevatt, 2006) but there are still many which need to be replicated especially the need is in India. Various authors have proposed, for eg; Meyer and Archer (2001) identified the CDI as one of several Rorschach indices that remain under researched.

Rorschach psychodiagnostic test has been well recognized projective test to understand psychopathology and personality features of patients of various psychiatric conditions since long time. In the evolution of this test there are five American systems of scoring and interpretation which are prevailing with their more or less popularity and empirical validity. Those systems are named according to their pioneers, viz. Beck, Klopfer, Rapaport, Hertz and Piotrowski's system of interpretation. Unfortunately those systems were incredibly different from each other in terms of their administration, scoring and interpretation and created enormous controversy among the practitioners not only in America but also in Europe. In spite of these difficulties the Rorschach methodology has flourished across many continents. An integrated comprehensive approach was first introduced by John Exner in 1978 under the recommendation of International Rorschach Foundation. Since then Exner's comprehensive system has got huge popularity among the practitioners worldwide and is consistently showing empirical validity in assessing psychopathology and personality pattern in various psychiatric conditions. A recent international survey found that, among clinicians who use the Rorschach, 96% code and interpret the test using the Exner's Comprehensive System (CS) as their primary system (Meyer, Hsiao, Viglione, Mihura, & Abraham, 2013).

Rorschach test has been in use in India since 1947 and the volume of research studies revealed that the test is being used with diverse population (Manikam and Dubey, 2005).The Rorschach Inkblot test that was developed in 1921(Rorschach, 1951) is the oldest and the most popular projective test in India and it is widely used in clinical setting (Dubey, 1981; Kohli and Kaur, 2002; Verma and Misra, 2002). Manikam and Dubey (2005) suggested there are still lack of studies in India especially comprehensive system of Rorschach and efforts need to be given across India to prepare norm of various psychiatric conditions and normal population.

Hence, the rationale of the present undertaken study is to examine different pathological thought processes, affective loading and coping deficits and related personality styles in two major psychiatric conditions, viz. schizophrenia and bipolar affective disorder in Indian culture by using Exner's Comprehensive System and compare the findings with Indian standardized objective tests.

Methodology

The aim and objectives of the study- The study aims to compare the psychopathology, affective disturbances, coping resources and personality styles of the patients with schizophrenia and bipolar affective disorder by utilising Rorschach psychodiagnostic test (CS) and personality questionnaire and a coping checklist along with disorder specific psychiatric rating scales. The research hypothesized that there would be differences between the two groups on affective, thought and coping and personality domain.

Design of the study- The current study has used a hospital based, cross sectional, between groups design research.

Sample- This contains total of 30 patients, in each group 15, who fulfilled the criteria of respective disorders according to ICD-10. The major exclusion criteria were substance abuse, Mental Retardation, patients who already have

gone through or currently under ECT, any comorbid medical and psychiatric conditions and history of any organic condition. The inclusion age range is 18-55, irrespective of gender. Purposive sampling was used in the study.

Venue of the Study- Patient population is selected and studied from inpatient and outpatient services of Hospital for Mental Health, Ahmedabad and GMRES Civil Hospital, Gandhinagar, Gujarat.

Tools used in study- Consent Form, Socio-demographic data sheet, Positive and Negative Syndrome Scale (PANSS, Kay et al. 1987), Young Mania Rating Scale (YMRS, Young, 1978) The Coping Checklist-1 (CCL-1, Rao, Subbakrishna and Prabhu, 1989), Eysenck Personality Questionnaire- (EPQ, Singh and Sharma, 1988), The Rorschach Inkblot Test (Exner's Comprehensive System, Fourth Edition, 2003).

Procedure of Data Collection

In the initial stage, consent was taken from the patients by a predetermined performa and then socio-demographic data was collected from them. The next stage was consisting of administration of rating scales, viz. PANSS, YMRS and then objective Coping Checklist and EPQ were administered on the respective clinical groups. In the third or last stage Rorschach Psychodiagnostic test was performed for both the groups following 15 minutes of interval of the second stage.

Statistical Analysis and Results

SPSS 17 was used for descriptive and correlation analysis which resulted in Mean, Standard Deviation, Frequency, Range, Percentage, Students' t test and Pearson correlation coefficient. The results are mentioned in following tables.

Table 1: Socio-Demographic and Clinical Ratings Data

Analysis		**(N=30) Mean ± SD /f**		**Range (Min-Max)/ %**	
Population		**Schizophrenia**	**BPAD**	**Schizophrenia**	**BPAD**
Age (years)	**Variables**	51.00±9.98	32.00±10.83	24-51	18-55
Gender	Male	12	11	80	73
	Female	3	4	20	17
Socio-economic status	Lower	10	9	67	60
	Middle	5	6	33	40
	Upper	0	0	0	0

Marital Status	Unmarried	1	5	7	33
	Married	10	7	67	46
	Divorced	4	3	26	20
Religion	Hindu	10	12	67	80
	Muslim	5	3	33	20
Education	0-5	3	4	20	26
	6-10	9	5	60	33
	>10	3	6	20	40
Occupation	Farming	2	1	13	7
	Service	4	8	26	53
	Daily Wager	3	3	20	20
	Unemployed	6	3	40	20
Domicile	Rural	4	3	26	20
	Urban	11	12	73	80
Family Type	Nuclear	13	11	87	74
	Joint	2	4	13	26
		(N=18) **Mean ± SD/N**		**Range (Min-Max)/%**	
Duration of Illness(in years)		8.9±10.09	5.3±4.42	1-30	1-15
Family History of Psychiatric Illness	Absent	13	14	87	93
	Present	2	1	13	7

Table 1 shows Mean, Standard Deviation, Frequency and Range of various variables of socio-demography and clinical rating scales of the patients with schizophrenia and bipolar affective disorder. The sample of the present study consists of total 30 patients, 15 patients each belong to group schizophrenia and bipolar affective disorder (BPAD). The table shows majority of the population in both the groups is males 12 and 11 respectively of the above mentioned conditions and most of them are from lower socio economic status. From the schizophrenia group 3, 9 and 3 and from the bipolar group 4, 5 and 6 have studied till primary, secondary and higher secondary and college level. Eighty percent of the population belong urban background and 74 percent of them are from nuclear family background. Where schizophrenia patients have their mean average duration of illness of8.9 years BPAD group shows 5.3 years of illness.

Table 2: Students t Test of Personality and Coping Measures between Two Groups

Variables	Mean ± SD	t Values	P Value
EPQ Extraversion Schizophrenia	6.80±3.11	-0.53	**0.001**
BPAD	14.60±3.40	-	-
EPQ Neuroticism Schizophrenia	12.20±4.04	-0.08	0.931
BPAD	12.40±5.91	-	-
EPQ Psychoticism Schizophrenia	11.70±2.21	-0.58	0.565
BPAD	12.30±2.35	-	-
EPQ Lie Schizophrenia	7.30±2.11	-2.22	**0.039**
BPAD	10.00±3.19	-	-
CCL Problem Solv Schizophrenia	2.80±1.31	-1.75	0.096
BPAD	4.50±2.75	-	-
CCL Dist Positive Schizophrenia	4.90±1.79	-2.70	**0.015**
BPAD	6.80±1.31	-	-
CCL Dist Negative Schizophrenia	1.60±1.50	-0.31	0.755
BPAD	1.80±1.31	-	-
CCL Acc-Redef Schizophrenia	5.50±1.84	-1.11	0.281
BPAD	6.40±1.77	-	-
CCL Relig Faith Schizophrenia	4.50±1.77	0.00	1.000
BPAD	4.50±1.93	-	-
CCL Den-Blame Schizophrenia	5.40±2.21	1.28	0.214
BPAD	4.20±1.93	-	-
CCL Social Supp Schizophrenia	3.30±1.33	-0.69	0.499
BPAD	3.70±1.25	-	-

Table 2 shows students't test results of various personality and coping between the two groups
CCL=Coping Check List, PS=Problem Solving, DP= Distraction Positive, DN= Distraction Negative
AR= Acceptance and Redefinition, RF= Religious Faith, DB= Denial and Blame, SS= Social Support

Table 3A: Students t Test for various measures of Rorschach Test (CS) between the Two Groups

Variables	Mean ± SD	t Values	P Value
Tot Num of Resp Schizophrenia	17.50±3.43	-3.52	**0.002**
BPAD	25.90±6.70	-	-
W Sum C Schizophrenia	1.25±1.16	-2.03	0.057
BPAD	2.65±1.84	-	-
R X + % Schizophrenia	0.43±0.18	0.57	0.573
BPAD	0.39±0.14	-	-
R XA % Schizophrenia	0.67±0.18	-214	0.833
BPAD	0.68±0.11	-	-
R Xu % Schizophrenia	0.24±0.07	-1.52	0.144
BPAD	0.29±0.08	-	-
R X-% Schizophrenia	0.31±0.14	0.52	0.607
BPAD	0.29±0.06	-	-
R WDA % Schizophrenia	0.70±0.19	-0.30	0.761
BPAD	0.72±0.18	-	-
R Zd Schizophrenia	-0.40±2.19	2.87	**0.010**
BPAD	-3.7±2.89	-	-
R Pure H Resp Schizophrenia	1.60±1.71	0.12	0.095
BPAD	1.50±1.97	-	-
R Pure C Resp Schizophrenia	0.40±0.69	-0.36	0.722
BPAD	0.50±0.52	-	-

Table 3B: Students t Test for various measures of Rorschach Test (CS) between the Two Groups

Variables	Mean ± SD	t Values	P Value
R Lamda Schizophrenia	6.12±5.88	0.59	0.56
BPAD	4.87±3.21	-	-
R Isolation Ind Schizophrenia	0.41±0.34	2.28	**0.035**
BPAD	0.15±0.10	-	-
R Aff Ratio Schizophrenia	0.49±0.14	-1.59	0.127
BPAD	0.64±0.34	-	-
R W Sum 6 Schizophrenia	12.80±17.05	0.24	0.813
BPAD	11.30±9.94	-	-
R Perseveration Schizophrenia	1.20±1.22	0.57	0.572
BPAD	0.90±1.10	-	-
R Cooperation Schizophrenia	0.50±0.70	-0.78	0.443
BPAD	0.90±1.44	-	-
R Aggression Schizophrenia	0.40±0.69	-0.28	0.777
BPAD	0.50±0.84	-	-
R Personalized Schizophrenia	0.40±0.51	-0.14	0.167
BPAD	1.10±1.44	-	-
R Popular Schizophrenia	2.10±1.96	-1.77	0.09
BPAD	3.80±2.29	-	-
CDI Schizophrenia	3.30±1.063	-0.14	0.88
BPAD	3.40±1.34	-	-
PTI Schizophrenia	1.50±1.71	-0.74	0.46
BPAD	2.00±1.24	-	-

Table 3A and 3B show comparison of Students't test results of various relevant Rorschach variables between the two groups

TNR= Total Number of Responses, Pure H= Total Number of pure Human Responses, Pure C= Total Number of pure Colour Responses, Iso Ind.= Isolation Index, Aff Ratio- Affective Ratio, CDI= Coping Deficit Index, PTI= Perceptual Thinking Index

Table 4: Pearson r between Rorschach variables and Clinical Ratings of the Two Groups

Rorschach Variables	PANSS: Positive	PANSS: Negative	PANSS:GP	PANSS: Total	YMRS LTD	YMRS Content	YMRS Total
TNR	**0.701***	**0.818****	**0.656***	**0.821****	0.401	0.238	0.473
WSum C	0.129	-0.031	0.125	0.099	0.525	0.172	0.214
X + %	-0.296	-0.606	-0.613	-0.563	-0.622	0.012	-0.540
XA %	-0.301	**-0.753***	-0.608	-0.607	-0.267	0.195	-0.367
Xu %	-0.023	-0.422	0.067	-0.163	0.612	0.225	0.389
R X-%	0.397	**0.756***	**0.680***	**-0.679***	-0.341	**-0.706***	-0.021
WDA %	-0.161	-0.444	-0.481	-0.401	-0.221	0.259	-0.465
R Zd	-0.123	-0.608	-0.226	-0.327	-0.107	-0.458	-0.011
Pure H	0.146	0.239	0.329	0.271	0.352	-0.015	0.519
Pure C	0.386	0.069	-0.049	0.169	-0.218	-0.286	0.055
Lamda	0.311	0.382	0.489	0.452	-0.315	-0.165	0.429
Isolation	-0.428	0.038	-0.293	-0.298	0.552	-0.070	0.109
Aff Ratio	-0.234	0.034	-0.001	-0.093	0.070	0.069	0.178
R WSum 6	**0.792****	0.250	**0.724***	0.721	0.518	0.416	0.783
Persev	-0.241	0.313	-0.056	-0.036	0.042	0.192	0.283
Coop	0.287	-0.340	0.193	0.106	0.349	0.271	0.362
Aggression	0.107	0.034	0.514	0.270	-0.135	0.320	-0.148
Perseveration	0.428	0.186	0.298	0.366	0.286	0.021	**0.046***
Popular	-0.017	-0.305	-0.330	-0.235	-0.110	0.315	-0.453

* Significant at the0.05 level (2-tailed)
** Significant at the 0.01 level (2-tailed)
***Significant at the 0.001 level (2-tailed)

Table 4 shows Person correlation coefficients of various relevant Rorschach variables and all the dimensions of Positive and Negative Syndrome Scales (PANSS) and two relevant dimensions of Young Mania Rating Scales (YMRS) with the two groups.

Table 5: Pearson r between all Personality, Coping and Rorschach Measures in Schizophrenia

Variables	EPQE	EPQN	EPQP	EPQL	CCLPS	CCLDP	CCLDN	CCLAR	CCLRF	CCLDB	CCLSS
TNR	-.404	0.144	0.343	-.543	.025	-.406	.129	-.51	-227	.305	**-.80****
WSum C	0.261	0.437	0.032	-.079	.000	.120	-.159	.247	-.20	.002	.304
X + %	0.409	0.198	0.031	0.310	.339	.395	-.504	.530	.238	-.54	.259
XA %	0.563	0.112	0.125	0.432	.533	.572	-.37	**.76****	.175	-.49	.385
Xu %	0.473	-.372	0.151	0.318	.487	.365	-.20	**.67****	-.27	-.04	.363
R X-%	-0.364	-.162	-.165	-.495	-.507	-.580	.253	**.68***	-.10	.341	-.315
WDA %	0.249	.215	0.312	0.333	-534	.244	-.39	.58	.120	-.29	-.039
R Zd	0.563	.160	-.050	0.352	.354	.440	-.28	**.68***	-.08	-.28	.518
Pure H	0.254	.333	.082	-.332	-.138	.167	-.11	.070	.109	-.01	.301
Pure C	0.346	.283	.373	-.241	.459	.124	-.57	.345	.357	-.40	-.261
Lamda	-0.666	-.485	-.403	-.402	-.241	-.118	-.02	-.43	.449	-.24	-.185
Isolation	-0.357	-.326	-.475	-.131	-.407	-.039	-.34	-.04	-.36	-.05	.214
Aff Ratio	0.102	0.050	-.234	-.201	-.183	.213	-.50	.211	.143	-.30	.352
WSum 6	0.463	-.192	0.101	-.264	.424	-.023	-.06	.117	.513	.282	-.304
Persev	-0.481	-.031	-.506	-.283	**-.72***	-.343	-.19	**-.73***	.203	-.15	-.108
Coop	**0.705***	0.349	0.248	0.186	.477	.395	.000	.384	.574	-.35	.176
Aggr	0.194	0.047	-.488	-.015	-.507	-.142	.380	-.34	-.08	.100	.451
Pers	0.193	0.276	-.603	-.020	.458	-.072	.086	.000	.605	.058	.215
Popular	0.184	0.457	.415	0.206	.480	.350	-.21	.169	**.74***	.391	-.266
CDI	-0.118	-.429	-.028	.293	-.031	-.33	**.64***	-.09	-.47	.483	-.096
PTI	.000	.400	-.506	-.148	-.054	-.21	-.29	-.49	-.11	-.21	-.211

* Significant at the0.05 level (2-tailed)
** Significant at the 0.01 level (2-tailed)
*** Significant at the 0.001 level (2-tailed)

Table 5 shows Pearson correlation coefficients of relevant measures of Rorschach, all measures of Personality and Coping of Schizophrenia group.

Table 6: Pearson r between all Personality, Coping and Rorschach Measures in Bipolar Affective Disorder

Variables	EPQE	EPQN	EPQP	EPQL	CCL PS	CCL DP	CCL DN	CCL AR	CCL RF	CCL DB	CCLSS
TNR	-.046	-.324	-.194	-.440	-.141	**.815****	.023	.144	-.22	-.23	-.586
WSum C	.276	-.236	-.293	.311	.148	.541	-.39	.591	.367	-.49	-.364
X + %	.036	.405	.574	.055	.318	-.284	.232	-.42	-.32	.393	.530
XA %	.045	**.743***	**.785****	.018	.103	-.377	.292	-.47	-.12	**.663***	.359
Xu %	.009	.322	.155	-.122	-.437	-.018	-.05	-.03	.348	.227	-.417
R X-%	.168	-.553	-.578	-.021	-.373	-.372	-.32	.063	.139	.353	.086
WDA %	.244	.543	.495	-.081	.138	-.279	.336	.624	-.13	**.716***	.120
R Zd	.154	.008	-.307	.216	-.396	**-.740***	.047	104	.095	.038	.303
Pure H	.417	-058	-.180	.053	-.031	.259	.388	**.671***	-.32	-.206	.113
Pure C	.248	-.321	-.491	.066	-.420	.480	-.48	.000	.262	-.436	.253
Lamda	-.386	-.357	-.119	-.624	-.524	-.160	-.19	-.433	-.07	.185	-.232
Isolation	.136	.127	-.122	.422	-.216	-.159	-.26	.294	.533	-.010	-.442
Aff Ratio	.165	-.028	.019	-.151	-.306	.072	-.51	.005	.372	-.010	.029
R WSum 6	.437	-.269	-.288	.063	.196	.353	.124	**.653***	-.13	-.268	.026
Persev	.077	-.284	-.030	-.316	-.128	.445	-.47	-.034	.125	**-.640***	-.186

* Significant at the0.05 level (2-tailed)
** Significant at the 0.01 level (2-tailed)
*** Significant at the 0.001 level (2-tailed)

Table 6 shows Pearson correlation coefficients of relevant measures of Rorschach, all measures of Personality and Coping of Bipolar Affective Disorder group.

Discussion

Table 2 shows independent t test results of all the variables of personality, coping and Rorschach analyzed in the study. The significant differences have been found between two groups on the measures of Extraversion and social conformity (L scale) of personality. Patients belonging to BPAD group show significantly higher level of extraversion and social conformity than their schizophrenia counterpart. This finding goes parallel with other studies like Sariusz, M et al. 2003 who found extraversion trait on EPQ in BPAD patients. On measures of coping BPAD patients show significantly higher use of positive distraction as their coping strategy than the other group. Related to Rorschach variables schizophrenia patients have given significantly lower number of responses than the bipolar group which can be attributed to their more overloading of negative symptoms as found in mean analysis of PANSS. BPAD patients also have given more pure colour responses, not but near to significant level, than their counterpart, which is quite consistent with conventional findings. Regarding cognitive functioning, where both the groups have shown disturbances, on Rorschach variables, the findings have come up with mixed nature and nothing significant has been found out except scanning efficiency (Zd). This can be due to presence of psychopathology in both the groups as revealed by respective rating scales where they scored much higher than their cut off scores. On this scanning ability BPAD patients have shown better ability at significant level, this finding go parallel with executive dysfunction in patients with schizophrenia. Maria (2011) also reported poor scanning efficiency in her sample of schizophrenia where she got Zd=-0.32 and in the current study also this is similar (Zd=-0.40) Schizophrenia patients show more lonely and alienated than their counterpart on isolation index of Rorschach. The reason can be more negative symptoms in schizophrenia than bipolar patients who have all the diagnosis of mania.

There are few interesting findings, indicated by t test, have been revealed in the current study which go parallel with the existing literature, though they are non-significant but important to discuss. Patients with bipolar affective disorder have revealed their poor affective or emotional regulation by showing higher affective ratio and pure colour responses than schizophrenia group. Less number of pure colour responses (mean= 1.39) also evident in Maria's (2011) findings in schizophrenia patients which is little lower(mean=0.40) in current study. Whereas the later group shows higher Lamda value indicative of defensive and avoidant nature in them. Patients with schizophrenia also show more severe psychopathology in their special scores (W Sum6) on Rorschach on the other hand BPAD patients show more popular responses corroborated with their higher extraversion and social conformity. Current study's total severe specials cores (WSum6=12.80) are quite higher than many studies reflecting their full blown psychosis during the assessment as revealed by rating scale's findings. Hilsenworth et al. (2007) found that only (mean=W Sum6=0.55) in his psychotic population but their findings related to the PTI score (PTI=0.56) is quite similar to the current study (PTI=1.50).

Pearson correlation analysis between rating scales findings and Rorschach variables in

two groups reveal significant positive correlation between all the measures of PANSS and total number of responses (TNR) in schizophrenia indicating more the varieties of symptoms patients usually come up with more verbalizations on Rorschach test. The significant negative correlation (r=-0.756 and r= .680nat 0.05 level) between PANSS negative score and general psychopathology and Xu% reveal that more the negative symptoms and more overall general psychopathology related to more meditational or cognitive deficits. Some mixed results also have come in context of rating scales and psychopathology of both the groups. Related results also suggest that more the positive symptoms and general psychopathology more the likelihood of giving thought disorder related responses (W Sum6) in schizophrenia as indicated by significant positive correlation between them (r=0.792 at 0.01 level and r=0.724 at 0.05 level). Total score on YMRS has shown significant positive correlation (r= 0.046 at 0.05 level) with perseveration responses on Rorschach revealing similar findings that more manic psychopathology is related to lack of switch to different responses as one of the special scores in Rorschach.

Correlation analysis among personality, coping and Rorschach variables in schizophrenia group reveal that positive coping like acceptance and redefinition is significant and positively correlated with scanning efficiency on Rorschach suggesting more better information processing of different stimuli in the environment is linked with positive coping we use to solve different problems or dealing with the environment. Though the same coping is correlated with Xu% and X-% (r=0.67 at .05 level and r=0.68 at 0.05 level of significance) which further reveal that though they may appear to use more adaptive and better coping but that may not be always the case or generalizable to all situations where their atypical and distorted processing are still active because they are still in the state of psychopathology as indicated by rating scales.

Patients with schizophrenia also have shown significant negative correlation (r= -0.72 and r= -0.73 at 0.05 level of significance) between positive coping style (acceptance and redefinition) and perseveration as special score on Rorschach. This finding further suggests that more they accept or generous to the adverse situations or attempt understand that from positive point of view less they suffer from cognitive or behavioural rigidity. On the other side, extraversion is such a personality style which gets positively correlated (r=0.705 significant at 0.05 level) with cooperation as a special score, this finding again signifies more identification with the human society related to more supportive or helpful those people are. Religious and faith as a coping shows positive correlation (r=0.74 significant at 0.05 level) with popular responses on Rorschach. In context with social conformity this finding also corroborates with earlier finding. Distraction negative as a maladaptive coping shows significant positive correlation (r=0.64 significant at 0.05 level) with deficits in CDI on Rorschach in patients with schizophrenia. This is suggestive of poor coping resources are related to incapable handling of the environmental demands.

Patients with bipolar affective disorder show significant positive correlation (r= -0.743 at 0.05 level and r= -0.785 at 0.01 level of significance) between neuroticism, psychoticism dimensions of personality and XA% on Rorschach as a resource in positive thought process. This result may not be misleading to the conventional notion of psychopathology as an impairing factor for thought process but these patients may be worth full or productive to specific situations but not for all demanding situations or environment

where cognitive activity has to be much more flexible and intelligent. The similar explanation can be given to the parallel findings where denial blame has shown significant positive correlation with XA% and WDA%. Distraction positive is a coping resource where patients successfully engage themselves in some unproductive work for the sake of avoiding the challenging or demanding environment. This particular coping has shown significant negative correlation (r=-0.740 significant at 0.05 level) with scanning efficiency variable (Zd) with Rorschach. Finally it reveals more they distract themselves less they show worth full scanning effort to the situational demands. Whereas acceptance and redefinition coping style shows significant positive correlation with pure human responses on Rorschach suggesting more positive coping is related with more identification with human society. Patients with bipolar affective disorder also show significant positive correlation between acceptance-redefinition coping with psychopathology revealing summation of severe special scores (W Sum6) and coping deficit index (CDI) on Rorschach revealing that usage of their positive coping may be restricted to the known environment and that may be the reason why their overwhelming psychopathology, in terms of special scores, and coping deficits get positively correlated. Similarly positive distraction, where they become more social just to avoid and ignore demanding situations, gets positively correlated with cooperation as a positive special score. On the other hand, excessive extravesion during their long standing illness in BPAD gets positively correlated with poor coping resources and negatively correlated with their perceptual disturbances. These findings reveal that with the intense extraversion (significantly more than schizophrenia group as indicated in t test) coping deficit can be related positively but not to the extent of perceptual disturbances.

Summary

The overall results reveal that Patients with bipolar affective disorder (BPAD) have shown significantly more extraversion personality trait than patients with schizophrenia. They also show significantly higher level of lie score suggestive of higher social conformity. Both the groups show similar elevation in their neuroticism and psychoticism as corroborated by their respective rating scales. On coping dimensions, BPAD group reveals their more usage of positive coping styles in challenging situations as suggested by higher distraction positive and problem solving coping resources than the patients with schizophrenia who show significantly higher on denial and blaming coping which is regarded as negative coping style. Both the groups show getting and utilizing poor social support as a coping instrument.

On Rorschach test, patients with schizophrenia show significantly less number of total responses than their bipolar counterpart. BPAD patients show significantly better scanning efficiency, as indicated by Zd. Whereas, schizophrenic patients revealed higher on isolation index of Rorschach. Bipolar patients show more disturbances in affective modulation and emotional discharge as indicated by higher pure colour, affective ratio and WSumC responses. On the other hand, patients with schizophrenia revealed higher defensive and avoidant nature by significantly score high on lamda variable and significantly poor identification with society indicated by less number of popular responses. Correlation analysis reveal, in BPAD group, more the extraversion tendency less their perceptual disturbances and more positive coping resources are positively correlated with better identification and supportive and friendly attitude to their society. Whereas, in schizophrenia, positive coping and extraversion

personality trait are positively correlated with better scanning efficiency and better socialization. Negative coping is positively correlated with coping deficit on Rorschach.

The study has its limitation in total sample size and very majority of its male sample. In Bipolar group there was not a single case of depression where all had diagnosis of mania. Further studies should incorporate more sample with almost equal representation of female gender and depressive bipolar patients and other relevant variables of Rorschach should also be included.

References

Dao, T.K., Prevatt, F. (2006) A Psychometric Investigation of the Rorschach Comprehensive System's Perceptual Thinking Index. Journal of Personality Assessment, 86,180-189.

Dubey, B.L. (1981). Rorschach Indicators in Normal and Clinical Groups in Military Population.ISPT Journal of Research. 5: 54-56.

Hilsenworth et al (2007) The Rorschach PTI: The Examination of Reliability, Validity and Diagnostic Efficacy. International Journal of Testing. Vol: 7 (3), 269-291.

Jorgensen, K., Anderson, T.J. and Dam, H. (2000) The Diagnostic Efficacy of the Rorschach Depressive Index and the Schizophrenia Index. A Review Assessment, 7, 259-280.

Katsounari, I. and Jacobowitz, J. (2011). A Comparative Analysis of MMPI and Rorschach Findings Assessing Combat-Related PTSD in Vietnam Veterans: Psychology. Vol.2, No.4, 335-341

Kohli, A., and Kaur, R. P. (2002). Rorschach Profile and its Relationship with PEN Questionnaire in Borderline Psychosis. SIS J. of Proj. Psy. & Ment. Health, 9: 109-113

Manickam, L.S.S. and Dubey, B.L (2005). Rorschach Inkblot Test in India : Historical Review and Perspectives for Future Action. SIS Journal of Projective Psychology. & Mental Health. 12. 61-78

Maria Vivel Gomila (2011) The Rorschach Test in Differential Diagnosis of 245 schizophrenic patients. Annuary of Clinical and Health Psychology. Vol:7, 79-93

Meyer, G. J., & Archer, R. P. (2001). The hard science of Rorschach research: What do we know and where do we go? Psychological Assessment,13, 486-502

Meyer, G.J. Hsiao, W.C., Vigilione, D.J., Mihura, J.L., and Abraham, L.M. (2013). Rorschach scores in Applied Clinical Practice: A Survey of Perceived Validity by Experienced Clinicians. Journal of Personality Assessment, 95 (4), 351-365.

Perry, W., Minassian, A., Cadenhead, K., Sprock, J. and Braff, D. (2003) The Use of the Ego Impairment Index across the Schizophrenia Spectrum. Journal of Personality Assessment, 80, 50-57.

Rao, K, Subbakrishna, D.K, Prabhu, G.G (1989) Development of a Coping Checklist—A Preliminary Report. Indian Journal of Psychiatry), 31(2), 128—133.

Sariusz-Skapska. M, Czabala. C, Dudek. D, Zieba. A and Rduch. S (2003). Personality Tests in Patients with Unipolar and Bipolar Disorder. Psychiatr Pol., 37 (2), 225-233.

Verma, M.K. and Misra, S. (2002). Rorschach Response Patterns of Drug Addicts. SIS J. of Proj. Psy. & Ment. Health. 9: 62-64.