

Comparative study of depressed and non-depressed young adults regarding Cognitive style and Ego-function

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Abstract

Depression emerge from cognitive style and it is very much associated with ego function where reality testing, judgment, drive control, defense function, thought process, synthetic integrative functioning, morality, object relation has been linked. The purpose of this present study was to explore how the relative standing of the depressive in the two domains, mainly Cognitive Style and Ego-Function, collectively operate to contribute to their Pathology among young adults. For this study, a sample of 200 depressed young adults and 200 non-depressed young adults (matched normal control) were taken [100 male and 100 female in both case]. Standardized psychological test(questionnaire)were administered-Beck Depression Inventory, Cognitive Style test, Ego Function style, Kuppuswami SES Scale, General Health Questionnaire Scale. Data were collected using the technique of purposive sampling. Result showed that clinically depressed group, compared to the normal control group lagged behind in Cognitive aspect and poorer Ego-Function. Significant relation were found between depression and cognitive style and between depression and ego function in comparison to non-depressed young adults with the help of t-test and ANOVA(analysis of variance).

Keywords: Depression, Cognitive style, Ego Function, Young Adults.

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Worldwide, depression is a very common illness. An estimation of 350 million people of all ages are affected by this disorder. So, it is major contributor to the overall global burden of disease. Recurrent depressive disorder involves repeated depressive episodes where person feels loss of interest, enjoyment, reduced energy and throughout depressed mood which leads to diminished activity for at least two weeks. Some other symptoms are disturbed sleep, appetite, feeling of guilt and low self worth. As per DSM, a depressed mood is often reported as feeling depressed, sad, hopeless and helpless. At its worst, depression leads to suicide and above 8,00,000 people die due to suicide every year and globally it was second leading cause of death among 15-30 years old in 2012(WHO Suicide data). In 1998, Martin Seligman(President of APA-American Psychological Association)worked on depression across the century and reported that the rate of depression was 10-20 times much than 50years ago and it has become a problem of young person and according to U.S Centers for disease Control and Prevention, use of antidepressants increased 400% and users were aged 18-44years in last two decades (Bruce. E.Levine,2013).In America, one study revealed that seriously considered attempting suicide by college students has increased to 30.3% in 2012-13 from 23.8% in 2010-11(Amy Novotney,2014). So, it is seen that alarming rate of depression has increased among young adults and it prevails each and every country. In past decade many theorists, notably Beck, Seligman and Teasdale have given emphasize to the cognitive manifestations of depression and assumed that these are common factors of the other aspects of the disorder. Cognitive style is sufficient cause for such depressive mood which include viewing the negative life event as likely to lead to other negative consequences, implying that he/she or the person is unworthy or deficient. Cognitive vulnerability is the tendency of a person to make particular kind of interferences/interpretations about the cause, consequences and self worth implied to the negative life events. The person who generate these negative interpretations are supposed to be at risk for hopelessness, helplessness, worthlessness that leads to depression. This kind of negative cognitive styles and rumination in response to depressed mood as risk factors for depressive episodes and a general self focusing style is seen to be a factor to increase vulnerability to depression. In a study (Alloy, Abramson et.al 1999), it was proved that individual who generated negative cognitive styles would more likely to develop depressive mood or symptoms when they experienced negative life events than the individual who did not. Naturally, the person having cognitive vulnerability for depression will have some disturbance in personality dimension where reality testing, judgment, sense of reality, drive control, object relation, thought process, defense function, stimulus barrier, autonomous functioning, sense of mastery, synthetic integrative functioning supposed to be affected. Overall ego function of the person stays at high risk. Basically negative or maladaptive cognitive schemata which involve immature rules of a conduct, inflexibility, unattainable, self expectations influence attitude and behavioral responses. According to Jung, the ego has four inseparable functions which helps to perceive and interpret reality-Sensation, Thinking, Feeling, Intuition. Thinking refers to the faculty of rational analysis, understanding and responding to things through the intellect obviously affected by cognitive vulnerability and depressogenic mood. Feeling- the interpretation of things at a value level, must be affected by affective disorder. As thinking and feeling are act of judgment, easily got affected in depression. Sensation-conscious perception through the sense organs are supposed to be disturbed and affected by recurrent mood disorder. Intuition which is

source of inspiration, creativity, novel ideas surely hampered by helplessness-hopelessness-worthlessness condition in Emotional disorder. The aim of the present study is to find out the psychological factors(cognitive style and ego function) related to depression of young adults. In recent years, research orientation in clinical and therapeutic domains of Psychology is searching more towards in-depth understanding of psychological functions, where dynamics of behavior is being emphasized extremely (Safran & Segal,1990).Therefore for better understanding of the depressive position the present study intends to reveal the relative status of cognitive style, ego function collectively in a group of Depressed young adults as compared to normal controls.

Objectives

The objectives of the present study are as follows :-

1. To study the depressed and non-depressed young adults with respect to cognitive style and ego functions.
2. To identify the role of gender on cognitive style and ego function among depressed and non-depressed young adult.

Hypothesis

H1: There is significant differences between depressed and non depressed young adults in terms of Cognitive style test.

H2: There is significant differences between depressed and non depressed young adults in terms of Ego function test.

H3: There is significant effect of gender on depressive patient in respect to Cognitive style.

H4: There is significant effect of gender on non depressive young adults in respect to Cognitive Style.

H5: There is significant effect of gender on depressive patients in respect to Ego function.

H6: There is significant effect of gender on non depressive young adults in respect to Ego function.

H7: There is significant interaction effect of gender and depression on Cognitive style among young adults.

H8: There is significant interaction effect of gender and depression on Ego function among young adults.

Independent Variables- Depression, Gender

Dependent Variables-Cognitive Style, Ego-Function

Method

Participants

Participants in this study included 200 moderately depressed young adults[100 male & 100female] and 200 non-depressed young adults[100 male and 100 female] residing at Kolkata who volunteered to participate in the study. Here purposive sampling was done in case of patient population and random sampling was followed in case of normal population.

Inclusion Criteria:

1. The age of participants should be within 18yrs to 25yrs.
2. The socioeconomic status of the participants should be matched for both groups i.e. depressed and non-depressed groups (by using Kuppusswami SES scale-Revised 2012).
3. The depressive person should be clinically screened[diagnosed by Psychiatric Doctors].

4. Only moderately depressed clients were taken[by using BDI].
5. The patient would not have any other co morbidity of other psychiatric symptoms.
6. Non depressive person must not have any past psychiatric illness.

Exclusion Criteria:

1. Only Hindu subjects are studied, others are excluded.
2. Only Bengali and English speaking subjects were taken, others are excluded.
3. Joint families were excluded from the study as the complexity of relationships differ between joint and nuclear families. Moreover, joint families are rare in the urban areas of Kolkata.

Materials:

General Information Schedule : It is semi-structured information schedule. It contains information about socio-demographic variables like age, sex, education, domicile and occupation.

Kuppaswamy's SES Status Scale(Revised 2012): Constructed by Kuppaswamy on 1981, then it was modified by BP R Kumar, S R Dudala, AR Rao (2012). It was one of the most important social determinants of health and disease, thus widely studied constructs in social sciences. It is used to measure social and economic variables. Keeping the changing socioeconomic circumstances in mind, income criteria revised on 2012. CPI-IW (base 2001 = 100) shows reference index numbers as 208 on June 2012 as per Labour Bureau(2012), Government of India. Price index was 88.42 for 1998 and 208 for 2012 so conversion factor with 2001 as new base will be 2.35 ($208 \div 88.42$).

Beck Depression Inventory : The original version of the B.D.I. was introduced by Beck, Ward, Mendelson, Mock and Erbaugh in 1961. It consists of 21 items that measure characteristics, attitudes and symptoms of depression(Beck et al,1961). The test-retest reliabilities ranged from 0.48 to 0.86, depending on the interval between retesting and type of population(Groth-Marnat,1990) ,it has split-half reliability co-efficient of 0.93 and the concurrent validity of this test is 0.72(Beck et al. 1988).

General health Questionnaire : The General Health Questionnaire was designed to be self administered screening test aimed at detecting psychiatric disorders among respondents. It was designed by Goldberg and Hiller(1979)as a state measure.GHQ-28 containing 28 items was derived from factor analysis of GHQ-60.It consists of 4 subscales for somatic symptom, anxiety, insomnia social dysfunction and severe depression. For the present study Bengali adaptation of GHQ -28(Basu and Banerjee,1998) was used. Each item of the Bengali adaptation has been found significantly contributing to total score as correlation coefficient of each item with total score is significant at .01 level. Its split half reliability is 0.97.It is more used among normal subjects to screen out those with a Psychiatric disorder.

Multiphasic Questionnaire (MPQ) :First it was constructed by Murthy(1965). The test significantly differentiate (.01 level) normal with clinical group. It has 100 statements and can diagnose patients with depression(and also other disorder).The scale was used in the present study for substantiating clinical diagnosis. MPQ is derived from the Minnesota Multiphasic Personality Inventory (Hathaway & McKinley,1951).The questionnaire was developed and validated in India. It is a forced choice true/ false inventory that evaluates the personality profile for anxiety, depression, mania, paranoia, schizophrenia, hysteria, psychopathic deviation and lie scale, and repressor-sensitizer scales.

The Cognitive Style Test (CST) : It was originally developed by Blackburn, later it was revised and validated by Blackburn, Jones & Lewin (1986) and specially designed to assess degree of negative interpretations for both pleasant and unpleasant situation. It consist of 30 descriptive and events are classified into 3 themes relate to Beck’s cognitive triad of self, world and future. The overall structure of the test yields two types of events(pleasant and unpleasant).There are 5 items in each type. It is a self administrative inventory. The score ranges from 30-120 and highest score indicates greater negative perception. The Kappa co-efficient was significant at 0.001 level. For the present study Bengali adaptation of Cognitive style test(Prof. Nrisinha Kumar Bhattacharya & Sampurna Mitra)was used.

Ego Function Assessment(Modified) Scale (EFS): Bellak identified 12 separate ego functions and prepared a detailed interview schedule entitled the ego function assessment (EFA)scale with demonstrated inter related reliability and clinical validity. To enhance its applicability in general population, a 120 items questionnaire version of the same prepared (Bellak,1988) and named as Ego Function Assessment (Modified)Scale or EFA-M. For the present study Indian Bengali Adaptation of Ego Function Assessment Scale(Prof. Jayanti Basu and Mallika Banerjee)was used.

Results

The mean and S.D of the variables are as follows presented in (Table1). For depressed and non-depressed group the Mean and SD of CST score were 82.4 & 6.007 and 55.55 & 8.202 respectively. Mean & SD of EFS score for both groups were 87.31 &8.27 and 170.42 & 13.77.

Table-1: Mean and SD of Depressed and Non-Depressed young adult regarding Cognitive Style Test and Ego Function Scale:

Group	variables	N	Mean	SD
Depressed	CST	200	82.46	8.202
	EFS	200	87.31	8.277
Non-Depressed	CST	200	55.55	6.006
	EFS	200	170.47	13.02

Table-2: The Large Independent t-test between magnitude of depressed and non depressed young adults in response to CST & EFS.

Group	Variables	t-value	Df	Sig
Depressed vs Non Depressed	CST	37.441	398	.000**
	EFS	-76.211	398	.000**
Male vs Female Depressed	CST	-4.546	198	.000**
	EFS	-6.94	198	.000**
Male vs Female Non-Depressed	CST	14.857	198	.000**
	EFS	-9.001	198	.000**

**significant at .01 level

Results of the above Table showed that there are significant differences between depressed and non-depressed young adults at .01 level in respect to Cognitive style and Ego Function and also

gender differences in both group are significantly differ(at .01 level) regarding above said variables.

Table-3: 2x2 way Analysis of Variance shows the Effect of Depression and Gender on CST & EFS.

Factors	CST		EFS	
	F	sig.	f	sig.
Depression(d)	1.849	.000**	7.84	.000**
Gender (g)	8.593	.004**	128.77	.000**
d x g	120.268	.000**	12.69	.000**

**Significant at .01 level

From the above results(Table-3) it was found that gender and Depression had an immense significant effect at 0.01 level on CST & EFS and also interaction effect of gender and depression was find out on both dependent variables.

Discussion:

The Purpose of the study was to determine whether the two groups, depressed and non-depressed significantly differ in terms of the cognitive style and the ego function and whether gender differences presents in both group and also the interaction effect of depression and gender on cognitive style and ego-function. Major findings are as follows: Depressed and non-depressed group of young adult differ significantly in terms of Cognitive style at .01 level. So, H1 hypothesis has been accepted. Previous study has shown that cognitive style has considerable effect on depression. *Pszyczynski*(1987) found that self focused attention and self regulatory process leads to become depressed and it creates vicious cycle between negative outcome and depressive self-focusing style. Another study by Alloy, Abramson et. al (1999) stated that depressogenic cognitive styles do indeed conduce vulnerability for significant depressive disorders and suicidability and it correlates with information processing and personality. Data of another study indicates that Cognitive style Questionnaire measures the cognitive vulnerability factors with reliability and validity which is featured in the hopelessness theory of depression which as a matter of fact, coincide with present findings (*Gerald J.H. et. al.*2008). Research on Cognitive theory by *Mathew S. R. & Alloy L.B.* (2003) states that negative cognitive styles and rumination in response to depressed mood culminate the risk factors for depressive episodes and a general self focusing style use to increase vulnerability to depression. *Spasojevic J., Alloy L.B.*(2001)found Rumination is potential risk factor for depression and it is significantly associated with negative cognitive style, self criticism, dependency, neediness and history of past depression. The previous study findings support the present findings. Data showed that there was significant effect of gender on depressive patients and non-depressive population in respect to cognitive style. So, H3&H4 are accepted. Research by *Mezulis et. al*(2010) showed that stress and depression was strongly associated with girls over time and the cognitive vulnerability –stress interaction was significantly high in girls’ trajectories than boy. *Almeida & Kessler* (1998) assessed the experience of daily stressors and psychological distress among male and female subjects and concluded that females experience higher prevalence of high distress compared to males. So, gender differences in cognitive vulnerability mediate the emergence of the gender

differences in depression. Depressed & non-depressed group significantly differ in terms of ego-function and it is quite inevitable that it has considerable effect on depression. So, H2 & H5 & H6 are accepted. Previous research findings on Egyptian major depressive patients showed that mean of total ego function was greater than Schizophrenia but lower than Neurotics & and normal-control.(Mahfouz, Rashidi et. al 1993). Another findings by Klein D.N., Kotov R. & Buffered S.J. (2011) revealed that low extraversion and Positive emotionality and low effortful control moderate the relationship between neurotic/negative emotionality and depression which in other way related to ego-function. Ego-functions and their relationship to Psychopathologies were again reported by Basu, Basu and Bhattacharya(2004) where the role of 12 ego functions in relation to Stressful Life Events and the indices of psychopathology, namely Psychoticism, Anxiety and Depression among 60 Bengali adult patients suffering from Paranoid Schizophrenia were explored. So, the present study shows that depressed patients showed significant differences with regard to Cognitive style & Ego function when compared with normal subjects.

Conclusion:

The above study findings indicated that the effect of Cognitive style and Ego functions were considerably high on Depressive young adults and gender played a vital role on depression. Depressed patients did show significant differences with regard to all aspect of Ego functions and Cognitive style when compared with normal subjects. The documentation of significant cognitive factors and the factors of ego functions for depression has genuine potentiality for the development of interventions that can prevent this serious disorder.

References

- Alloy L.B., Abramson Y Lyn, Wayne G.W., Michael E H., Nancy A. T., Dena L. S., Donna T.R., Patricia Donovan (1999) Depressogenic Cognitive styles: Predictive validity, information processing and personality characteristics and developmental origins. *Behavior Research and Therapy*.Vol.37(6), pp.503-31.
- Almeida D.M., Kessler R.C.(1998). Everyday stressors and gender differences in daily distress. *Journal of personality and social psychology*,75(3),670-680.
- Amy Novotney (2014) Students under pressure. College & university counseling centers are examining how best to serve the growing number of students seeking their services. *American Psychological Association*. Vol 45,No.8,pp-37-41.
- Basu J; Banerjee M.(1998) Adaptation of the English version of the ego function assessment scale(modified) by Bellak for Indian Adults. *Indian journal of clinical Psychology*.25(1):57-65.
- Basu J, Basu S, Bhattacharya S,(2004) Ego function in relation to stressful life events and indices of psychopathology in paranoid schizophrenia. *Psychological reports* 95(3f),1248-1252.
- Beck A.T., Ward C.H., Mendelson M, Mack J., Erbaugh J.(1961) An inventory for measuring depression. *Archives' of General Psychiatry*. pp- 561-571.
- Beck et al.(1988).Psychometric properties of the Beck Depression Inventory(BDI): Twenty –five years evaluation.

- Bellak L.(1988) Ego Function Assessment (EFA): A Manual, C.P.S., Incorporated, ISBN 0918863023, 9780918863027.
- Blackburn I.M., Jones S. and Lewin R.J.P.(1986) Cognitive style in depression. *British Journal of Clinical Psychology* Vol. 25, Issue 4, pp. 241-251.
- BP Ravi Kumar, Shankar Reddy Dudala, AR Rao(2013). Kuppuswamy's Socioeconomic Status- A Revision of economic Parameter for 2012. *International Journal of Research and Development of Health (Community Medicine)*. Vol 1(1): 1-4.
- Bruce E. Levine (2013) Personal Health. How our Society breeds Anxiety, Depression and Dysfunction. ALTERNET.
- Gerald J. Haefell et.al (2008) Measuring Cognitive Vulnerability to Depression: Development & Validation of the Cognitive Style. HHS Public Access. *Clin psychol Rev.* 28(5): pp. 824-826.
- Goldberg D.P. and Hiller V.F.(1979) A scaled version of the General Health Questionnaire. *Psychological Medicine*.Vol.9,pp 139-145.
- Groth-Marnat G. (1990). *The handbook of psychological assessment* (2nd ed.). New York: John Wiley & Sons.
- Hathaway S.R., McKinley J.C.(1951). *Minnesota Multiphasic Personality Inventory*; manual(Revised) Psycnet.apa.org.
- Klein D.N., Kotov R., and Bufferd S.J. (2011) Personality and depression: Explanatory Models and Review of the Evidence. HHS Public Access, *Annu Rev Clin Psychol*,pp-269-295.
- Kuppuswamy B.(1981) *Manual of Socioeconomic Status (urban)*. Delhi, Manasayan, Labour Bureau, Government of India, [cited 2012 Dec 12]. Available from <http://labourbureau.nic.in/indnum.htm>.
- Mathew S. R. and Alloy L.B. (2003) Negative Cognitive Styles and Stress Reactive Rumination Interact to predict depression; A prospective study. *Cognitive Therapy and Research*, Vol 27(3), pp. 275-292.
- Mezulis A.H., Funaski K.S., Charbonneau A.M., Hyde J.S. (2010) Gender differences in the cognitive vulnerability-stress model of depression in the transition to adolescence. *Springer. Cognitive therapy and Research*. Vol.34,Issue 6,pp-501-513.
- Murthy H.N (1965).Development of Paranoid, Depressive, Manic and Anxiety Scale. *Trans. All India Institute of Mental Health,Bangalore*,5,50-59.
- Pyszczynski; Tom, Greenberg, Jeff (1987) Self Regulatory Perseveration and the Depressive Self focusing Style: A self awareness theory of reactive depression. *American Psychological Association, Psychological Bulletin*, Vol 102(1),122-138.
- Mahfouz R., Rashidi A.E., Asker M., Bakry A.E. and Hatem R.(1993). Ego Function Assessment in Major Depressive patients: An Egyptian sample. *Egyptian Journal of Psychiatry*,16:27-35.
- Safran, J.D.,& Segal, Z.V.(1990) *Cognitive therapy: An interpersonal process Perspective*. New York: Basic Books.
- Spasojevic J. and Alloy L.B. (2001). Rumination as a common mechanism relating depressive risk factors to depression *American Psychological Association. Researchgate. Emotion* Vol.1,No. 1, 25-37.