

# Profile of Clinical Analysis Questionnaire among Depressive Patients

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**Abstract-** Depression literally means the state of being pushed down. It is commonly used to refer to emotional states of sadness, despair, numbness, emptiness, hopelessness and feelings of blue. Mood is a pervasive and sustained feeling that is experienced internally which influences the person's behavior and his/her perception of the world. In such condition it is proven that the impact of illness on the personality variables. Very few studies were presented based on Clinical Analysis Questionnaire (CAQ). Current study seeks to establish the profile of depressive individuals on personality questionnaire. We assessed (n=43) depressive patients and (n=45) control group using CAQ. It was found that the patients with depression are tend to score high in clinical scales like schizophrenia index (Sc) and show negative correlation on personality variable like Dominance (E), and Impulsivity (F).

**Index Terms-** Clinical Analysis Questionnaire, Personality profile, Depression.

## I. INTRODUCTION

Hippocrates defines depressive disorder essentially as excessively prolonged sadness. The disorder was initially thought to be caused by an imbalance in black bile and thus was labeled as melancholia; in contrast, normal sadness and negative moods in response to circumstances or due to a generally negative temperament were referred to as melancholy (Rick E. Ingram 2009).

The prevalence of depression in Western countries is high. Current estimates of 1-year prevalence in Europe and North America are 5 to 7 percent (Kessler et al., 2003). The lifetime prevalence of depression, anxiety, and stress among adolescents and young adults around the world is currently estimated to range from 5 to 70 percent. This cross-sectional study was conducted by (Sahoo et al., 2010), determine prevalence of current depressive, anxiety, and stress-related symptoms. Depressive symptoms were present in 18.5 percent of the population, anxiety in 24.4 percent, and stress in 20 percent. The study indicates that the clinical depression was present in 12.1 percent and generalized anxiety disorder in 19.0 percent. Comorbid anxiety and depression was high, with about 87 percent of those having depression also suffering from anxiety disorder. Especially, for depression they observed prevalence rate of 06.4 percent (Mild depression), 06.7 percent (Moderate depression), and 03.5 percent of Severe depression were estimated. It is approximately twice as common among women as it is among men. It is estimated

that approximately 25 percent of women in the United States will experience at least one significant episode of depression during their lives which is contrary to the popular misconception that, depression is the most common disorder among the elderly. The cornerstone of treatment of depressive disorder is pharmacotherapy and psychological therapy, in which CBT has been proved to effective for depression. For the successful therapy outcome in-depth investigation of the individual will have a crucial part in the determination of treatment modality. The very few existing literature suggest that personality traits always have significant impact on the treatment (Bagby R et al 2008).

However, there has been a dearth of literature on the specific personality variables and pathological traits of depressive patients. In the backdrop of this, the present study was designed to assess both personality traits and pathological traits using clinical analysis questionnaire.

## II. RESEARCH ELABORATIONS

**Objective:** The main aim of this research has been to find the relationship of personality in depression and compared with normal control group. It was hypothesized that person with depression have tendency to show deviation in the normal personality and to score high in pathological scale.

**Design:** This study employed a between group design.

**Sample:** The participants in the depressed group were self referred, Psychiatrist referred who were attending the clinics for the regular follow up and the control group was the relatives of the patient who accompanied them to the clinic and from Sweekar Institute of Rehabilitation were included in the study after getting the permission from the higher Authorities of the respectable Institutions. Sample consisted of 92 adults of either gender, residing at Andhra Pradesh were included. In depressed group n=47, whereas in control group, n=45 adults were included.

Participant were eligible for participation in the study in the depressed group, if they were 1) aged between 16 and 40 years 2) who are all fluent either in English or telugu language 3) minimum educational qualification of inter or degree 4) meeting the criteria for depression according to ICD-10 Diagnostic Criteria for Research (DCR), 5) participants who accepted were invited to sign an informed consent form.

**Procedure:** Participant were eligible to participate in the control group in the study if they were 1) aged between 16 to 40 years 2) without any (past/present) history of any psychiatric

illness 3) accepted individuals were invited to sign an informed consent form.

Series of Questionnaires was administered to screen the participant. For the depressed group Beck Depression Inventory was administered first to assess the severity of depression. Whereas in the control group, General Health Questionnaire was administered to find risk individuals for developing any psychiatric disorders, the score of  $\geq 4$  in GHQ was excluded from the study. Clinical Analysis Questionnaire was commonly used for both depressed and control group. The following exclusion criteria were applied for recruiting subjects into study.

#### **Exclusion criteria:**

1. Age of below 16 years and above 40 years
2. Illiterate
3. BDI score  $< 13$
4. Co-morbid psychiatric disorders
5. Substance use disorder
6. Head injury or other organic cause
7. Not completed the whole questionnaire
8. Unwilling to take part in the study

#### **Measures used**

**Beck Depression Inventory (BDI-II):** BDI-II is a 21-item self-report instrument for measuring the severity of depression in adults and adolescents aged 13 years and older. The instrument was developed by Aaron T. Beck, Robert A. Steer, Gregory K. Brown in the year 1996.

**Clinical Analysis Questionnaire (CAQ):** CAQ is 272 item self-report for measuring the normal and pathological trait levels and this multidimensional instrument is basically an extension of the Sixteen Personality Factor Questionnaire to the abnormal personality trait domain. Thus the 16 normal personality trait dimensions from the 16PF as well as an additional 12 pathological trait factors are included in the CAQ. In particular, there are seven depression subscales, along with factors measuring Paranoia, Psychopathic Deviation, Schizophrenia, Psychasthenia, and Psychological Inadequacy. Joint factoring of the 16PF with the MMPI served as the basis for including the five additional psychopathological factors in the CAQ apart from the depression factors. This instrument was developed by Cattell and Sells, 1974; Krug, 1980.

### **III. RESULTS**

**Table: 1. Demographic characteristics of Depressed Group (n = 45) and Control group (n = 47).**

Variables	<b>Depressed Group</b>		<b>Control Group</b>	
	<b>Freq. (%)</b>	<b>Mean (+SD)</b>	<b>Freq. (%)</b>	<b>Mean (+SD)</b>
<u>Sex</u>				
Female	3 (6.4)	-	5 (11.1)	-
Male	44 (93.6)	-	40 (88.9)	-
<u>Age</u>		32.44 ( $\pm 5.24$ )		32.48 ( $\pm 5.02$ )
20-29	17 (36.1)	-	12 (26.4)	-
30-39	26 (55.4)	-	30 (66.5)	-
$\geq 40$	4 (8.5)	-	3 (6.7)	-
<u>Domicile</u>				
Rural	21 (44.7)	-	5 (11.1)	-
Urban	26 (55.3)	-	40 (88.9)	-
<u>Education</u>				
>12th standard	47 (100)	-	45 (100)	-

<u>Family Type</u>			
Nuclear	42 (89.4)	-	39 (86.7)
Joint	5 (10.6)	-	6 (13.3)
<u>SES</u>			
Low	14 (29.8)	-	-
Middle	33 (70.2)	-	45 (100)
<u>Treatment</u>			
On Treatment	44 (93.6)	-	-
<u>BDI Score</u>	-	33.17 (6.26)	-

**Table 2: Shows Mean ( $\pm$ SD), 't' scores on Clinical Analysis Questionnaire (CAQ) in Depressed group and for control group.**

Factors	Depression Group Mean ( $\pm$ SD)	Control Group Mean ( $\pm$ SD)	't'	'p'
A (Warmth)	5.78 (1.06)	8.40 (0.83)	13.07	0.001
B (Intelligence)	4.68 (1.36)	6.77 (1.50)	6.99	0.001
C (Emotional Stability)	1.31 (1.23)	5.84 (0.95)	19.61	0.001
E (Dominance)	2.72 (0.57)	5.20 (0.78)	17.25	0.001
F (Impulsivity)	1.74 (0.92)	7.13 (0.84)	29.26	0.001
G (Conformity)	4.14 (0.72)	5.82 (0.49)	12.95	0.001
H (Boldness)	2.91 (0.71)	7.08 (0.59)	30.28	0.001
I (Sensitivity)	7.17 (1.08)	3.91 (0.99)	14.95	0.001
L (Suspiciousness)	6.00 (1.33)	1.62 (0.74)	19.28	0.001
M (Imagination)	2.70 (1.88)	3.93 (0.75)	4.07	0.001
N (Shrewdness)	6.61 (1.49)	6.68 (1.45)	0.23	0.816
O (Insecurity)	8.87 (0.82)	4.06 (0.53)	32.94	0.001
Q1 (Radicalism)	5.10 (0.72)	7.40 (7.40)	16.24	0.001
Q2 (Self-sufficiency)	4.55 (1.24)	7.55 (0.72)	14.03	0.001
Q3 (Self-discipline)	3.57 (1.31)	5.31 (0.76)	7.70	0.001
Q4 (Tension)	8.14 (0.75)	5.24 (0.64)	19.85	0.001
D1(Hypochondriasis)	7.38 (0.96)	6.68 (0.59)	4.11	0.001
D2 (Suicidal Depression)	7.91 (0.90)	6.95 (0.29)	6.76	0.001
D3 (Agitation)	5.57 (1.55)	3.73 (1.19)	6.34	0.001
D4 (Anxious Depression)	8.40 (1.19)	5.17 (1.19)	12.97	0.001
D5 (Low Energy Depression)	7.44 (0.92)	5.60 (0.61)	11.18	0.001
D6 (Guilt & Resentment)	6.97 (1.43)	5.57 (0.75)	5.81	0.001
D7 (Boredom & Withdrawal)	8.80 (0.79)	6.44 (0.62)	15.78	0.001
Pa (Paranoia)	7.21 (0.72)	6.37 (0.64)	5.82	0.001
Pp (Psychopathic Deviation)	2.51 (0.80)	1.20 (0.40)	9.80	0.001
Sc (Schizophrenia)	7.40 (0.71)	6.57 (0.58)	6.07	0.001
As (Psychasthenia)	5.70 (1.15)	5.00 (0.97)	3.13	0.002
Ps (Psychological Inadequacy)	7.44 (0.54)	6.28 (0.66)	9.18	0.001

**Table 3: Relationship between BDI score and CAQ subscales this showing significant relationship.**

Factors	“r”	“p”
E (Dominance)	<b>-0.43</b>	<b>0.03</b>
F (Impulsivity)	<b>-0.34</b>	<b>0.018</b>
Sc (Schizophrenia)	<b>0.42</b>	<b>0.03</b>

#### IV. CONCLUSION

The nature of relations between the personality traits and depression is complex, and our understanding is still limited. Several line of evidence suggests that the relevance of personality to depression is evident; and thus the hypothesis got enormous attention that their association has received over the years in the clinical and research literatures. Although the theories and research underlying the personality-depression and their relationship has varied widely, the idea that personality is important to understand the cause, manifestation, or outcome of depression has persisted. The findings of the present study lend empirical evidence for such a hypothesis demonstrating a significant difference in personality traits among the depressed and normal individuals in adult group. Also, the study demonstrates a robust relationship between personality traits and severity of depression.

Studies on clinical samples typically report that understanding the association between personality and depression has implications for elucidating etiology and comorbidity, identifying at risk individuals, and tailoring treatment (Daniel N. Klein, 2011). However, research in clinical sample suggests that, the affective temperament types, like depressive temperament has been the most systematically studied, the terms “depressive temperament,” “depressive personality,” and “depressive personality disorder” have been used interchangeably in the literature to refer to the following constellation of traits: introversion, passivity, and non-assertiveness; gloominess, cheerlessness, and joylessness; self-reproach and self-criticism; pessimism, guilt, and remorse; being critical and judgmental of others; conscientiousness and self-discipline; brooding and given to worry; and feelings of inadequacy and low self-esteem (Akiskal et al. 2005).

The majority of established risk factors for depressive disorders are either unchangeable (i.e. socio-demographic characteristics) or reaction pattern to the short term stressful life events. In contrast, personality is at least somewhat changeable, especially in youth, but may forecast the onset of depression, which makes traits a potentially attractive means of identifying individuals at risk and informing selection of interventions. Based on this view, the present study suggested interactive pattern of personality and depression, in which the individuals with depression have personality aberrations which can be explainable on the basis of severity level and duration of the depressive episode. The results of the present study were discussed about the personality among the depressed individuals.

Table 1 show that there is higher percentage of males in depressed group and control group. Also, mean age, family type, area of living were slightly differ regarding depressive group and control group. The distribution of age, gender, socio-economic status (Middle), unemployment, appeared contrary to the previous study by Sandeep Grover (2010), in which they found that depression is common in young adults, in women and low socio-economic status. Regarding family type, the distribution is similar to the study Sethi et al. (1980), in which they suggested that individuals' those who are residing in nuclear family are vulnerable to depression.

It is evident from the table 2 that there is a significant difference in personality traits between the two groups were the mean scores of the subscales in the first part of the CAQ is significant. In reference to the higher scores of scales I-Sensitivity, L-Suspiciousness, O-Insecurity, and Q4-Tension, which indicate that depressed individuals were more dependent, jealous, critical, irritable, moody, experience guilt, gets angry quickly, and difficulty in getting sleep. This findings are in agreement with the previous study conducted by (Samuel E. Krug, 1980-CAQ Manual), who found that certain personality traits of depressed individuals appear to be associated with the high scores in the scales I-Sensitivity, L-Suspiciousness, O-Insecurity, and Q4-Tension. However, the other scales of the CAQ part-I, shows the significant difference between two groups-the mean is lower in the depressed group with respect to the scales A-Warmth, B-Intelligence, C-Emotional stability, F-Dominance, G-Conformity, H-Boldness, M-Imagination, Q1-Radicalism, Q2-Self-sufficiency, and Q3-Self-dicipline. These results are line of agreement with the previous study conducted by (Samuel E. Krug, 1980-CAQ Manual), in which they found that depressed individuals have concentration difficulty, unsatisfying relationships, overwhelmed by the day to day activities or goals, passive aggressive, internalize their feelings, sociopathic, react to the stress easily, unconcerned about day to day activities, withdrawn, obsessional, and these individuals are not effective problem solvers. In the opinion of Kameoka V A (1986), depressed individuals personality traits are appear to be strongly associated with scales of B-Intelligence, E-Dominance, F-Impulsivity, G-Super ego, H-Parmia/Boldness, I-Sensitivity/Premisia, L-Suspiciousness/Protension, Q1-Radicalism, Q2-Self-sufficiency, and Q4-Ergic tension.

Though the mean score of the scale N-Shrewdness was similar to the previous findings (Samuel E. Krug, 1980-CAQ Manual), in the present study, it is statistically not significant between two groups, which can be explained in terms of, individuals prefer to be in sophisticated environment, and they tend to be diplomatic about handling other people.

When compared to the control group, the mean score is higher in the clinical scales of the CAQ (Part-II). In reference to the scales D4-Anxious Depression and D7- Boredom and withdrawal is highly elevated and the score is significant between the groups. Which indicates that, severely depressed individuals were clumsy, shaky in handling things, lacks self confidence, confused, unable to cope up with the sudden demands, profoundly disturbed, feels that life is too pointless; tendency to avoid people, these people feels happier when they are away from the people. This findings of the present study is in line of agreement with the previous study conducted by Welsh's (1956), in which they found that the elevation of the scores on the subscales D1- Subjective Depression, D4-Mental Dullness, D5-Brooding, and Hy3- Lassitude-Malaise of scale 3; Pd4-Social Alienation and Pd5- Self-Alienation of scale 4; Pa2-Poignancy of scale 6; Sc1-Social Alienation through Sc4- Lack of Ego Mastery (Conative) of scale 8; and the Si3 subscale. Which shows that depressed patient has general maladjustment and shows some characteristics like socially withdrawn, timid, dependent, and self-conscious, depressed, ruminative, and sad, self-reports of fatigue, tiredness, and sleep difficulties, this general maladjustment factor 1 highlight the depression factor as primary form of emotional distress? On the other hand the average high score is seen among other clinical subscales (D1-Hypochondriac Depression, D2-Suicidal Depression, D3-Agitated Depression, D5-Low-energy Depression, D6-Guilt and Resentment, As-Psychasthenia, and Ps-Psychotic tendency) in the depressed group when compared to the control group, which is in line of agreement with the previous findings of (Samuel E. Krug, 1980-CAQ Manual) which indicates that depressed individuals shows tendencies like preoccupation with bodily dysfunction, feels emptiness and meaningless, thoughts/wishes of death, frequent feelings of sadness and gloom, difficulty in getting sleep, blame themselves, feels guilt, self-critical, little self control, think themselves as doomed or condemned. However, in the present study the mean score of the clinical subscales Pa-Paranoia and Sc-Schizophrenia is slightly high, when compared to the previous findings of (Samuel E. Krug, 1980-CAQ Manual), and this could be interpreted as, high scored individuals were suspicious, jealousy, cynicism about human nature, difficulty getting their ideas into words, feels that world is unsympathetic, feeling of rejection, feels themselves as little important to others. Also, in the previous study suggests that the moderately high elevation occurs in neurotics. Among the clinical subscales the Pp-Psychopathic deviation is only the scale which the mean score is in low range which indicates that depressed individuals were socially inhibited. As a whole, these findings are in line of agreement with the previous study (Kameoka VA, 1986) which indicates that D1-Hypochondriac Depression, D2-Suicidal Depression, D3-Agitated Depression, D5-Low-energy Depression, D7-Bored Depression, Pa-Paranoia, Pp-Psychopathic deviation, Sc-Schizophrenia, As-Psychasthenia, and Ps-Psychotic tendency these scales are strongly associated with the depression.

From table 3 it can be observes that there is a highly significant, positive correlation of the scores of schizophrenia in CAQ scale and the BDI score, this means that, those who are in severely depressed shows the schizophrenia like traits that is withdrawn themselves from the others, they see themselves as

little worthy to others. Whereas the negative correlation was found in the two domains in the first part of the CAQ (normal personality), E-Dominance and F-Impulsivity which can be interpreted as severely depressed individuals are tend to show characteristics like being away from the people, and less impulsive respectively.

## V. CLINICAL IMPLICATIONS

The literature on the relation between personality and depression is large, but it has many gaps and inconsistent findings. Personality traits predict, and may in fact influence, the course and treatment response of depression. Meta-analytic evidence indicates that existing preventive interventions can reduce the incidence of depressive disorders by 25% (Cuijpers et al. 2008). Another advantage of traits is that they can be assessed relatively easily and efficiently and thus are ideal for screening. Few studies have examined personality facets, but preliminary evidence suggests that lower-order traits can add substantially to the prediction of treatment response (Bagby et al. 2008). Among the depressed individuals the self-criticism which is one of the personality traits was found to forecast poor treatment outcomes (Blatt et al. 1995).

Under DSM-IV or ICD-10, it is not unusual for clinicians to make diagnoses by counting the required 5 out of 9 symptoms needed for a diagnosis of "major depressive episode." This practice can sometimes be associated with the routine prescription of antidepressants and with a failure to consider the possibility of offering psychotherapy. What this approach to diagnosis really fails to address is the enormous heterogeneity of patients meeting the criteria for major depression. If we take personality into account, we would be in a better position to individualize treatment choices for patients. Thus, the present study made an attempt by using the comprehensive measure of CAQ to explain the relationship of the normal and pathological traits of personality in depressed patients.

## VI. LIMITATIONS

1. The sample size of the study has been small
2. Role of gender, severity level of depressive episode is also important factor; present study included more males and severely depressed individuals.
3. The study primarily focused on the first order personality factors.

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