INTRODUCTION

The purpose of this research was to study the self-concept in a sample of neurotics, schizophrenics and normal control group. More explicitly, it was hypothesized that there would be no significant differences in the reported self-concept among these 3 groups as measured on the Tennessee Self Concept Scale (TSCS), The Self-Confidence Inventory (SCI), The Personal Orientation Inventory, The Experience Inventory (EI), The Personal Opinion Survey (POS) and the IPAT Anxiety scale Questionnaire (ASQ) using the statistical technique of one-way analysis of variance. It was also hypothesized that the neurotics, schizophrenics and normals cannot be significantly discriminated and classified on the basis of certain self-concept, demographic and clinical case history variables and this was tested using the multivariate technique of multiple discriminant function analyses. Incidentally, correlations were also computed between the measures on TSCS and the other tests for the 3 groups separately to determine the patterning and organization of the self-concept so as to presumably gain a more in-depth understanding of the 'neurotic', 'schizo-
phrenic' and 'normal' condition (from both the 'adaptive' and growth oriented perspectives). The underlying assumption for this being that the clinical conditions — in this study neurosis and schizophrenia — irrespective of their abnormality can also be characterized by an inherent need for adaptation and growth.

The ensuing discussion is organized into 3 main parts to facilitate clarity in the presentation and interpretation of the results of the present study as given below:

(a) Interpretation and discussion pertaining to the results from analysis of variance.

(b) Interpretation and discussion of results from Pearson product moment correlations.

(c) Interpretation and evaluation of classification from multiple discriminant function analyses.

It is to be noted that the operational definition of the self concept in the present study, was defined in terms of Wylie (1974) and Taylor's (1977) proposition that self report measures are mediated by an individual's self concept (refer p 93). However, in the ensuing discussion the tests and what they directly measure will be used to enable facile communication of the results. A framework of the discussion is also
introduced at this juncture to enable the reader an easy access to various aspects of the discussion.

I. **Interpretation and Discussion of Results from ANOVA**

A. T.S.C.S.

i. Positive vs Negative self concept (self esteem)
   - General Self Esteem
   - Self esteem from internal frame of reference
   - Self esteem from external frame of reference.

ii. Conflict and variability in self perception

iii. Approach and self description

iv. Clarity and differentiation of the self concept

v. Degree of differentiation of the groups

vi. Univariate vs profile analysis
   - Neurotic vs Normal
   - Schizophrenic vs Normal
   - Neurotic vs Schizophrenia

B. S.C.I.
C. P.O.I.
D. E.I.
E. P.O.S.
F. IPAT - ASQ

Results viewed in terms of the first hypothesis.

II. **Correlation of the TSCS with other tests**

i. TSCS with SCI

ii. TSCS with POI

iii. TSCS with EI
IV. TSCS with POS

V. TSCS with IPaT - ASQ.

III. Multiple discriminant function analyses

A. Multiple discriminant function analysis based on test measures.

i. Mode of inter and discussion

ii. Evaluation of classification.

B. Multiple discriminant function analysis based on case history, symptomatology and socio-demographic data sheet.

i. Interpretation

ii. Evaluation of classification function.

Results viewed in terms of the second hypothesis.

C. An integrated interpretation based on A & B.

Discussion of results from Analysis of Variance

To begin with the findings on the TSCS will be discussed followed by the SCI, POI, EI, POS and ASQ.

A. Tennessee Self Concept Scale (TSCS)

The results on the TSCS indicate that there are significant differences between the clinical groups and the normal control groups (vide table p 135). It is noteworthy that 20 out of the 28 scales utilized from this test had significant F ratios - the details of
which will be discussed in the following pages.

At the outset it may be noted that these results provide a picture indicating that the normals have a significantly more positive self concept than the neurotics and schizophrenics as seen on the TSCS.

Since the TSCS is a multi-dimensional measure of the self concept it provides diverse information pertaining to response set, manner of accomplishing self definition (T/F ratio), self criticism (SC), general self esteem (Total P score) – which includes self esteem as defined from the internal and external frames of reference; self concept from internal frame of reference in terms of Identity (R1), Self satisfaction (R2) and Behavior(R3). Self esteem from external frame of reference in terms of Physical self (Cₜ), Moral ethical self (Cₚ) Personal self, (Cⱼ) Family self (Cₚ) and Social self (Cₑ) acquiescence conflict and denial conflict (Net conflict score) general conflict and confusion (Total conflict score); variability or inconsistency from one area of self perception to another (Variability score), certainty/uncertainty of self concept (Distribution score). The TSCS also has been reported to gives information that help in the differentiation of the various groups often encountered in a clinical setting (psychotic, neurotic, personality disorder) and identifies subtle defensiveness (Defensive positive) and integrated personalities (Personality integration). The ensuing
discussion is likely to throw light on these aspects.

1. Positive Vs Negative Self Concept (Self Esteem)

   General Self Esteem (Total P Score)

   This is the most important single score on the counseling form and it reflects the overall level of self esteem. As Fitts notes "Persons with high scores tend to like themselves, feel that they are persons of value and worth, have confidence in themselves, and act accordingly" (Fitts, 1965, p 2). In contrast, people with low scores are doubtful about their own worth; see themselves as undesirable; often feel anxious, depressed, and unhappy; and have little faith or confidence in themselves. It is to be noted that general self esteem is from both the internal and external frame of reference having the following measurable components viz., Identity, Self satisfaction and Behaviour (Constituting the internal frame of reference in terms of self-as-object, self-as-doer and self-as-observer and judge respectively, Fitts, 1971; iii) and Physical self, Moral-ethical self, Personal self, Family self, and Social self (contributing to general self-esteem from external frame of reference). These various sub-selves from the external frame of reference cut through, or contain elements of the three basic horizontal layers of Identity self, Judging self, and Behavioral self (Fitts, 1972, iii).

   Keeping in view the above meaning to general self
The results from the present study (vide table 5, p. 135) can be considered as significant. The neurotics, compared to normals, have a significantly lower level of self-esteem. They see themselves as unworthy, undesirable, often feel anxious, depressed, and unhappy; they have little faith or confidence in themselves.

The schizophrenics also have a significantly lower level of self-esteem than the normals and can be interpreted in the same manner as above.

An interesting feature of the present study is that no significant differences emerged between the neurotic and schizophrenic groups. But there is a trend towards the neurotics reporting higher self-esteem than the schizophrenics. This feature of the finding will be discussed subsequently after the interpretation of scores from the internal and external frame of reference.

**Self Concept from Internal Frame of Reference**

**Identity:**

One of the 3 principal parts or subselves in Fitt's conceptualization of the self-concept is Identity, i.e. self-as-object. Fitts (1971, iii) observes that "the identity self is perhaps the most basic aspect of the self concept. This is the 'Who Am I?' feature of the self concept - the labels and symbols assigned to the self by the individual to describe himself and establish
his identity. Self-theorists have often emphasized the influence that the identity self, or self-as-object, has upon one's behavior. Identity or 'Who Am I?' features of the self concept are indicated on the TSCS by such items as, for example, 'I have a healthy body', 'I am a religious person', 'I have a lot of self control', 'I am an important person to my friends and family', 'I am a friendly person' etc.

Coming to the results (vide table 5, p 135) it indicates that the neurotics in comparison to the normals have a significantly lower/negative 'Identity self'. Similarly, the schizophrenics in comparison to the normals report a significantly lower/negative Identity self. On the contrary, the neurotics and schizophrenics did not differ significantly from each other on this measure.

Thus, it can be seen that the two clinical groups in contrast to the normals have a more negative Identity self-concept and are seen to frequently endorse such items as 'I am a sick person', 'I am a bad person', 'I am a nobody', 'I am not loved by my family', 'I am mad at the whole world', etc.

Behavioral Self

Refers to 'what I do' or this is the way 'I act' (Fitts, 1965). Fitts (1971, iii) notes that behavior precedes identity in the infant and to a lesser extent
throughout life. It is interesting to note that behaviorism has ignored the identity self and concentrated on the behavioral self. In contrast, psychoanalytic theory concentrates on man's identity - its definition, its distortions and inaccuracies, and its evolution. However, Fitts proposes that these subselves are equally important, and that each influences the other. True integration or actualization of the self requires free, continual, and accurate or realistic interaction, between the two, i.e., Behavioral Self and Identity.

Once again the results from the present study indicate that the neurotics and schizophrenics as compared to normals perceive their Behavioral self more negatively, i.e., they perceive their behavior or the way they function in their day to day life in a negative manner. In other words, the normals for example, take good care of themselves physically, do what is right most of the time, solve their problems quite easily, they play fair with their friends and family, and see good points in all the people they meet to a relatively greater extent than the clinical groups. The neurotics and schizophrenics did not differ from each other significantly on this measure.

Self Satisfaction

This reflects the level of Self-satisfaction or Self-acceptance. It is pertinent to note that an
individual or group may have a very positive sense of identity and perceives his/their behavior with high esteem but have low feelings of self-acceptance. According to Fitts, this may be due to very high standards and expectations the individual has for himself. Or vice-versa, the individual may be quite self satisfied in spite of having a negative sense of identity and negative perception of his behavior.

The neurotics and schizophrenics as compared to normals have significantly lower level of self-satisfaction and self-acceptance, i.e., for example, they don't feel as well as they should, they wish they could be more trustworthy, they are not as smart as they want to be, they are not the person they would like to be, they feel they ought to get along better with other people. As in the case of the preceding measures of the self concept the neurotics and schizophrenics did not differ significantly from each other on this measure too.

This dimension of the self concept has been studied rather extensively with the outcomes being quite mixed. For example, Botkawar (1970) found neurotics to be the least self acceptant as compared to normals. Rajini (1982) found statistically significant differences on this dimension (using discrepancy measure) among neurotics, schizophrenics and normals, with the neurotics the least self accepting followed by the schizophrenics. Zuckerman & Monashkin (1957) found that the paranoid schizophrenics
were the minimum self-acceptors as compared to the other schizophrrenics and neurotics. However as Block and Thomas (1955) note satisfaction with self would appear to be of only limited relevance if not qualified and supplemented by other measures of personality status.

Self Esteem from External Frame of Reference

This comprises of the Physical self, Moral-ethical self, Personal self, Family self and Social self. As noted earlier each of these selves cut through, or contain elements of the three basic selves, viz. Identity self, Judging self and Behavioral self (Fitts, 1971, iii).

On the whole, the results from the present study on the TSCS (vide table 5, p135) indicate that the 2 clinical groups have poorer self esteem than the normal group from the external frame of reference. More specifically, it was found that on Physical self which pertains to how 'the individual is presenting his view of his body, his state of health, his physical appearance, skills and sexuality' (Fitts, 1965, p 3) is significantly more negative in the neurotic and schizophrenic groups than in the normals. The normals are characterized by such attitudes as 'I am an attractive person', 'I like my looks just the way they are', 'I feel good most of the time'.

As in the other scales Physical self did not differentiate the neurotics from the schizophrenics.
The low Physical self scores for the two clinical groups seem logical for people who experience many physical concomitants of mental anguish—anxiety, depression, fear and sexual conflict, as well as violent aggressive impulses and catatonic stupor may have marked physical effects (Pitts, 1972 iv) which in turn is perhaps reflected on the Physical self-concept scale.

**Moral Ethical Self**

Here the results are quite different. We see that the neurotics did not differ significantly from the normals on this aspect of self perception. On the contrary, the schizophrenics differed significantly from the normals indicating thereby a more negative self-concept in terms of Moral ethical self. The neurotics and schizophrenics did not differ on this scale.

Moral-ethical self scale pertains to how the individual describes the self from a moral ethical frame of reference—moral worth, relationship to god, feelings of being a 'good' or 'bad' person, and satisfaction with one's religion or lack of it and is tapped by such items like 'I am an honest person', 'I shouldn't tell so many lies', 'I am true to my religion in my every day life'.

The finding that the neurotics did not differ significantly from normals with regard to moral ethical self
may be viewed against Fitts report (Fitts, 1972, iv) who observes that Moral ethical self is consistently one of the best protected areas of self-perception in the neurotics. It is easier for the neurotic to express inadequacy in the other areas than in the moral area. As Fitts explains it is less threatening to account for one's behavior on the basis of physical factors, 'my poor aching back', or 'I don't feel good', than in terms of moral ethical factors, - 'I have no integrity', or 'I do things that are morally wrong'.

**Personal Self**

This score reflects the individual's sense of personal worth, his feeling of adequacy as a person, and his evaluation of his personality apart from his body or his relationships to others (Fitts, 1965). A positive self concept in this area indicates attitudes like 'I have a lot of self control', 'I am satisfied to be just what I am', 'I can always take care of myself in any situation'.

The results indicate that the neurotics feel significantly more inadequate, unworthy than the normals. The schizophrenics also express a sense of unworthiness and inadequacy as a person and evaluate this aspect of their personality significantly differently, i.e., in a more negative manner than the normals. However, the neurotics and schizophrenics did not differ significantly from each other on this measure of the self concept.
Family Self

This scale reflects one's feelings of adequacy, worth, and value as a family member. It refers to the individual's perception of self in reference to his closest and most immediate circle of associates. As seen on the earlier scales, the neurotics and schizophrenics again show lower self esteem on Family self than the normals. The neurotics and schizophrenics do not differ from each other significantly in their perceptions pertaining to Family self.

In short, the two clinical groups in comparison to normals feel to a relatively greater extent that friends have no confidence in them, they are too sensitive to things their family say and they do not act like their family thinks they should.

As Pitts (1965) notes this is another 'self as perceived in relation to others' category but pertains to 'others' in a more general way. It reflects the person's sense of adequacy and worth in his social interaction with other people in general. For example, 'I am a friendly person', 'I try to please others but don't overdo it', 'I find it hard to talk to strangers' are used to index Social self.

Here, also, the two clinical groups show the same
trend. They differ significantly and negatively from the normals in this aspect of their self-perceptions, i.e., they are hard to be friendly with, they feel they are no good at all from a social standpoint, and do not feel at ease with other people etc. However the neurotics and schizophrenics do not differ significantly from each other.

In summary, it can be seen that the neurotics and schizophrenics consistently experience a lower level of self esteem than the normals. This lowered self-esteem can be considered as of a general pervasive nature and also specifically in terms of various aspects of the internal and external frame of reference. It is pertinent to note that the neurotics and schizophrenics did not differ significantly in their perception of self-esteem. With this picture, albeit limited, of the 2 clinical conditions in contrast to the normals one may turn to the others characteristics of their self concepts as further seen on the TSCS.

11. Conflict and Variability in Self-Perception

The term 'conflict' on the TSCS has a very specific meaning and is measured in terms of Net conflict scores and Total conflict scores. Net conflict measures the extent to which an individual's responses to positive items differ from, or conflict with, his responses to negative items in the same area of self-perception. This is of two kinds, viz., acquiescence conflict (when the
individual is over affirming his positive attributes) and denial conflict (the individual is over-denying his negative attributes in relation to the way he affirms his positive characteristics. He concentrates on eliminating the negative). When Total conflict is high it indicates confusion, contradiction, and general conflict in the same area of self perception. As Fitts (1972, iv) observes the individual showing conflict within his subselves is seeing himself as both good and bad simultaneously and a person who continues to assign these conflicting values is demonstrating dissonance similar to that of Festinger's (1957) idea of cognitive dissonance. The net conflict score it may be noted measures the directional trend of such conflict and the Total conflict score measures the total amount of conflict without regard to its direction.

On the other hand, variability refers to the inconsistency of self-perception from one area of self-perception to another such as variation in level of self regard within the external frame of reference viz., Physical self, Moral-ethical self, Personal self, Family self and Social self which is measured on the Column variability score and variability within internal frame of reference, viz., identity, self-satisfaction and behavior which is measured on Row Variability score. Total variability is a summation of these two sub-totals. High variability reflects little unity or integration and such individuals tend to compartmentalize certain areas of self and view these areas quite
apart from the remainder of self. In this respect, Fitts (1972) notes that the subselves of the average person are somewhat more variable, but form a basically unified whole. In contrast, the subselves of the extremely deviant and disturbed individual show wide variability, and their behavior is often erratic, unpredictable, and meaningless to others.

Viewed against this background, the results from the present study (vide table 5 p 135) reveal that the groups do not differ significantly from each other in Net conflict as the F ratio has not reached the accepted significance level. Nevertheless, there is a trend that indicates that the 2 clinical groups comprising of the neurotics and schizophrenics show relatively more acquiescence conflict than the normals. In other words, the neurotics and schizophrenics indicate stronger affirmation of positive attributes than denial of equivalent negative attributes.

In respect to Total conflict the results reveal that only the neurotics as compared to the normal experience significantly greater conflict. On the other hand, the schizophrenics do not differ significantly from either the normals or the neurotics respectively. The mean values indicate that the neurotics experience the greatest conflict in contrast to the normals and schizophrenics. That is to say the neurotics of the present study show more contradiction, confusion or dissonance in their self-perceptions. Fitts (1972) points out that the
neurotics often score high on Total conflict which the present study further upholds.

In respect to variability, one needs to consider it in terms of both the internal and external frame of reference as well as the overall variability. In this context, it was found that general variability (Total Variability) distinguished only the schizophrenics from the normals. The neurotics did not differ significantly from either the normals or schizophrenics. In respect to variability from an external frame of reference (column Variability) the F ratio did not reach significance but here once again there is a trend toward the schizophrenic group evidencing higher variability than the neurotics or normals. Further, this is markedly pronounced in terms of the internal frame of reference (Row Variability), i.e., pertaining to identity, self satisfaction and behavioral self for the schizophrenic group who were statistically and significantly different from the normals in respect to this measure. However they did not differ significantly from the neurotics.

In the light of the above the variability scores indicate that the schizophrenic lack unity and integration to a relatively greater extent than normals. This is in keeping with the observation of Fitts who reports that this is mostly to be seen in schizophrenics or manic depressives (Fitts, 1971, iii). Further, in clinical
practice one often encounters a striking amount of variability in the schizophrenics' behaviour and this presumably may in part be consequent to their variable self perceptions.

These findings further substantiate an aspect of self concept theory. A number of self theorists have emphasized the role of inconsistency and variability in self perception and its significance for behavior. For example, Kelly (1955) and Epstein (1973) propose that individuals make and test hypotheses and revise these concepts accordingly, organizing these observations eventually into a broad network called theory. As Epstein observes if experiences were not so arranged it would be impossible to behave effectively in a complex world with innumerable conflicting demands" (Epstein, 1973, p 408).

Similar ideas have also been expressed by others. James (1892) argues that consistency was to be praised and that the inconsistent were sick souls. Rogers (1951) and Fitts (1971) for example speak of the self organization as a unifying gestalt. Lecky (1945) postulated a striving for consistency per se and notes that emotional states cannot be treated independently but must be regarded as different aspects of a single motive - the striving for unity. Murphy feels that 'the urge to consistency can indeed be accepted as a primary mechanism' (Murphy, 1947, cited in Wylie, 1968,
p 749). In another vein, Taylor (1977) proposes in terms of his 'self concept hypothesis' that clear, well-articulated and highly differentiated self concepts will presumably lead to stable and coherent item responses. Analyzing some of the consequences of inconsistent self perceptions Wylie (1968) observes that such self-concepts lead to conflicting behavior tendencies and that this would lessen the possibility of getting the positive reinforcement attainable from carrying out any one tendency. Additionally, conflicting behavior tendencies are seen as inherently frustrating or anxiety-provoking since goal-directed behavior is interfered with.

Gergen (1971) has recently made an eloquent plea for a recognition of the fact that inconsistencies are the rule in self-conception. After reviewing a number of studies in respect to self-presentation, he suggests that the popular notion of the self-concept as an unified, consistent or perceptually whole psychological structure is possibly ill-conceived and that it seems, that the more natural state of the organism is one which includes numerous disparities and contradictory tendencies (Gergen, 1971). Incidentally, relevant to Gergen's argument is a study by Allen and Potkay (1977) who found a high degree of variability in the daily self-description of subjects. However, as Bam (1977) suggests this would seem best attributable to the instructions given to subjects (to structure the tests as a reaction to
recently occurring events) and the task itself.

In the final analysis, Gergen's view does not necessarily imply confusion or even inconsistency since the notion of 'multiple selves' as used by him represents a means of organizing one's overall self-concept. The association of different self-views with different roles represents differentiation rather than inconsistency. It is only when one has differing self-definition within a role - 'am I a sensitive or an insensitive friend?' - that inconsistency is experienced and the extent of this tendency will largely depend on the 'individuals' awareness of the inconsistency, the functional value of the concepts at stake, and the amount of training he has had in avoiding inconsistency" (Gergen, 1971, p 22).

"Inconsistency or dissonance among various conceptions of self may produce self alienation, as Horney (1950) notes, a "loss of feeling as an organic whole -- an alienation from the real self". In the same vein Weiss (1961) observes that "the main characteristics of today's patient is his estrangement from himself".

The results of the present study pertaining to inconsistency and variability in self-perception to varying extents in the two clinical groups has been observed in other empirical studies too. For example, Guller (1966) concluded that schizophrenics appear to have a self
concept disorder component which manifests itself through inconsistent self-descriptions. Gruber and Johnson (1977) found that schizophrenics were more inconsistent in their self perception and they interpreted their results on the basis of communication patterns within the families of schizophrenics. Ostraukas (1975) found in a sample of psychiatric patients as opposed to a normal control group that the index of structural inconsistency was higher in the psychiatric sample and this index for patterns of self-evaluation was found to correlate significantly with an independent measure of maladjustment, that is, the social competence index. Marx and Winne (1980) indicate that the greatest variability on the TSCS was for the psychotic group in contrast to the neurotic, personality-disordered and non-patient groups. A significant feature of the present study is the similar finding that schizophrenics have the greatest variability as compared to the normals and neurotics. This further substantiates Marx and Winne findings pertaining to this aspect as they also had used the TSCS. Inconsistency in self concept has been linked also to the initial age of drug usage with high inconsistency group attaining lower mean age scores than those of either the low or medium inconsistency groups (Lieber-witz, 1978).

Pitts (1972,111) observes that in most psychopathology self-esteem varies considerably from one subself to another. In fact, such variability is noted by him as a
sign of psychological disturbance and the areas of high
and low self esteem have been proposed to be related to the
nature of the disorder. In this context, it may be re-
called that the schizophrenic's variability is most strik-
ingly evident in terms of the internal frame of reference,
i.e., this is what I am, this is what I do, and this is
what I feel. In view of this it can be put forth that their
problem probably appears to be of an essentially pervasive
and fundamental nature as the above constitute the 3 prin-
cipal and basic parts of the self (Pitts, 1971, iii).

(iii) Approach and Self-Description

The scales that reflect on how the groups approach the task of self description will be discussed here.

Pitts (1972, iv) recommends the use of the distribution (D), T/F ratio and the measures of defensiveness
namely Self criticism (SC) and Defensive positive (DP) for the above purpose. To recapitulate the D scores are
purely behavioral measures which describe the individual's approach to self description apart from the content
of his self report. These scores (number of 5, 4, 3, 2 and 1
category responses that are used) in addition to a
composite score provide a picture of how the individual
goes about defining his self concept. For example,
Pitts (1965) observes that schizophrenic patients often
use '5' and '1' answers almost exclusively. Other dis-
turbed patients are found to be extremely uncertain with
a predominance of '2', '3' and '4' responses. On the other hand, well integrated people are said to employ a more balanced use of all five categories (Fitts, 1965).

The True/False ratio (T/F) can be considered a measure of response set or response bias, as task approach or behavioral measure which has meaning only in terms of empirical validity, and it can also be interpreted to indicate how the individual is achieving self-definition (Fitts, 1965). Fitts (1972, iv) prefers to consider its meaning in terms of the latter as it is specifically related to the self-concept. He points out that most people accomplish self-definition by the dual process of affirming what they are and rejecting what they are not, by identifying what is self and what is not self, such people are able to employ both approaches to an approximately equal extent so that the T/F score is somewhere near an equal ratio of 1.00. Fitts reports that the schizophrenic groups score highest in T/F and interprets this to indicate that these groups whose identity problems are well established find the task of self-differentiation very difficult and handle it in a deviant manner. 'They seem so uncertain about who and what they are that they welcome any external suggestion, even a printed test item, and endorse it whether it applies or not. They are apparently so preoccupied with the question, 'Who am I?' that they can fully employ only one of the dual approaches to self-definition' (Fitts, 1972, iv, p 111).
The self criticism score is considered to be a measure of openness and self awareness, of an individual's ability or willingness to criticize himself and to admit his negative aspects. On the other hand, it is a measure of defensiveness or tendency to deliberately distort and enhance the self-image (Fitts, 1972, iv). Fitts reports that a normal capacity for self criticism is optimal and that low scores are often associated with a distorted and unrealistic self concept.

Defensive positive is another measure of defensiveness or the effectiveness of psychological defenses. In this context Fitts (1972, v) reports that psychologically disturbed and deviant people tend to have deviant scores on this measure - either very high, indicating positively distorted self-concepts or very low, reflecting a lack of normal defenses. It is reported that well integrated people usually score near, or slightly above, the mean on Defensive positive (Fitts, 1972, v).

The results from the present study (vide table 5, p 135) indicate that the three groups do not differ significantly on the composite Distribution score as well as in terms of the number '5' (completely true), '4' (mostly true), '2' (mostly false) and '1' (completely false) responses that they have endorsed. Significant differences were noted on the number of '3' (partly true - partly false) responses used by the neurotics and normals. This can
be interpreted to indicate that the neurotics are relatively more guarded and defensive in their approach to self-description. The schizophrenics were not significantly different from the normals or neurotics respectively on this measure.

True/False ratio did not reach statistical significance thereby indicating that the three groups do not differ significantly in their response set or the tendency to define the self by agreeing with the content of items rather than by rejecting them. This is contrary to Fitts (1972, iv) findings who found that schizophrenics have the highest T/F ratio. This discrepancy in results may be due to the differing sample characteristics.

On the self criticism scale the neurotics, schizophrenics and normals did not differ significantly from each other as the F ratio is insignificant. This indicates that the groups do not differ in defensiveness, openness, honesty in self-description and capacity for self criticism.

The above results are contrary to those reported by Sarbin and Rosenberg (1955),/Wylson (1976) who found that the psychiatric group was more self-critical; Rajini (1982) reports that a neurotic group was highest in self criticism in comparison to schizophrenics and normals. Perhaps, these findings can be explained in terms of the operational measurement of self-criticism.
which is different from that used in the present study. It may be recalled that the self criticism scale of the TSCS consists of 'mildly derogatory statements that most people admit as being true for them' (Fitts, 1965, p 2). The scope for variation thus appears to be limited thereby obscuring any real differences between different groups. However there is a slight trend to indicate that the normals are more self critical (i.e., more open and less defensive) followed by the neurotics. The schizophrenics appear to be the most defensive in the present study.

Coming to the other measure of defensiveness, namely, Defensive positive the results indicate that the schizophrenics are significantly less well defended on a subtle measure of the above type as compared to normals, thereby, probably suggesting a lack of normal defenses. The neurotics did not differ significantly from the normals and schizophrenics respectively on this measure. In this context (Fitts 1971, iii) reports that well integrated individuals are better defended on a subtle measure (Defensive positive) but have a normal capacity for openness and self criticism on the more obvious and overt measure of defensiveness (self criticism). The present study also indicates this though not very strikingly in the case of neurotics.

Integrating the above findings it is evident that...
the clinical groups have in general a similar task approach to self definition as the normals with, however, one exception in each clinical group. The neurotics approach the task of self description by 'hedging' 'avoiding' and being 'non committal' as compared to normals. On the other hand, the schizophrenics psychological defenses do not appear to be effective, reflecting thereby a lack of normal defenses in the approach to self description as compared to the normals.

(iv) Clarity and Differentiation of the Self-Concept

Another dimension of self perception that can be seen on the TSCS is the degree of differentiation or clarity of the self-concept (Fitts, 1965). Some people have very vague and undifferentiated self concepts. It is as if they are so uncertain as to who and what they are that they are unable to distinguish one feature from another - they are vague and undecided regarding all of their characteristics. Others tend to dichotomize their self perceptions into extremes so that everything is either good or bad, desirable or undesirable. Normal and well integrated persons have rich, clearly-differentiated self perceptions that are characterized by clarity, precision, and uniqueness (Fitts, 1972, iii).

The above is measured on the TSCS in terms of the Distribution score and this consists of the D score
in addition to the number of 5, 4, 3, 2 and 1 responses used. As already seen, it not only indicates the above but also tells us how the task of self-description is approached.

At the outset it is interesting to note that only one of the Distribution scores emerged significant, namely, number of 3 responses used. The three groups did not differ significantly in their overall Distribution score. There is a trend that suggests that the neurotics in contrast to the normals and schizophrenics have relatively less differentiated and articulated self-concepts. They are more defensive and guarded. This is emphatically brought out on the number of 3 responses used score. Here, the neurotics as compared to the normals use this category significantly more often thereby indicating that they are hedging and really avoiding committing themselves in reporting their self-concepts. However, no significant differences emerged on this score in respect to the neurotic and schizophrenic groups. It is pertinent to note at this juncture that though the normals did not significantly differ from the neurotics and schizophrenics on most of the measures pertaining to clarity and differentiation of self-concept there is a strong trend towards the normals evidencing a more balanced choice of all responses - 'black, white, and varying shades of grey'. This is apparent on the profile sheet which will be discussed later.
(vi) **Degree of Differentiation**

Here six Empirical scales of TSCS are used which help in differentiating one group of subjects from all other groups, viz., Psychosis scale, Neurosis scale, Personality Disorder scale, General Maladjustment scale and the Personality Integrated scale. In addition, as already noted the TSCS has a scale to measure defensiveness of a more subtle nature (i.e., Defensive Positive) in contrast to Self criticism score which measures overt defensiveness. The former score stems from a basic hypothesis of self theory: viz., that individuals with established psychiatric difficulties do have negative self concepts at some level of awareness, regardless of how positively they describe themselves on an instrument of this type (Fitts, 1965). It is to be mentioned that the above noted empirical scales in contrast to the other scores, have no theoretical rationale but are based solely on empirical data - namely item analyses which utilized whatever cluster of test items that differentiated one group of people from other groups (Fitts, 1965).

Surprisingly, the neurotics and schizophrenics did not differ significantly from each other on the above scales but, however, there were significant differences between the two clinical groups and the normals.
The two clinical groups evidenced a lower level of personality integration, relatively more general maladjustment, psychotic pathology, personality disorder and neurosis than the normals. Further, only the schizophrenics differed significantly from the normals on the subtle measure of defensiveness. Their scores suggest a lack of the usual defenses for maintaining even minimal self-esteem. It may be recalled when discussing overt defensiveness it was noted that though the F ratio was not statistically significant on this scale there was a trend to suggest that the schizophrenics were less able to show openness and a capacity for self criticism. However on a subtle measure the results indicate the opposite. This can best be reconciled in Fitts (1971, iii) own terms who states on the basis of several studies that a certain amount of subtle defensiveness is necessary and that individuals who have been found to be high on personality integration are better defended on a subtle measure such as defensive positive. Finally, it is worthwhile to observe that on the General Maladjustment scale and Personality Integration scales the neurotics as compared to the schizophrenics evidence relatively less maladjustment and more integration though this is not statistically significant.

**Summary**

Taking an overall view of the results from the TSC8 it is evident that the two clinical groups in
contrast to the normals have a significantly more negative/deviant self concept on most of the dimension of TSCS. The term negative indicates not only lower self esteem but also greater inconsistency, variability and conflict in self perceptions. Their deviant self concept has been observed on the various empirical scales too. Finally, an interesting feature of the present results is the fact that no significant differences emerged between the two clinical groups.

The results from the present study are in agreement with theoretical writings and empirical studies which conclude that clinical conditions have a more deviant self concept. Fitts (1972,iii) in a manner similar to other self psychologists like Rogers (1959) Snygg and Combs (1949), Epstein (1973) proposes: 'In general and other things being equal, the more optimal the individual's self concept the more effectively he will function' (Fitts, 1972,v p 4). Thus, if we accept the criteria of normality adopted in our present study as indicating relatively more 'effective functioning' as opposed to the neurotics and schizophrenics, then this proposition appears acceptable and the TSCS can be seen as providing a fairly adequate picture and measure of 'effective functioning'.

There have been various personality theorists in addition to self psychologists who have proposed similar ideas. For example, Allport (1955) identifies a clear
sense of identity, self acceptance and self objectification (know thy self) as characteristics of the healthy personality. Fromm (1941, 1947, 1970) distinguishes a sense of identity through a process of individuality as one of the basic features of a healthy person. Maslow (1968, 1970) has proposed that the satisfaction of the lower needs is a pre-requisite for achieving self actualization - one of which is the need for self esteem.

Jahoda's (1958, cited in Wylie, 1979) extensive search of the literature on what constitutes mental health resulted in a proposed set of criteria important among these being acceptance of self and a clear sense of identity. Kaplan (1972, 1975) identifies negative self attitudes as a common predisposing influence in the adoption of a wide range of deviant response patterns. Coan (1974) identifies self satisfaction as one of the factors delineating the optimal personality. In addition, most other personality theorists have alluded to the role of negative self concepts in abnormal behavior. Breuer and Freud (1955) referred to 'pathogenic ideas', Ellis (1975) to 'irrational beliefs', Kelly (1955) to 'disordered constructs', Perls (1951) to 'mistaken concepts of self', Adler (1927) to 'mistaken opinions', Bandura (1967) to a 'sense of efficacy' and finally, Lazarus (1971), Beck (1967) and Meichenbaum (1974) in addition to other cognitive oriented theorists and practitioners have referred to the self concept in the understanding and modification of behavior.
From a different angle, the results on the TSCS can be viewed as joining the host of several other empirical studies in finding a more negative self concept in clinical/maladjusted groups. For example, McPartland/(1961) using the 'Who am I' test, Ziller et al.,(1964) with the topological measurement technique to measure Self Social Constructs of the individual, Kaplan and Pokorny (1969) utilizing a modified version of the Rosenberg Self Esteem Scale, Plutchick et al., (1970) administering personality traits, Miskimins and Braucht(1971) on the Miskimins Self Social Other Discrepancy Scale, Rajini (1982) on Personality Word Card utilizing self-ideal discrepancy measure on self-acceptance and self critically, Shetty and Sathya- vathi (1979) on TSCS, Truax et al., on Butler and Haigh Q sort, Mojdehi (1973) utilizing a Semantic differential technique and Fitts (1972, iv) on the TSCS have all reported that the clinical groups have a poorer/deviant self-concept.

Nevertheless, in spite of an overwhelming number of studies indicating the above a few exceptions to this trend is apparent. In such instances the maladjusted group has been found to score more positively on certain self concept: indices. Miskimins and Berry (1971) have emphasized this point and suggest that patients (generally psychotics) successfully utilize defenses to resolve high self-ideal-self disparity thereby resulting in an inflated concept of self. However, they note that
such discrepancies can be detected on the basis of more
sophisticated techniques (e.g., The Miskimins Self Goal
Other Discrepancy Scale). Fitts (1965) has recognized
this possibility and has empirically derived the
Defensive Positive scale on the TSCS. At this juncture
it can be mentioned that those studies which have reported
results contrary to the general trend may have had their
samples contaminated by the inclusion of subjects such as
borderline schizophrenics, ambulatory schizophrenics,
pseudo-neurotic schizophrenics in addition to not con-
trolling for paranoid/non-paranoid status chronicity etc.
thereby evidencing contradictory results.

It was noted earlier that no statistically signifi-
cant differences emerged between the neurotics and schizo-
phrenics on any of the dimensions and subscales of the
TSCS. This is contradictory to many investigations
having a similar aim as this study and the possible
reasons for this can be viewed in terms of the classifi-
catory scheme pertaining to mental disorders and the
methodology of such studies.

Fitts (1972) among others (e.g., Laing, 1967; Szasz,
1970; Eysenck, 1975) observes that the present classi-
 ficatory system is quite 'sloppy' and that psychiatric
disorders are rarely clear and simple enough to warrant
a simple diagnostic label. This is because the nature of
pathology shifts and changes, and the exact diagnosis
varies according to the time it is made. Diagnosticians often disagree markedly as to the exact diagnosis for an individual and further institutional policies may have a distinctive effect upon diagnoses in several ways.

Turning to the empirical studies that indicate significant differences between neurotics and schizophrenics, Håson and Worchel's (1957) is interesting to begin with. They found that neurotics had the poorest self-appraisal in contrast to the schizophrenics and normals using a self rating inventory. In addition they found that the self-ideal discrepancy was significantly greater for this group than the schizophrenics or normals of their study. Miskimins, Braucht and Berry (1971) on the basis of the Miskimins self goal other discrepancy scale successfully discriminated psychotic symptomatology groups from other types, example, neurotics. In another study relevant to the present discussion is the one by Lazzari and Gough (1980), whose results contradict Hillson and Worchels (1957) findings. In their study adequacy of personal adjustment was poorest for patients with psychotic MMPI profiles, next poorest for the indeterminants, and least for those in the neurotic category as measured on the adjective check list. In the same vein, et al., McPurtland/(1961) report that self conception as reported on the 'Who Am I' test were related to different levels of ward behavior and to the occurrence of grossly
disturbed actions as well.

An interesting feature of many of the above studies (in addition to others not cited here) that have found significant differences between neurotics and schizophrenics and/or psychotics is the method by which these groups were classified. In Lazzarini and Gough's study psychiatric patients were classified on the basis of the MMPI profile by means of the Meehl-Dahlstrom rules; Miskimin's and Braucht used a psychiatric behavioral symptomatic check list consisting of 34 symptoms rating and they correlated this with the finding from their self concept instrument; McPartland correlated his self concept measures with different levels of ward behavior.

The results of the present study pertaining to the neurotics and schizophrenics need to be viewed in light of the above discussion. Statistically insignificant results may be due at least partially, to the exclusive use of the psychiatric classification system which is caught in a cross fire of criticism (Scheff, 1963; Eysenck, 1975; Bandura, 1969; Cameron, 1944).

Another reason for these insignificant differences may be due to the within group differences being greater than the between group. An examination of the standard deviations in the groups indicate that the clinical groups are characterized by much greater variability
in a majority of the instances as compared to normals. The schizophrenics s.d's indicate greater within group variability than the neurotics in a majority of the scales thereby tending to obscure statistically significant differences.

In the above context the present sample characteristics need to be considered while interpreting these insignificant differences between the two clinical groups. It may be recalled that the present study utilized two broad diagnostic categories viz., neurotics and schizophrenics. Though some major variables relevant to self-concept studies were controlled full justice could not be done to all due to the time bound nature of this research in addition to the language problem faced by the investigator. The clinical samples were selected irrespective of outpatient/inpatient status, length of hospitalization chronicity/acuteness of schizophrenic illness, paranoid/non-paranoid status, specific categories of neuroses - to name a few. It is known that some of these variables moderate differences in psychological tests (..; Foulds, Dixon, McClelland and McClelland, 1962; Hamlin and Jones, 1963; King Sley and Struening, 1966; Magaro and Abrams, and Cantrell, 1981) though in terms of self concept research many are yet to be examined. It would be interesting to know the nature of the results if the neurotics and schizophrenics were simultaneously controlled for all these variables.
Nevertheless, it is to be emphasized that the primary rationale in studying neurotics and schizophrenics in this study irrespective of other more specific criteria is because it was assumed in accordance with the recent empirical literature pertaining to the multidimensional view of neurosis and psychosis (e.g., Eysenck, 1975; Eysenck and Eysenck, 1976) opposed to a unidimensional that these two groups are distinct and hence differences of a more specific psychological nature (here self concept) may be evident in respect to these two groups irrespective of such finer defining characteristics as already noted earlier. In view of this it was considered fruitful to explore its correlates first at a more general level (neurosis vs schizophrenia) irrespective of other more specific within group characteristics. Therefore, at this juncture it can probably be concluded that the neurotics and schizophrenics as defined by the various parameters of this study do not differ significantly in their self concept. The latter it may be noted as measured on the TSCS.

vi. Univariate Vs Profile Analysis

An univariate analysis indicates that the neurotics and schizophrenics are not significantly different from each other although both the groups differ significantly from the normals. Nevertheless, a profile analyses would be of value and interest to the clinical
psychologist who is constantly in search of relevant information to aid in the understanding and treatment of a clinical condition. In view of this Meehl's (1978) observation on the role of statistical inference is pertinent. In a sweeping indictment of over-reliance on statistical inference in all of psychological research, Meehl recently suggested that this reliance was one of the worst things that ever happened in the history of psychology. Similarly, Stevens (1968) asked 'Can no one recognize a decisive result without a significance test?' (Stevens, 1968 p 853). In this vein, a profile analyses is worthy of attention. Fitts (1972 iv) has to a considerable extent highlighted profitably some of the differences between various diagnostic groups on the basis of the TSC8 which is of practical day to day clinical value.

In interpreting the profile first the neurotic and normal groups will be compared followed by the schizophrenic and normal and finally the neurotic and schizophrenic groups.

**Neurotic Vs Normal**

Looking at the profile sheet it is apparent that the neurotics and normals lie very close to each in terms of defensiveness. A striking difference can be seen on T/F with the neurotics achieving self-definition on what he is and is relatively unable to accomplish the same
thing by eliminating or rejecting what he is not. On the contrary, the normals to a relatively greater extent achieve self-definition by a more balanced employment of both tendencies - affirming what is self and eliminating what is not self. When viewed as a figure ground perceptual task with 'self' as figure and 'not self' as ground, these patients apparently have difficulty differentiating the ground (Fitts, 1972, iv). It is interesting to note that Gividen (1959, cited in Fitts, 1972, iv) found that T/F discriminated between paratroop trainees who successfully weathered stress and those who did not. As Fitts (1972, iv) concludes the ability to withstand stress, is also related to the manner in which one differentiates his self concept.

The neurotics are conspicuously higher on Net and Total conflict than the normals. On Total conflict the difference is nearly 10 T scale units. The higher Net conflict scores indicate acquiescence conflict and this occurs when the subject is overaffirming his positive attributes. In addition, the neurotics experience relatively greater internal inconsistency in their self-perception than normals.

On the various Positive scores it is evident that the neurotics are consistently low on different aspects of self esteem from both the internal and external frame of reference including general self esteem.
Identity, Behavior, Physical self and Social self are relatively more depressed. The better protected areas for the neurotic appear to be Self Satisfaction, Moral-ethical self and to a lesser extent Personal self. Pitts (1972 iv) reports a similar finding. He notes that self satisfaction and moral-ethical self are consistently the best protected areas in the neurotics.

Variability is lower in the normals than neurotics. The normals handle the task of self description with a greater degree of certainty and indulge in a comparatively more balanced use of the various response categories than neurotics. They are more defensive on a subtle measure (Defensive Positive) and less mal-adjusted on the different, empirical scales than the neurotics. This is further noted on Personality Integration scale which is a measure of positive mental health. On this scale the normals are considerably higher than neurotics.

Schizophrenic Vs Normal

The same pattern is evident in respect to the schizophrenics vs normals groups as was seen above. The schizophrenic's approach to self-definition is characterized by relatively more uncertainty (D score). They use extreme responses (number of '5' and '1') relatively less often than normals. They are overtly more defensive though their psychological
defenses (as seen on D P) are relatively less effective. The schizophrenics show a fairly strong acquiescent response set (T/F) i.e., they over-emphasize what they are but are less able to reject what they are not. Fitts (1972, iv) also reports a similar finding. There is relatively more confusion and contradiction in the schizophrenic's self perception (total conflict) and an over-affirming of positive attributes (Net conflict score) than as seen in normals. Self-esteem is consistently low from both the internal and external frame of reference in addition to the overall self esteem score and variability in their self perception is strikingly more than in the normals. The better protected areas within the schizophrenics are in terms of Self satisfaction, Physical self, Personal self and to a relatively lesser extent Moral ethical self. Areas of least self-esteem and stress are those pertaining to Identity, Behavior, Social self and to a lesser extent Family self. For the normals the least self esteem is in the area of Identity and Social self but these are higher than what is seen for the schizophrenics.

On the empirical scales the schizophrenics spike on all the deviant scales (General Maladjustment, Psychosis, Personality Disorder, Neurosis). The normals show better Personality Integration (PI scale) as compared to the schizophrenics—the difference being nearly 10T scale units.
Neurotic Vs Schizophrenic

The neurotics are less overtly defensive, more honest in their self descriptions (SC) and show more effective psychological defenses (DP) than the schizophrenics. The neurotics handle the task of self description with more uncertainty (D score) indicating that they are hedging and avoiding in the task of self description (spike on number of 3 responses used). The neurotics are characterized more by response-set than schizophrenics (T/F). They over emphasize what they are but are relatively unable to accomplish the same they by eliminating or rejecting what they are not. The neurotics experiences considerably more confusion, contradictions and dissonance in their self perceptions (Total conflict) than the schizophrenics. Self-esteem in the two groups varies. Identity and Physical self is lowest for the neurotics. In contrast, the schizophrenics have lower Self satisfaction and perceive their Behavior more negatively than the neurotics. In contrast, the schizophrenics have lower Self satisfaction and perceive their Behavior more negatively than the neurotics. In addition Moral-ethical self, Personal self, Family self and Social self are associated consistently with lower self-esteem in the schizophrenics than neurotics. Variability in self regard from both the internal (i.e., Identity, Behavior and Self satisfaction) and external frame of reference (Physical self, Moral ethical self, Personal self,
family self and social self) is higher for the schizophrenics. This is more pronounced in terms of their identity, behavior and self-satisfaction.

The neurotics are less maladjusted on a general measure (GM) and show less personality disorder (PD). On Psychosis (Ps) and Neurosis (N) scales the two groups have almost similar profile points. On a positive measure of health the neurotics appear more integrated than the schizophrenics (PI).

Thus, it can be seen that the profile analysis has indicated several noteworthy trends in the 3 groups that is of immediate practical value especially pertaining to neurotics & schizophrenics. Having presented and discussed a multidimensional portrayal of the self concept in the neurotics, schizophrenics and normals it would be now interesting to see the further nature of the results on the SCI, which is also a phenomenological measure of the self concept.

B. SELF CONFIDENCE INVENTORY

The term self confidence "encompasses several areas of an individual's self experience and his perceived adequacy or otherwise thereof" (Basavanna, 1971, p 1). The self confident person on this inventory is defined as one who perceives himself as socially competent, emotionally mature, intellectually adequate,
successful, self satisfied, decisive optimistic, independent, self reliant, self-assured, forward moving, fairly assertive, having leadership qualities and in general as having positive and constructive self feeling and evaluation.

The results of the present study (vide table 6 p 138) indicate that both the neurotics and schizophrenics differ significantly from the normals on self confidence. In other words the clinical groups have lower self confidence as compared to normals. The neurotics and schizophrenics in contrast to the normals perceive themselves as having less ability to act effectively in a situation to overcome obstacles and to get things to all right.

It is interesting to note that on yet another measure of the phenomenal self concept, namely, self confidence the neurotics do not differ significantly from the schizophrenics. Apparently, the term self confidence as defined in this inventory can be viewed as being very similar to the concept of general self esteem as measured on the TSCS. The similar finding noted on the SCI as well as TSCS in so far as it pertains to self esteem and self confidence is noteworthy.

It may be recalled that one of the guiding the choice of the SCI is that it provides a restricted measure of the self concept, namely, self confidence, which has been identified by Smith (1962)
on the basis of his factor-analytic study as the first dimension of the self concept. Some investigators have recommended the study of self concept in terms of multiple measures due to the variability in what the tests measure even though they are purportedly called self concept tests (Silber and Tippet, 1965). The present investigation has given due consideration to this aspect, and the finding from theanova on the SCI is remarkably consistent with the results from the TSCS pertaining to the dimension of self esteem even though the method of measuring this concept is quite different in the two tests. The next section will examine what variables of TSCS correlate with the SCI in the 3 groups thereby further indicating the probable nature of communality in the two tests.

Since the neurotics and schizophrenics do not differ on yet another measure of self concept viz., self esteem/self confidence, this may indicate that the concepts of self esteem/self confidence are not sufficiently potent and relevant in a statistical sense in discriminating these two groups. Probably, there are other dimensions in the phenomenal self concept that need to be explored for purposes of distinguishing neurotics from schizophrenics statistically. This is a tentative suggestion and the possibility exists that the specific nature of the sample may have been an influential factor in determining these results and thereby curtailed.
its generalizability. Future research can examine the
utility and potentiality of the self-esteem construct in dis-
criminating more narrowly defined samples of neurotics
and schizophrenics.

C. PERSONAL ORIENTATION INVENTORY (POI)

The POI provides a measure of self actualization in
terms of the two major scales viz. Time Competence and
Inner Directed: and 10 sub-scales pertaining to Self
actualizing value, Existentiality, Feeling reactivity,
Spontaneity, Self-regard, Self acceptance, Nature of man,
Synergy, Acceptance of aggression and Capacity for inti-
mate contact. The POI measures such of the values and
behavior hypothesized to be of paramount importance in
the development of the self-actualizing person. Accord-
ing to Shostrom (1966) self actualizing people fall
within the T score range of 50-56.

In the present study all the 12 measures obtained on
the POI indicated that they differentiate the clinical
groups from the normal control group as revealed by the
respective F ratios (Vide table 7, p 139) These findings
can probably be understood to indicate that the normals
are significantly more self actualizing than the clini-
cal groups. A noteworthy feature of the results is that
the neurotics and schizophrenics did not differ signi-
ficantly from each other on any of the POI measures. In
striking contrast, differences were noted for the
neurotics vs normals and schizophrenics vs normals on all the scales of the POI with one exception, namely, pertaining to the Self actualizing scale wherein the schizophrenics did not differ significantly from the normals.

The interpretation and discussion of the results from each of the measures will be treated in terms of the two clinical groups as compared to the normal group to enable easy communication of the findings as these differences in the majority of instances are common to both the neurotics and schizophrenics. To begin with the Time competence and Inner-directed measure will be considered as these are the two major areas important in personal development and interpersonal interaction as indexed on POI.

**Time Competence**

Jones notes that 'Time is one of the defining properties of our world and so of ourselves' (1976, p. 353). Similarly, Schwartz (1977) concludes that being in time is reflective of the way in which one relates to most aspects of being.

The results on this scale (Vide table 7 p139) indicate that the normals are significantly more Time competent in that they are able to tie the past and the future to the present in meaningful continuity, and their aspirations are tied meaningfully to present working
goals. On the contrary, the neurotics and schizophrenics are comparatively more time incompetent, living primarily in the past, with guilt, regrets, and resentments and/or in the future with idealized goals, plans, expectations, and fears. The results on this measure are in harmony with those reported by Shostrom (1966).

Distortions in temporal behavior have been explored among various forms of psychopathology (Banks, Cappon & Hayen, 1966; Braly and Fre, 1971); Schizophrenia (Goldstone and Goldfart, 1962; Johnson and Petzel, 1971); depression (Delling and Robin, 1967) alcoholism (Roos and Albers, 1965) and suicide (Greaves, 1971). These studies have indicated that different categories of maladjusted behavior are linked to deviant temporal behavior.

It is of interest to note that time competence has been linked to anxiety though the causal link of this has not been clearly delineated. The present study, it may be recalled also revealed that the clinical groups were significantly more anxious (vide page 145 pertaining to results). In this context the observation of Cottle (1969) among others is of significance.

Cottle notes that:

"Anxious persons appear less able to establish their union of time zones. In many of their perceptions, they reflect a temporal as well as personal disunity (May, 1950) or what some have
called ego disintegration. For them, the temporal horizon is muddled, futures are not adequately differentiated from presents (Melges and Fourgerousse, 1966) and the fantasy of regaining the past is common (Cottle, 1969, p. 542).

Krauss (1967) hypothesizes that one of the techniques available to individuals for lowering their level of anxiety is to perceive time relatively more in terms of the present and future. He suggests that differences in anxiety level may be reflected in differences in temporal perspectives. Further, 'anxiety may be conceptualized as a time related construct invoking subjective experiences as occurring in the present and the anticipation of events which might occur in the future' (Krauss and Ruiz, p. 454).

In the light of the above, Melges and Fourgerousse's (1966) proclamation that if an individual has no plans or cannot deal with the present in terms of the past, then behavioral disorganization will result is highly relevant in terms of the findings on the Time competence scale which indicates that the neurotics and schizophrenics are significantly less time competent. The findings of the present study further substantiate the above statement as neuroses and schizophrenia can be interpreted as various forms of behavioral disorganization.
**Inner Directed**

This scale measures the extent to which the source of direction to the individual is inner and guided by internal motivations. An inner directed person is relatively more independent and self-supportive than an other directed person who is to a greater extent influenced by external forces. The neurotics and schizophrenics have significantly lower scores than the normals (vide table 7, p. 139). This indicates that the normals are guided relatively more by internalized principles and motivations than the two clinical groups. In contrast the neurotics and schizophrenics are relatively less guided by such motivations.

The results from the present study concur with those reported by Shostrom (1966) and Knapp (1976). For example, Shostrom and Knapp (1966) found in two groups of outpatients in therapy, one a group of beginning patients entering therapy and the other a sample of patients in advanced states of psychotherapeutic progress that the latter group had higher inner directed scores on the POI. Similarly, Fox (1965, cited in Shortrom, 1966) found that a group of 100 hospitalized psychiatric patients were significantly less inner directed than a group of normal adults as well as a sample of nominated self actualized individuals.

Recently, Coan (1977) in his study pertaining to the
optimal personality identified a similar concept as one of the factors that may characterize the optimal personality. One of the modes on which a person can be self-actualized is interpreted as 'Efficiency' which is associated among other qualities with a capacity for functioning without direction from without. As Coan notes:

'Unless the individual can function autonomously, he is failing to operate with total individual efficiency, for he is dependent on someone else to supply some of the thinking, planning, decision making, energy, motivation and so on' (Coan, 1977, p 297).

The two major POI measures, it was noted, was found to be significantly higher in the normals than the clinical groups. As Shostrom, (1966, p 19) notes such an individual who is living fully in the moment, or the present, does not require concern for support or sustenance and to say 'I am adequate now' rather than 'I was adequate once' or 'I will be adequate again is self validating and self justifying' (Shostrom, 1966).

Turning to the other measures on the POI the discussion of these remaining scales will be taken up in pairs that are complementary to each other as they represent the balancing that is critical to self actualization (Shostrom, 1966).

Valuing

This aspect of self-actualization is measured on the Self actualizing value scale and the Existentiality
scale. These two scales indicate the degree to which one's value are like self-actualizing people and the degree of flexibility in the application of values to living.

The results on the above measures are not uniform in the neurotics and schizophrenics as compared to normals (vide table 7 p 139). The neurotics hold significantly less self-actualizing values than the normals. This indicates that the normals hold and live more by values characteristic of self-actualizing people than the neurotics who relatively more often or to a greater extent reject such values. On the other hand, the schizophrenics did not differ significantly from the normals in respect to self-actualizing values. However, both neurotics and schizophrenics were significantly less flexible in applying the self actualizing values to one's life as compared to normals. They were more unable to react situationally or existentially without rigid adherence to principles and use good judgement in applying these values than normals. Further, the neurotics and schizophrenics tended to hold values so rigidly that these could be compulsive or dogmatic.

In view of the above it can be concluded that in respect to valuing the two clinical groups show less self-actualizing characteristics than normals. Though the schizophrenics do not differ on one of the above
two measures it can nevertheless be interpreted as significantly less self actualizing as the 'balancing that is critical to self actualization' is absent.

**Feeling**

This aspect of self-actualization is measured on the feeling reactivity and spontaneity measures of the POI. Specifically, feeling reactivity measures sensitivity or responsiveness to one's own needs and feelings and spontaneity reflects on freedom to react spontaneously, to be oneself and the ability to express feelings in spontaneous action.

The findings indicate that the clinical groups are significantly more insensitive to their own needs and feelings and relatively more fearful of expressing feelings behaviorally than normals.

**Self-perception**

This indicates affirmation of self because of worth or strength and the ability to like oneself because of one's strength as a person. In addition, it measures the affirmation or acceptance of oneself in spite of one's weaknesses or deficiencies. Shostrom (1966) points out that it is more difficult to achieve self-acceptance than self regard, but self actualizing requires both. It may be of interest to point out that this aspect of self-actualization appears to be quite
similar to the concept of Self esteem, Self satisfaction and Self acceptance as defined on the TSCS. In the light of this it would be interesting to take note of the results on these POI measures pertaining to self regard and self acceptance. The results indicate (Vide table 7 p 139) that the neurotics and schizophrenics have a significantly more negative perception of themselves in comparison to the normals and have significantly lower self acceptance. These findings are similar and consistent with those found on TSCS and SCI.

Awareness

Awareness is measured on the Nature of man, constructive scale and the Synergy scale of the POI. Since the neurotics and schizophrenics are significantly lower on these scales than the normals (Vide table 7 p 139) the picture that emerges in respect to the above is that the normals see man as essentially good and can resolve the good-evil, masculine-feminine, selfish-unselfish and spiritual-sensual dichotomies in the nature of man to a significantly greater extent than the clinical groups. Further, the normals have the ability to be relatively more synergistic, to transcend dichotomies, to see the opposites of life as meaningfully related in comparison to neurotics and schizophrenics. Conversely, the neurotics and schizophrenics tend to see opposites of life as antagonistic and view, for example, work and play, trust and love.
selfishness and selflessness as opposites to a greater extent than the normals.

**Interpersonal Sensitivity**

This is indicated on the acceptance of one's own aggressiveness and the capacity for intimate contact scales. The former measures the ability to accept anger or aggression within oneself as natural and the latter scale reflects on the ability to develop meaningful, contactful relationships with other human beings.

As the results suggest the clinical groups are relatively more defensive and use denial and repression of their aggression to a greater extent than normals. The clinical groups have difficulty with warm inter-personal relationships as compared to the normals.

To summarize the discussion on the POI thus far, it is evident that the two clinical groups in this study—psychiatrically defined as neurotic and schizophrenic—differ significantly from the normals in the level of self-actualizing characteristics that they exhibit. They report fewer ego satisfactions, seem more frustrated and appear to have less self esteem. They were less reality oriented in terms of time-orientation and were hidebound, rigid, and conventional. Consequently, as Knapp states 'the ordinary problems of living would rest more heavily on their shoulders, and would thus tend to bring about internal tensions and distress' (Knapp, 1976, p10).
The findings from this investigation give further confirmation to those reported by various investigators using clinical groups (Shostrom, 1966; Knapp, 1976; Rofsky, Fox, Knapp and Michael, 1977) and are congruent with the theoretical writings of various humanistic psychologists.

Maslow (1954), Rogers (1961), Seeman (1959), Fitts (1970), Coan (1977) among other humanistic psychologists have elaborated theories pertaining to the realization and development of the human potential. Allport (1961, 1968) speaks of the 'mature personality' with a unifying philosophy of life, Fromm (1955) on the productive personality, Jung (1954) refers to the 'individuated person' and Frankl (1969) of the 'self transcendent person'. In another vein, Maslow (1970) places emphasis on 'self actualization', Rogers on the 'fully functioning person', Seeman on 'personality integration' Fitts on 'interpersonal competence' and Coan on 'human fulfillment'. These theorists discuss at length the conditions that are essential for positive mental health and the characteristics of integrated or fully functioning people.

At this juncture it may be worthwhile to elucidate a little further on the views of some of the above theorists. For example, Maslow's (1970) contribution was to emphasize the master drive of self-actualization
within a theory of human motivation. He proposed a hierarchy of needs and argued for a hierarchy of potency that operates in such a way that the earlier needs in the list must be substantially met before the later ones can gain expression. He distinguished two classes of motives: the lower needs are striving to overcome deficiencies, while the higher needs, or meta needs, are concerned with growth and self aktualization. In general, according to Maslow, need deprivation leads to sickness and need gratification leads to health. Maslow regarded neurosis as a deficiency disease that may result from the frustration of any of the lower needs—safety, belongingness, self esteem etc. In the healthy person these needs have been met and behavior is governed more by a striving for growth or self actualization (i.e., B needs).

Rogers (1950) identifies the fully functioning person as characterized by positive self regard, openness to experience ("... when self experiences are accurately symbolized, and are included in the self concept in this accurately symbolized form, ...). If these were completely true of all self experiences, the individual would be a fully functioning person...." Rogers (1959, p 206), by the ability to establish a wide variety of identifications and by self regulation and self direction. That is, the effective individual relies on his total organismic valuing process to
guide him toward need satisfaction, self actualization and adequate behavior.

Fitts (1971, iii) proposes that identifiable patterns of self perceptions reflect exceptional degrees of actualization. He states that the self concept serves as a valid index of level of self-actualization. Since the present study on the TSCS indicates that the clinical groups are more deviant and on the POI these groups show relatively less self actualizing characteristics the close relationship as posited by Fitts appears to be considerably substantiated.

Bayne (1977) draws a distinction between 'real self' and 'false self' and self-actualization is viewed as a state in which self-concept is more congruent with real self than false self.

Coan, (1977) on the basis of an extensive review of the formulations of various writers pertaining to the optimal condition and his own multivariate studies, has formulated a multidimensional theory of the optimal personality in contrast to the unidimensional approach of Maslow and Rogers among others. He suggests five basic modes of human fulfilment or realization that underlie most of the notions of the ideal human condition: efficiency, creativity, inner harmony, relatedness and transcendence. The characteristics associated with these modes have also been noted by other
theorists as the constituents of the self actualizing personality. For example, positive self esteem, experience of control etc. However, the main difference in this conceptualization of the ideal condition from others is in terms of the methodology used to arrive at it and thereby its conceptualization pertaining to dimensionality. Coan (1977) proposes a multidimensional theory of the optimal personality wherein self realization is possible within one mode without doing anything unusual with respect to the others. This proposition is in striking contrast to the reflections of most other theorists and will be taken up again at a subsequent stage in an endeavour to explain some of the other findings from this study.

It was stated at the beginning of this section that the present study did not find statistically significant differences between the two clinical groups themselves. One, rather compelling way to interpret this finding is that these two clinical groups would not show greater self-actualizing characteristics or positive mental health by virtue of their very illness/clinical condition/ problems in living. Maslow (1970) indicates that self actualization is possible only when the lower needs in the hierarchy are satisfied. The clinical groups reveal that many of these lower needs are relatively unsatisfied (e.g. self-esteem, security). Thus, it appears more reasonable to suggest, albeit tentatively, that the
Figure 9. Profile Sheet for the Personal Orientation Inventory.
neurotics and schizophrenics are not only less self-actualizing but also that they are minimally different from each other in terms of positive mental health as measured on the POI. This needs to be more fully explored and confirmed in future studies.

The self-actualizing picture as seen on the POI for neurotics, schizophrenics and normals

From the POI measures an overall self actualization picture of the normals, neurotics and schizophrenics can be constructed. Shostrom (1966) reports that the T score range of 50-60 characterizes the 'self actualizing person' and 60-70 of a pseudo self actualizing' person.

In viewing the obtained profile in figure - one may note that except for Self regard in the normals not a single POI scale reached the T score of 50. Nevertheless, on all the scales the normals show relatively more self actualizing characteristics than neurotics or schizophrenics. The finding that normals do not fall in the actualized or metamotivated range suggests various possibilities important among them being the fact that the normals are quite young and developing people with a mean age of about 30 years. As Maslow (1954) observes self actualization of the sort he had found in his older subjects was not possible for young developing people.
As compared to neurotics the schizophrenics on the profile sheet have relatively higher T scores on many scales of the POI. The schizophrenics are apparently more time competent, Inner-directed, hold better values and are more flexible in applying such values than the neurotics. In addition, the schizophrenics are more spontaneous, i.e., they feel relatively free to react spontaneously, to be themselves and of expressing their feelings behaviorally in comparison to the neurotics. On 'Acceptance of aggression' and 'Capacity for intimate contact' the schizophrenics are comparatively higher than the neurotics. The only scale on which the neurotics score higher is 'Feeling reactively' and this indicates that they are more sensitive to their own needs and feelings than the schizophrenics. The profile sheet indicates that the schizophrenics are not uniformly high on all scales as compared to neurotics. This suggests that whatever better adjustment these schizophrenics may report on the POI it lacks a global pervasive and balancing quality that is necessary for better adjustment.

The present finding that the neurotics are relatively less 'adjusted' than the schizophrenics is somewhat surprising since the latter group is conventionally accepted as the more grossly disturbed. It is tempting to speculate on this discrepancy on the basis of the schizophrenic psychodynamics. In this vein, it is known that the neurotics in contrast to the schizophrenics
are relatively more reality oriented and in touch with it. By virtue of this, perhaps, the neurotic is constantly and incessantly pulled into the flux of being in the world with its consequent heightened ambiguities and contradictions, accentuated further, by his greater sensitivity to his own needs and feelings ('Feeling reactivity' on POI scale). He does not have the more drastic defences of the schizophrenic of withdrawing from the world, of indulging in autistic and paleological thinking (Arieti, 1974). Consequently, his daily encounters, of living in the world, probably make the realization and fulfillment of the self even in a rudimentary manner difficult as the possibilities open to him are much more diverse by virtue of his less dramatic and drastic defences as opposed to in the schizophrenic.

D. The Experience Inventory (EI)

People differ considerably in the type of experiences to which they are open and in the scope of events which they are capable of being aware. As Coan notes, 'there seems to be important variation not only in overall openness but also in the pattern of events or experiences to which people are open' (Coan, 1977a, p 1). He also points out that it is possible for people to be selectively open and that they may welcome one type of experience while avoiding or suppressing another.
The EI is a measure of some of the components of openness to experience and consists of the following scales:

Aesthetic sensitivity vs insensitivity.
Unusual perceptions and associations.
Openness to theoretical or hypothetical ideas.
Constructive utilization of fantasy and dreams.
Openness to unconventional views of reality vs adherence to reality.
Indulgence in fantasy vs avoidance of fantasy.

Deliberate and Systematic thought

The results from the present investigation reveal that an overwhelming majority of the F values insignificantly differentiate the 3 groups. Those that have a significant F value are 'constructive utilization of fantasy and dreams' and 'deliberate and systematic thought'. The following results will pertain to the positive findings, namely as found in the neurotic vs schizophrenic group and then proceed to the discussion on the possible reasons for the insignificant differences noted between the clinical groups and the normals.

Neurotic Vs Schizophrenic Groups

It is interesting to note that of the 7 scales measuring various factors of openness to experience only 'constructive utilization of fantasy and dreams' and 'Deliberate and systematic thought' differentiated the neurotics significantly from the schizophrenics (Vide table 8 p. 140 for results on EI).
The schizophrenics had a higher mean score on constructive utilization of fantasy and dreams than neurotics. In contrast, the neurotics scored significantly higher on Deliberate and systematic thought than the schizophrenics.

The schizophrenics higher score on constructive utilization of fantasy and dreams seems somewhat in tune with their symptomatology. As this EI factor scale indicates, probably the schizophrenics in contrast to the neurotics are more willing to rely on the use of dreams, day dreams and undirected thought for problem-solving and other purposes. In striking contrast to this, the neurotics report a need for orderly and planful thinking and frequently indulge in it.

The above findings call for a more concerted approach to the study of the important correlates of EI in the neurotics and schizophrenics before a fuller implication of these scales can be recognized.

Incidentally, there have been a host of studies bearing on some way on the openness or restriction of experience - perceptual defense, complexity and tolerance of ambiguity. These studies cast light on the nature of these concepts from a psychoanalytic framework. For example, Frenkel Brunswik's (1949) work with tolerance of ambiguity, Barron's (1952) with preference for complexity, Berlyne's (1960)
investigations of response to novelty and Feirstein (1967) study on tolerance for unrealistic experiences suggest that subject's difficulties facing conflictual or complex perceptual situations are related to anxiety coming from sexual, aggressive and other potentially anti-social impulses. In other words, the person with more conflict about dreams is assumed to have a greater tendency to avoid all conflictual experiences. Adorni, Frenkel Brunnwick, Lewinson and Sanford (1950) point out that a wide range of rigid behavior (e.g., rigidity in problem solving, intolerance of ambiguity etc.) constitutes a 'counter balance to underlying conflicts often verging on chaos' (Adorno et al. 1950, cited in Feirstein, 1967). Feirstein (1967) supports the concept that rigidity can represent defences against disorganized internal experiences.

Openness to experience in normals as compared to the clinical groups

A particularly interesting feature of the results of this study (vide table 8, p 140) is that no factor of openness - as measured on the EI significantly differentiated the neurotics or schizophrenics from the normals. However, on two scales, viz. 'Aesthetic sensitivity vs Insensitivity' and 'Openness to hypothetical and theoretical ideas' the normals showed a slight trend towards more openness than the 2 clinical
groups. On 'Constructive utilization of fantasy and dreams' and 'Dliberate and systematic thought' the normals fell between the two clinical groups.

The insignificant differences indicated by the respective t values are quite contrary to the theoretical writings of many self and growth oriented psychologists. For example, Rogers (1951, 1961) proposes openness to experience as a basic characteristic of a healthy individual. Epstein (1973) states that an individual with an extensive self-theory would have concepts available for coping with a wide variety of situations and would be aware of more facets of his feelings, abilities, and personality characteristics than an individual with a narrow self theory. This would thereby imply that such an individual would be more flexible and open to experience. Other theorists like Jourard and Landsmans (1980), Maslow (1954, 1968), Combs and Snygg (1959), Fitts (1971,iii) espouse similar views. The views of Coan (1974, 1977c) are very pertinent to the present discussion. He has identified openness to experience as one of the dimensions that could characterize the optimal personality. He observes that "the basic pre-condition for a more inclusive inner harmony would be an openness to the total realm of the total flow of experience. This openness would entail more extensive self awareness" (Coan, 1976, p 299).
The finding that the normals in this study did not show greater openness on any of the dimensions of the EI work can be viewed from the conceptual frame of 'growth' and 'adjustment'. Maslow (1970) Karson (1980), Shostrom (1966), Schultz (1977), Coan (1978) among others have drawn attention to these concepts.

The term growth is commonly employed to refer to the concept used most vigorously by humanistic psychologists. It casts human beings in the same light as other organisms, defines a natural course of human development whose ends are flexibility, freedom, and connectedness, and sets up neurosis as a failure in growth. It is important to note that this kind of mental health runs deep, does not depend on societal approval, and is not obtained easily. Adjustment, or adaptation on the other hand, is the kind of mental health that keeps one out of therapy and as Karson's notes:

'Even very neurotic characters, whose shallow lives are populated with extensions of their grand pride and base self hate, can correctly consider themselves mentally healthy by carefully adapting to their niche in life so they neither stick out nor fall in' (Karsons, 1980, p. 504).

Coan (1978) makes a similar point which is best expressed in his own words. He points out that the well adjusted person is:

"Free of disturbing emotions and apparently at peace with himself. He experiences a high level of self-esteem and self confidence. He likes himself and feels capable of success. These are all qualities that point to inner harmony, but
Harmony may rest on a shallow base. The person who appears best adjusted is often an individual who has simply accepted the views and the will of the surrounding society and failed to experience a very large part of himself. What passes for inner harmony is really the blissful unawareness of conformity. Of course, this type of adjustment does entail inner harmony on a limited scale - a harmony of these parts, borrowed or otherwise, that lie within the scope of the individual's awareness. There may be other parts effectively excluded from awareness with which reconciliation would be difficult (Coan 1977, p 299).

In the light of the above, perhaps, the normals of this study can be seen as well adjusted in terms of the 'adaptive' and not from the 'growth' perspective. This line of thinking appears more tenable when it is recalled that the 'normals' in the present study though relatively more self-actualizing than the two clinical groups do not reach the self-actualization level characteristic of the true self-actualizers as proposed by Shostrom (1966) and measured on the P0I.

Alternately and/or in addition the present results pertaining to insignificant differences between the clinical groups and normals can be interpreted in terms of the particular characteristics of the EI itself. In this context, it is relevant to note that the EI items are biased towards measuring openness to inner experience. It is also known to moderately correlate with introversion (Coan, 1974, 1977c). In addition, since the EI shares a response bias with the measures of distress the subject earns scores that indicate openness
or distress to the extent that he is willing to report qualities that people are likely to view as abnormal or undesirable. But as Coan cautions 'it is doubtful however, that the apparent relationship between openness and distress can be entirely dismissed as an artifact of our measurement technique' (Coan, 1974, p 81). It is also to be mentioned that significant sex differences emerged on the SI with females reporting more openness than males (Coan, 1974).

In view of the above, the subjects in the present study may have evidenced to some extent a general reluctance to report experiences because people view such qualities as 'abnormal' or 'undesirable'. Since this inventory is known to show sex bias, a wider coverage of dimensions pertaining in addition to the 'active mode' may help in revealing any real underlying differences in future studies on similar samples.

Finally, the present results can also be viewed in terms of the self actualization model proposed by Coan (1976). In this context he notes that there is nothing that can be considered a general factor of self actualization or positive mental health. He identified five basic modes of human fulfilment or realization that underlie most of the notions of the ideal human condition. These modes are relatively independent of one another and as Coan observes 'it is possible to
attain a high level of fulfilment, self realization, or self actualization within one of these modes without doing anything unusual with respect to the other four' (Coan, 1977 p 246). Bearing in mind this conclusion, perhaps, the normals are relatively more actualized than the clinical groups in respect to other dimensions but in terms of openness are not very different from them.

The point that openness to experience may not be intimately and positively associated with normality is highlighted in Tellegen's and Atkinson's (1974) study. They note that the 'absorption' factors whose motivational-affective component consists in a sentient and tolerant 'openness to experience' is independent of a stability and an introversion factor.

In short, the results pertaining to openness to experience indicate that the neurotics and schizophrenics in this study are each characterized by a particular dimension of openness. However, this is not significantly different from the normal condition whose relatively higher level of self actualization (POI) does not also encompass significantly greater openness than the neurotics or schizophrenics. The EI has served to underscore the probable relevance of the concepts of 'adaptation' and 'growth' in relation to normality. In addition, it is interesting to note that openness to experience as measured on the EI is the first in the battery thus far that has revealed statistically significant differences between the neurotics
and schizophrenics.

**Personal Opinion Survey (POS)**

The POS is designed to assess several major aspects of the experience of control and is a multidimensional measure of this construct consisting of 7 scales.

The results from the present study indicate that only 3 of the 7 scales reached values that were statistically significant (vide table 9, p 142). It is interesting to note that on 2 of these scales the clinical groups differed significantly from the normals in the direction of lower control. On only one scale the neurotics differed significantly from the schizophrenics.

**Experience of control in the 2 clinical groups as compared to the normals**

It was found that the POS scale measuring 'successful planning and organization' significantly differentiated the schizophrenics only from the normals. It is interesting to note that the neurotic group was not significantly different from the normals on this scale.

Coan defines this scale as follows: 'The items refer essentially to the planning, organization and completion of tasks. The high scorer reports successful self control in the realm of work' (Coan, 1977b, p 2).

Coan, (1977c) in discussing the optimal personality identifies the dimension of 'efficiency' as one of the
several modes that could characterize this personality. It is of interest to point out that fulfilment in respect to this mode require such qualities as organization, an ability to plan and to carry through a plan, and a capacity for effective work (Coan, 1977c). As would be expected from this, the schizophrenics evidence the least fulfillment on this aspect of the dimension is so far as it is measured by the above POS scale.

Considering the other two significant results on the POS it was found that the clinical groups differed from the normals on the scale measuring 'Self control over internal processes' and 'Control in immediate social interaction. On these two factors the neurotics and schizophrenics had a significantly lower mean score than the normals.

Self control over internal process indicates control over somatic, affective, and cognitive processes. Since the neurotics and schizophrenics score significantly lower than the normals on this scale they are characterized by afflictions of unavoidable itching, depression, ideas that run through their mind, muscular inordination, twitching or tightening up of muscles, unexplainable cheerfulness etc. (Coan, 1977b).

Control in immediate social interaction measures whether the subject himself is able to control social situation or secure desired responses from other people
(Coan, 1977b). The neurotics and schizophrenics report significantly less control in the social realm than normals.

The other POS scales like 'Achievement through conscientious effort', 'Personal confidence in ability to achieve mastery', 'Capacity of mankind to control its destiny vs supernatural power or fate' and 'Control over large scale social and political events' did not significantly differentiate the clinical groups from the normals.

The observation made by Coan (1977b) that in severe psychological disturbances, the sense of control is lost in various forms and to various degrees has been upheld in this study as the clinical groups experience significantly lower control only in respect to certain dimensions of this construct.

**Neurotic vs Schizophrenic groups**

'Successful planning and organization' is the only scale that significantly differentiated the neurotics from the schizophrenics. The neurotics reported significantly higher control on this dimension, i.e., successful self control in the realm of work. It may be recalled that the schizophrenics significantly perceived lower control in comparison to the normals too in this dimension, though the neurotics were not significantly
different from the normals. Thus, the experience of control on the above dimension appears to be a distinctive feature of the schizophrenic condition as seen in the present study.

On the whole, the significant results on the POS indicate that the clinical groups—particularly the schizophrenics experience lower control than normals. For example, Lefcourt (1973) has made the point that while freedom and control are both illusions, inventions of man to make sense of his experience, they do have consequences:

"...the sense of control, the illusion that one can exercise personal choice, has a definite and a positive role in sustaining life. The illusion of freedom is not to be easily dismissed without anticipating undesirable consequences. To submit to however wise a master planner is to surrender an illusion that may be the bedrock on which life flourishes" (Lefcourt, 1973, p 424).

Similarly, Singer (1970) defines health by the degree to which a person is free to perceive himself as an independently acting and reacting unit of experiencing consciously the choices at his disposal, and making choices with a conscious sense of responsibility for them. He states that a belief in external control is one of the prime expressions of psychopathology.

"Man is all too prone to search for external guidelines and conditioners because freedom of choice and action, and the awareness of such freedom and the responsibility associated with this awareness are frequently unbearable. But this very search
for external motivators and this very abandoning of freedom are the essential expressions of psychopathology itself. Escape from freedom, as Fromm among others, has shown so well, is giving up one's humanness, represents self oblivion, leads to willing submission to totalitarian domination and so therefore pathological. (Singer, 1970, p XVIII-xix).

Rotter (1966) hypothesized that people who view reinforcements as contingent on their own behavior (internals) are better adjusted than those who see reinforcements as determined by fate, chance, or powerful others (externals) although he did theorize that there might be a curvilinear relationship with individuals at the extreme ends of the I-E dimension being more maladjusted than those in the middle range. In a similar vein, Frank and Marolla (1976) note that one's sense of 'inner' self esteem derives from the experience of self as an active agent of making things actually happen and realizing one's intents in an impartial world.

It involves the general pragmatic notion of that sense of self arising in connection with active striving in the face of obstacles; 'Inner here' is 'inner' in the sense that it stems from feelings of one's own capacity - competence and potency.... Inner self esteem is not given, it is earned; but it is earned through one's own competent actions, and the rewards stemming from such actions rather than particular 'persons' (Franks & Marolla, 1976, p. 326).

This conceptualization appears more meaningful in the context of the present study if it is recalled that the clinical groups not only have lower self esteem (TSCS, SCI, PDI) but also experience lower control as
seen on POS scales. According to Franks and Marolla (1976) inner self esteem is the subjective assessment of one's self in terms of the instrumental prerequisites of adapting and relating to the outside environment in pragmatic terms. Further, they point out that while outer self esteem is made possible by the desire to be connected affectively with others (system maintenance) the well spring of inner self esteem lies in the more impersonal domain of one's feeling of capability. 'The sense of power of potency can be quite independent from one's sense of being accepted and liked' (Franks and Marolla, 1976, p 326."

Horney (1950) observes that the neurotic does not own his energies. He has the feeling that he is not being a moving force in his own life.

Efran (1963) and Davis (1970) have suggested that externality enables one to preserve self esteem in the face of failure by the simple expedient of blaming outside forces. Further, the externally controlled may attempt to order his environment so as to prevent himself from being able to control what happens to him and thereby avoid disconforming his expectancies of being externally controlled. Perhaps, for the maladjusted a feeling of powerlessness, of not being an agent of causation (Baken, 1966) or in White's (1959) terms a lack of 'effectance' is the most comfortable or even
adaptive orientation to the environment, and consequently they are loath to abandon it - at least in a few realms'.

The humanistic psychologists very pointedly stress the importance of the feeling of control as a distinguishing characteristic of positive mental health. Allport (1937, 1961) noted that it is important for the individual to develop a sense of responsibility for his actions, even though they are partly determined by biological and social influences that he cannot control. Similarly, Rogers (1751) points out that one of the characteristics of fully functioning personality is independence, self direction, movement away from 'oughts' and from meeting expectations, that is, an internal locus of evaluation. Coan (1977a) observes that 'in severe psychological disturbances, the sense of control is lost in various form and to various degrees' (Coan 1977 p1).

As was pointed out earlier the observation by Coan (1979) that the sense of control is lost in various forms and to various degrees is upheld in the present investigation, i.e., the two clinical groups, did not invariably experience less control on all the dimensions measured on the POS. Specifically it pertains to relatively less self control over internal processes and in immediate social interaction. A distinctive feature of schizophrenics experience of control is in terms of the scale measuring successful planning and organization which is significantly lower than in the normals or neurotics.
Empirical studies on the maladjusted groups have predominantly used the Internal-external locus of control scale of Rotter's or some variations of it. Though the concepts of experience and locus of control are not identical there are certain similarities which makes it fruitful to compare the present results with those reported using scales based on Rotter's conceptualization. Most of these studies indicate that psychologically disturbed groups experience an external locus of control. As Strickland observes "At the least, it appears that the reporting of life contentment is related to internality, whereas pathological difficulties are linked to external expectancies" (Strickland, 1978, p 1200). For example, Shybut (1968) found that psychotic patients had a higher external score than normals and neurotics.

Smith, Pryer and Distefano (1971) indicate that severely impaired patients were significantly higher in external control than were mildly impaired patients. However, there are a few studies which indicate that an external locus of control is not consistently reported by schizophrenics. In this respect, Pryer and Steinke (1973) found that paranoid schizophrenics and personality disorders were more external than the chronic undifferentiated schizophrenics and neurotic depressives. Similarly, Lottman and De Wolfe (1972) report that process schizophrenics were more external in perceived control than the reactive schizophrenics or non-
schizophrenia controls who did not differ significantly from each other. These authors observe that within schizophrenia, locus of control is a function of long term social learning based on level of premorbid adjustment, and is not simply the result of current symptoms. Camargo and Reznikoff (1975) report that neurotics did not differ significantly from the schizophrenics on the socio political subscale, however, on the Personal locus of control scale neurotics scored significantly more internally than other combined groups. In another informative study, Cash and Stuck (1973) found that paranoid schizophrenics accounted for practically all the externality in the schizophrenic sample. The nonparanoids were no different from neurotics and non psychiatric groups. Further, they note that acutes were significantly more external than chronics. The premorbid dimension failed to differentiate schizophrenia in locus of control. Studies by Lottman Davis and Gustafson (1973) and Sivley and Johnson (1965) indicate that external locus of control was found in only certain maladjusted groups and not in all the respective groups studied by them.

In the light of the above it may be recalled that only one factor viz. successful planning and organization significantly differentiated the neurotics from the schizophrenics. Perhaps, if the schizophrenics and neurotics were defined in a more rigorous manner (e.g. paranoid/non-paranoid status etc.) other
differences may have emerged on the POS. Nevertheless, since the aim of this study was to investigate the experience of control in the two broad groups called neurosis and schizophrenia using the POS these results are significant in their own right. Moreover, past studies (some of which were noted above) that have found significant differences between different types of schizophrenics, neurotics and normals have used primarily Rotter's I - E locus of control scale. Some of the drawbacks of this scale were already noted in the chapter pertaining to present study (Vide p 122-23 hence any conclusion based on this scale needs to be deferred until further reports from sophisticated multidimensional instruments are published. At this juncture, it can be mentioned that the POS represents one such attempt pertaining to the experience of control and the present results need to be interpreted in this light. As Coan points out 'the POS appears to yield much information that is not reducible to Rotter's dimension' (Coan, 1977b, p 4).

F. IPAT ANXIETY SCALE QUESTIONNAIRE (SELF ANALYSIS FORM)

The above test is a measure of eliciting clinical anxiety information rapidly. It is a brief, non-stressful questionnaire giving an 'accurate appraisal of free anxiety level' (Cattel and Schuler, 1965) and yields measures on the following scales:
Q3 (-)  Lack of self sentiment development
C (-)  Ego weakness
L  Suspiciousness, paranoid type insecurity
O  Guilt proneness
Q4  Frustration tension, id pressure
A  Covert score (anxiety)
B  Overt score (anxiety)
A + B  Total anxiety score
B/A  Ratio of overt to covert score.

On the above measures of anxiety (Vide table 10, p 144) the results from the present study indicated that F values were significant on eight measures of the nine utilized. The measure pertaining to L, i.e., suspiciousness, paranoid-type insecurity was not significant. The t values on the eight measures reveal that the neurotics and schizophrenics each differed significantly from the normals in the direction of greater anxiety. However, no significant differences emerged on any of these scales between the neurotics and schizophrenics. The ensuing discussion will first interpret the results for the clinical groups vs. normals and then consider the results between the neurotics and schizophrenics. Before proceeding to this it is relevant to recall that the study of anxiety in this study was primarily from the phenomenological framework. Bem and Allen (1974) among others point out that if an individual indicates he is not anxious then he is not.
They stress on the importance of quality of situation not being construed for the individual but rather by the individual. This has been brought out in the work of Valin (1970) who observes that a person who thinks he is not anxious or fearful will behave quite differently from someone who does even though they may be experiencing the same bodily changes. Viewed in this context the 'self analysis form' can be taken as a pertinent measure of the phenomenal anxiety of the subjects.

The measures that significantly differentiated the normals from the two clinical groups are Covert anxiety, Overt anxiety, Total anxiety, Lack of self sentiment development, £go weakness, Guilt proneness, Frustration tension, id pressure and ratio of Overt to covert score. All these values are in the direction of significantly greater anxiety in the two clinical groups as compared to the normal group. To elaborate further, the normals in contrast to the clinical groups have the motivation to integrate their behavior about an approved, conscious self sentiment and socially approved standards and they have high ego strength, i.e., the capacity to control and express frustrative tensions in a suitably realistic way. The finding that the clinical groups are characterized by ego weakness implies according to Cattell and Schierer (1965) an insecure ego, with many defenses thereby generating anxiety. Alternately, these authors note that high anxiety tension has caused some regression
and prevented a normal growth of ego strength. The clinical groups in contrast to normals are characterized by feelings of unworthiness, depression and guilt and are prone to emotionality, tension, irritability and jitters. This is measured by the Q4 scale and according to Cattell and Schierer (1965) appears to represent the degree to which anxiety is generated by id pressure.

It is significant to note that the three groups did not differ on the L scale which measures suspiciousness and paranoid type insecurity.

The above results are in agreement with Cattell and Schierer's (1965) statement that the IPAT ASQ is a good criteria of mental health. These results concur with the various theories pertaining to the role of anxiety in mental illness as the present findings indicate that the neurotics and schizophrenics are both characterized by higher anxiety than normals. For example, Freud considered anxiety as the 'fundamental phenomenon and the central problem of neurosis' (cited in May, 1950, p 113). Horney (1950) uses the term 'basic anxiety' and delineates the manner by which it leads to the formation of neurotic defenses. She notes that anxiety is the reaction to the threat to any pattern which the individual has developed upon which he feels safety to depend. For Sullivan (1953) anxiety is seen as apprehension of disapproval in inter-personal relations. Wolpe (1958) and Eysenck (1965)
propose that mental disorders are learned when intense anxiety becomes associated improperly with various environment conditions. Rosenberg (1965) observes that any threat to the individual's self esteem provokes anxiety, and neurotic defense mechanisms are intended to prevent additional anxiety as well as lessen present anxiety or poor self-esteem. He also indicates that in some individuals low self esteem produces anxiety. It is pertinent to highlight at this juncture, that the neurotics and schizophrenics have lower self esteem and self confidence as seen on TSCS, SCI and POI of this study. The close relationship posited by Rosenberg between anxiety and self esteem is considerably substantiated in this investigation though a statement in respect to the causal link between these two variables is precluded by the particular design of this research effort.

Rogers (1951) proposes that maladjustment is a consequence of incongruity in the self concept leading to symptoms such as anxiety. In the present investigation, it may be recalled that the clinical groups were relatively more characterized by conflict, variability and dissonance (TSCS) in self perception and anxiety (ASQ) than the normals, thereby giving some support to Roger's observation. However, the acceptance or refutation of the cause-effect relationship between incongruity in self-concept and anxiety is beyond the scope of this study. Siunn (1965) also reports that high dissonance level is
associated with high levels of anxiety.

Jourard and Landsman (1980) point that when persons cannot avert the experience of anxiety by regulating their lives or their environment, they may develop any of the life styles that are described by psychiatrists as neurotic or psychotic.

Anxiety in terms of Kelly's (1955) personal construct theory occurs when construct systems are in transition. Anxiety is the awareness of people that the events with which they are confronted are mostly outside the range of convenience of their present construct system. For McReynold's (1962) anxiety is a function of the amount of unassimilated perceptual material. The assimilation of percepts which reduces anxiety can be made difficult by a high rate of influx of percepts, by the extreme novelty of percepts, by additional necessary percepts not being available and by incongruities in the perceptual material. Harvey (1961) observes that the prerequisite of anxiety is threat to subject-object relations, and that this should be greater especially if the concepts involved are high on the hierarchy. Concepts regarding self tend to be the most central to the conceptual system. Thus, introduction of anxiety might lead to a distortion of the self as a construct separate from the environment and to the attachment of anxiety which is generated by external sources to the self.
The negative self concept in terms of lower self esteem, high anxiety etc., in the clinical groups as compared to the normals can be understood in terms of the above. However, these aspects may have to be taken up for a detailed study in a separate investigation, eg., the study of the causal relationship between anxiety and self esteem.

Neurotic Vs Schizophrenic groups

So far, the discussion on anxiety pertained to the differences between the normals on the one hand, and the two clinical groups and a brief overview of some of the theories bearing on these findings. Examining the results further (vide table10, p144) it is evident that the neurotics and schizophrenics do not differ significantly in their mean anxiety scores - at least as indicated by univariate analysis. The fact that significant differences did not arise is somewhat surprising. Cattell and Schierer (1965) report that neurotics - particularly anxiety neurotics are characterized by a higher anxiety level as measured on the IPAT - ASQ. The present results may be due to several reasons important among these being the nature of the sample. The clinical samples represent two broad heterogenous groups. Perhaps, the within group differences served to obscure the between group differences. In addition, it is to be noted that most of the neurotics were on some form of treatment (pharmacological and/or psychotherapeutic). This may have
subsequently reduced the level of anxiety to a certain extent in those individuals.

Based on the work of Venkaturamaiah and Kumari (1975) a profile was drawn for the three groups (figure). This indicates graphically the differences between the clinical groups and the normals as well as highlights the close similarity between the neurotics and schizophrenics.

Having discussed the results obtained on the different self reports tests it could be summarized that out of a total of 66 measures used 37 measures had $F$ values that were significant at the accepted level of confidence. In terms of the schizophrenic Vs. normal group the total number of significant $t$ values is 41; neurotic Vs. normal the number is 40; and in respect to neurotic vs. schizophrenic the total number of significant $t$ values is 3.

It may be recalled that the first hypothesis of this study stated that no significant differences will be evident on the various measures of the self concept among the neurotics, schizophrenics and normal control group. Since the results obtained in this investigation indicate significant differences among the three groups beyond what would be expected at the .05 level of chance the above stated hypothesis is rejected.
The overall results indicate that the two clinical groups comprising of neurotics and schizophrenics report a lower level of self esteem, higher anxiety, they are relatively less self actualizing and report lower control on certain dimensions pertaining to the experience of control than the normals. In addition, the neurotics and schizophrenics reveal more deviant features in their self concepts than the normals. On the multidimensional measure of openness to experience the two clinical groups were not significantly different from the normals.

In contrast, the neurotics and schizophrenics emerged significantly different from each other on relatively fewer measures of the self concept. More specifically, these measures are in respect to openness to experience and the experience of control. The above two groups did not differ from each other in their level of self esteem, anxiety, self confidence or self actualizing characteristics.

The findings of the present study can be of therapeutic use. Humanistic psychologists, for example (Rogers, 1951) indicate that even severely disturbed patients have the capacity for constructive self direction. Thus, maximal use could be made of the specific findings on the various test measures in the present study in the planning of psychotherapeutic interventions, thereby endeavouring to facilitate the expression of the growth
potential of an individual/client.

As may be apparent to the reader the discussion of the results of this study were viewed from a number of perspectives incorporating concepts at times which were not distinctly phenomenological even though the methodology and design of the investigation was cast in a phenomenological humanistic framework. Here, Wylie's (1968, 1974) observation is worthy of attention. She notes that theorizing in respect to the self concept is highly inadequate and inconsistent and that various phenomenological oriented self theorists are not consistently phenomenological. For example, Rogers (1951), Fitts (1972) make use of terms such as drives, unconscious motives, repression and denial that are tacitly assumed to occur and to determine behavior, 'even though it is never clearly specified how such non-phenomenological constructs are to be articulated into the theoretical system' (Wylie, 1974, p 10). She concludes that problems and limitations of phenomenological theorizing have not been faced squarely by proponents of self concept theorists.

Incidentally, in view of the above, certain of the findings from this study can be viewed from other per- ceptives - example the cognitive developmental - and though this may be somewhat discursive, it is nevertheless worthy of a passing attention.
It may be recalled that the clinical groups were significantly characterized by lower self esteem, self actualizing characteristics, experience of control and by more conflict and variability in their self concepts than the normals. In trying to understand this, the ego developmental framework as proposed by Loevinger (1976) appears of some tentative value. In this context, the maladjusted can be viewed as being more in the conformist stage of ego development where the person identifies his own welfare with that of others and becomes concerned with social approval. The focus of a person in this stage is on external aspects of living, on being like others in a valued group. Viewed from this angle the findings of the present study indicate that the clinical groups are relatively more other directed (POI) and experience significantly lower control in some aspects of their lives. In contrast to the clinical groups the normals appear to be relatively more characterized by the conscientious and autonomous ego stages. The former stage is characterized by increasing awareness of one's individuality and initiates a replacement of group values by individual standards. The conscientious person experiences himself as an initiator of all activity, a person who makes choices. The autonomous stage is characterized by a capacity to acknowledge and cope with inner conflict, to unite and integrate ideas that appear as incompatible alternatives to those at lower stages. This person is
Above conscience, values abstract ideals, and thinks in terms of psychological causation, taking a broad view of life as a whole. Since the normals are comparatively more inner directed, (POI) self confident (SCI), more sensitive to own needs and feelings (POI) more synergetic (POI) experience more control (POS) among other characteristics than neurotics and schizophrenics - the attributes of the conscientious and autonomous stages seem to characterize the normals relatively more than the clinical groups and/or alternately the attributes of the conformist stage appear to characterize the normals less than the clinical groups.

It is interesting to note that in a recent study by Vincent and Vincent (1979) they found in a general clinical population that ego level was lower in a patient sample than in the sentence completion test manual construction sample. Similarly Waugh and McCaulley (1981) conclude that 'few, if any, persons in psychopathological groups are likely to attain the highest levels of ego development in which self actualization processes are present' (Waugh and McCaulley, 1981, p 296).

Viewed from another perspective, the concept of 'representational boundaries' deserves some attention in attempting to understand the greater variability in the schizophrenics self concept (TSCS) as found in this study. Blatt and Weld (1976) have recently proposed that
schizophrenic thought disorder can be understood as a reflection of an underlying impairment in maintaining boundaries, and have attempted to understand a wide-range of research on schizophrenia in relation to this boundary concept: self-concept, interpersonal, family, cognitive and linguistic characteristics can be shown, they assert, to be indicative of a fundamental impairment in the person's ability to construct and maintain boundaries. Disruptions in these boundaries may result in confused, fluid, or shifting representations of self and of world, or, by a defensive over-development of boundaries, in rigid and inflexible representations (Johnson and Quinlan, 1980).

In the above context, it is worth noting that the schizophrenics have a significantly lower sense of identity (TSCS). This may be because of a fundamental impairment in the ability to construct and maintain boundaries - the latter again emphasized in the significantly higher variability and to a lesser extent conflict in their self definition as compared to normals. The finding that the neurotics of this study are also characterized by a negative self concept points to the possibility that probably the self concept is 'multiply determined' with different underlying determinants in the two groups. In this context Arisi (1967) observation is pertinent. He notes that one of the distinctive features of the schizophrenics condition is that the self is defended by extensive use of primary cognition
and paralogical thinking while it is not corrected or compensated by secondary cognition. On the other hand, the neurotics do not exhibit this drastic and regressive use of the defenses.

Another avenue which suggests itself for speculation is the cognitive frame work. Though the present study is not designed to make any definitive statement from this perspective it is nevertheless tempting to draw some speculative parallels. Fitts points out that 'a careful translation of all developmental studies into the frame work of self theory would be an important contribution...' (Fitts, 1971, iii, p 27). Many studies, albeit in adolescents, have attempted to integrate cognitive development with changing conceptions of the self (e.g: Guardo and Bohan, 1971; Koocher, 1974; Montemayor and Eisen 1977). These studies begin to explain why identity confusion and conflict may be a more acute problem for younger than older adolescents and it is hypothesized that the emergence of self identity parallels the stages of development postulated by Piaget (1953). Piaget (1968) has contended that views of identity, or self views, change as cognitive development proceeds to increasingly more sophisticated levels. Brim (1976), Epstein (1973) Dickstein (1977) among others have suggested that the self concept may be viewed as a theory of the self. As cognitive functioning progresses the individual is able to formulate increasingly more complex and abstract theories of the self.
Viewed from the above perspective it is of interest to speculate whether not the maladjusted groups more inconsistent, dissonant, variable, less differentiated and confused self image (TUCS) is not consequent to some type of idiosyncracy in their cognitive processes or stage of cognitive development attained. This could in turn be a multiply determined phenomena having not necessarily the same determinants in neurotics and schizophrenics. For instance the schizophrenics use the primary cognition relatively more than other clinical states thereby characterized probably by a less sophisticated cognitive functioning than others - e.g. normals. Perhaps, in the neurotics, formal operational thinking at the input - processing level is idiosyncratic. For example, Young (1981) notes that the neurotics in contrast to the normals exhibit consistent idiosyncracies in the cognitive information process. However, further speculation needs to be deferred until this matter is more intensively and comprehensively investigated and translated into self-theory.

In conclusion, the discussion of the results from the analysis of variance brought to light that most measures of the different tests used here differentiated the clinical groups from the normals and to a lesser extent between the two clinical groups themselves. It also highlighted the possibility of an association between certain measures of the tests with each other.
For instance, the Total Positive score of the TSCS which is a measure of general self-esteem appears to have much in common with self-confidence as indexed on the SCI as both the clinical groups are significantly lower on these two indices than the normals. Therefore, it was felt worthwhile to go in for a correlational analysis of the TSCS - which is a multidimensional measure of the self concept emanating from a phenomenological theory of the self - with the measures obtained on the other tests. The following section deals with this aspect.

II. CORRELATION OF THE TSCS WITH OTHER TESTS

The aim of this section is to discuss the results pertaining to the Pearson product moment correlations computed between measures of the TSCS and those from other tests used in the study, namely, SCI, POI, EI, POS and IPAT .SQ. The correlations were analyzed separately in the three groups so that differences, if any, in the manner by which the variables correlate significantly with each other may be more readily apparent in respect to these groups. It was assumed that whatever may be the type of maladjustment, the client or patient has the capacity for self direction and growth (Rogers, 1951, 1959; Schuldt and Truax, 1968). In this vein, examining the correlations with a multidimensional measure of the self-concept such as the TSCS ought to serve the purpose fruitfully in highlighting such possibilities and the manner and
direction in which this is being pursued in the three groups. At this juncture it may be mentioned that though a multiple discriminant function analysis was done the number of variables used for this purpose had to be strictly limited so that there would be a reasonable proportion between the variable sample and subject sample. Consequently, this may have entailed a possible loss of information by the exclusion of certain variables. However, it is hoped that the correlational findings reported here redress this to some extent at least and provide information pertaining to the nomological network of the self-concept construct in addition to the practical clinical value that this information may yield.

It is to be noted that the present discussion pertains to only the significant correlations that emerged between the measures of the TSCS and the measures from the others tests and this will be taken up test by test. However, whenever essential the discussion will freely cross refer to the results of the TSCS with other test measures for purposes of highlighting, substantiating and getting a more meaningful global picture of the results. For example, while discussing the significant correlations from measures of the TSCS and POS the correlational results from TSCS and POI for instance, may also have to be drawn into the discussion for the above purpose.
Though the significant correlations from the different test measures in relation to variables of the TSCS may in some instances vary from group to group, nevertheless a trend and pattern is discernible in the 3 groups to invite meaningful comparisons.

**Relationship between TSCS and SCI**

The SCI like the TSCS is a phenomenological measure of the self concept varying from the former in its stated multidimensionality. It may be recalled that self-esteem as measured on the TSCS and defined in the manual (1965) appears to be closely related to the construct of self-confidence (vide page 98 for comparison of the definition of the above two constructs). In view of the correlational analysis done between these two tests one would expect on the basis of phenomenological self-concept theory that these two measures should positively correlate in so far as it pertains to self-esteem on TSCS, i.e., higher self-esteem on TSCS is expected to be concomitant with higher self-confidence on SCI. In addition, we would expect the different scales of the TSCS that indicate a deviant self concept to be concomitant with lower self confidence on the SCI.

Coming to the results, it is interesting to note that the neurotics and schizophrenics have relatively
more variables from the TSCS that correlate significantly with the SCI score than the normals and the probable implication of this will be discussed at the appropriate place.

More specifically, in the normal group (Vide table, page 150) it was found that confusion and variability in self-regard from one area of self perception to another and the greater use of number of 5 responses (i.e., Row variability, Total variability, Total conflict and 5 responses of TSCS) is concomitantly associated with lower self-confidence. In addition, the use of number of 4 responses is also linearly and significantly associated with SCI score in a negative manner, i.e., high use of 'mostly true' responses is concomitant with higher self-confidence. Since the SCI score is an inverse scale high scores indicate lower self-confidence and vice versa. The full implication of the response categories on TSCS with SCI score is not fully comprehensible and must await further studies before a meaningful picture can be drawn. However, Cronbach (1946) and Peabody (1962) regard the extreme response as exemplifying a set in response to a specific format, beyond which it has little or no relevance. It has also been suggested that extreme responding is basically a maladaptive syndrome which is more likely to occur under conditions of stress (Berg and Collier, 1953; Borgatter and Glars, 1961). In this context the present results indicate that extreme use of 5 response
true) is concomitant with lower self confidence.

On the whole findings in the normal group are consistent with self-theory which proposes that a better organized self concept is more likely to be positive (Fitts, 1971, iii).

In the neurotic and schizophrenic groups (Vide Table 12 p 150) General self esteem (Total Positive), Identity, Behavior, Physical self, Personal self, Moral-ethical self, Family self, Social self correlated negatively with the SCI score. In the normal group only two of the above scales from the TSCS viz. Personal self and Social self correlated negatively with SCI score. This would indicate that persons who tend to like themselves, who feel that they are persons of value and worth, have confidence in themselves, and act accordingly - concomitantly have greater self confidence (SCI).

A point noteworthy in the above significant correlations in the 3 groups for the TSCS Positive score (i.e., self-esteem measuring scales) is that in the clinical groups a comparatively larger number emerged as significantly related to SCI score than in the normals. Further, in the neurotics and schizophrenics Personal self correlated highest with SCI score (.8 region) whereas in the normals it was moderate (.3 region). Fitts (1965) describes the Personal self scale as measuring an
individuals sense of personal worth, his feeling of adequacy as a person and his evaluation of his personality apart from his body or his relationship to others. It appears plausible that in the clinical groups this close relationship between Personal self and SCI, in addition to others (Identity, Behavior, Physical self, Moral-ethical self, Family self of TSCS) is because it is likely to be moderated by certain other variables not commonly found in normals example anxiety. To anticipate a later part of the discussion it is relevant to note in this context the finding that the two clinical groups had reported significantly greater anxiety (Vide page 168).

At this point the findings of Scanlon (1979) is noteworthy. Scanlon reports a high degree of similarity between self-esteem and anxiety/defense and suggests that anxiety/defense is a complex response which operates as a component of self-esteem.

This line of thinking is further augmented if we consider the magnitude of the correlations which is typically in the .4 region for the normals in contrast to the clinical groups which often goes upto .7 and .8 also. Wylie (1974) points out that typical correlations between instruments purportedly measuring the same construct are in the .4 region. Since the correlations in the neurotics and schizophrenics in some instances are substantially higher one may have to invoke the concept of a moderator variable in the clinical groups to explain this high.
magnitude of relationship between certain TSCS measures and the SCI. However further studies are needed to specify its nature though one which immediately suggests itself is the dimension of repression-sensitization whose close affinity to anxiety is well documented.

Com the other significant correlations we find that only in the schizophrenic group self-satisfaction, Certainty in self-perception (D score) number of 5 and 1 responses - all from the TSCS correlated negatively with SCI score. This would indicate that higher self acceptance and certainty of self-concepts is concomitant with higher self confidence for the schizophrenic. The converse, namely, hedging and being non comittal in self-description (number of 3 and 2 responses) is also significantly and linearly associated with lower self-confidence in the schizophrenics. Thus both poles certainty-uncertainty in self perception are probably closely linked and concomitant with the schizophrenics self-confidence. However, the use of extreme response (completely true) is not significantly linked with lower self-confidence in the normals.

On the empirical scales only the neurotic and schizophrenic group showed significant correlations with the SCI score. Defensive positive, General maladjustment, Neurosis and Personality disorder scales correlated negatively with the SCI score. The latter 3 scales
indicate that higher maladjustment, greater personality disorder and neurosis is simultaneously accompanied with lower self confidence. These significant correlations again substantiate in part one of the major hypothesis of self theory, viz., that maladjustment is accompanied by a negative self-concept.

In conclusion, the results of the significant correlation co-efficients of various measures of the TSCS with SCI are majoratively in the expected direction. There are certain trends in respect to the neurotics and schizophrenics that raise the possibility that self-esteem may be moderated by some other variable(s) thereby creating significantly higher correlation co-efficients between certain measures of the TSCS and SCI unlike in the normals. This interpretation is only a pointer and must await fuller exploration. Further, the use of extreme responses (completely true) on the TSCS has different connotations in the normals and schizophrenics thus suggesting the utility of taking the sample characteristics into account while interpreting this as its correlates do not appear invariate across groups.

**Relationship between TSCS and POI**

While examining the significant correlations from measures of the TSCS with those from the POI one is guided by two broad theoretical expectations. On the one hand, Rogers (1959) Maslow (1954,1959), Pitts (1971,iii)
among others propose that an optimal self concept is accompanied with greater self-actualising characteristics. In fact, Fitts (1971) proposes that the self-concept serves as an index, or criteria of self actualisation.

Quite contrary to the preceding views is that of Coan (1974, 1977c) who has proposed a specific model of the optimal personality that is multidimensional in nature in contrast to past theories pertaining to this subject. This model implies, for instance, that an individual may be high in respect to human fulfillment on only a few dimensions and quite average on others.

In view of the above divergent views it would be interesting to examine the correlations between the TSCS and the POI. On the one hand, we would expect a positive and less deviant self-concept (TSCS) to be concomitant with more actualizing characteristics as viewed on the POI. However, Coan's theory would make us wary of making such a straight statement since certain optimal traits-in so far as they are relevantly measured on the POI and TSCS-need not cohere together.

Before proceeding to the results Fitts proposal that the self concept (TSCS) serves as an index of self actualization needs to be delineated as this will clarify the ensuing discussion. He has identified several trends on the TSCS that are characteristic of the self-actualizing individual. Specifically, these individuals
have higher self-esteem, less internal dissonance, contradiction, conflict and variability in their self-perception. They have fewer deviant and pathological features on their self-concept and show less acquiescent response set. These individuals are neither extremely defensive nor entirely lacking in defenses nor extremely certain or uncertain about their self-concepts.

Considering the results one finds that in the normal and neurotic groups a majority of these correlation coefficients indicate a more positive self-concept is concomitantly associated with higher self-actualizing characteristics. In the schizophrenics the picture is a little different and in some instances quite contrary to the above noted direction. While discussing the results, the normal group will be dealt with first to establish a meaningful baseline and to serve as a backdrop for the interpretation of the correlations in the neurotic and schizophrenic groups.

**Normal group**

In the normal group T/F ratio correlated moderately and positively with Time Incompetence and the Other-directed scales of the POI (Vide page 152-154 for results). Further, it correlated negatively with Existentiality, Feeling reactivity, Self-acceptance, acceptance of aggression and Capacity for intimate contact (POI).

T/F ratio not only reflects response-set but also
the manner by which the individual achieves self-definition or self description. A high T/F ratio indicates that the individual is accomplishing self-definition by focussing on what he is and is relatively unable to accomplish the same thing by eliminating or rejecting what he is not. FITTS (1972, iv) cites ERICKSON, (1963) on this aspect. He notes "that the ability to define the self by differentiating that which is 'not self' is an essential stage in psychological development. ERICKSON maintains that it is a later stage than the earlier emphasis upon self-definition through the discovery of "what I am" (cited in FITTS, 1972, iv page 111).

Bearing in mind the above results it can be seen that individuals who have an imbalance in their self-definition live primarily in the past with guilt, regrets, and resentments and/or in the future with idealized goals, plans, expectations, predictions and fears and are directed in their mode of reaction by their peer group or external forces. Further, individuals with high T/F ratio are concomitantly inflexible in applying values or principles in life, considerably insensitive to their needs and feelings, show an inability to accept one's weaknesses and natural aggressiveness by denying repressing or being defensive. Finally, such individuals have difficulty with warm interpersonal relationships.
The correlates of T/F appear to be impressive in respect to mental health. As Fitts (1972 iv) remarks "we could examine all of the available T/F ratio data in the form of correlations with other tests... (and) 'in the process we would learn more about what T/F is telling us about psychopathology' (Fitts, 1972, iv p 111).

Fitts (1971, iii) hypothesis that high personality integration is incompatible with uncertainty in self-perception is borne out in the present results pertaining to normals. Specifically, Net and Total conflict from the TSCS correlated negatively with the two major POI scales in addition to a few others from the latter instrument. These correlation co-efficients are mostly in the moderate region. The composite picture that emerges in respect to these significant correlations is that an individual whose self concept is characterized by uncertainty and dissonance is also one who is concomitantly unable to live in the present with full awareness and contact and full feeling reactivity, i.e., they are more other-directed and they hold less of self actualizing values that pertain to their definition and conception of nature, of man's place in it, of man's relation to man, and of the desirable and non desirable as they may relate to man-environment relations and inter-human relations. This is emphasized in their inability to accept their natural aggressiveness, their relative insensitivity to their own needs and feelings, and their inability to accept

Italic's mine
their own weakness and to develop intimate interpersonal relationship with other human-beings.

An apparent though tentative implication from the aforementioned findings is that uncertainty in regard to oneself - 'to be or not to be' - probably acts as an inhibiting force in the striving towards self-actualization. In Buberian terminology if one is unable to define an 'I', then probably it is not possible to relate to a 'thou'.

The general trend noted so far, namely, a positive and theoretically congruent relationship between TSCS and PUI (as proposed by Rogers, Fitts, among others) is further reflected in the positive relationship of Self-satisfaction (TSCS) to Existentiality and Feeling reactivity and Capacity for intimate contact.

**Moral-ethical self (TSCS) correlated moderately with Feeling reactivity and Capacity for intimate contact.**

**Moral-ethical self (TSCS) correlated moderately and positively with Existentiality.** Fitts (1965) notes that Moral-ethical self defines self from a moral, religious and ethical standpoint. It is interesting to observe these two scales correlate positively with each other, i.e., high self esteem in respect to moral-ethical self is also associated with flexibility in applying values and principles in life.
Personal self (TSCS) is positively associated with Time competence, Inner Directedness, Existentiality and Capacity for intimate contact thereby giving further substantiation to self theory (Rogers, 1951; Fitts, 1971, p 111).

Considering the empirical scales from the TSCS General maladjustment (GM) correlated positively with Time competence, Inner-Directedness, Existentiality, Synergy and Capacity for intimate contact. Studying this wide gamut of significant relationships in terms of mental health it becomes apparent that the GM scale is not only a sensitive index of general maladjustment but also of characteristics pertaining to Positive mental health and Fitts proposition that "The TSCS is a good criterion of mental health throughout its entire continuum" (Fitts, 1972, iv, p 9) is further substantiated in this context.

The Psychotics scale (TSCS) correlated significantly and negatively with Existentiality (POI) but the Personality disorder scale (TSCS) correlated positively with Existentiality (POI). This would indicate that high scores on the two TSCS is accompanied by inability to apply values and principles to one's life flexibly. In addition, Personality disorder is concomitantly related to inabiliting to transcend dichotomies, that is, to be synergistic.

In conclusion, it appears that the TSCS and POI
to a moderate extent are measuring similar underlying constructs - at least in the normal group of this study. Further Fitts (1971, iii) hypothesis that the self concept as seen on the TSCS is a sensitive index of level self actualization appears to have been borne out to a considerable extent in this group. Notwithstanding, it is to be mentioned that one test cannot be substituted for the other in view of the moderate correlations indicating, thereby, that only a certain portion of commonality exists between these two scales. Finally, these results are in agreement with those reported in the literature, e.g., Wills (1974), Fitts (1971), Russell (1974) who have indicated that individuals with positive self concepts are also more self-actualizing and that self-actualization is incompatible with maladjustment (James, 1976).

Neurotic Group

In the neurotic group Net and Total conflict (TSCS) correlated significantly and negatively with Time-competence and Self-acceptance. That is to say, confusion, conflict and dissonance in self-perception is simultaneously accompanied with less self-actualizing characteristics pertaining to time-orientation and acceptance of one self. It may be recalled that one of the attributes of the self-actualizing individual is lesser conflict and dissonance in self perception (Fitts, 1971, p 111). The above noted correlations further support this theoretical relationship in a
maladjusted sample too. In addition, the correlations indicate that the neurotics uncertainty is not compatible/conducive to his self-acceptance.

General self esteem (Total Positive)Self-satisfaction, Personal self, and Personality disorder—all from the TSCS correlated positively with the Self-regard scale of the POI. Self-regard as defined on the POI seems to be closely related to that of self-esteem(TSCS) and the above congruent correlations give some validity to the TSCS measures and vice-versa.

Personality disorder scale and Self satisfaction of the TSCS correlated positively with Time competence. This indicates that individuals who exhibit lesser pathology of the personality disorder type and have higher self-satisfaction are concomitantly characterized by a self-actualizing time orientation, i.e., living in the 'here and now'. The Personality integration scale (TSCS) which is an index of positive mental health is positively related to acceptance of aggression of the POI. The latter indicates the acceptance of one's natural aggression.

The remaining significant correlations can probably be interpreted more meaningfully in terms of the neurotic condition. For example, it was found that Behavior (TSCS) correlated negatively with Self acceptance
(POI). Thus, the neurotic's behavior, his perception of his own behavior or the way he functions is concomitant with lower self acceptance. This 'peculiar' relationship to self-acceptance is further brought out in the manner by which the neurotic achieves self-definition. Specifically, distribution and number of 'completely true' responses (i.e., of 5's) of the TSCS correlated negatively with Self acceptance (POI). However, number of 3 responses (TSCS) correlated positively with self-acceptance (POI). Tentatively, this would seem to indicate that the neurotic shows some semblance of self acceptance he does by being simultaneously uncertain in his self perception. At this juncture it is of relevance to recall that in the neurotic a dissonant self-perceptions is concomitantly associated with less self-acceptance. Taken together, an implication from the above is that the neurotic who is able to achieve some semblance of self-acceptance does so by being simultaneously non committal to self, that is, by not having a clearly defined self-concept. In this manner - by evading a confrontation with the self, by being non committal, he can also probably avoid dissonant self perceptions and thereby achieve some self-acceptance. Perhaps, this is part of the price the neurotic has to pay for the above. Behavior referring to this is 'what I am' is probably associated with self-rejection in the neurotics. That is to say, the negative self concept of the neurotic may be determined relatively more by the
Self perception of his 'behavior' than for example by his Identity.

**Schizophrenic Group**

In the schizophrenic group Self criticism (TSCS) correlated negatively with Self-regard (POI) i.e., low self regard scores on POI is associated with high self criticism as seen on TSCS. Fleming and Watts (1980) note since (self report) both type of assessment/require the subject to make positive statements concerning ego involved personality characteristics, it would seem reasonable to expect the two measures to be significantly correlated. Further, it may be noted that in this group self criticism was positively associated with anxiety (ASQ) (vide p 16btable 16) and lack of self confidence (SCI). In view of this, the negative relationship of self regard to self criticism appears to be further meaningful.

Net conflict (TSCS) indicating dissonance in self-perception is associated with an inability to develop warm relationships (Capacity for intimate contact-POI). Further, Capacity for intimate contact (POI) is negatively related to Total self esteem, Identity, moral ethical self, Personal self, number of 5 responses (completely true), Defensive positive, General maladjustment and Psychosis. On the contrary, Variability in self perception-particularly pertaining to Identity, Behavior and Self satisfaction and number of 2 responses (mostly false) are concomitant with higher capacity for intimate
contact.

The overall picture that the aforementioned correlations indicate is that the schizophrenic is better able to maintain self-esteem identity and adjustment by concomitantly evading intimate relationships. As Hilgard (1949) noted anything belittling to the self is to be avoided. Intimate relationships are possible for the schizophrenic by being highly variable in his definition of self, i.e., by not having a consistent self theory (Epstein, 1973). In this context it is interesting to note that one of the distinctive features of schizophrenia is the variability in their behavior. Probably by being variable the schizophrenic avoids consistent negative self-evaluations.

It was also found that General self esteem was negatively related to Other directedness and Existentiality scales (POI). This suggests that even though the schizophrenic is relatively less influenced by others in his manner of reaction, nevertheless, it is simultaneously accompanied by an inflexible application of values. This trend is evident in the other correlations too, namely, Identity, Self satisfaction, Personal self, Family self, Distribution, Defensive positive, General maladjustment, Personality disorder and Neurosis of the TSCS - all of which correlated negatively with Existentiality. These correlation highlight the point that an inflexibility in the application of values is
concomitant with a more positive self concept and adjustment for the schizophrenic.

General self esteem and Personal self (TSCS) correlated positively with Self regard (POI). This is not surprising since the definitions of these scales imply considerable similarity.

In addition, Defensive Positive, General maladjustment and Variability in self-perception are associated positively with self regard (POI). Noteworthy among these array of correlations is the finding that variability correlated positively with self regard. It may be recalled that variability also correlated positively with Capacity for intimate contact. This indicates that the schizophrenic is able to define himself more positively (as seen on self regard scale of the POI) and enter into intimate relationships by being simultaneously variable. In other words, whatever self regard he shows is achieved by adopting psychological defences and by being variable in self-perception.

Self-satisfaction and self esteem in respect to Physical and Moral ethical self was positively associated with Self actualizing values (POI). However, since the schizophrenic is not simultaneously evidencing flexibility in applying such values, as noted earlier, the piece meal and pseudo nature of this striving is readily apparent. Further, Behavior, Personal self,
Defensive positive and General maladjustments are associated negatively with the Other-Directed scale of the POI. This again needs to be interpreted keeping in mind that most of these scales evidence correlates in terms of the POI that indicate inflexibility in application of values and/or capacity for intimate contact.

Personality Disorder (TSCS) correlated positively with Synergy, i.e., with an ability to transcend dichotomies. Number of 'completely true' and 'mostly true' responses (5 and 4) of the TSCS correlated positively with acceptance of aggression (POI). However the full implication of these correlations is not readily apparent. At the most it may be thought whether a schizophrenics predisposition to say 'yes' and to 'accept' is closely linked to his stance towards himself, of accepting his aggression i.e., the former may be an index of the manner in which he orients and takes a stand to certain aspects of himself.

In conclusion, the probable picture that the results indicate in respect to the relationship between self concept as measured on the TSCS and self actualization as seen on the POI is that the schizophrenic is split between different aspects of his 'self'. He is unable to attain growth of his self and potentialities in a wholistic and harmonious manner. On the contrary, this striving is possible or perhaps permissible in only a piece meal, variable and highly compartmentalized
manner. In the schizophrenic, a harmonious integration of self and 'being' is split—probably this being the price he pays to attain some rudiment of fulfillment. In striking contrast, the normals/characterized by and a more harmonious fulfillment/evidence few such contradictions and this is also apparent to a lesser extent in the neurotics.

**Relationship Between TSCS and the Experience Inventory (EI)**

The Experience Inventory, is a multifactorial measure of openness to experience in different realms. Self-psychologists in general have observed that openness to experience is a distinguishing characteristic of an individual with a healthy self concept. For example, Rogers notes: "It is this permissiveness of the self toward all experiences and impulses, accepting them without denial or distortion, which appears to be the measure of sound personality organization" (Rogers, 1959, p 436).

In a similar vein, Fitts (1971, iii) observes that individuals with a positive self concept reported both positive and negative experience. He notes that "such individuals were able to use both kinds of experience to open themselves to new and additional experiencing and concludes that 'such a process we would equate with growth, i.e., with increased self actualization or personality integration" (Fitts, 1971, iii, p 80).
Coan (1977) in his model of the optimal personality proposed that: "thus, self insight and openness to experience apparently go together, but they both tend to be accompanied by a proneness to subjective distress, or anxiety, rather than a sense of emotional well-being. Furthermore, self insight and openness to experience prove to be negatively correlated with various measures of experienced control" (Coan, 1977c p 289).

In view of the above it would be illuminating to examine the relationship of openness to experience and different dimensions of the self concept as seen on the EI and TSCS respectively.

**Normal Group**

In the normal group (vide table 14, p180 for results) self criticism (TSCS) correlated positively with 'Aesthetic sensitivity' and 'Unconventional views of reality' (EI). This indicates that the individual who is more open to his faults and weaknesses i.e., less defensive is concomitantly more open to a variety of aesthetic experiences in contrast to a more prosaic orientation. The individual who is defensive (low SC) is perhaps precluding the possibility of being open to experience of the above sort or vice versa.

It is interesting to note that Bone (Undated, cited in Coan, 1977) found Aesthetic sensitivity correlated positively with Factor I (premsia or emotional sensitivity
and factor M (Autia) of the 16 PF Questionnaire. Unconventional views of reality correlated positively with that factor E (Dominance). It may mentioned in this study self criticism (TSCS) correlated positively with anxiety and negatively with Self-confidence Inventory-score (Vide page 160,168). Taken together, these correlations suggest that an individual who is less defensive is also more anxious, lacks self-confidence and is more open to experience pertaining to aesthetic sensitivity and unconventional views of reality. The results so far probably appear to be supporting Coan's hypothesis that openness to experience is not only accompanied with anxiety distress but also may be negatively related to conventional conceptualizations of emotional well being the latter as indexed on SCI.

T/F ratio (TSCS) correlated positively with Constructive utilization of fantasy of dreams. T/F ratio, to recall, indicates not only acquiescent response set but in self theory suggests the tendency to achieve self-definition by focusing on what he is only and not also by taking into account what he is not. In this context, such individuals who are characterized by a relative imbalance and poor impulse control (Fitts, 1972,iv) are concomitantly able to have more access to unconscious processes or a willingness to rely on them for creative or constructive ends. Further, in the present study it was noted in respect to normals that the correlates of
high T/F ratio was lower self-actualizing characteristics as seen on POI.

Net and Total conflict of the TSCS correlated positively with Constructive utilization of fantasy and dreams (EI). This would indicate that confusion in self-perception and over-affirmation of positive attributes is concomitant with greater openness on the above dimension of the EI. In addition, the results indicated that Net conflict of the TSCS is positively and linearly associated with 'Unusual perceptions and associations' of the EI. This would mean that individuals who over-affirm their positive attributes, thereby scoring high on Net conflict also have greater openness in terms of reporting unusual ways of experiencing themselves, their body, and their physical surroundings. In short the above indicates that an uncertain, dissonant self-concept is more prone to openness on these dimensions. In order to get a fuller meaning of these results it is relevant to note that Net and Total conflict are concomitant with higher anxiety, lack of self-confidence and lower self-actualization in the normal group. In the light of this it is interesting to observe that conflict in self-perception is concomitantly associated with openness in respect to certain dimensions, namely 'Constructive utilization of fantasy and dreams' and 'Unusual perceptions and associations'.
Thus, the picture so far in respect to normals reveals that certain aspects of the self concept that are considered deviant (high SC, Net and Total conflict and high T/F ratio) is concomitant with more openness to experience in different realms. It is of significant interest to note that most of these findings are contrary to traditional views of self psychologists (e.g. Rogers, 1959, Fitts, 1971, iii).

The following correlations are somewhat different from the preceding trend in that General self esteem, Identity and Social self (TSCS) correlated positively with Deliberate and Systematic thought. This indicates that individuals with a positive sense of identity and esteem also express a need for orderly and planful thinking and frequently indulge in it. As Coan (1977a) notes this dimension implies "most directly an openness to this kind of thought rather than the use of it to avoid the kinds of thought embodied in other scales" (Coan, 1977, p 1). Further, it is reported that this scale tends to correlate negatively, though slightly with the other scales of the EI. Since the above scales from the TSCS are associated positively with self-actualizing characteristics as seen on the POI, perhaps this dimension of openness, that is, in respect to 'Deliberate and that systematic thought' is more directly and positively associated with optimal health as defined on the POI.
Identity and family self (TSCS) correlated positively with 'esthetic sensitivity' (EI). Since aesthetic sensitivity also correlated positively with self criticism (TSCS) a possible implication of this finding is that openness on this dimension is compatible with less defensiveness but by also having a positive sense of identity and family self.

Defensive positive (TSCS) correlated positively with 'Constructive utilization of fantasy and dreams' (EI). The latter also correlated significantly with T/F and Total conflict is uncertain in self-perception. Defensive positive it may be mentioned correlated positively with other scales indicating greater self confidence and self-actualizing characteristics in the normals. A probable implication of this is that openness on this dimension has correlates of both a distressing nature as well as of an emotional well-being kind and could manifest itself in varied contexts.

The Psychosis scale (TSCS) correlated negatively with 'esthetic sensitivity' (EI). This correlation is interesting since the latter scale of the EI also correlated significantly and positively with Identity, Family self and Self-criticism. The implication here is that psychosis probably precludes openness in terms of aesthetic sensitivity even though high self criticism which is concomitant with anxiety and low self confidence does not preclude this type of openness or
or vice-versa.

The Personality integration scale (TSCS) is concomitantly and negatively associated with 'Aesthetic sensitivity', 'Unusual perceptions and Associations', 'Constructive utilization of fantasy and dreams' and 'Indulgence in fantasy'. The Personality integration scale, it may be pointed out, is an empirically derived scale based on the responses of people who by a variety of criteria were judged as average or better in terms of level of adjustment or degree of personality integration. Thus, individuals who are high in optimal health as defined on this scale are apparently less open to experience as seen on many of the EI dimensions.

In sum, a probable implication from the above findings is that the context within which 'openness' occurs is important as this may be associated with a deviant as well as a healthy self-concept as seen in the normals of this study. Optimal health as defined on the TSCS apparently is not compatible with openness to experience in many realms.

Thus, it can be seen that both viewpoints, namely, the self-theorists view that a positive self-concept is associated with more openness is partially supported in the present results and also, Coan's hypothesis that openness to experience tends to be negatively related to emotional well-being has gained some support in the
preceding discussion. The question that these correlations have raised is whether openness for certain experiences is attainable by different 'routes' - assuming this to be an effect in the casual chain.

**Neurotic Group**

In the Neurotic group only three significant correlations emerged between the TSCS and the EI (vide table 14 p 160).

Family self (TSCS) correlated negatively with 'Unusual perceptions and associations' (EI) indicating thereby that an individual who reports high esteem in respect to family self is also one who does not report various unusual ways of experiencing himself, his body and his physical surroundings. It is of interest to note that high self-esteem pertaining to family self was associated concomitantly with lower anxiety and higher self-confidence. The neurotic who reports greater openness on this dimension is probably one who has low self-esteem as a family member, who has high anxiety and low self-confidence. If it is assumed that a certain measure of conventional and disciplined behavior is required to attain high self-esteem as a family member then as a consequence it may be hypothesized that openness of the above sort is probably restricted/precluded by this conventional attitude.
Certainiy in self perception (Distribution score on TSCS) correlated negatively with 'Openness to unconventional views of reality'. This suggests that a well-defined self concept bordering on rigidity precludes openness on the above dimension. In this context a question can be raised whether a self-concept that is less certain is more permeable and compatible to such type of experiences.

The number of 2 responses (TSCS) correlated negatively with 'Aesthetic sensitivity'. The implication of this correlation when occurring in isolation of the other distribution responses of the TSCS is not fully comprehensible. At the most, it could be thought of as probably suggestive of a close relationship between the act/attitude of negation - using '2' 'mostly false' responses - and negation of openness.

In conclusion, it can be mentioned that the neurotics unlike the normals evidence and point to the possibility that openness to experience and self perception from an internal and external frame of reference as seen on TSCS are not significantly and linearly related. In other words, an implication of this is that in the neurotics of this or its absence is less linked to the study openness to experience/evaluative dimension of their self concept as compared to the normals.

**Schizophrenic Group**

In the Schizophrenic group (vide table 14) p 150 Net conflict, i.e., acquiscent conflict-over affirmation of
positive in self perception (TSCS) correlated positively with openness to 'Unconventional views of reality'. Probably, a self concept that is conflicted and characterized by an over-affirmation of positive attributes is more permeable in the same vein as the concept of permeability of ego boundaries as put forth by Federn (1952), thereby, facilitating the above type of openness to experience.

Family self (TSCS) correlated negatively with 'Unusual perceptions and associations'. This would indicate that high scores reflecting feelings of adequacy, worth, and value as a family member is concomitantly associated with lesser openness pertaining to the above dimension. This, incidentally, was also observed in the neurotic group. Unusual perceptions and associations wherein the high scorer reports various unusual ways of experiencing himself, his body, and his physical surroundings was found to be positively associated with guilt proneness and negatively with self concept control of the 16 personality Factor Questionnaire (Bone, cited in Coan, 1977a). General maladjustment (TSCS) correlated negatively with indulgence in fantasy (EI), thereby indicating that higher adjustment is concomitant with lesser openness on this EI scale. The above findings appear to compare well with Bone's results.

In summary, the trend in the correlations for the normal and clinical groups do not appear to form a
clear cut and consistent pattern as in some instances both
deviant and positive aspects of the self concept appear
to be concomitantly associated with greater openness on
certain dimensions of the EI. It would be interesting to
know the other correlates of these EI dimensions in terms
of a wider gamut of personality measures before the impli-
cation of the present results are fully comprehensible.
However, there are a few studies which indicate for
example that conservatism was significantly related to
EI total score (Victor, Jones and Ryder, 1977); that
males who expressed hostility through negativism and
irritability exhibited loosely defined ego boundaries
between themselves and others and expressed difficulty in
engaging in orderly, planful deliberate and systematic
thought while men who experienced feelings of guilt and
suspicion were prone to think in an orderly, planful
deliberate and systematic fashion (Wyrick, Gentry and
Shows, 1977); that the Internal cognitive person who
has a tendency to like unusual or new cognitive processes
which deal with explanatory principles and cognitive
schemes were found to view themselves as intellectual,
warional, reflective, emotional, conventional, original,
passive and not anxious; the high Internal sensation
person with a tendency to like unusual dreams, fantasy or
feelings which are internally generated was found to
describe himself as emotional, sensitive, passive and
lacking stability (Pearson, 1971). Further studies pertaining
to this /... are needed in various groups to clearly
demonstrate its correlates.
**Relationship between TSCS and POS**

It may be recalled that the POS is designed to assess several major aspects of the experience of control. Courn (1977b) notes that there is a tendency for certain factors of experienced control to be positively associated with variables that involve emotional strength and negatively associated with variables that suggest anxiety, distress or emotional sensitivity.

Several self psychologists have observed that an individual with a more positive self concept is also one who experiences and exercises greater control over his action and behavior than an individual with a negative self concept. Studies bearing on this aspect (vide chapter II for review of these studies) have substantially supported the hypothesis that a more internal experience of control is concomitantly associated with a more positive self concept. Since the POS is a relatively more sophisticated test (in terms of its psychometric characteristics) endeavouring to overcome many of the lacunae/the earlier devised tests attempting to measure the Experience/locus of control, its correlation with a multidimensional measure of the self concept such as TSCS may prove valuable in further increasing our comprehension of the correlates of the experience of control in terms of self theory—the latter as indexed on TSCS in abnormality and normality.
Normal Group

In the normal group the significant results indicate table 15 (vide/page 163) that Self criticism, Net conflict and number of 5 response, i.e., 'completely true' from the TSCS correlated moderately and negatively with 'capacity of mankind to control its destiny', of the POS. However number of 4 responses on the TSCS ('mostly true') correlated positively with the above POS scale. This would indicate that greater experience of control pertaining to a general belief in man's ability to build a just society, to control both his own evolution and natural physical phenomena, and to act in a way that will permit the elimination of war is concomitantly and linearly associated to some extent with greater defensiveness, lesser acquiescent conflict - the over-affirmation of positive attributes - and with the behavioral act of endorsing to a lesser extent 'completely true' categories in a self-report test. Since Net conflict is closely related to response set (Fitts, 1965) this would imply in other words, that a response-set characterized by over-affirmation of positive attributes coupled with greater openness and capacity for self criticism is not concomitantly associated with greater experience of control in terms of man's ability to build a just society, to act in a way that will permit the elimination of war etc.
It is of interest to note that the significant correlates for the above dimension of experience of control are in terms of defensiveness and response-set and not in terms of self-esteem. The full implication of defensiveness and response-set in the causal chain is not known. Perhaps, a certain measure of defensiveness coupled with a particular response-set is not conducive to the entertainment of ideas pertaining to greater control in this realm.

Turning to the next significant correlation coefficient it was found that Self criticism, Row variability, and number of 5 responses (TSCS) correlated moderately and negatively with 'Self control over internal processes' (POS). However, Personality Integration (TSCS) correlated positively with this scale of the POS. The trend of correlations imply that an individual who is more defensive, experiences less variability in self regard from one area of self perception to another from the internal frame of reference (i.e., Identity Behavior and Self satisfaction) and who in a behavioral task endorses less frequently 'completely true responses' is one who is concomitantly experiencing greater control over somatic, affective, and cognitive processes. Further, an individual who is well integrated—as measured on the Personality integration scale of the TSCS is also one who experiences/reports greater control over somatic, affective and cognitive processes.

In general, the above trend in the correlations is
in the expected direction as we would expect an individual with a less deviant self concept (lesser variability in self-perception and high personality integration) to experience greater control than one who has deviant features in his self concept.

Variability in perceptions (Total and Column Variability TSCS) correlated moderately and negatively with successful planning and organisation; i.e., successful self-control in the realm of work. Secord and Beckman (1965) point out that self-consistency renders the individuals own and other people's behavior more predictable. In this vein it would probably imply that variability in self-perception precludes successful self control in the realm of work as the individuals and other people's behavior is less predictable.

Number of 3 responses of the TSCS correlated negatively with 'Control over large scale social and political events'. This indicates that an attitude of hedging, defensiveness and of being noncomittal is concomitantly associated with lower control pertaining to the individual's beliefs that he himself and individual people in general can have an effect on major social processes.

Defensive positive and Personal self of the TSCS correlated positively and moderately with 'Control in immediate social interaction'. It is worthwhile recalling that Defensive positive which is a subtle
measure of defensiveness has correlates in the present study that majoritively indicate emotional well-being. A further interesting feature of the above just mentioned correlations is that only 'Personal self' and not other aspects of self esteem is significantly associated with greater control in respect to social situations and to secure desired responses from other people.

The aforementioned significant correlations are in tune with a majority of the findings in the literature that indicate a positive relationship between self esteem and internal locus of control (e.g. Coopersmith, 1967; Hersch and Scheibe, 1967; Fish and Kurokenick, 1971; Heaton and Duerfeldt, 1973).

In conclusion, only a few scales from the POS appear to be significantly and linearly associated with certain dimensions of the self concept as seen in the present sample of normals. Mostly, these dimensions on the TSCS pertain to the organization and structure of the self concept (like conflict, defensiveness, variability etc.) and less in terms of its evaluative dimension with the possible exception of Personal self.

**Neurotic Group**

In the neurotic group the results indicate (vide table 15 page 163) that a positive self concept is concomitantly associated with greater control in the realm of
successful planning and organization' of the POS. More specifically, General self esteem (Total positive), Identity, Behavior, Physical self, Moral-ethical self, Personal self, General maladjustment, Personality disorder and Neurosis scales from the TSCS are positively associated with successful self-control in the realm of work.

Behavior and Physical self correlated moderately and negatively with 'Capacity of mankind to control its destiny' of the POS. However, Variability in self perception (Column variability TSCS) from the external frame of reference correlated positively with the above dimension of experience of control. This indicates that positive self perception of behavior and physical self and low variability in self regard is concomitantly associated with a lack of faith in the powers of science and scientific methods to solve human problems.

General self esteem, and Personal self of the TSCS correlated positively with 'Self control over internal processes' of the POS. Variability in self perception in terms of the internal frame of reference, namely, Identity, Behavior and Self-satisfaction correlated negatively with the above dimension of control. Incidentally, it may be of some interest to note that in the normal group also variability in self-perception is negatively correlated to self control over internal processes. Further, Personal self of the TSCS is
apparently more highly and positively associated in the neurotics with this dimension of control in view of its higher correlation.

High self-esteem in terms of Personal and Social self, and lower Variability in self perception (Row variability) is simultaneously and moderately associated with higher 'Control in immediate social interaction' (POW). The latter scale pertains to whether the subject himself is able to control social situations or secure desired responses from other people. The present findings are consistent with similar studies on this subject and as Coan (1977b) indicates control in immediate social interaction correlated positively with 16 PF Questionnaire on Ego-strength, Dominance, Surgency, Pirmia and Autia and negatively with Shrewedness, Guilt proneness and Ergic tension.

In summary, an interesting feature of the correlations in respect to the neurotic group appears to be the finding that though the neurotic's variability in self-perception is concomitantly associated with greater control in respect to capacity of mankind to control its destiny, this same variability, however, is simultaneously associated with reduced control on other dimensions i.e., self control over internal processes and control in immediate social interactions-the latter reflecting more personal realms. The significant correlations discussed in the
preceding pages also highlight the probability that all the dimensions of experience of control are not significantly and linearly related to the self-concept. This was also noted in the normals. Further unlike in the normals, relatively more attributes of the neurotic self-concept (as seen on the TSCS) is closely linked to his experience of control and vice versa.

**Schizophrenic Group**

The significant correlations (vide page 163) indicate that in the schizophrenic group the self-evaluation dimension is intimately and positively associated with 'Self-control over internal processes' of the POS. More specifically, General self-esteem, Identity, self-perception of Behavior, Physical self, Personal self, Social self and in addition Defensive positive and General maladjustment scales of the TCS are concomitantly and linearly associated with greater control on the above dimension of the POS. Self criticism (TSCS) correlated negatively with this POS dimension. Most of these correlations are in the moderate region the highest being for Personal self of the TSCS. Probably, feelings of personal worth and adequacy as a person is more intimately linked to the experience of control in respect to somatic, affective and cognitive processes.

The above noted trend in respect to self-concept and experience of control is also evident in respect to
the POS dimension, pertaining to 'Successful planning and organization', i.e., successful control in realm of work (Coan 1977b). More explicitly, it was found that positive self-perception of 'Behavior', Physical self, Social self, Family self, Self-satisfaction and on the empirical scales higher subtle defensiveness and less general maladjustment (all from the TSCS) were concomitantly and positively associated with greater experience of control in respect to successful planning and organisation. Coan (1977b) reports this dimension of the POS correlated negatively with Premia, Guilt proneness and Ergic tension of the 16 PF Questionnaire (i.e., with anxiety, distress, emotional sensitivity etc.) and the present findings give further support to the above reported trend.

'Control in immediate social interaction' of the POS is simultaneously and positively associated with a more positive self concept viz: high General self esteem, positive perception of Identity, Behavior, Personal and Social self and less of general maladjustment as seen on the TSCS. Interestingly, and contrast to the normals wherein only Personal self and Defensive positive were significantly and positively associated with this dimension of control in the schizophrenics substantially more aspects of the self concept are significantly linked to higher or lower control in respect to immediate social interaction. This probably indicates that the schizophrenics self-image can be more easily and globally
devastated due to any loss of control in the realm of social interaction.

A statistically significant and thereby unique finding in the schizophrenic group is the correlation between physical self of the TSCS and personal confidence in ability to achieve mastery of the POS. It is only in this group that the latter scale reached significance. This correlation indicates that the individuals positive perception of his body, his state of health, his physical appearance, skills and sexuality are concomitantly and positively associated with greater confidence that he as an individual has the capacity for accomplishments in various realism-mathematical mechanical, scientific, athletic, linguistic (Coan, 1977b).

The correlations in the schizophrenic group are majoratively in a theoretically congruent direction. As noted in the other two groups it is strikingly apparent that self-control over internal processes, capacity of mankind to control its destiny, successful planning and organization and control in immediate social interaction are more frequently and significantly associated with the self-concept than the other dimensions pertaining to the experience of control.

Relationship between TSCS and IPAT-ASQ

The relationship between self concept and anxiety has been extensively studied and fairly well documented.
In brief, self-theory predicts that a positive self-concept is incompatible with anxiety and this will be further highlighted in the ensuing discussion. For reasons already noted in the results chapter only the total anxiety score was taken into consideration for interpretation of the relationship between significant measures of the TSCS and ASQ (vide page 168; Table 16).

**Normal Group**

Self-criticism (SC, TSCS) correlated positively with total anxiety (ASQ) in the normals (vide p168 table16 for results). High scores on self-criticism generally indicate a normal, healthy openness and capacity for self-criticism. However, extremely high scores indicate that the individual may be lacking in defenses and may in fact be pathologically undefended (Fitts, 1965).

The above positive relationship between self-criticism and anxiety may also be noted in terms of Furlong and Laforge's (1975) statement. They note that high anxious subjects have a tendency to choose the socially undesirable trait when describing themselves thereby becoming highly self-critical of themselves. In the same vein, Flemming and Watts (1980) observe that since both types of assessment require the subject to make positive responses concerning ego-involved personality characteristics, it is reasonable to expect the two measures to be positively correlated. In addition
these results can be viewed in terms of the repression - sensitization dimension also. In this context, Byrne et al., (1965) state 'since repressions by definition deny that anything is wrong with them and sensitizers by definition over emphasize their feelings, perhaps we should not be surprised to find them repeating this pattern of responses on other self-report instruments.' (Byrne et al., 1965, p 588). This has been noted in other studies too (eg; Carr and Post, 1974; Shavit and Shouval, 1977). However, this aspect calls forth an entirely well-planned research project and the present observation is only an indicator towards this.

Coming to the next significant correlation it can be seen that Net and Total conflict (TSCS) correlated positively with anxiety (ASQ). It may be recalled that Net and Total conflict reflect the individuals conflict, inconsistency, dissonance and confusion in self perception. Most personality theorists hypothesize that without conflict there is no anxiety which is noted in the present study also. For example, Epstein (1973) proposes that any disorganization to the self theory brings about anxiety. Rogers (1951, 1959) Lecky (1945) Snygg and Combs (1949)and Frits (1971, 111; 1972 iv) among others have associated anxiety with any threat to the organization and unity of the phenomenal self. Rosenberg (1965) has noted that this relationship may be an interaction, and dynamic process rather than a well demarcated
Consequent relationship. Existential writers (eg. Fromm, 1947) have focused our attention on the inescapable conflicts inherent in life that are future oriented and inherent to growth.

It is interesting to find that Family self(TSCS) correlated significantly and positively with anxiety(ASQ). This would indicate that any increase in self esteem in relation to the primary group of family and close friends is concomitantly associated with an increase in anxiety. This correlation is in the moderate region and is somewhat surprising in view of the other significant correlations which are in a theoretically congruent direction in the group. It may be hypothesized that the attaining/maintenance of high self esteem in terms of family self is relatively more stressful to the individual due to the primary nature of this group and consequently the individuals incessant embeddedness within it.

Variability in self-regard from one area of self perception to another particularly from the internal frame of reference (Total variability and Row variability) is positively and moderately associated with anxiety. It may be recalled that Secord and Backman (1965) observe that self-consistency renders the individuals own and other people's behavior more predictable. It makes their interaction more predictably rewarding and non punishing. In the light of this the positive correlation between variability and anxiety appears to makes good sense.
A higher Distribution score coupled with a higher use of number of 5 responses (completely true) on the TSCS is found to be significantly and positively associated with anxiety. It is of relevance to note that a high D score indicates that the subject is very definite and certain in what he says about himself while low scores mean just the opposite. Fitts (1971,iii) points out that the self-concepts of an optimally healthy individual are neither too certain and definite nor very uncertain but somewhere in the middle. In view of this interpretation given to the D score, a very certain and definite self concept and its concomitant association with anxiety appears congruent and since number of 5 responses which contribute to a high D score is also positively associated with anxiety it further supports the above interpretation. However, it is to be noted that the relationship between anxiety and certainty - uncertainty in self perception may be more of a curvilinear type which the present study did not examine as only Pearson product moment correlation coefficients were calculated.

The above finding pertaining to anxiety and its close relationship to a definite and certain self concept is further supported in the correlations pertaining to number of 4 and 2 responses on the TSCS. These scales correlated significantly and negatively with anxiety, use of number of 4 and 2 responses give a measure of the
self concept that is neither too certain nor too uncertain i.e., in the optimal range, and its negative relationship to anxiety is not surprising.

Personality integration scale of the TSCS correlated negatively with anxiety. Since the former scale is an index of positive mental health (Fitts, 1971) its negative relationship to anxiety is in the expected direction (e.g.: Rogers, 1951).

Neurotic Group

The only positive correlation to be found in the neurotic group is between self criticism (TSCS) and anxiety; This was noted in respect to the normal group and the probable reasons for this association have been already discussed.

Turning to the other significant correlations it was found that a wide gamut of measures from the TSCS correlated moderately with anxiety measure in a theoretically expected direction, i.e., a more positive self concept was concomitantly associated with lower anxiety. More specifically, it was found that higher General self esteem, positive self perception in terms of Identity, Behavior, Personal self, Family self, Social self and lesser deviancy on the empirical scales pertaining to Defensive positive, General maladjustment, Personality disorder, Neurosis and Personality integration were associated concomitantly with lower anxiety.
An interesting feature of these correlations in contrast to the normals is that a substantially greater number of those measures which index self esteem (internal and external frame of reference) are significantly and linearly associated with anxiety.

Many studies have been reported in the literature that support the above negative relationship between anxiety and self-esteem (Eg Endler and Okada, 1975). Individuals with high self esteem are found to be socially competent, while individuals with low self esteem are frequently found to suffer from anxiety concerning social interactions (Argyle, Bryant and Trower, 1974; Argyle, Trower and Bryant, 1974). Similarly, Clark and Arkowitz (1975) found that socially anxious subjects evaluated their social performance more negatively than did neutral observers of their performance. Low anxiety subjects did not differ significantly from the observers in their judgements. Izard (1964) found that negative self-evaluations were associated with negative affective states. Finally, Ohnmacht and Muro (1967) report that the low self-acceptant group manifested tendencies towards ego weakness, shyness, paranoid tendency, guilt proneness, low integration and high ergic tension as seen on the 16 PF Questionnaire. They conclude 'thus at least in so far as the 16 PF measures the dimensions underlying anxiety—they all serve in delineating self acceptance' (Ohnmacht and Muro, 1967, p 237). The
preceding studies on the whole indicate a negative relationship between self concept and anxiety and the results in this group substantially support this relationship.

**schizophrenic Group**

In the Schizophrenic group Self-criticism correlated moderately and positively with anxiety thereby indicating that higher self criticism is concomitantly associated with greater anxiety. This trend as noted already is evident in the normal and neurotic groups also.

The other significant correlations in the schizophrenic group indicate that a more positive self concept is simultaneously associated with lower anxiety. More specifically, the results indicate that higher and more positive General self esteem, Identity, Self-satisfaction, Behavior, greater self esteem in reference to physical attributes and functioning including state of physical health and sexuality, higher self-esteem from a moral, religious and ethical standpoint, greater self esteem in terms of personal worth and adequacy, more positive self esteem of self in relation to the primary group of family and close friends and greater general adequacy and desirability in relation to all others is concomitantly associated with lesser anxiety. The highest correlations are in respect to Personal self and Total self esteem.

In addition, the Neurosis scale of the TSCS correlated negatively with anxiety, less of neurotic disorder
as measured on the TSCS is concomitant with less of anxiety.

An interesting feature of these correlations is that in the schizophrenics and neurotics anxiety is linked to various and more numerous facets of self esteem than in the normals. This raises the question of whether this greater association of anxiety with self-esteem in the neurotics and schizophrenics as contrasted to normals is due to a greater negativism towards self thereby leading to a significant and linear association between anxiety and self esteem. This would seem more plausible if one recalls that the two clinical groups have a lower self-esteem (vide p 135). Alternately, the possibility arises that the intimate association of self-esteem and anxiety in the clinical groups because it is moderated by (a) variables inherent to their clinical state. However, further statements on this aspect is beyond the scope of the present study.

Summary

To briefly summarize the highlights in the preceding discussion pertaining to the significant correlations between TSCS and other test measures, it can be said that in respect to SCI and IP.T-ASQ the findings generally tend to form an orderly cluster which is logically and theoretically consistent with the construct of self-concept.
In respect to other tests, in the normals it was found that a more optimal self-concept (TSCS) was concomitantly associated with higher self actualizing characteristics (POI). On openness to experience (EI) it appears that certain of these dimensions are linearly and positively associated with a deviant self-concept (TSCS). On the other hand, openness to experience is also simultaneously associated with certain positive features of the self-concept thereby suggesting the possibility that openness can be either/and of a distressing nature or of an emotional well being kind - the latter as defined on certain indices of the TSCS. Finally, an optimal self concept is positively related to the experience of control on a few dimension of the latter.

In the neurotic group one of the interesting highlights that emerged in respect to the TSCS and POI is that having a very certain, definite and dissonant self concept is concomitantly associated with less of self acceptance (POI). Whatever self acceptance he may achieve is probably by being non-committal in his definition of self. A potential source of great stress to the neurotic appears to be in terms of his perception of his behavior i.e., the way I act and to what I do. The remaining significant correlations are in a theoretically expected direction, that is optimal features of the self-concept are concomitantly associated with greater self-actualizing characteristics. In respect to the correlations between
the TSCS and EI there is a trend to indicate that the dimensions of openness to experience are not significantly and linearly related to the dimension of self-esteem (TSCS). The correlations in terms of the TSCS and POS on the whole are in a theoretically congruent direction i.e. positive features of the self concept are probably associated simultaneously with greater experience of control. However, the present evidence indicates that maladjustment is not related to lack of control in all dimensions and in one instance a deviant feature of the self concept is associated with higher control on a dimension of the POS.

In the schizophrenic group the correlations between the TSCS and POI probably indicate that the schizophrenic's striving for growth or for maintaining a positive sense of self is more of a compartmentalized effort. Self concept (TSCS) and openness to experience (EI) in this group do not indicate any clear cut trend as the number of significant correlations is very few. In general, dimensions pertaining to the experience of control correlated positively with those variables of the self concept (TSSC) that indicate positive self-perception.

In conclusion the correlational analysis has provided to some extent a meaningful picture of the neurotics and schizophrenics with respect to multiple measures pertaining to the construct of self. It probably sheds
some light on the psychopathology and psychodynamics of the
patient which can be of considerable value in the planning
of a particular psychological intervention programme.
Finally, the preceding discussion can probably serve as
pointers to the planning of future researches wherein multi-
variate techniques may have to be necessarily used to
further understand the nature, function and interaction of
these variables across a wide range of groups. The next
section of the discussion attempts to examine the uti-
licity of some of the major variables pertaining to the self
in discriminating different groups and their efficiency
for purposes of classifying neurotics, schizophrenics
and normals - as defined here.

3. MULTIPLE DISCRIMINANT FUNCTION ANALYSES

It has generally been a matter of consensus both
among clinicians and other psychologists that the proper
approach to the study of personality tests is in investi-
gating many variables simultaneously (Hall and Lindsey,
1957). To study single relationships would not only be
inefficient but could be misleading due to a lack of in-
formation containing certain variable interrelationships
or interaction.

In the above context, a multiple discriminant
function analyses was done on the test measures and
the data sheet. To begin with the discussion will
pertain to the test measures and followed by an interpretation of the data sheet variables. Finally an attempt will be made to develop an integrated picture of the 'neurotic' - 'schizophrenic' and 'normal' conditions with reference to the second hypothesis posed for this investigation.

(a) **Multiple discriminant function analysis based on test measures**

In the interpretation of the weights the method delineated by Sanathanan (1975) has been followed. She indicates that the meaning of the co-efficients of the same variable in different discriminant functions is as follows:

The more positive the co-efficient is for a particular variable in a likelihood discriminant function, the more increase there is in the likelihood of an individual belonging to the group associated with that likelihood discriminant function due to any increase in the value of that variable, other things being equal. If a variable has a positive co-efficient in a particular likelihood discriminant function, this implies that the higher the value of an individual for that variable the more likely it is to belong to the group associated with that likelihood discriminant function. For a negative coefficient the implication is the opposite, i.e., the higher the value of an individual the less likely it is to belong to that group. The
higher the magnitude of the coefficient (regardless of the
sign), the more important the corresponding variable in
discriminating between that and the rest of the groups.
The ensuing discussion will be interpreted in the above
manner (Vide Table 19, p 179).

The variable which has the highest weight in all the
three groups is Total Positive score from the TSCS. Since
all the three weights are characterized by the positive
sign and the normals followed by the neurotics have the
highest weights the following interpretation is given.
The normals are characterized and best discriminated
from the neurotics and the schizophrenics by their posi-
tive general self esteem. They like themselves, feel that
they are persons of value and worth, have confidence in
themselves, and act accordingly. On the contrary, the
schizophrenics and to a lesser extent the neurotics are
doubtful about their own worth, see themselves as undesir-
able, often feel anxious, depressed, and unhappy and
have little faith or confidence in themselves (Fitts,
1965). As Gergen observes:

"To feel esteem for self is akin to one's most
basic experience of well-being - the childhood
experiences of being supported and nurtured by
a benevolent environment. To be without esteem
is symbolic of one's basic anguish in an unpre-
dictable and uncontrollable world" (Gergen, 1971,
p 69).

It is interesting to observe that the schizophrenics
who are considered to be relatively more deviant from
the norm also hold the most negative self concept as measured here. Fitts (1972, iv) proposes that the TSCS is a valid indicator of pathology and this is further substantiated in this study.

Self confidence as indexed on the SCI has emerged as the second highest discriminator across the three groups. The trend in the weights indicate that the normals are higher in self-confidence than the schizophrenics and neurotics. The schizophrenics report the least self-confidence in comparison to the other two groups. It is noteworthy that the results from the TSCS and SCI pertaining to self-esteem and self confidence respectively are compatible with one another and further reflect on the consistency of the reported self concept across test measures in so far as it pertains to the above aspects.

Distribution score on the TSCS indicates that the schizophrenics are characterized by the highest certainty (rigidity?) in their self-perception, the neurotic the least certainty and the normals are between them. The Distribution score indicates certainty about the way one sees himself (Fitts, 1965). Fitts (1971) has proposed that the self concept of a healthy individual is neither too certain nor uncertain but in the middle, i.e., 'a more balanced choice of all responses - black, white, and varying shades of grey' (Fitts, 1971, iii p 76).
This proposition has been empirically supported in many studies (eg: Pitts, 1971, iii) and has been further upheld in the current research.

'Deliberate and systematic thought' from the EI is the next variable in a descending order of being an effective discriminator among the groups. It may be recalled that the high scorer on this scale of the EI 'reports a need for orderly and planful thinking and frequent indulgence in it' (Coan, 1977a, p 1). The schizophrenics are least characterized by an openness to this mode of experience. On the other hand, the neurotics are highly open to this mode of experience. The normals are moderate, lying between the neurotics who are at the open end of the pole and schizophrenics who are at the opposite end. At this juncture, it may be worth conjuring whether extremes as measured on this dimension is compatible with 'normality' - when this is used to connote, positive self-esteem, self-confidence and 'balanced' definition of the self concept, which was found to be highly characteristic of the 'normals' in contrast to the clinical groups in this study. In another vein, it is also to be noted that the emphasis in the EI is on experience per se and that there is 'nothing here to indicate that the high scores would be more likely than others to indulge in exploration that requires active movement into the environment' (Coan, 1977b p 157).
The remaining variables do not fall into a clear cut hierarchy of decreasing magnitude of discrimination among ranking of the groups, as the/weights differ quite markedly in some instances in the groups. Hence, the ensuing discussion does not indicate any order of importance in respect to the potency of the discrimination of the following variables. However this is indicated in the tables (vide p179).

Variability in self perception as seen and indexed on the TSCS indicates that the schizophrenics are the highest among the three groups on this dimension of self-perception. The schizophrenic's self-regard varies from one area of self-perception to another quite dramatically in striking contrast to the normals and to a lesser extent the neurotics also. Studies for example by Brownfain (1952), Johnson (1974) Marx and Winne (1950) and Fitts (1972,111) among others have reported a similar trend. The present findings on this dimension of the self-concept can be seen as further supporting the above reported findings in a different cultural context. In addition, it may be of some interest to recall the earlier finding that the normals in this study were also neither too certain nor uncertain in their self concept as compared to the two clinical groups. This holds true for the dimension of variability too. In this vein, it is tempting to speculate that perhaps, as a consequence of present day society a notable feature of it being a constant flux, the development or maintenance of well
defined self-concept is not conducive to optimal health. In a somewhat similar manner, Coan (1974, 1977b) emphasizes the importance of flexibility and identifies this as one of the crucial attributes of an optimal personality and this is further underscored by Pitts (1971, iii) who reports that the subselves of the average person in comparison to the deviant are somewhat more variable, but form a basically unified whole. In this manner, probably, a too well defined self-concept is not optimal and this is also indicated in the above results.

'Capacity of mankind to control its destiny vs. supernatural power or fate' of the POS has the highest weight in the normal group and the lowest in the schizophrenic group. The neurotics are between the above two groups in their report of control on the above dimension. This scale of the POS indicates a 'general belief in man's ability to build a just society, to control both his own evolution and natural physical phenomena, and to act in a way that will permit the elimination of war'. Perhaps a lower belief in control in the clinical groups in man's ability to build a just society etc. may be a spill over or reflection of their own basic pessimism in regard to their selves'. (lower self esteem). Nevertheless, whatever may be the reasons for a lower control the findings on this dimension concur with the theories pertaining to experience/locus of control that state that
psychopathology is accompanied by a relative loss of this experience of control, and that the disturbed person sees himself as the victim of agents external to him. (e.g., Cohn, 1974, Lefcourt, 1973). Finally, at this point it may be of some interest to note that the internal pole of the above dimension was found to go with certain unconventionality of thought, while the opposite pole went with conventional thinking, especially in the realm of religion (Cohn, 1974).

Inner-directed from the POI is highest in the schizophrenics and least in the neurotics. The normals are between the two clinical groups. Shostrom (1966) has observed that the more self-actualizing individual is neither too inner directed nor outer-directed but tends to fall between these two orientations. In the light of this, the schizophrenics, apparently, are directed more rigidly by an 'inner gyroscope' to the relative exclusion of realistic outside forces which in turn may be consequent to their clinical symptomatology characterized by withdrawal and autistic thinking in addition to other symptoms. On the other hand, the neurotic apparently lacks to a relatively greater extent an inner source of direction, and approval by others becomes for him the highest goal. For him power is invested in the actual or imaginary approving group relatively more than in the other two groups. On the contrary, the normals appear to be more balanced in
their sources of reaction and direction of behavior and tend to be less 'dependency - deficiency-oriented' than either the schizophrenics or neurotics. They can be characterized as having more of an autonomous self-supportive or being orientation than the two clinical groups.

In respect to the other dimension of openness to experience, namely, 'Unusual perceptions and associations' of the EI, the neurotics are the most open followed by the schizophrenics. The normals are least open on this dimension and report relatively less 'various unusual ways of experiencing himself, his body, and his physical surroundings' (Coan, 1977a p 1). It is pertinent to observe that the positive correlate of this dimension on the Maudsley Personality Inventory was with Neuroticism. (Bone undated, Personal Communication, to Coan, 1977a). Bearing this in mind it is not very surprising that in the present study the neurotic group emerged as the most open and the normals the least on this dimension. Perhaps, openness to experience on the above dimension is a consequent feature of the neurotic and to a lesser extent the schizophrenic state as opposed to the normal state. At this juncture it is worthwhile to mention that many of the EI items on this dimension have a close affinity to description of depersonalization and derealization experiences. Since such states are closely linked to anxiety which
in turn is a hallmark of neuroses, the higher openness on this dimension on the part of neurotics in this study appears comprehensible to some extent; Coan (1974) has stressed the close relationship between openness and subjective distress. One tentative implication of this could perhaps be that the neurotic state and to a lesser extent schizophrenic state is compatible/facilitates this type of openness. It would be interesting to observe the function of this dimension in other differently defined states ranging from the abnormal to those identified high on positive mental health. In this context Coan's observation is pertinent. He suggests that 'anxiety and guilt may be a necessary price for accepting and exercising our freedom' (Coan, 1977c, p 290) and of being more open. Perhaps neuroses and schizophrenia are 'sufficient' conditions for openness pertaining to unusual perceptions and associations but by no means the necessary ones.

Total conflict as measured on the TSCS is highly characteristic of the neurotics and least of the schizophrenics. The normals are between the above two groups on this dimension of self-perception. High total conflict reflects confusion, contradiction and dissonance within the same area of self perception. Since the neurotics show highest conflict in self-perception this indicates that they see themselves as both good and bad simultaneously. Fitts (1972) has reported that neurotics often score very high on this dimension of self perception.
Conflicting self-concepts lead to conflicting behavior tendencies and lessen the possibility of getting the positive reinforcement attainable from carrying out any one tendency in addition to being inherently anxiety provoking. In a like manner, Vallacher notes that:

"While uncertainty about some things may not be particularly troublesome, uncertainty about the self typically is, since it undermines one's sense of predictability and control. If a person is uncertain he or she is highly sensitive to social feedback and is likely to accept as valid a wide range of evaluation" (Vallacher, 1980 p 18).

It is interesting to note that the schizophrenics convey a picture of least conflict. This may be interpreted to indicate a relatively 'right and rigid' self description that precludes a certain measure of flexibility in the self concept. Combs and Snygg (1959), Rogers (1951) Coan (1974, 1977c) among others have stressed the optimal characteristic of flexibility, i.e., a flexible stability as opposed to a stability resulting from rigidity. Apparently, the normals are the most flexible stable as opposed to the neurotics who appear to be too inconsistent on the one hand, and the schizophrenics who are too rigid.

On 'openness to theoretical and hypothetical ideas' of the EI, the normals are the most open and the schizophrenics the least open to this mode of experience. The neurotics are neither too open nor closed to this mode of experience. The normals in contrast to their position on the other dimensions pertaining to openness, namely,
'unusual perceptions and associations' and 'deliberate and systematic thought' are more open to theoretical and hypothetical ideas and report enjoying abstract, novel and unusual ideas and intellectual puzzles. On the contrary, the schizophrenics appear to be repelled by such experiences. It is of some value to note that this dimension of openness correlated positively with the factor B viz. intelligence of the 16 PF (Bone's personal communication to Coan, 1977c). Therefore, in this context it may be speculated whether the schizophrenics idiosyncratic cognitive processes might partially explain an aversion to this mode of experience.

The weights pertaining to 'Self control over internal processes' of the POS reveal that the schizophrenics report the highest control and the normals the least. The neurotics are between the schizophrenics and normals in their report of their experience of control on the above dimension. High scores on self-control over internal processes scale indicate that the subject 'reports control over somatic, affective, and cognitive processes' (Coan, 1977b, p 2). This finding is a little puzzling as it has been reported that this factor is negatively related to subjective distress (Coan, 1974). In other words, and quite contrary to the present results it was found that a lack of self-control went with subjective distress. Perhaps, the present findings can be viewed within a context of social desirability. In
most cultures it is considered desirable for an individual to be able to maintain control over his behavior, his feelings, and the events in his surroundings that are affected by his behavior. In this vein any statement that refers directly to such control is considered by most people as either desirable or undesirable (Coan, 1974, p 2). Since the above scale is most directly concerned with self-control, it may be put forth, albeit tentatively, that a lack of control on this dimension is not only undesirable from a general point of view but particularly more so for the individual who has a devastated self-image in terms of low self-esteem and worth. In the context of the present study it can be speculated that though the schizophrenic can acknowledge to himself in respect to his 'self' that he is useless 'inadequate' or 'unattractive' it is quite another thing for him to say that he has 'no control over' this 'self'. The latter admission may be a more shattering and undesirable experience for him than the former which needs to be avoided at any cost to stave off further self perception of disintegration. The possibility that the schizophrenics are influenced to some extent at least in their self reports by higher defensiveness than the normals or neurotic is further underscored on the self criticism scale of the TSCS. The respective weights for the three groups reveal that the schizophrenics are the most defensive and probably 'making a deliberate effort to present a favourable picture of
themselves' in comparison to the normals or neurotics and this attitude that they have may have reflected more heavily on the above self dimension. However, this is only a tentative explanation for the above results and needs to be further substantiated in future studies.

As already noted above 'self criticism' on the TSCS which measures defensiveness is highly characteristic of the schizophrenics followed by the neurotics. The normals are relatively more open and report a capacity for self criticism than the preceding two groups.

Total anxiety as measured on the IPAT ASQ is highest in the neurotic group and lowest in the normal group. The schizophrenics fall in the middle. Since this scale assesses clinically defined anxiety (Cattell and Schierer, 1965) the trend in the weights for the three groups is in the expected direction as it is generally reported that neurotics report more anxiety than most other clinical groups.

'Aesthetic sensitivity vs. insensitivity' of the EI at the open pole highly characterizes the normals followed by the neurotics and schizophrenics. The schizophrenics who are least open to this dimension of experience express a more prosaic orientation, which emphasizes clear representation and denotation. On the contrary, the normals report a variety of aesthetic experiences.
The weights pertaining to 'Achievement through conscientious effort' scale of POS indicates that the schizophrenics report higher control than normals and neurotics. The normals indicate the least control. Thus, the schizophrenic espouses the view that one can accomplish many things if one tries hard enough and that success may be in the academic, social or physical realm. It is interesting to see that this trend in results is quite contrary to previous studies that have indicated a lower/external control on the maladjusted as compared to normals (eg: Tiffany, 1967; Shybut, 1968; Smith et al., 1971; Lottman and De Wolfe, 1972; Levenson, 1973). However, with the probable exclusion of Tiffany's study many of these investigations have utilized Rotter's I/E locus of control scale which is conceptually and theoretically different from the POS. Therefore, the implication of this dimension of control in the light of the results from the present study/to be deferred. Nevertheless it is of some interest to note that in Conant's (1974) multivariate study 'Achievement through conscientious effort' "tended to go with a sort of banal conductivity that attaches particular importance to the norm of productiveness". Finally, the results in respect to the normals may be interpreted in the light of Hersch and Scheibe's (1967) observation that a person may describe himself as an external because he is in a highly competitive world where the actions of others may have great relevance for the success of his own
efforts. Consequently, the external orientation may be both simultaneously realistic and pessimistic.

'Personal confidence in ability to achieve mastery' of the POS characterizes the schizophrenics at the positive end of the pole with the neurotics reporting least control; namely, confidence that he as an individual has the capacity for accomplishment in various realms - mathematical, mechanical, scientific, athletic, linguistic. Cook (1974) reports that high control appeared to be related to quantitative ability and to a masculine interest pattern.

In respect to control over 'large scale social and political events' (POS) the neurotics reported highest experience of control, the normals the least, and the schizophrenics were between these two groups. This scale reflects the extent to which the subject believes that he himself and individual people in general can have an effect on major societal processes. It is pertinent to note that the emphasis in this scale is not on the experience of control so much as the recognized possibility of control. The normals standing on this dimension can be tentatively interpreted to indicate a relatively more realistic though pessimistic appraisal at a more general social level. This scale of the POS has been found to correlate highest with Kotters I-E locus of control scale (Cook, 1977b) and past studies using the
Rotter and Hild have generally found that the clinical groups are more external which is contrary to the present findings (e.g., Shybut, 1968; Smith et al., 1971). An interesting observation that is made in regard to the above dimension of control is that this in conjunction with the scale measuring 'Achievements through conscientious effort' suggests that the '.... individual who reports a high level of personal control tends to assume that his own performance is not strictly bound by whatever limits are indicated by available evidence....' (Coan, 1977 book p, 103). In this context it may be recalled that experience of control in regard to achievement through conscientious effort is more highly characteristic of the clinical groups than the normals. This probably suggests a more realistic appraisal of the normals in contrast to the clinical groups who are not bound by this attitude.

The above findings need to be viewed keeping in mind the greater defensiveness of the neurotics and schizophrenics as compared to normals. This defensiveness is perhaps highly selective in that it permits the report of low self-esteem statements about the self but simultaneously rejects those which suggest a loss of control over the self that are perceived/being inherently more demeaning. At this juncture Lefcourts view is pertinent. He notes that 'the sense of control, the illusion that one exercise personal choice, has a
definite and a positive role in sustaining life' (Lefcourt, 1973, p 424-425). In this vein, it may be conjured whether the maladjusted (neurotics and schizophrenics) need to maintain this illusion relatively more than normals who, on the other hand, have a more stable and positive sense of self (as measured on TSCS) and consequently feel a lesser need to emphasize the 'potency' 'effectance of one's own aggression' and to present oneself as 'origins' rather than 'pawns' on a self report test. It is of relevance to observe that on most of the dimensions of the experience of control, particularly those that most directly pertain to the personal level of self control, the clinical entities report comparatively higher control than normals. This can be tentatively interpreted in the above manner. However, this result is sufficiently isolated to engender caution in drawing inferences. Finally, it needs to be mentioned in line with Coan's (1974) observation that a pronounced need to maintain control at all times would seem an undesirable state of affairs, for it would serve to restrict the range of experiences within rather pedestrian bounds. It may be asked here whether this pronounced control and particularly self control on all dimensions is desirable as Coan notes subjects who reported a lack of control on the POS "showed signs of greater openness to experience and consequently richer experiences ..." (Coan, 1974 p 107). Thus in the light of this, it appears reasonable to put forth that probably a balanced experience of control is more
optimal. This is suggested by the slight trend in the present results for the normals which indicate that they are characterized by an additional dimension pertaining to openness to experience than the schizophrenics or neurotics who on the whole report greater experience of control. Further, Gatz, Tyler and Pargament (1978) study highlights that moderate I-E may be better than internality.

'Control in immediate social interaction' also indicated that the schizophrenics reported highest control followed by the neurotics and normals. The items on this scale are in terms of whether the subject is able to control social situations or secure desired responses from other people. Coan (1974) observes on the whole that subjects who reported a high degree of experienced control showed evidence of a more stress free but narrower existence. Perhaps, the schizophrenic and to a lesser extent the neurotic though reporting higher experience of control have a narrower existence than the normals thereby enabling such an experience of control.

One exception to the above trend, namely, the schizophrenics reporting higher experience of control

1 Since a total score is not given for either the EI or POS the above is deduced by making a frequency table in terms of higher, moderate and lower openness to experience and experience of control.
in the realms of self control is in respect to 'successful planning and organization' dimension of the POS. Here it is interesting to see that the schizophrenics report least self control, the neurotics the highest with the normals between these two groups. The neurotic position on this dimension is perhaps more comprehensible if it is recalled that they also report a greater openness and need for orderly and systematic thinking and frequently indulge in it (vide p 357) than the normals or schizophrenics. On the contrary, the schizophrenics are least characterized by 'Deliberate and systematic thought' and seldom indulge in it as compared to neurotics. Consequently, in view of the nature of the items that measure successful planning and organization which may be interpreted to imply a pre-requisite for a certain measure of orderly thinking, the current findings are probably thereby rendered more comprehensible. The normals who are characterized by moderate openness to 'Deliberate and systematic thought' also report moderate experience of control in regard to 'Successful planning and organization'. Finally, the above also needs to be interpreted in conjunction with Coan's (1974) conclusion that the control experienced in one area of life may be unrelated to the control in another.

On the EI dimensions pertaining to 'Indulgence in fantasy vs. avoidance of fantasy' and 'Openness to unconventional view of reality vs. adherence to mundane
reality' the schizophrenics are most open followed by the neurotics and normals. The schizophrenic spends a lot of time daydreaming and enjoys the content of his fantasies. The schizophrenics' greater openness on this dimension may be facilitated by their autistic thinking and social withdrawal'. On the contrary, the normals prefer to keep their thinking channeled along orderly, realistic and constructive lines. In addition, the schizophrenic is willing to entertain a variety of specific ideas in such realms as astrology, extrasensory perception, astral projection, and reincarnation to a relatively greater extent than neurotics or normals. In respect to 'constructive utilization of fantasy and dreams' it is noteworthy that the normals are most open followed by the neurotics. The schizophrenics are least open on this dimension thereby suggesting less access to unconscious processes or a willingness to rely on them for creative and constructive ends. On the other hand, the normals report relatively more use of day-dreams, dreams, and undirected thought for problem solving and other purposes than neurotics or the schizophrenics.

The Time-competence scale of the POI indicates that the normals are the most time competent as compared to neurotics and schizophrenics. The schizophrenics are least time competent. Thus, the schizophrenic and to a lesser extent the neurotic do not discriminate well between past or future. They are excessively concerned
with the past or future relative to the present. They are characterized by guilt, regret, idealized goals, plans, wherein the past does not contribute to the present in a meaningful way and future goals are not tied to present activity. The results from the present study substantiate the reports by Gostrom (1966) pertaining to clinical groups as compared to normal samples.

From the preceding discussion probably a few tentative conclusions can be drawn in respect to normals, neurotics and schizophrenics. The normals are characterized and best discriminated from the other two clinical groups in terms of high self esteem and a less deviant self concept as indexed on the TSCS. This is concomitantly associated with more self-actualizing characteristics (PO) and lower anxiety (IPAT, ASQ). A noteworthy finding here is that a positive relationship exists among these foregoing variables and Fitts (1971,iii) hypothesis that the self concept can be viewed as an index of self-actualization is probably supported in so far as the latter is measured on the POI and IPAT - ASQ and further substantiates similar studies (example Russell, 1975; and Wills, 1974). The same trend is noticeable but in the opposite direction for the neurotics and schizophrenics, namely a negative/deviant self concept is simultaneously associated with lower self-actualizing characteristics and high anxiety.

On the openness to experience dimensions it is found
that the normals are open on relatively more number of dimensions than neurotics or schizophrenics. In addition, they are characterized both by the open attitude, i.e., by an ability to relax control over themselves and the world around, as well as by the structured attitude, i.e., deliberate analysis and reflection. In contrast, the schizophrenics appear to be tilted towards those modes of experience that require an open attitude, and this is not adequately balanced by the 'structured' attitude as seen on EII. Coan's observation in view of this is relevant. He notes: 'In the long run, the second basic attitude - directed toward order and control - is the one more conducive to stability and adjustment' (Coan, 1974, p. 201). The neurotic is generally in the moderate region in regard to openness to experience. In the final analysis, in this study openness to experience is not invariably related to higher subjective distress as noted by Coan (1974) and in some instance is compatible with positive self-concept (TSCS) self-actualizing characteristics (POI) and low anxiety (IPAT, ASQ).

The results in respect to the experience of control are somewhat paradoxical as the schizophrenic group indicated relatively higher control on more numerous dimensions of the POS than the normals. The neurotics are typically in the middle between the normals and schizophrenics in their report/experience of control. Though the normals are apparently characterized by a
lesser experience of control than schizophrenics or neurotics this is not concomitant with greater subjective distress. Coan (1974) observes that an experienced lack of control tends to be distressing. On the contrary, the opposite was found in this study as the schizophrenics reported higher anxiety than normals. This finding was tentatively interpreted in the preceding pages in terms of higher defensiveness of the schizophrenics and the possibility that self-perception of loss/lower control is more devastating and demeaning to the schizophrenic than the normals who are fairly secure and established in an adequate sense of self - a self that is time competent as well as optimally oriented in sources of motivation. A noteworthy feature here is that the schizophrenics higher control is not simultaneously associated with higher openness to experience of a rich and varied nature. This gives some support to Coan's (1974) proposition that the two are negatively related, that is, the experience of control and openness to experience.

Before concluding this discussion a brief note on the position of anxiety in the overall functioning of the different groups as seen on these test measures can be mentioned. Recently, some theorists like deGreve (1974); Assagioli (1965) and Coan (1974, 1977c) among others observe that anxiety and optimal health are not necessarily incompatible and in some instances a necessary price of human fulfillment. The results of
this study suggest that positive health in so far as, it is relevantly measured on TSCS and POI is incompatible with anxiety in the normals. However, in respect to openness to experience and experience of control there is no in-variate relationship between these dimensions and anxiety in this group. Within the clinical groups it is interesting to observe that though the neurotics are relatively more anxious they simultaneously indicate more positive self-esteem and time competence than the schizophrenics. Once again there is no evidence for a consistent trend between anxiety and various dimension of openness to experience and experience of control in these groups.

**Evaluation of Classification Functions**

From tables 21, 22 (Vide pgs. 181-183) it is evident that the particular variables used in the multiple discriminant function analysis are efficient for purposes of discriminating and classifying the neurotics, schizophrenics and normals. The error rate is modest and the number of successful 'hits' is very substantial. More specifically, in the neurotic group only 3 out of a total of 30 (10%) individuals were misclassified. In the schizophrenic group it was 6 (20%) and in the normal group 3 (10%) were misclassified. Since the number of schizophrenics misclassified were more in the direction of neuroses there is a greater need for additional measures that are more directly relevant to these two groups. Alternately
and/or in addition the greater misclassification in respect to the schizophrenics may have arisen due to the various problems encountered in making a diagnosis of a clinical entity. For example, some of the neurotics may have had an underlying schizophrenic process that was not readily apparent to the clinician. Nevertheless, the various variables pertaining to self-concept, self actualization, anxiety, openness to experience and experience of control have proved to be of considerable relevance for purposes of discriminating and classifying the normals, neurotics and schizophrenics as defined in this study. Having discussed the findings from the multiple discriminant function analysis one can now go on to the results based on the data-sheet.

b. **MULTIPLE DISCRIMINANT FUNCTION ANALYSIS USING VARIABLES FROM THE DATA-SHEET**

It may be recalled that a separate multivariate analysis was done using variables that were significant at the .05 level or beyond in respect to the data-sheet (Vide chapter IV page 199). To briefly recapitulate it was pointed out that the nature of the scores from the two sources of data, namely, from the tests and from the data sheet were different, in that scores on the former was of a continuous nature and the latter was mostly of a dichotomous nature. In view of this it was felt desirable to keep the analysis of these two sources of
It is of some relevance to note that the total number of variables used here was comparatively larger than the total number of variables used in the Multiple discriminant function analysis pertaining to the test measures. Consequently, the interpretation of the results in respect to the data sheet is somewhat different as it pertains to only the 'better' discriminators so identified by the statistical procedure used for this purpose.

Bock and Haggard (1968) have observed that the functions do not always closely indicate either the direction or magnitude of the effects of the corresponding variables and therefore the chi-square tables (Vide appendix A) were also studied to facilitate an interpretation of the present results. While this may not exactly correspond with the positions assigned by the discriminant weights, they would nevertheless enable an understanding of how within the case history and symptomatology realms these variables manifest themselves. Such a methodology has been perforce followed in other researches (Rao, 1976). Since the emphasis is more on arriving at a multifaceted global picture of the neurotic, schizophrenic and normal condition in terms of the self concept test measures and the data sheet immediate discussion of the discriminators pertaining to the data sheet is essentially brief.
To begin with the interpretation of the results on the data sheet will deal with the neurotic vs normal groups, followed by the schizophrenic vs normals and neurotics vs schizophrenics.

**Neurotic Vs Normal**

The results indicate (vide table on page 199) that 'Unsatisfactory relationships in work' is a relatively strong discriminator between the neurotics and normals. The neurotics are characterized by more dissatisfaction in the realm of work pertaining to their relationship with supervisors/subordinates/colleagues. They also report more frequent change of jobs than the normals. Further, they change jobs whenever they do so more for reasons relating to their own instability than normals. The next good discriminator between the neurotics and normals is 'marital status'. At first this may be a little surprising since the two groups were controlled on this variable. The probable reason for it emerging high in the order of the better discriminators may be several. For example, it has been noted that a weight is equally divided between two highly correlated variables or a variable may act as an error suppressor, i.e., it contributes to discrimination by removing error from another variable (Bock and Haggard, 1968; Overall and Klett, 1972). Further, marital status may be contributing to discrimination in terms of the other variables used in the present analysis. In this context an examination of the frequencies of such
variables with high discrimination weights like occupation, frequency in change of jobs etc. indicated a trend towards the married sub-groups hailing relatively more often from professionals job categories than unmarried. It was also found that students fell more often in the unmarried sub-groups. In addition, the married schizophrenics tended to change jobs more frequently than other groups for reasons inherent to their clinical condition. Though the frequency in change of jobs was found more often in the married group, however, this should be viewed bearing in mind that in many instances the unmarried were students and therefore the question of work characteristics like the above do not apply. Thus marital status in conjunction with the above factors as noted above has probably contributed to discrimination. Turning to the other relatively good discriminator, i.e. 'Occupation', the results indicated that more number of normals hail from the professional class than neurotics. Further, in tune with their clinical condition the neurotics are more characterized and discriminated from the normals in terms of 'sleep disturbance', 'headache', 'disturbed eating habits' 'course of illness' and such personality characteristics as those which indicate shyness and feelings of isolation in social interactions.

**Schizophrenic vs Normals**

While considering the various variables that appear of good classification (wide table page 199)
value it is interesting to note that once again the area of work is of significance in discriminating the schizophrenics from normals as in the case of neurotics from normals. More specifically, the variables which maximally differentiated the schizophrenics and normals is in terms of frequent changes of job. As noted earlier this may be due to several reasons of a positive or negative nature. In this context, the schizophrenics change of jobs is apparently more due to their inherent instability whereas the normals on the other hand are influenced by a motivation for an upward mobility. The schizophrenics are comparatively less 'systematic and meticulous' in their work which seems comprehensible in view of their basic maladaptive symptomatology. In addition, they report more 'neurotic traits' in childhood and are further discriminated from the normals on the basis of 'mode of onset of illness', 'marital status', (the relevance of the latter has already been noted in the foregoing page), 'headache', 'unsatisfactory relationships in work', 'loneliness', sleep disturbance and anxiety Chothopadhyay et al., 1979 on the basis of their study observe that anxiety acted as a permanent disposition in psychotics and they interpreted it as a protection against their environmental stress.

Neurotics Vs Schizophrenic

A scrutiny of the highly relevant discriminators between the neurotics and schizophrenics (vide table 27 page 199) emphasizes what was already seen in respect to the other groups the relevance of those variables
pertaining to the realm of work. The neurotics as compared to the schizophrenics are better differentiated from them in terms of how systematic and meticulous they report themselves to be while doing a job of work. They report being more efficient than the schizophrenics. Also, the neurotics are less inclined to change jobs frequently and have better relationships with their supervisors/colleagues/subordinates in the realm of work than the schizophrenics. 'More of onset' has emerged as a relatively strong discriminator between these two groups. Occupation serves to discriminate these two groups quite markedly with the neurotics occupying relatively more professional type of occupations than the schizophrenics and more number of schizophrenics are unemployed as compared to neurotics. This may be because the schizophrenics are characterized relatively more by effective action inhibiting symptoms than neurotics.

In general an overall view of the results indicates that a common discriminator among the various groups is that pertaining to the realm of work. At this juncture, it is of some relevance to point out that occupational difficulties which apparently is more characteristic of the clinical groups and particularly more the schizophrenics than the other two groups may in turn be a multiply determined phenomena having different underlying causal factors in each group. For instance, the schizophrenic's difficulties may stem more directly from his
basic maladaptive symptomatology characterized by loss of contact with reality (in varying degrees) autistic thinking, suspiciousness of a paranoid nature and the like. On the other hand, the neurotic is relatively more reality oriented and his problems may be due to dysfunction of his coping mechanisms which is of a less grosser nature than that commonly found in the schizophrenics. In addition, the possibility arises that in some instances neuroticism may arises/a reaction and consequence to perceived threat and stress whereas in the schizophrenics this causal link may be essentially reversed.

Turning to the evaluation of classification functions pgs, 201, 202 & 203 (vide tables 28, 29, 30) it is highly significant to note that the on the basis of variables used in the multiple discriminant function analysis the neurotics, schizophrenics and normals were very effectively classified with the error rate being zero across the 3 groups. A more careful study of these variables may prove to be potentially informative for future researches in the area of self-concept.

In view of the significant results from the two sources of data on which a multiple discriminant function analysis was done the second null hypothesis of the present study which stated that the neurotics, schizophrenics, and normal groups cannot be effectively discriminated and classified on the basis of certain self concept and case history, symptomatology, and socio-demographic variables is rejected.
an integrated interpretation of results from the test measures and the data sheet

A consistent and highly discriminating trend in respect to the various groups is achieved in terms of self esteem from the test measures on the one hand, and the realm of work from the data sheet. As was noted in the previous pages, self-esteem highly discriminates among the neurotics, schizophrenics and normals with the normals reporting higher self esteem followed by neurotics and schizophrenics. Further, it was also seen that occupational difficulties pertaining to high frequency in change of jobs due to inherent instability of the patient and difficulties in interpersonal relationships in the realm of work is relatively more characteristic of the schizophrenics and to a lesser extent the neurotics than the normals. Apparently, there appears to be a close relationship between self esteem and the realm of work. In this vein it may be put forth that those who have greater difficulties in work are also those who experience/report lower self-esteem and such individuals are more likely to be schizophrenics. The probable reasons for the above noted close association has been the focus of considerable research emanating largely within the theoretical framework of Super et al. (1963) and Korman (1966, 1969). Super identifies the self concept as the determinant of job choice, so that an individual's occupation and the picture of the kind of person he is, will be compatible.
According to Korman (1966, 1969) a person of high self esteem is likely to choose a vocation which will satisfy his needs and in which he will be adequate because such a vocation is in 'balance' with his self perception. On the other hand, a low self esteem person is characterized by a sense of personal inadequacy and an inability to achieve need satisfaction in the past. Such a person, Korman argues, is likely to choose an occupation which he knows will neither satisfy his needs nor suit his abilities.

In terms of Super's theory it may be speculated whether the neurotics and schizophrenics self-concept which is more negative in terms of self-esteem, variable and more conflicted than the normals leads to improper job choices and consequently frequent change in jobs. Further, their variable and conflicted self perception renders their own behavior less predictable and this may result in greater interpersonal difficulties and also thereby loss of jobs. It is interesting to note that schizophrenics who have the highest variability in their self concept, that is, characterized by little unity or integration of the self are also those who consistently experience greater difficulty in interpersonal relationships in work. From the view point of Korman's 'Consistency theory of work-motivation', the greater deviancy in the realm of work is seen as consistent with a negative self-concept.

On the basis of the above it can be concluded that
those who have a more positive self-concept (TSCS) are also those who have less problems in the realm of work, who change jobs when they do so more for reasons pertaining to better prospects and such individuals are more likely to be normals. Those individuals who report the most negative self-concept are also likely to report greater occupational difficulties and such individuals are more likely to be schizophrenics. The neurotics are between/extremes. Many studies have been reported in the literature that indicate that both chronic and situational self esteem appear to be important determinants of performance, choice and satisfaction in the realm of work (Dipboye, 1977) and that those who are successful in their occupation are more sociable, outgoing, emotionally stable and assertive than those who were not successful in their occupation (Inshiuddin, 1980; Kalanidhi and Deivasenapathy, 1980).

In addition, the neurotics and schizophrenic are differentiated from each other in their attitude to their work. The neurotic is likely to be more systematic and meticulous in his work than the schizophrenic which in turn may be due to the greater experience of control that the neurotic experiences/reports in the realm of work than the schizophrenic i.e., the neurotic reports successful self control in the realm of work. Moreover, the neurotic is characterized by a more 'structured' attitude, i.e., by deliberate and orderly
thinking and this may be of great relevance and help for attaining success in his occupation. On the other hand, it was seen that the schizophrenic is predominantly and highly characterized by the 'open attitude' (e.g., spontaneity, permeability) thereby probably inhibiting execution of tasks successfully, as these would necessarily require a certain measure of orderly thinking.

Another meaningful association noted is that pertaining to anxiety and difficulties in the realm of work. It may be recalled that anxiety is higher in the schizophrenics and neurotics than normals. It is commonly observed to be an inherent feature of the psychopathology of these clinical conditions. However, in some instances the anxiety may have been exacerbated by external problems like for instance, in the realm of work thereby creating a vicious circle.

Occupational status is found to be a good discriminator among the clinical groups. The data probably points to a positive relationship between occupation and self-concept with perhaps those higher in the hierarchy having better self-concepts, (POI, TSCS). In this context, it needs to be mentioned that the number of schizophrenics who were unemployed were relatively more than normals. The reasons for this were already noted. Further, the status of being unemployed may have repercussions on the evaluation of self as in the schizophrenics whose self-confidence and self-esteem was found
to be lowest.

In conclusion, an attempt was made to understand some of the more meaningful and obvious associations from the test measures and data sheet in order to gain a more integrated picture of the different groups. However, the above needs to be viewed as only tentative pointers for further exploration of a systematic nature.
IMPLICATIONS OF THE PRESENT STUDY

A scientific investigation of a particular nature probably has certain implications of a practical, theoretical and heuristic kind of which the present study is no exception. The results from this endeavour indicate various possibilities and avenues for fuller exploration and confirmation.

At a more practical level in terms of therapy, the present study indicates that self concept is intimately related to pathology and its opposite - positive health; an individual with a devastated self-image who may manifest any of the various psychiatric symptoms and be labeled accordingly - for example neuroses and schizophrenia here - can be helped to build a more positive self-concept in a number of ways depending on the individual needs of the case and the orientation of the therapist. For instance, Freudian theorists advocate psychoanalysis to gain insight and understanding that will lead to new behavior and a realistic conflict free ego; Rogerians stress the creation of an interpersonal climate characterized by understanding, acceptance and self direction; behaviorists seek to reinforce positive behavior and cognitive oriented therapists endeavour to modify the cognitions ('irrational beliefs', 'stylistic patterns of maladaptive thinking', self-speech etc.) assumed to underlie maladaptive behavior.
The present study is of help to the therapist in probably localizing the areas in the individual's orientation to himself and therefore to a considerate extent vis-a-vis the environment—that are probably creating and/or maintaining the negative self-picture in the maladjusted as opposed to a relatively positive self concept in the adjusted. In this sense, the results from the present investigation seem to have some diagnostic value for psychological intervention, for setting up therapeutic goals and also indicating the possibility of an operational measurement of the effectiveness of such intervention in respect to those areas localized as probably problematic to the client.

The present study also throws light on the manner by which the self-system is maintained in different 'clinical' states as well as in 'normal' states. It indicates to a considerable extent the utility of the various tests employed here in understanding the psychopathology and psychodynamics of the neurotic or schizophrenic.

Finally, this study can be considered as a springboard for the planning of methodologically more refined studies having positive hypotheses on various samples that are selected by more narrowly defined criteria. This could help in clarifying the relevance of the various self concept tests to identify different clinical states in addition to other specific benefits that may accrue to such endeavours.
**LACUNAE IN THE PRESENT STUDY**

Though an attempt was made to have a well designed and methodologically sound study various constraints due in part to the time bound nature of the present research programme as well as the nature of research (clinical) served to handicap the implementation of the demands of strict scientific rigor.

The major limitation of the present study is imposed by the nature of the sample, which drawback though would have been partly overcome had not the project been time bound. The sample studied here was small in number due to the restrictions imposed by the selection criteria. It consisted of only two broad diagnostic groups irrespective of finer discriminations within each group. In addition, some of the multivariate statistical programmes that were not readily available would have been more suitable for the purposes of this investigation.

In view of the above, it is to be noted that the conclusions drawn on the basis of this research cannot be generalized until a further constructive replication of the essential aims of the study is undertaken on more homogenous clinical groups.