# The status of ego-functions, locus of control and cognitive style of the tribal depressive patients of Tripura state

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In the present study, a group of tribal patients suffering from clinical depression (CD) was compared with a group of matched normal control (NC) to see whether the former would show any difference with the later in terms of Ego Functions, Cognitive Style and in their attributional style of perceiving events (Locus of Control). The main objective was to examine how the relative standing of the depressive in the 3 domains, mainly Ego-Functions, Cognitive Style and Locus of Control, collectively operate to contribute to their pathology. Standardized Psychological Tests (Questionnaires) were administered following standard procedures given by the respective test devices. Results showed that the clinically depressed (CD) group, compared to the normal control (NC) group perceived self as incompetent, and lagged behind in cognitive and motivational aspects with poorer Ego-Functions mainly negative Cognitive Style and maladaptive attributional pattern to event outcomes. This predisposes them towards helplessness and hopelessness leading to a depressive state.

Keywords: ego-functions, locus of control and cognitive style

The Diagnostic and Statistical Manual of Mental Disorders (DSM) states that a depressed mood is often reported as feeling depressed, sad, helpless, and hopeless. In the past decade a number of theorists, notably Beck and Abramson, Seligman and Teasdale (cited by J.C. Coyne Essential Papers on Depression, 1985), have given particular attention to the cognitive manifestations of depression and have assumed that these features are casual of the other aspects of the disorder. Depressed persons characteristically view themselves, their situations, and their future possibilities in negative and pessimistic terms. They voice discouragement, Hopelessness and Helplessness. They see themselves as inadequate and deficient in some crucial way. There may be thoughts of death, wishing to be dead and suicide attempts.

Depressed person's involvement in their daily lives is interpreted by them in terms of loss, defeat and deprivation and they expect failure when they undertake an activity. They may criticize themselves for minor short comings and seemingly search for evidence that confirms their negative view of themselves.

Depressed persons over generalize from negative experiences, selectively abstract negative details out of context, ignore more positive features of their situations and negatively characterize themselves in absolutist and dichotomous terms.

Locus of control has been found to be a very relevant factor in depression. Beck (1967) had written: the depressed patient is particularly sensitive to any impediments to his goal directed activity. An obstacle is regarded as an impossible barrier. Difficulty in dealing with a problem is interpreted as a total failure. In achievement orientation situations depressed patients are particularly prone to react with a sense of failure. Research reports (DuCette & Wolk, 1973; Davis & Phares, 1967) reveal that an internal locus of control and ego strength is likely to coexist, within the same person. In fact, it is conceivable that a perception of internal control may be the phenomenological counterpart to ego strength.

A major area of research examining the psychopathology of

depression relates to cognitive changes in depression. The theoretical viewpoint underlying these investigations assumes that certain characteristic cognitions have a prominent role in maintaining the depressed state.

Cognitive models of depression view particular thoughts as the crucial cause of depressive symptoms. According to Beck, two mechanisms, the cognitive triad and errors in logic, produce depression. The cognitive triad consists of negative thoughts about the self, about ongoing experiences and about the future. Negative thoughts about the self consist of the depressed person's belief that he is defective, worthless and inadequate. The depressed person's negative thoughts about experience consist of his interpretation that what happens to him is bad. He interprets small obstacles as impassable barriers.

Finally, the depressed persons' negative view of the future is one of hopelessness. When he thinks of the future, he believes the negative things that are happening to him now will continue unabated in future.

In recent years, research orientation in clinical and therapeutic domains of psychology is tending more towards depth understanding of the psychological functions, whereby dynamics of behaviour is increasingly being emphasized (Safran & Segal, 1990). In this respect, Ego psychology has important contributions to offer since ego's definite behavioral anchorage renders it more amendable to quantification than some other psycho analytical concepts. Ego was initially conceived of as a surface differentiation of the Id. (Freud, 1923). Currently the ego is conceived of as the executive organ of the psyche and controls motility, perception, contact with reality and through the mechanisms of defense available to it, the delay and modulation of drive expression (Kaplan & Saddok, 1998).

Murgai Sathyavathi (1988) examined the relationship between Cognitive distortions and certain personality variables, i.e. self esteem, locus of control, alienation and extroversion, in a group of patients with neurotic depression and a group of matched normals. Results showed that the neurotic depressives differ significantly from normals on locus of control, self esteem and alienation but not on extroversion. The individuals in the depressed clinical group

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appear to be significantly more external in their locus of control than normals. Findings are consistent with findings of other researchers as well (Derry & Kuiper, 1981; Pietromonaco and Markus 1985). Murgai and Sathyavathi (1988) reported that the depressed group appears to be significantly more alienated than normals. So, it may be expected that individuals who perceive events as being out of their personal control and evaluate themselves unfavourably, would experience powerlessness and meaninglessness.

There are several researches on locus of control and cognitive style. The learnt helplessness model (Seligman, 1975) and revised hopelessness model (Abramson et al., 1989) has been tested by many investigators with mixed results. On the positive side, it has been found that depressives are more likely than control to explain negative events by means of the external orientation (Sweeney, Anderson & Bailey 1986). Moreover, the attributional style can help predict who, in a given sample, has been depressed in the past (Alloy, Lipiman & Abramson, 1992) and who will become depressed in the future, when exposed to stress (Abramson, Alloy & Metalsky, 1995). At the same time there is conflicting evidence. For example, some researchers have found that the stress plus negative attributions lead to depression (Hammen et al., 1988). The attributional style may be represented through the concept of locus of control.

Basu, Basu and Bhattacharya (1997) in a study on 60 normals, 60 depressed subjects administered the presumptive stressful life events scale (Singh, Kaur and Kaur 1983), the Bengali adaptation of the Ego Function Assessment scale (Bellak 1989), and Bengali adaptation of B.D.I (Beck et. al. 1961). They find out the relative impact of the 12 ego functions on the amount of experienced depression. The results indicate that though the amount of total presumptive stress had inconsequential effect on depression, the combination of the total presumptive stress and some of the ego functions played a significant role in determining the overall psychopathology of depression. The study highlighted the role of object Relation, Thought Process, Adaptive Regression, Defensive Function, Mastery Competence and Synthetic function among all the ego functions in depression. The study showed that the better the functions, less the depression.

Ego-functions and their relationship to Psychopathologies were again reported by Basu, Basu and Bhattacharya (2004). This study explored the role of 12 ego functions in relation to Stressful Life Events and three indices of psychopathology, namely, Psychoticism, Anxiety, and Depression among 60 Bengali adult patients suffering from Paranoid Schizophrenia.

On the basis of the research reviewed there is good reason to believe that external control orientation and abnormal functioning is correlated. Some of the reviewed studies have studied link between locus of control and ego strength. Therefore for better understanding of the depressive position, the present study intends to see the relative status of ego functions, Locus of Control and Cognitive style collectively in a group of clinically depressed tribal patients as compared to normal controls.

# Method

## **Participants**

The Tripuri (also Tipra or Tipperah) people are the original inhabitants of the Kingdom of Tripura in India The Tripuri people are considered part of the Tibeto-Burmese ethnic group. They are tribes & indigenous people who are now minority in Tripura.

In total 30 Tripuri subjects were selected and equally divided into

two groups, viz, a) Clinically Depressed group (n = 15) and b) Normal Control group (n = 15). The mean age of the patients was 32.6 years and SD 4.02 years and that for the normal was 32.2 years and SD 2.76 years. The age difference between groups was not significant statistically. The patients were matched for their duration of illness (Mean duration = 3 years and SD = 2.06 years). The patients and the normals were also matched for sex, (12 male, 3 female) education (minimum H/S), and socioeconomic status (middle class), religion (Hindu) and in marital status etc. The patients were on drug treatment (due to medical and ethical reasons) at the time of this study.

## Procedure

To conduct the study, as a first step consents were obtained from the local hospitals and medical college authorities. Patients meeting the DSM IV diagnostic criteria for depression and reporting to the outpatient division of the psychiatry department for their treatments were referred to the present investigators.

The diagnosis was made by the chief psychiatrist which was subsequently confirmed by a psychologist by applying Multiphasic questionnaire in a double blind arrangement. When both the psychiatrist's diagnostic impression and the diagnostic impression obtained on the M.P.Q were at consensus, the patients were referred to the present investigators and they found out whether those patients fulfilled the inclusion and exclusion criteria. In case the patients not meeting these criteria, those patients were referred back to the concerned psychiatrist. The patient meeting the criteria for selection were explained the terms and conditions of their treatment. Also they were explained about the nature of psychological test they will have to undergo. Receiving consent from them on arrival each patient was taken to the particular cubicle of the hospital where the psychological questionnaires were administered in a single session, the questionnaires were filled in, in presence of the assessor so that any clarification could be done immediately. In between two questionnaires, sufficient rest pause was given to the patient to overcome monotony if any.

The procedure followed for the administration of the psychological questionnaires to the normal controls was identical. The only exception was that they didn't have to attend O.P.D. Psychiatry. Otherwise screening of Psychiatric disorder, if any, was done by applying General Health Questionnaire (G.H.Q, Goldberg & Hiller 1979). Beck Depression Inventory (Beck et al. 1961) was administered to the normal to confirm that they didn't have depression. The scoring of the data was done following standard procedures given by the respective test devises or questionnaires. Statistical treatment of the data namely mean, Standard Deviation, Mann Whitney U Test were computed to obtain between group differences on the variables assessed.

#### Instruments

*Personal Information schedule:* Devised by the authors to collect the basic information.

Beck Depression Inventory (B.D.I-II): Developed by Aaron T. Beck (1961). The test has 21 items and it is a multiple choice self report inventory which is a very widely used instrument for measuring severity of depression. The internal consistency of the BDI-II is high (.91) and it is positively correlated with the Hamilton Depression scale with a Pearson r of .70 and high one week test retest reliability (.93). Score ranges from 0-63. Higher score indicate more severe depressive symptoms.

General Health Questionnaire (G.H.Q): Constructed by Goldberg and Hiller (1979). Test retest reliability of this test has been reported to be high (.78 to .92) and interraters and intrarater reliability have both been shown to be excellent (Cronbach's alpha .9to.95). It correlates with HADs and other measures of depression. Score ranges from 0-28. In this present study, the GHQ is used among normal subjects to screen out those with a psychiatric disorder.

Cognitive Style Test (C.S.T): Devised by Willkinson and Blackburn (1981). This is a highly reliable and valid self administrative inventory with 30 items having 4 choices in each. Score ranges from 30-120. In the present study the scores were considered with respect to self pleasant, self unpleasant, world pleasant, world unpleasant, future pleasant and future unpleasant. The lowest score in each domain is 5 and highest score is 20. Higher Score indicate more negative perception.

Ego function Assessment (Modified) Scale: Devised by Bellack et al. (1973). Bellack et al identified 12 separate ego functions and prepared EFA scale with high interrelated reliability and clinical validity. It has 120 items version (modified) which consist of 12 subscales intended to assess 12 major ego functions viz. Reality Testing (RT), Judgement (J), Sense of Reality(R), Drive Control(DC), Object Relation (OR), Thought Process (TP), Adaptive Regression in service of the Ego (ER), Defensive functions(DF),

Synthetic integrative function (SF), Autonomic Functioning(AF), Stimulus Barrier(SB), and Sense of mastery and Competence (MC). Score ranges from 0-20 in each area. High score indicates high level of functioning on that domain.

Multiphasic Questionnaire (M.P.Q): Constructed by Murthy and Lakshminarayana (1968) on the lines of MMPI. The test significantly differentiate (.01 level)normals with clinical group. It has 100 statements and can diagnose patients with depression (and also other disorders). The scale was used in the present study for substantiating clinical diagnosis.

Levenson's Scale for Locus of Control: The test was formulated with the social learning theory of Rotter(1966). It is a Likert type scale having five poits. The scale consists of 24 statements, 8 each for powerful others (P), chance control (C) and interval control (I). High score in each area indicates that: P-Other people control your outcomes. C- Unordered chance as random events control your outcome

I- your believe that your outcomes are controlled by you- that your current situations and rewards are direct outcomes of things you control.

These three theoretically distinct elements of control have been consistently confirmed by factor analysis of the instrument (Levenson, 1974)

# **Findings**

Table I: Showing the Mean, standard Deviation (SD), U Value and their level of significance on the respective variables between Clinically Depressed Group (CD) and the Normal Control Group (NC).

Sl.No. Variables		CDGROUP		NC GROUP		U Value	Level of Sig.
		Mean	SD	Mean	SD		
1.	R.T.	13.3	1.3	13.83	0.8	80	Not Sig.
2.	J	15.4	4.2	15.9	1.32	76	Not Sig.
3.	R	16.4	2.52	15.3	2.34	66	Not Sig.
4.	DC	9.47	4.6	17.1	2.5	25	P>0.01
5.	OR	7.13	1.3	13.36	3.15	11	P>0.01
6.	TP	10.87	1.9	15.9	2.5	19.5	P>0.01
7.	AR	10.93	4.7	15.7	2.96	30	P>0.01
8.	DF	10.3	2.56	16.43	1.74	10.3	P>0.01
9.	SB	10.00	1.1	16.3	2.8	12.5	P>0.01
10.	AF	8.47	4.01	15.2	3.7	24.5	P>0.01
11.	SF	9.13	2.8	14.06	4.6	41.5	P>0.02
12.	MC	6.13	3.1	16.2	2.7	0	P>0.01
13.	Total CST	76.53	7.1	57.53	9.12	15	P>0.01
14.	S/U	12.67	2.8	10.2	2.62	64	P>0.05
15.	S/P	13.80	2.8	10.1	1.8	41.5	P>0.02
16.	W/U	13	1.5	9.4	3.2	23.56	P>0.01
17.	W/P	14	2.1	9.2	3.0	38.43	P>0.01
18.	F/U	11.27	3.65	11.3	3.45	66	Not Sig.
19.	F/P	11.47	2.04	8.73	2.5	53.5	P>0.02
20.	P.O	26.43	4.5	18.56	5.8	18.89	P>0.01
21.	C	24.76	5.5	18.6	5.2	54	P>0.02
22.	I	22.34	4.9	26.98	3.8	68.6	Not Sig.

RT- Reality Testing, AR - Adaptive Regression, J - Judgment, DF - Defensive Functioning, R -Sense of Reality, SB - Stimulus Barrier, DC - Drive Control, AF - Autonomic Functioning, OR - Object Relation, SF -Synthetic Integrative Functioning, TP- Thought Process, MC - Mastery Competence, Total CST Total Cognitive

Style, S/U- Self Unpleasant, S/P Self Pleasant, W/U- World Unpleasant, W/P World Pleasant, F/U- Future Unpleasant, F/P-Future Pleasant, P.O- Powerful others, C-Chance Control, I-Individual Control, Not Sig. Not Significant.

Table I shows mean, Standard Deviation Mann Whitney U test and level of significance of the depressed patients and the normal controls with respect to different variables. So far as Ego Functions are concerned in MC, DC, OR, TP, AR, DF, SB, AF and SF depressed patients show poor functioning.

In cognitive style though the total score showed a significant difference (p < 0.01) statistically between the depressed group and the normal controls, statistical treatment of the data obtained on different items under cognitive style test showed that the depressed patients have shown consistently negative appraisal of the self, world and future compared to the normals.

In the Locus of Control the depressed group has shown significantly higher scores on both Powerful (p < 0.01), other and chance Control (p < 0.02); sub items of the Locus of Control scale compared to the normal controls. This indicates that depressed patients attribute more to chance factors and to powerful others with regard to the outcomes of their life events. However with regard to their tendency to utilize internal Locus of control both the depressed group and the normal controls did not show any statistically significant difference though the trend to utilize internal control was relatively higher for the normal group.

## Discussion

From the results it is clear that the Clinically Depressed (CD) group's actual and perceived performance in interacting with and mastering the environment, with respect to their existing capacities was poorer than the normal control (NC) group. This probably contributed to the higher strength of attribution of event outcomes to powerful other and chance control in the CD group. Perceiving themselves as incompetent, they tend to hold others and fate, luck etc. responsible for what happened in their lives. On the contrary, their NC Counter parts with higher mastery competence perceived life events as mainly controlled by them. Although the CD group attributed event outcomes to external factors, they couldn't stop themselves from blaming self for personal incompetency; therefore they might not have differed significantly with the NC group with respect to individual control.

Furthermore, as indicated by the results of the present study, the clinical group's control over drives, impulses and affects was poorer than the NC group. Mention may be made here that Bellak, Hurvich, Gediman, (1973) opined that the drive control of the psychopaths is also poorer than the normals. However, the psychopaths have lesser feelings of guilt than the normals. This helps them to act out situation and without having any consideration about the social evaluation of their behavior. On the contrary, patients suffering from depression do experience guilt, which possibly stops them from direct expression of unacceptable drives and impulses. Thus in the ability to control drives, impulses etc., coupled with inhibited expression of such drives and impulses possibly contributed to their depressed status. Studies in this context mentioned that in depressed group this control is loosened and the internalized aggression often leads to self mutilation and suicidality. The present findings therefore support previous findings (e.g., Basu & Chakraborty 1996).

Disturbances in Autonomous Functioning (AF) of the CD group, indicates impairment in attention, concentration and memory functions of the group. Lack of initiative may interfere with habit patterns, known skills and hobbies as well.

Disturbances in apparatus of AF led to poorer attention, concentration ability to learn, concept formation etc. This led to their

poor scores in thought process (TP) compared to the NC group. However loose unrealistic thought patterns has not been noted in the data of the CD group for the present study as was revealed from the CD patients responses on to the items of the Ego Functions questionnaires.

Disturbances in Autonomous Functioning (A.F) also led to concreteness in thinking which hampered the ability of the CD group to engage in creative endeavors. So, unlike the NC group, they could not adapt to the crisis by engaging in creative endeavors, as indicated by their relative score on Adaptive Regression (AR).

Poor competence mastery, and also poor cognitive functioning and lack of initiative adversely affected the CD group's integration between thoughts expectations and behaviours. They were able to successfully execute the behaviours that would satisfy their expectations. This lack of integrity between the thought and action level, as reflected by their poorer synthetic Integrative Functioning (SF) further contributed to their depressed status.

The CD group, compared to the NC Group was more sensitive to external stimuli and less able to screen out such stimuli when they disturbed their functioning or rest. Moreover they were more likely to react to such stimuli with withdrawal rather than active coping mechanism which possibly contributed to their depressed, low motivational status, as indicated by their relative score on stimulus Barrier (SB).

The above discussed findings indicate that the CD group compared to the NC group perceived self as incompetent and lagged behind with respect to cognitive and motivational aspects. This status made them feel helpless and view themselves, with respect to both pleasant and unpleasant events, in a negative light. This might have been the possible reasons for the CD groups' poorer score than the NC group in cognitive style test.

The CD group not only perceives the self in a negative light but also the environment and the situations they are living. Their negative perception of their environment seems to be related to their object Relation (OR). The CD group's poorer OR score, compared to the NC group implies that their present relationships were adaptively influenced by their past immature ones. CD group equated temporary physical absence of love object with the lack of that object and experienced high degree of anxiety, frustration and hostility in relationships. Their pathological dependence on their love object led to their need for constant reassurance from significant others and made them perceive slightest problems in relationship as catastrophic. Their expectations from relationships are pathological. It is quite natural on their part to be easily frustrated in relationship. They perceive the world in a negative light with respect to both pleasant and unpleasant events. Thus they scored significantly higher than the NC group on world pleasant as well as world unpleasant items of Cognitive style Test (CST).

Poor mastery competence, Poor Adaptive Functioning, thought process, object relation, synthetic integrative Functioning, external locus of control, perception of self and others in a negative light is likely to predispose a person to view the future hopelessly. As expected, the CD group in the present study, perceived unpleasant events related to future more negatively than the NC group. Thus from the above discussion it is clear that the NC group adapts to the environment more actively and competently than the CD group, given their higher MC, and higher AF, SF, TP, OR, However it is not so that their competencies are never challenged by adversities. They also experience their share of frustrations, anxieties and pains but in

those circumstances they are able to use the adaptive defenses more adequately toward the negative emotions. The negative life events have deeper and more enduring impact on the CD group, compared to the NC group, as indicated by DF or Defensive Functioning.

The CD group however did not differ with the NC group on three important ego functions that is Reality Testing (RT) Judgment (J) and sense of Reality (SR). Thus the study is in conformity with Basu & Banerjee, 1998, that Awareness of external reality, accuracy of perception and awareness of inner status (as involved in RT) are not disturbed in patients suffering from pathologies without psychotic features. Similarly lack of awareness of appropriateness and likely consequences of intended behaviour and the reflection of the same in manifest behaviour (as indicated by Judgment) is disturbed in psychotic states only. Furthermore experience of external events or self as unreal is also found only in dissociate disorders and psychotic states. The subjects in the present study were free from any psychotic symptoms and had insight into their disturbances.

Therefore, they did not differ with the NC group with respect to the ego functions of Reality Testing, Judgment and Sense of Reality. So, the present study shows that with the exception of Reality Testing, Judgment and senses of Reality, depressed patients did show significant difference with regard to other aspects of Ego functions when compared with normals subjects.

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