CHAPTER - VI
DISCUSSION

This section concentrates on examination of statistical findings pertaining to hypotheses and theoretical validation. Psychodynamic School of thought conceptualizes magnitude of ego-strength as a major component of healthy personality. Key concepts of ego strength are effective dealing with reality, promotion of interpersonal relation with human beings, tolerance of internal conflicts and successful management of defense mechanism more in positive and healthy manner. For the purpose it governs and utilizes psychological functioning – cognition, affect, emotion and behaviour in an integrated manner. Variant levels (high / poor) of ego – functioning operates in normal and psychiatric population. Examination of statistical analysis and theoretical discussions were made only with reference to this in schizophrenia and affective disorders on Rorschach test and SIS-I.
1. Rorschach Variables

Total Number of Responses (R): R was 21.98 in normals, 15.22 in schizophrenics (t = 6.133, P<0.01), 15.76 in manics (t=6.33, P<0.01) and 12.62 in depressives (t= 12.073, P<0.01) indexed in Table – 2 and Table – 3. R was thus evidenced to be significantly higher in normals than clinical population. The present study confirmed the hypothesis (1: A-i ) that R would be higher in normals than clinical population. The R on Rorschach for normal population varies from 13.80 to 33.00 (Beck, 1961; Kumar, 1961; Prabhu, 1967; Asthana, 1971; Pratap and Kapur, 1984; Dubey, 1989)

R indicated scored productivity (Beck et al. 1961) and R with elevated F+ and average P used to index intellectual organization and spontaneity. Lower / rejection, on the other hand, indicated blocking of responses and poor ego – strength reflecting immaturity of ego to handle ego-defences in face of life stresses in an effective way, evidenced in schizophrenics, manics and depressives. Decreased productivity in schizophrenia might be linked with impaired cognitive functions, paucity of ideas, lack of initiative and shallow affect. The present findings were in congruent with previous study (Asthana, 1963). A decreased R productivity might be attributable to repression mechanism. Ego through repression might be accomplishing mediation between the threatening,
frustrating world and the incessantly demanding gratification of id. Secondly, ego by means of repression might be successful in avoidance of reality, which might be perceived by clinical population as very harsh. Thus, significantly reduced R in clinical population could be attributable to poor ego-strength that failed to allow to perceive the reality in its proper perspective and to accomplish realistic problem-solving behaviour through proper planning, thinking and rational emotional processing of external environmental stimuli.

**Whole Responses (W):** W was 19.24% in normals, 30.77% in schizophrenics ($t = 4.001, P < 0.01$), 28.87% in manics ($t = 4.691, P < 0.01$) and 22.58% in depressives ($t = 1.732, P > 0.05$) indexed in Table - 2 and Table - 3. It was evidenced that W in normals was significantly less compared to schizophrenics and manics. W responses in the present study were 19.24% in normal which was lowest in sample. W percent ranged from 15 to 29.8 percent in earlier studies (Kumar, 1961; Prabhu, 1967; Asthana, 1971; D' Netto et al 1974; Dubey, 1989). The present study thus, supported the hypothesis (1 : A-ii) that W responses in normal would be lower than defined psychiatric population.

W has a direct relation with intellectual ability and capacity to organize things or objects in a meaningful and coherent whole (Rorschach, 1942). Beck (1952) considered W as a measure of conceptual activity. Moderate / average
percent of W indicates perception of environment in a more differentiated and meaningful inter-related way. W with good form level indexes individual’s clear, highly differentiated and well-organized view on environment. He appears to have an organizational, integrated and gestaltian view of the environment. But an elevated percent of W in protocol evidences a tendency of over critical, severe intellectual criticism and perfectionism. Higher number of W responses lacking normal details in schizophrenia and mania reflect exaggerated perception of self when quality of W is inferior (Beck, 1952).

**Rare Detail (Dd):** Dd was 3.85% in normals, 14.86% in schizophrenics (t=4.907, P<0.01), 4.45% in manics (t=0.593, P> 0.05) and 5.74% in depressives (t= 1.681, P>0.05) indexed in Table – 2 and Table – 3. The findings in the study were in agreement with the proposed hypothesis (1: A-iii) that Dd would be lower in normals as compared to clinical population.

Dd responses were least frequent in the test protocols. In normal group Dd were found in the range of 0.2% to 9.24% (Kumar, 1961; Beck et al., 1961; Prabhu, 1967; Asthana, 1971; D’ Netto et al., 1974; Pratap and kapur, 1984; Dubey, 1989). In the index study, the mean Dd in normal group was 3.85% which was within the range of previous studies.
Bohm (1958) stated that schizophrenics have a tendency to bizarre Dd, which may at the same time be found in markedly high numbers (especially in Paranoids). In the present study, schizophrenics produced the highest number of Dd responses suggesting that the variable is sensitive to differentiate between schizophrenics and other groups.

Exaggeration of Dd responses indicate (i) individual’s well differentiation but little interest in integration and organization tendency, (ii) higher interest in factual things, certainty and correctness, (iii) a fearful tendency to go into too deeply and of being involved, (iv) an obsessional tendency (a defense against insecurity), and (v) a tendency for compulsive behaviour and rigid perfectionism. So, increased number of Dd responses in psychiatric population is a sign of poor ego-strength.

**White space (S):** S% was 7.83% in normals, 60.16% in schizophrenics (t = 4.730, P<0.01), 28.82% in manics (t=3.635, P<0.01) and 23.07% in depressives (t= 2.606, P<0.01) observed in Table – 2 and Table – 3. S responses were found to be within the range of 0.43 to 5.87 percent (Beck et al., 1961; Kumar, 1961; Asthana, 1971; Dubey, 1989). The present findings recruited support of previous reported studies. Thus, the findings confirmed the hypothesis (1:A-iv) that S responses would be lower in normals as compared to clinical population.
S responses indicated an oppositional tendency which was generally observed in schizophrenia, mania and social deviants for poor integration of value system with innate needs of the individual. It reflected poor ego-functioning in face of internal conflicts between id (archaic needs) and super ego (Social value system). Exner (1991, 1993) stated that an elevated number of S responses indicate an oppositional stance towards others, which thus can become detrimental to the development and promotion of healthy and harmonious social relations. The reported study indicates a close link between elevated S responses and increased psychopathic deviate scale on the measures of Minnesota Multiphasic Personality Inventory (MMPI) in paranoid schizophrenics (Exner, 1993) reflecting unconventionality as oppositionality. This analysis also recruited supporting evidence of other studies.

S responses indicate negative or oppositional features (Rorschach, 1942; Beck, 1945; Rapaport, 1946). Bandura (1954) did find a significant positive correlation between negativistic behaviours and S responses. Beck and Molish (1945) stated that the primary significance of the S responses has been that of some form of oppositional behaviour emerging in a variety of symptom patterns: contrariness, negativism, hostility, self-will.

In the present study, schizophrenic group gave the highest S responses. In schizophrenia S projects miscarried modes of self-will, sheer negativism and resistiveness. Kraepelin (1919)
discussed the concepts of negativism and oppositional behaviour in schizophrenia within the framework Rorschach developed his concept of white space percept.

Because of grandiosity manic patients develop oppositional tendencies which are reflected in their associations with S responses. In the index study also manic patients produced a significantly higher S response which is in conformity with the findings of Pratap and Kapur (1984).

In summary, S as index of poor ego-strength emerged in the psychiatric population.

**Good form Responses (F+):** F+ percent was 75.24% in normals, 43.70% in schizophrenics \( t = 11.858, P<0.01 \), 52.10% in manics \( t = 7.796, P<0.01 \), and 52.20% in depressives \( t = 10.387, P<0.01 \) evident in Table – 2 and Table – 3. Reported studies evidenced similar direction of F+ percent. It was 79.25% (Beck et al., 1961), 82% (Kumar, 1961) and 83.14% (Prabhu, 1967). The present findings of the study, thus, supported the hypothesis (1 : B-i) that higher F+ percent would be indicated in normal compared to clinical population.

F+ percent in Rorschach indicated his controlled reactivity to reality without any emotional or affectional involvement. An over emphasis on F+ percent indicated neurotic constriction
in the sense of excessive dependency on use of defense mechanism for maintaining mental balance in face of inner conflict / life stress. An under emphasis on F+ percent indexed pathological reactions for perceptual controlling ability of individual appeared to be disturbed by emotional or affective impulses. The present study evidenced statistically significant poor F+ percent in clinical population, which reflected pathological reaction and lack of control of perceptual stimuli incessantly streaming from his reality. However, the interpretation of F+ percent in collaboration with other Rorschach indices generally indicates ego-strength of individuals.

The pure form percept is the most common determinant in the test. It is interpreted in terms of its quality, that is good form (F+) and poor form (F-). The F+ percent was described by Rorschach (1942) as reflecting the person's ability to direct his ideation with conscious attention, control, discriminating judgement and regard for the environment. According to Beck (1954), the F+ responses indicate that the examinee has respect for the reality of the environment.

Beck and Molish (1945) stated that by virtue of the extreme cathexis of labile and hedonic affect onto their object relations the F+ percent becomes lowered in manics. Pratap and Kapur (1984) also found lower F+ percent in manics. Bohm (1958) reported poor form perception in manics as one of
the diagnostic indices. Finding in the present study i.e. manics showing significantly lower F+ percent than the normal group is in the line of previous studies.

Schafer (1948) reported that generally depressive patients produce higher F+ percent, but if anatomy content is quite high in the protocol of such patients, then there is lowering of F+ percent. In the index study, the F+ percent of depressive patients is significantly lower than the normal group. The preponderance of anatomy content in the protocols of depressive patients in the present study perhaps resulted in lowered F+ percent.

The findings of the study were suggestive of higher ego-strength in normals and poor ego-strength in psychiatric population i.e. schizophrenia, mania and depression.

**Human Movement (M)** – M was 6.65% in normals, 1.03% in schizophrenics \( t = 4.554, P<0.01 \), 3.10% in manics \( t = 2.708, P<0.01 \) and 1.62% in depressives \( t = 3.991, P<0.01 \) projected in Table – 2 and Table – 3. The findings confirmed the hypothesis \( 1 : B-ii \) proposed in the study that M would be higher in normals compared to clinical population. Previous studies demonstrated similar trend of M in Rorschach protocol. M was found to be within range of 4.52 percent to 13.21 percent (Kumar, 1961; Beck et al., 1961; Prabhu, 1967; Asthana, 1971; D' Netto et al., 1974; Dubey, 1989). Pratap and Kapur (1984)
observed significantly lower M in manic patients, and Guirdham (1936) reported a decreased M in depression. The present findings thus, were in agreement with previous studies.

The projection of movement generally demonstrates active operation of dynamic forces in the individual. It indicates distribution of variant degree of unconscious psychic energy in different type of M responses as governed by ego-mechanism operational in the individual. M is operationally defined in terms of three basic components: (a) form (b) action and (C) content. The range of M varies from 3 (extraverts) to 5 (introverts) which is indicative of good ego-strength, and absence of M / very low number of M shows a serious emotional disturbance in an intelligent subject. It is indicative of activation of fantasy as ego-defense regulated by ego. The individual attempts to escape harsh reality rather than initiating to conquer reality. It is a deliberate effort to escape reality and to take shelter in a land of fantasy and the ego has very little control over unconscious archaic / repressed drives. M with good form level indicates creativity and reality orientation. Content indicates empathic ties with other in society.

In back drop of this analysis, a higher M with higher F+ level indicates higher ego-strength to deal effectively with reality and the psychiatric population with low M and less number of F+ level indicated poor ego-strength. Normals were,
thus, found to be having higher ego-strength and the Psychiatric population to be possessing poor ego-strength.

**Anatomy Responses (An)** - An was 3.36% in normals, 8.36% in schizophrenics ($t = 2.664, P<0.01$), 13.01% in manics ($t = 3.667, P<0.01$) and 19.77% in depressives ($t = 8.925, P<0.01$) indexed in Table – 2 and Table – 3. The findings in the present study were concurrent with the proposed hypothesis (C) that An responses would be lower in normals but significantly higher in clinical population.

An responses indicate pre-occupation with soma and somatic problems even in absence of any physiological illness. An responses with florid elaborations involving diseased process are attributed to projected feelings of depersonalization and these may stem from somatic delusional ideation / contents (Beck and Molish, 1945). Rav (1951) theorizes that An responses are linked with individual’s increased resources to reduced / constricted drive and motivation.

An increased An responses in the psychiatric population, specifically with highest prevalence in depression, evidenced somatic pre-occupation and in extreme cases the depersonalization syndrome. Thus, An responses in psychiatric population indicated poor ego-functioning.
Popular Responses (P): P was 17.37% in normals, 8.83% in schizophrenics (t = 5.350, P<0.01), 12.32% in manics (t = 3.111, P<0.01) and 12.82% in depressives (t = 2.834, P<0.01) stated in Table – 2 and Table – 3. P responses in normals generally evidenced to be within the range of 11 to 25 percent. The present findings of the study were within the defined range. P in the present study was found to be statistically significantly higher in normals than psychiatric population which extended confirming support to the hypothesis (D) that an elevated P response would be evidenced in normals as compared to defined clinical population in the study.

P indicates individual’s tendency of viewing the world in a normal fashion reflecting an adequate ties with reality. Poor P and several O responses with an increased F – level indicate serious weakening of ties with reality.

A moderate / average P response indicate individual’s ability to evaluate and to react to the reality as most people generally respond to it i.e. in conventional fashion. Conversely, when P responses are below the average, the person is likely to make less conventional, more individualistic responses, even in situations that are simple and/or precisely defined. Clinical population especially schizophrenics, depressives and personality disorders produced less P responses than non-clinical adults (Exner, 1993). In summary, a below average number of P responses suggests person’s tendency for unconventional behaviour, a sign of poor ego-strength.
2. SIS - I Indices

Total Number of Responses (R): R was 37.70 in normals, 20.12 in schizophrenics (t = 7.572, P<0.01), 28.56 in manics (t = 3.781, P<0.01), and 20.22 in depressives (t = 7.725, P<0.01) indexed in Table - 20 and Table - 21. The findings confirmed the hypothesis (2: i) that an elevated R would be found in normals as compared to clinical population. R productivity on SIS - I indexes individual's imaginative power, functional intelligence and interpersonal relations. These psychological functioning appeared to be low in clinical population but not in normals. Breakdown of perceptual filtering mechanism is hypothesized in psychiatric population. This breakdown permits crowding a large number of stimuli which are condensed, developing most probably symbols (formation of imagery experiences in occipital cortex), that are blocked / inhibited resulting low production of response in psychiatric population. Low responses most probably indicate impairment of planned action / withdrawal of activities because of excessive sensory crowding. Following this type of argument, the logic-laden hypothesis may be advanced that low R is an index of impaired reality testing, disturbed social interpersonal relation and tendency for isolation and social withdrawal.
Movement Responses (M) – M was 5.37% in normals, 4.18% in schizophrenics (t = 1.019, P>0.05), 1.70% in manics (t = 4.066, P < 0.01), and 2.17% in depressives (t = 3.392, P<0.01) stated in Table – 20 and Table – 21. The findings partially supported the hypothesis (2 : ii) that M responses would be found to be higher in normals as compared to clinical population.

The comparison across groups on M responses in the index study suggesting that both the manic and depressive groups could be significantly differentiated from normals, but this variable failed to significantly differentiate schizophrenics from normals.

However, on Rorschach it was observed that all the clinical groups producing significantly lower M responses could be differentiated from normals.

Most typical Responses (MT) – MT responses was 12.32% in normals, 7.17% in schizophrenics (t = 4.136, P<0.01), 9.51% in manics (t = 2.724, P<0.01) and 16.71% in depressives (t = 3.144, P<0.01) indexed in Table – 20 and Table – 21. The findings lent a supportive confirmation that an increased MT responses would be hypothesized in normals as compared to the clinical population (2 : iii).

MT responses was found to be lowest in schizophrenics (mean = 7.17%), highest with depressives (mean = 16.71%) and moderate i.e. in between (mean = 12.32%) in normals. Moderate
MT responses most probably indicated realistic orientation with coherent and logical thinking about self and reality but extreme MT responses most probably indexes exaggerated critical self appraisal and over evaluation of reality (a higher super-ego strength and weak ego-strength). A higher super-ego most probably tortures ego as it completely rejects id impulses to face the harsh reality. This overcritical self-appraisal / torturing super-ego developed a sense of exacerbated guilty feelings, a core generic concept in genesis of depression. The lowest MT responses in schizophrenics most possibly indexed avoidance of harsh reality indicating a flight to land of unreality, the land of fantasy which is exception to rules of probability (Freud, 1915). Reality is considered by Schizoids as harsh, frustrating and punishing, and therefore withdrawal from reality, a generic symptom of schizophrenia is a ego-defensive mechanism but this mode of reaction is a sign of poor ego-strength. As compared to schizophrenics, manics probably evaluate the reality in similar vein but instead of leaving it, manics possibly aggressively fight with it and innately desire to conquer it, and his aggressive tendency to conquer it prompts him to engage in over activities but the mode of over activities is faulty and unrealistic which is a sign of poor ego-strength. Cassell and Dubey (2003) comment, “A higher number of MT responses is suggestive of coherent, logical thinking and ability to keep up with demands of society. It may also be interpreted as a measure of ego-strength and team concept”, but present
findings confirms this view with modification. A medium / moderate number of MT responses might be attributable to higher ego – strength, very low or excessive higher number of MT responses might be interpreted as poor ego-strength.

**Typical Responses (T)** – T responses was 62.26% in normals, 46.45% in schizophrenics \( t = 5.392, P < 0.01 \), 51.63% in manics \( t = 4.678, P < 0.01 \) and 51.07% in depressives \( t = 4.915, P < 0.01 \) indexed in Table – 20 and Table – 21. T responses were found to be significantly higher in normals compared to schizophrenics, manics and depressives. The present study confirmed the hypothesis (2: iv) that an augmented T responses would be found in normals as compared to clinical population.

T responses indicated perception and projection of gestaltian image on SIS – I and are signs of positive health. A higher number of T responses therefore are linked with the state of healthy physical, psychological and social functioning of an individual. It is an index of good ego-strength that evaluate reality in its own perspective, and utilizes individual’s physical as well as psychological resources with optimal functioning in a dynamic and coherent mode to adapt with reality, because ego-strength is correlated with solving problems realistically instead of adapting avoiding / escape / withdrawal / aggressive mode of responses.
Thus, the present findings were in agreement with the theory of ego-dynamic functioning.

**Atypical Responses (AT):** AT responses were 25.78% in normals, 48.14% in schizophrenics ($t = 6.783, P < 0.01$), 38.60% in manics ($t = 4.896, P < 0.01$) and 32.44% in depressives ($t = 2.489, P < 0.05$) reported in Table - 20 and Table – 21. The findings in the index study were in agreement with the hypothesis (2 : v) that a lower AT responses would be hypothesized in normals as compared to clinical population.

AT responses represent poor quality and vague percept either in structure or verbalization. It is because perceived sensations are not processed and organized by secondary elaboration mechanism which involves ego-functioning. Higher involvement of ego-functioning is linked with higher functioning of secondary elaboration that makes up poor, vague percept a more logical, coherent and meaningful percept. Therefore, a decline of AT is an indication of sound ego functioning. The present study evidenced higher number of AT responses in clinical population and the lowest in normal. A higher mobilization of secondary elaboration mechanism in normal and a deficient activation of this mechanism in clinical population are probably related to poor production of AT responses in normals as compared to psychiatric population. Thus, the findings are in collaboration with conceptualization of Cassell and Dubey (2003) that “the number of AT responses is
proportionate to the degree of Psychological or Psychiatric disturbance. Perseveration may be sign of neuropsychological impairment and usually absent in normal people”.

In summary, poor ego-strength as indicated by AT responses was evidenced in psychiatric population.

A correlational study between variables of Rorschach test (R, H+Hd, A, F+% , P and An) and SIS – I indices (R, H, A, T+MT, MT, and At) evidenced the following findings as tabulated in Table – 38, Table – 39, Table – 40 and Table – 41.

(a) Correlation between Rorschach and SIS – I in respect of R index was 0.581 (P < 0.01) in normals, 0.055 (P>0.05) in schizophrenics, 0.566 (P<0.01) in manics and 0.403 (P<0.01) in depressives. The findings were suggesting that there was significant correlation between Rorschach and SIS – I in respect of R index in normal population and clinical population except schizophrenics. Production of R along with good form level is an index of sound reality testing and an integrated functioning of social interaction (discussed earlier), a sign of good ego-strength. So, the defined tests were emerged as equivalent in respect of R productivity which was sound measure of ego-strength of individuals. But it was not similar in schizophrenic population. A deviation of the trend in schizophrenics might be attributed to excessive reactivity and complete
breakdown of filtering mechanism. Future research in this direction might reveal the truth.

(b) The r between $H+H_d$ (Rorschach) and $H$ (SIS – I) was 0.487 ($P<0.01$) in normals, $-0.179$ ($P>0.05$) in schizophrenics, 0.475 ($P<0.01$) in manics and 0.118 ($P > 0.05$) in depressives. The indices of $H + H_d$ in Rorschach and $H$ in SIS – I are believed to project an inner need of individuals to have contact with human beings. As the gregarious instinct i.e. innate need for healthy social interaction in normals and manics are very high the r in respect of $H$ indices between Rorschach and SIS – I was found to be significant but similar trend was not evidenced with schizophrenics and depressives because of their lower need of having social contact. Superior ego-strength in terms of $H + H_d$ in Rorschach and $H$ in SIS – I was evidenced prominent in normal population.

(c) The r between $F+\%$ (Rorschach) and $T + MT$ (SIS – I) was 0.487 ($P < 0.01$) in normals, $-0.063$ ($P > 0.05$) in schizophrenics, 0.546 ($P < 0.01$) in manics and $-0.183$ ($P > 0.05$) in depressives. The findings were suggestive that the defined indices to measure ego-strength in terms of good form level, logical, coherent and integrated thinking, sociability, sound imaging formation were emerged as equivalent in normals and
manics. The power of the test might not be extended to examine similar psychological functioning in schizophrenics and depressives.

(d) The r between P (Rorschach) and MT (SIS – I) was found to be 0.389 (P < 0.01) in normals, − 0.277 (P < 0.05) in schizophrenics, 0.153 (P > 0.05) in manics, and 0.333 (P < 0.05) in depressives. The defined trend analysis of P (Rorschach) and MT (SIS – I) could be extended only to normals and depressives but similar trend analysis in schizophrenics and manics was found to be beyond the boundary of the test.

(e) The r between M (Rorschach) and M (SIS – I) was 0.356 (P < 0.01) in normals, − 0.006 (P > 0.05) in schizophrenics, 0.515 (P < 0.01) in manics, and 0.078 (p > 0.05) in depressives. Thus, r between M (Rorschach) and M (SIS – I) could not reveal the similar trend.

In summary, correlation findings demonstrated a similar trend in measuring psychological functioning (ego-strength) in parameters of all defined indices of Rorschach and SIS – I except An/At in normals. The study revealed a significant correlation between the defined indices of Rorschach and SIS – I except popular responses, only in mania but not in schizophrenia and depression. In brief, the status of Rorschach and SIS – I in measuring the ego-strength, was appearing significantly high in normals and manics but very low in Schizophrenia and depression.