CHAPTER II
PREVIOUS WORK

The present effort is the development of a tool to measure self-concept. Self-concept is considered important in the integration of personality, in motivating behaviour and in achieving mental health. As a consequence, there has been a proliferation of literature dealing with tools to measure this salient concept. Most of these tools view self-concept as unidimensional and as a measure of a global construct. When the internal structure of these tools were explored, more than one factor emerged, indicating the multidimensional nature of the construct in many cases. The present trend, therefore is more towards conceptualising self-concept as a multidimensional construct.

Absence of a clear and acceptable definition appears to have led to some uncertainty in the field. A multitude of terms are employed with reference to concepts which may or may not be synonymous, depending upon the interpretation of any given theorist or author. Terms such as, self-concept, self-satisfaction, self-love, self-esteem, self-acceptance, self-worth, self-confidence, and self-appraisal which may actually refer to quite different aspects of a more general psychological process, are often used interchangeably and inconsistently. For e.g., as Wylie (1974) point out, for some authors, self-acceptance means respecting
one's self, including one's admitted faults, while self-esteem means congruence between self and ideal-self, or being proud of one's self and evaluating one's attributes highly. Other theorists define optimum self-esteem as being manifested by moderately small discrepancies. Lack of clarity on a conceptual level will obviously have methodological effects. As Wells and Marwell (1976) state, "The body of evidence relating to self-esteem demonstrates that the various self-esteem instruments measure something, but the question of 'what' remains". Coopersmith (1967) defines self-esteem as "...... the evaluation which the individual makes a customarily maintains with regard to himself, it expresses an attitude of approval or disapproval". Rosenberg (1965) defines self-esteem in a similar vein. For him self-esteem is 'a positive or negative attitude towards a particular object, namely the self'. Wylie (1974) refers to the same construct as 'self-regard' and defines it as an "............ overall or very general evaluative attitude towards self". According to Fitts (1971) "the phenomenal self is the self as observed, experienced, and judged by the individual himself; this is the self of which he is aware. The sum total of all these awarenesses or perceptions, is his image of himself - his self-concept". Shavelson, Hubner and Stanton (1976) reviewed several of the definitions on self-concept revealing thereby seventeen different conceptual dimensions on which they could be classified e.g., (a) emphasis on a stable or changing self-concept, (b) types
of evaluation-normative standard, absolute personal standard or non evaluative (c) dimensionality of self structure - unidimensional or multidimensional.

This drawback in the area of research on self-concept has inspired investigators to arrive at precise definitions and more integrated and substantial theory of self-esteem. Further, in evolving tools on self, the investigators have adopted different types of self-report methods to elicit the individuals self-description. The most frequently used types of instruments are the questionnaires, rating scales and adjective check lists (Wylie, 1961). In designing the tools, some have used positively and negatively worded items to control for acquiescence response set and some have failed to do so.

In this process of tool construction different authors emphasise and resort to different modes of reliability and validation techniques. Thus adequate emphasis is given to the content validity of the instrument in some cases, while neglecting to a certain extent, the discriminant and convergent validity. In others, construct validity is established through multitrait-multimethod analyses, and by the use of factor analysis. Factor analysis is thus used by some primarily to evolve the tool, and by others as a supportive, secondary measure to confirm the dimensions conceptualised by them. Some of the tools have been used in the clinical population to see how well the tool may dis-
-criminate between the clinical and normal populations. Some of these aspects will be dealt with in detail subsequently.

Thus after indicating in passing the status of the concept in tool construction, the methods to elicit the self appraisal of individuals, the problems of reliability and validity, an attempt is made in the present chapter to list some of the tools, which are of recent origin, which are used frequently with adults and about which information is available. Wylie (1961) has listed the tools used to arrive at the self-picture in a tabular form. She points out that some of the tools listed are used only once or twice and about which no published reliability and validity information is available. Such tools are omitted in the present chapter. The studies would be dealt with in a chronological order.

BILL'S INDEX OF ADJUSTMENT AND VALUES (IAV)

- Bills, Vance and McLean (1951)

The Index of Adjustment and Values (IAV) was designed to serve as a research tool and to assess changes in adjustment which occur during psychotherapy (Bills, Vance and McLean, 1951). A sample of 124 words, which occurred most frequently in client centered interviews and which represented self-concept definitions, were selected from Allport's list of 17,953 traits. The list of 124 words was further reduced to
49 through item analysis, forty of which were positive and 9 negative, attributes. The items have five response alternatives and yield a self-minus-ideal discrepancy score as well as a direct self-acceptance score.

A split-half reliability of .92 (Letkowitz, 1967), .91 (Bills et al, 1951) and a test-retest reliability of .83 is reported for Acceptance. The discrepancy score has a split-half reliability of .88 and test-retest reliability of .87, over a six week period (Bills et al, 1951).

On the basis of a factor analysis, Mitchell (1962) reported that seven factors account for the variance of the IAV. He concluded that the use of a single self-concept score was unjustified. However in another factor analytic study by Bills (1971, cited in Wylie, 1974) the first factor accounted for the majority of the variance.

The scores on IAV correlate with several self report measures of self-concept (e.g., Strong, 1962; Stone and Winkler, 1964; Spitzer, Stratton, Fitzgerald and Mach, 1966). A number of other studies in proof of the above is reported by Wylie (1974).

Validity studies have been reported for the index. Bills (1953 a) reported that IAV differentiated groups with different personality characteristics. Individuals with a greater discrepancy score showed a large number of depressive signs on Rorschach (Bills 1954) and the IAV was found to be a valid measure of changes in emotionality. (Roberts, 1952;
Bills, 1953b), Bendig and Hoffman (1957) found a significant relationship between self-acceptance and introversion and neuroticism.

Wylie (1974) while critically evaluating the tool feels that the IAV adjectives are influenced by the social desirability effects to large extent. Studies by Cowen and Tongas (1959) and Spilka (1961) throw ample light on this aspect. She also feels that acquiescence response set is inadequately controlled as 40 of the 49 traits are positive attributes. Another criticism which is common to almost all the tools is the failure to take into consideration the perceived salience for the subjects, while summing across items to arrive at a global score. However, Burns (1979) feels that IAV is of considerable value as it is less cumbersome to use and has high reliability.

**SELF-OThERS QUESTIONNAIRE**

- Phillips (1951)

The Self Others Questionnaire was constructed by Phillips (1951) mainly for research purposes. The scale comprises of 50 statements, 25 to measure attitudes to self and 25 to measure attitude to others. Self and other items are randomly arranged through the scale.

A test-retest reliability of .84 for self scale and .82 for others scale (N - 45 college students) over a 5 day interval is reported. There is no direct evidence of
validity, However substantial correlations were reported between 'self scores' and 'others scores', ranging from .54 to .74.

In evaluating the tools Burns (1979) feels that acquiescence response set is inadequately controlled as all the items are negatively phrased. Also, no direct evidence of validity is reported by the author and hence studies towards that end are required.

ACCEPTANCE OF SELF & OTHERS SCALE

- Berger (1952).

The Acceptance of Self and Others Scale consisting of two subscales was standardised by Berger (1952). From an item pool of 47 statements on self-acceptance and 40 statements on acceptance of others, 36 and 28 items respectively were retained, on the basis of an item analysis. The items are to be answered on a Likert five-point rating system.

Split-half reliabilities were obtained for five groups ranging from .75 to .89 for Acceptance of Self and .77 to .88 for Acceptance of Others. Estimates of validity were obtained by asking 20 subjects to write essays about themselves and another group about their attitudes towards others. The essays were rated by judges. When the mean ratings were correlated with corresponding scale scores, they yielded a correlation of .89 for Acceptance of Self and .73 for
Acceptance of Others respectively. A group of stutterers had a lower mean score on the Acceptance scale as compared to non stutterers. According to Burns (1979) the scale appears to be one of the few carefully developed instruments in the field of self-concept measurement.

PERSONALITY WORD CARD (PWC)

- Sarbin and Jones (1953)

Adjective Check Lists have been one of the important methods employed by a number of investigators to study the self-concept of individuals. One such list is the Personality Word Card (PWC) designed by Sarbin & Jones (1953). This Adjective Check List consists of 200 items that relate to a trait, a quality, an attribute or an attitudinal behaviour of an individual. The subjects are required to sort these adjectives into two piles namely 'yes' or 'no' depending upon whether the items are applicable to their self or not. The procedure is repeated twice with different instructions for the real 'self' and 'ideal self'.

The PWC provides six measures namely (1) Acceptance Index in Real Self and (2) Ideal Self (3) Criticality Index in Real Self and (4) Ideal Self (5) Self-Ideal Discrepancy in Self-Acceptance (6) Self-Ideal Discrepancy in Self Criticality. Sarbin and Rosenberg (1955) have reported a reliability of .81. They also claim that PWC has proved satisfactory after retesting over a period of 30 days. It was found that 66% of the 50 subjects checked more than
70% of the same adjectives as they had done during the first testing. The authors also state that the adjective check list method has 'rational' and 'logical' validity.

Sarbin and Rosenberg (1955) compared the self-concepts of neurotics with the normals on PWC. The normal group described their 'self' as warm, rational, active, honest and sincere, whereas the neurotic group emerged as anxious, insecure, nervous, worrying and emotional. The index of Self Acceptance among normals was .89 and for neurotics it was .88. The index of Self Criticality was .00 in normals and .20 neurotics.

Vinutha (1978) found that neurotics and psychotics had greater Self Ideal Discrepancy and were less accepting as compared to the normals. Rajini (1982) found neurotics to be most self critical, least self accepting and with the highest self ideal discrepancy as compared to schizophrenics and normals.

**TWENTY STATEMENTS TEST (TST)**

- Kuhn and McPartland (1954)

The main distinguishing feature of the 'Who Are You' (WAY) or the 'Twenty Statements Test (TST) is its unstructured format. Bugenthal and Zelen (1950) suggested a method where the subject was required to give three answers to the question Who Am I? Whereas in TST the subject is required to respond to the question in twenty statements
and write it in the order that occurs to him. The test gives scope for noun forms (categories) as well as adjectives (attributes). The following categories are considered for coding the responses (Kuhn, 1960). (1) Social groups classifications (2) Ideological beliefs (3) Interests (4) Ambitions (5) Self evaluations. Self-concept scores can be arrived at by coding the responses on TST.

Some researchers consider the unstructured format as an advantage as it gives scope for free expression (Hickman and Kuhn, 1956; Gordon, 1969) while others feel that it may arouse resentment on the part of the respondent. There are controversies with regard to the salience of the items that occur at the initial and final phases. (Gordon, 1968; McPhail, 1972).

TST is found to be correlated with scores on IAV and Adjective Check List (ACL) with a correlation of .3 to .4. A correlation of .73 between coded self acceptance on WAY and Feelings of Personal Worth from California Test of Personality is reported by Zelen (1954). In the hospital set up McPartland, Cumming and Garretson (1961) found that self conceptions as reported in writing to the question 'Who Am I' were related to different levels of ward behaviour and to the occurrence of grossly disturbed behaviour.

Some of the major shortcomings of the tool as pointed out by Wylie (1974) and Burns (1979) are with regard to problems in handling the scoring of an open ended instrument
The most well known set of Q statements is the extensively used instrument developed by Butler and Haigh (1954). The set consists of statements from therapy protocols of clients who verbalised during client-centred therapy sessions. There are 100 items which are to be sorted into nine files, with a certain number of items in each file to ensure a quasi normal distribution.

Dymond (1953) obtained an adjustment score for the 100 items. Based on the classification of the statements into positive or negative for adjustment by two clinical psychologists, and an agreement by five other judges, items were reduced to 74. The items are usually used for a self sort and an ideal sort, yielding a discrepancy score.

Information about the reliability by most Q sort sets is as yet unknown and neglected area (Wylie, 1974; Goodstein, 1979). However Stimson (1968) found a test-retest reliability of .74 for the adjustment scores of Dymond
after 6 months. Livson and Nichols (1956) feel that when a prescribed forced distribution is used for the Q sort procedure rather than a quasi normal sorting, higher test-retest reliabilities could be arrived at.

Some evidence for convergent validity is found from correlations between Butler and Haigh Q sort scores and scores from other instruments measuring self-concept. Shlien (1961) reported a correlation of .82 between the 100 item and 80 item Butler and Haigh Q sort, and a correlation of .50 with IAV. As evidence towards discriminant validity a negative relationship was found between scores on the Taylor Manifest Anxiety Scale and the Q sort of Butler and Haigh (Winkler and Myers, 1963). High self-acceptance was associated with low anxiety scores. A significant relationship was observed between the Butler and Haigh Q sort and adjustment as assessed by the California Test of Personality (Hanlon, Hofstælter and O'Conner, 1954).

The Q sort has been used as a research tool in the exploration of self-concept in various groups including delinquents (Balester, 1956), psychiatric patients (Martin, 1969) and students in group counselling (Caplan, 1957). A significant increase in self-ideal correlations after therapy as against the control group is reported by Rogers and Dymond (1954) Shlien, Mosak and Driekurs (1962) and Cartright (1963).

Wylie (1974) brings to light the various shortcomings of this instrument. According to her "social desirability
influences remains unevaluated and uncontrolled". The forced choice format has an adverse effect on the accuracy of the subject's self report. Livson and Nichols (1956) and Jones (1956) contend that the subjects do not choose a quasi-normal distribution. The use of self-ideal discrepancy score may be distorted by factors like forgetfulness. The reliability information is not very impressive and the tool is not adequately explored through multitrait-multimethod analysis (Wylie, 1974).

**INTERPERSONAL CHECK LIST (ICL)**

- LaForge and Suczek (1955)

"The Interpersonal Check List (ICL) was developed by LaForge and Suczek (1955) to measure a number of variables defined by the Interpersonal Personality System by the Interpersonal Personality System of Leary (1956, 1957)" Wylie (1974) It provides a self description, an ideal-self description and a measure of self-acceptance in terms of discrepancies between self and ideal self descriptions.

Leary (1957) identified five 'levels' of personality of which level 2 appears to refer to the phenomenal self concept and level 5 to the phenomenal ideal for self (Burns 1979). The ICL contains 128 items, with 8 items for each of the 16 variables in the theory's classification scheme. The 8 items for any variable include 1, of least intensity, 3 for each of the 2 intermediate intensity levels and one of highest intensity. Different scoring systems are used by authors, rendering the comparisons of studies using ICL,
rather difficult, e.g., Dominance and Love is used either as self description or in terms of discrepancies (Bentler, 1963; Hamilton, 1971).

Latorge and Suczek (1955) report test-retest correlations from .73 to .78. Armstrong (1958) indicates that the Check List has high internal consistency with coefficients ranging from .95 to .97.

Several authors have reported a high correlation between social desirability and ICL items. (Levinger, 1961; Sperber and Spanner, 1962; Leff and Lamb, 1969).

Foa (1961) cites three studies (Bentler, 1963; Brier and Bieri, 1963; La Forge, unpublished) where factor analysis yielded no single factor representing self-regard. However the investigators have labelled two factors as Dominance and Love.

Certain studies throw light on the construct validity of ICL. Altrocchi, Parsons, and Dickoff (1960) and Altrocchi (1961) report that MMPI defined 'sensitisers' obtained more negative 'self-concepts' as compared to repressors. Adams, Robertson and Cooper (1966) report ambiguous findings concerning the effects of sensory deprivation on Dominance and Love scores of psychiatric patients. Sathyavathi (1971) using ICL on schizophrenics and neurotics confirmed the hypothesis of Sarbin which stated that the self descriptions of individuals socialised by parents only, differs from those who are socialised by other adults besides their parents. Mckenna-Hartung, Hartung and Baxter (1971) found
that subjects addicted to drugs had higher self-ideal discrepancy on the rebellious distrustful dimension. While studying the neurotic population Nagalakshmi (1977) found that they had low dominance and high self-ideal discrepancy on dominance as compared to the normals.

While reviewing the tool Wylie (1974) comments that there is little information regarding appropriate reliabilities. According to her "...... many problems of the invalidating influences of irrelevant response determiners remain untouched". She claims that the self-ideal score has no convergent or discriminant validity as seen from various studies. Bentler (1965) for further test development research.

SELF ACTIVITY INVENTORY (SAI)

- Worchel (1957)

The Self Activity Inventory was devised by Worchel (1957) to describe ways of coping with the areas of hostility, achievement, sex, and dependency needs and their frustration which were considered as sources of conflict in military life. The SAI consists of 54 items, all of which are negatively worded. Self, ideal-self, and other are measured on a 5 point scale.

A split-half reliability of .91 is reported by Byrne, Barry and Nelson (1963) for college students. A test-retest reliability of .79 for self; .72 for ideal; and .79 for other was obtained by Worchel (1957).
The SAI when factor analysed by Schulderman and Schulderman (1969a, 1969b) indicated that the maximum amount of variance accounted for by 19 factors, was 19%. The findings did not support the view that SAI measured a global construct.

A correlation of .60 between SAI and IAV discrepancy scores and .58 between SAI discrepancies and the scores derived by Dymond on BHQ gives some evidence for convergent validity. Studies by Strong (1962) and Stimson (1968) offer some support for the discriminant validity of SAI scores.

Certain studies throw light on the construct validity of SAI. An association between self ideal discrepancy scores and aggression was reported by Worcel and McCormick (1963). In a study by Hillson and Worcel (1957) on clinical groups neurotics were found to have significantly poor appraisals of themselves and greater self-ideal discrepancies as compared with schizophrenics and normals who did not differ in their self appraisals. In another study by Nebergall, Angelino and Young (1959) relatively large or small self-ideal discrepancies were significantly associated with disagreement, regardless of direction, between the group and individual estimates of adjustment.

Wylie (1974) points out certain drawbacks of the tool like meagre reliability information, poorly controlled social desirability aspects and weak support for construct
validity. In the light of the above further use of this instrument "cannot be defended" (Wylie, 1974).

**SEMANTIC DIFFERENTIAL**

- Osgood, Suci and Tannenbaum (1957)

The Semantic Differential according to Burns (1979)

"... was originally developed to measure the meaning systems of individuals, essentially connotative meaning". The Semantic Differential (Osgood, Suci and Tannenbaum, 1957) consists of sets of bipolar adjectives labelled at the end points of a continuum which is usually divided into 5 or 7 response gradations. The subjects are required to rate each scale with reference to the applicability of the polar items. To prevent the acquiescence response set, scale polarity is reversed for pairs in random order. Factor analysis revealed three distinct orthogonal factors (1) evaluation (2) potency (3) activity, of which evaluation is the major factor. Pervin, and Lilly (1967) found high social desirability scores on Marlowe-Crowne Social Desirability Scale scores to be significantly related to high self judgement, low self-ideal discrepancies and high importance ratings on Semantic Differential (Osgood, Suci and Tannenbaum, 1957 and Oles, 1973) obtained an internal reliability of .92 and test-retest reliability of .44 over a 6 month period.

A number of studies have used this tool in order to test theoretical predictions. Chandrika (1968) found that psychiatric patients differed from normals significantly
and had a negative self-concept. Ostraukas (1977) Bond and Lader (1976) report similar findings with the patient group who consider themselves as more tense, sadder and less successful as compared to the normal group. Psychiatric patients with first admissions had a significantly higher self-concept than those admitted for the second or more times (Mojdehi, 1973). The perception of self by first admission psychiatric patients and those closely involved with them differed in areas like degree of illness, communication and disturbed behaviour. The two groups manifested no difference as far as the ideal was concerned (Kennard, 1974). In another study, Melges (1971) found that change in self-esteem is dynamically related to changes in future outlook and suggested that low self-esteem may be treated by influencing attitudes toward the personal future. However, Kamano and Crawford (1966) remark that the scales failed to differentiate suicidal from non-suicidal subjects.

After reviewing the scale and related studies Wylie (1974) concludes that almost 2/3rds of studies have used only one scale i.e. good-bad to represent the evaluative factor. She states that the available studies cannot be utilised to explore the construct validity of the scales. Also, according to her the tool is "based on a rationale and procedure not ideally applicable to self-concept measurement". Burns (1979) advises potential users of this instrument to use factor analysis in order to determine whether their scales represent the evaluative dimension.
The Hilden's Q Sort (1958) is another set which is used frequently. Words of a particular level of difficulty and suitable for formulating statements of human reaction were drawn from Thorndike Century Senior Dictionary. Thus 20 sets of fifty items were drawn with the aid of a table of random numbers, the equivalence of which was checked empirically.

A test-retest reliability of .83 between self-ideal correlations for sets 14 and 15 is reported by Gildston (1967). The correlation of the Hilden's set (unspecified) with the 100-item BHQ is .65 with the 80-item BHQ is .69 and with IAV is .66 (Shlien, 1961).

There are certain studies which throw light on the construct validity of this 'Q' sort. Hilden's Q sort has been used in an attempt to measure psychological maladjustment by Chase (1957). The self-ideal congruence was greater in patients with no psychiatric difficulties (who were hospitalised in surgical wards) than psychiatric patients (psychotics, neurotics and personality disorder). Mannasse (1965) found that the hospitalised chronic schizophrenic group had a higher self-regard than the non hospitalised group. Downing and Hickels (1965) using Hilden's Q sort with a few modifications found that patients from a university psychiatric clinic had lower, more variable actual-self scores and higher, less variable, ideal-self
scores than medical clinic patients.

A post therapeutic increase in self-ideal congruence is noted by some researchers (Baymurr and Patterson, 1960; Hansen, Moore and Clarkuff, 1968).

Wylie (1974) has commented that social desirability aspects are not given sufficient consideration in tool development. Hence items from Marlowe-Crowne Social Desirability Scale were included in the present study. Information regarding this tool is given below.

**MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE (MC-SDS)**

- Crowne and Marlowe (1960).

The Marlowe-Crowne Social Desirability Scale (MC-SDS) was devised by Crowne and Marlowe (1960). An initial item pool of fifty items were derived from various personality inventories and submitted to 10 judges. The judges were instructed to score each item in the socially desirable direction. Thirty six items which had unanimous agreement and 11 items with 90% agreement constituted the preliminary form of the scale. To eliminate pathological item content, the items were again submitted to 10 judges. The preliminary scale was then administered to 76 students. After an item analysis, 33 items were selected for the final form. The internal consistency coefficient and test-retest correlation was .88 and .89 respectively.

The correlation between the MC-SDS and Edwards Social
Desirability Scale was .35. The MC-SDS correlated positively with the validity scales and negatively with the most of the clinical scales of MMPI.

An internal analysis of the MC-SDS led to the construction of three homogeneous short form versions (Strahan and Gerbasi, 1972). The authors recommend the use of still shorter and reasonably parallel forms of MC-SDS I and MC-SDS II (each form consisting of 10 items) when the administration time is highly limited. Reynolds (1982) developed three short forms of 11, 12, and 13 items and suggested that the 13 items form is a viable substitute for the regular 33 item MC-SDS scale.

Milham (1974) hypothesised that MC-SDS had two components, namely attribution and denial. Ramanaiah, Schill, and Leung (1977) found evidence for this hypothesis through a common factor analysis of the intercorrelation of the MC-SDS items.

The other most frequently used Social Desirability Scale is the Edward Social Desirability Scale (Edward, 1957).

**INVENTORY OF THE SELF-CONCEPT**

- Sherwood (1962)

The Inventory of Self-Concept by Sherwood (1962) attempts to measure the discrepancy between actual and aspired self on several 'Identity dimensions'. Each of these dimensions is weighed according to its importance in determining the respondent's overall self-concept. The resulting
score is an approximate index of self-esteem or self evaluation.

This measure of self was used by Sherwood in an attempt to develop the self identity theory proposed by Miller (1963). Several derivations of this theory were tested in the laboratory context with a sensitivity training group. The subjects were 68 adults attending the 2 week sessions. In this setting changes in identity and self-esteem were expected within a short period, which could then be correlated with pressure and information from a referent public.

The inventory consists of 26 labelled bipolar dimensions, and three to be labelled by the respondent. Each has eleven spaces between poles where checks can be placed. Two marks were made on each scale, an x for actual or present self and an 0 for 'aspired' self. Importance ratings were obtained by having the respondent place the number of each dimension on a line indicating its significance for his total self-evaluation.

The test-retest reliability over a 2 week period yielded correlation coefficients as follows:

<table>
<thead>
<tr>
<th>Measure</th>
<th>T-group (Experimental)</th>
<th>Student group (Control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspired self identity</td>
<td>.62</td>
<td>.84</td>
</tr>
<tr>
<td>Self identity</td>
<td>.61</td>
<td>.82</td>
</tr>
<tr>
<td>Importance</td>
<td>.55</td>
<td>.78</td>
</tr>
<tr>
<td>Self evaluation discrepancy</td>
<td>.47</td>
<td>.75</td>
</tr>
</tbody>
</table>
Only face validity was claimed, but a large number of predictions derived from self identity theory were confirmed, thus suggesting that the measure has promising construct validity.

According to Crandall (1973), though this inventory is - not strictly speaking, a semantic differential in the Osgood tradition, it is similar enough.

**ROSENBERG’S SELF ESTEEM SCALE (RSE)**

- Rosenberg (1965)

Rosenberg (1965) made an attempt to achieve a unidimensional measure of global self-esteem on the Guttman model. The scale was constructed for the use of adolescents. However adults were used for validation work. Preliminary analysis of Rosenberg's items included in adult surveys by the Survey Research Center (Crandall, 1973) suggest that they are fit for use with adults. Hence this tool is included with other tools on adults.

The scale consists of 10 statements, 5 of which are phrased positively and 5 negatively to control for acquiescence response set. The items are rated on a 4 point scale. Silber and Tippet (1965) obtained a 2 week test-retest reliability of .80 for a group of college students.

According to Wylie (1974) face validity of the tool has been established. A number of factor analytic studies on RSE are reported in the literature. Kaplan and Pokorny (1969) obtained two factors, the first of which was labelled
as self-derogation and the second reflected a posture of conventional defense. Kohn (1969) in his study arrived at 9 similar factors. Hensley and Roberts (1976) also arrived at two factors in their study, the first one loaded on positive self-appraisal items and the second on the negative items — not similar to that of Kaplan and Pokorny. Hensley (1977) found that when only college students were used for the analysis only one factor emerged, reflecting the unidimensional nature of the scale, whereas when only adults were used for analysis (Dobson, Goudy, Keith and Powers, 1979) two factors emerged. The authors caution against the use of this scale with adults when a unidimensional measure of self-esteem is required.

Evidence for convergent validity but not much for discriminative validity is shown in Silber and Tippet's (1965) study. Pointers towards construct validity is seen in a few studies. Those who were rated with low RSE scores were more often rated as gloomy and frequently disappointed in a study by Rosenberg (1965). Depressive affect was significantly associated with low RSE scores. In the New York group (Rosenberg 1965) and in Kaplan and Pokorny's (1969) study using self-derogation scales, low self-esteem was significantly associated with a larger number of psychosomatic symptoms.

Evaluating this scale, Wylie (1974) comments, "...... construct validity of the scale is quite vulnerable to deliberate distortion and such distortion may artifactually..."
inflated some of the validity relevant findings. She also feels that the factorial structure is complex and that the convergent and discriminant validity of the tool must be explored using multitrait - multimethod and other techniques. Burns (1979) feels that care should be taken with the scoring of the scale as it is somewhat confusing.

However the scale has certain meritorious aspects, such as an attempt to arrive at an unidimensional measure of self-regard, control of acquiescence response set, its brevity and the relative ease with which it can be administered (Wylie, 1974).

**ADJECTIVE CHECK LIST (ACL)**

- Gough and Heilbrun (1965)

Gough and Heilbrun (1965) do not purport ACL to be mainly a self-concept measure. However it has been used by several investigators as indicative of self-concept. The ACL can be used for self description - "...... to characterise the ideal-self, a future or past self, a legendary personage, ........ a belief, a theory or almost anything" (Gough and Heilbrun, 1980).

One hundred and seventy one items derived from Allport's 17,953 trait descriptive items (Cattell, 1943, 1946) along with certain words that described personality from various theoretical view points formed the initial pool of items. The final scale comprised of 300 adjectives and 37 scales. Of these self favourability and self
unfavourability scales are comparable with their scales measuring self-concept (Burns, 1979). The manual provides separate tables for subjects who fall into each of the four different ranges of total number of adjectives checked and one determines the subject's standard scores for self favourability (fav) and unfavourability (unfav) in the appropriate norm table. The authors claim that acquiescence could have a disproportionate effect on the ACL scales as the respondents are free to check any number of items. Social desirability response bias as indexed by Edwards Scale is relatively inconsequential. However Wylie (1974) disagrees with these claims.

Alpha coefficients ranging from .91 to .95 and test-retest coefficients ranging from .60 to .85 is reported for the fav. and unfav. scales.

The ACL scales when subjected to principal component analysis and varimax rotation, yielded 6 factors (Gough and Heilbrum, 1980). Parker and Megargee (1967) subjected the scales to 3 factor analysis, 2 involving self report data. All three matrices yielded the same factors (4 in number) thus questioning the discriminant validity of the scales. The results of the Miller, O'Reilly, Roberts and Folkins's (1978) study was congruent with the above study, in that 4 factors emerged and the factor structure remained stable over an year's interval. Small and Batlis (1978) arrived at five factors in their study, the structure being the same under different instructional
sets (self and ideal ratings). The entire 300 item pool was factor analysed by Parker and Veldman (1969) resulting in seven major orthogonal factors. The findings did not correspond to the scale scores of Gough and Heilbrun (1965).

On the basis of their study utilising the ACL, on MMPI defined clinical samples (61 male and 119 female) Lazzari and Gough (1980) conclude that "..... description of the real self appears to be related systematically and meaningfully to psychiatric status". However, Moudgil (1968) found no significant differences between schizophrenics and normals in their perception of self and ideal self.

Wylie (1974) criticises the instrument by asserting that reliability information is vague and information regarding discriminant and convergent validity is either absent or discouraging. Different scoring systems suggested by Gough (1960) and Gough and Heilbrun (1965) renders comparisons among researches difficult. However, Small and Batlis (1978) comment that "..... the Adjective Check List is not only a reliable device but also one with considerable utility".

The Tennessee Self Concept Scale developed by Pitts (1965) consists of 100 self descriptive statements to assess self-concept. The original pool of items were derived from the literature and the self descriptions of patients and non-patients. Half of the items are phrased positively
and half negatively to obviate acquiescence. The items utilised in this scale were evaluated rationally by seven clinical psychologists. Two scoring systems have been devised for the scale, i.e., a counselling form and a clinical research form. The responses are scored according to a two dimensional classification scheme. In the counselling form one dimension represents five aspects of the self, which are physical self, moral ethical self, personal self, family self, and social self. The other dimension represents identity, self satisfaction and behaviour.

The clinical research form contains additional scores such as true/false ratio, net conflict scores and total conflict scores. In addition there are six empirical scales consisting of the defensive positive scale, general maladjustment scale, psychosis scale, personality disorder scale, neurosis scale and personality integration scale. Finally a Number of Deviant Signs (NDS) score is derived. According to Pitts (1965) NDS score is the scale's best index of psychological disturbance, identifying individuals with about 80% accuracy

Pitts (1965) claims a .92 reliability coefficient over a two week period for the total self-concept score.

There are claims for an adequate content validity of the tool. However conflicting results have been reported on the basis of factor analytic work conducted on the TSCLS. Vachiano and Strauss (1968) reported 22 factors, the findings
of which concurred with the construct of self-concept as delineated by Pitts (1965). Whereas Pound, Hansen and Putman (1977) concluded that one general factor accounted for the majority of the explainable variance. Bertinetti and Fabry (1977) arrived at 9 factors which lent support to 7 of the 9 constructs proposed by Pitts (1965). Rentz and White (1967) found that five major dimensions of the self in the scale were aspects of only two independent factors. Gable, Lasalle and Cook (1973) and Boyle, Larson (1981) found evidence supporting the external but none for the internal dimension. Levin, Karn and Frankel (1978) concluded from a inter-correlation matrix that TSCS is a 2 faceted instrument (internal and external dimension). The findings of Fitz-gibbons and Cufler (1972) which yielded 20 factors from their analysis of psychiatric patients did not concur with the findings of Pitts (1965). Bolton (1979) in his factor analytic study of 12 TSCS subscales and 8,16 PF secondaries concluded that the most important personality dimension underlying TSCS is good adjustment, positive self evaluation, and emotional stability.

There are certain studies which may be construed as relevant to the construct validity of the TSCS. Pitts (1965) gave evidence for the discriminative capacity of the TSCS in distinguishing between the patient and non patient groups. While studying different groups of neurotics (N-122) he found that EDS was the most deviant score in them and that they had low self-esteem in general. Examining the TSCS profiles of psychotic patients (N-280) he found that
their self-concepts were negative, particularly in terms of identity, behaviour and physical self. However they sometimes considered themselves as superior, more desirable and impressive than others. He considered this to be a frantic effort towards self deception. The scale, according to him is successful in discriminating between specific diagnostic categories and degrees of impairment (Pitts, 1972, IV), studies by Marx (1978), Shetty and Sathyavathi (1977), Mathews and Conway (1980) Zolfaghari (1982) and Owen (1979) revealed that the overall self-esteem of the patient group was significantly lower than the normal control group. When pre and post therapy assessments were made using TSCS, an enhancement of self-concept was noticed (Ashcroft and Pitts, 1964).

Reviewing the scale, Bentler (1972) comments that the scale suffers from two major and 'fatal defects'. The first is the lack of information regarding the internal structure of the scale, and the second refers to the 'high degree of overinterpretation relative to the data base'. Another shortcoming pointed out by him is that there are no reports on the internal consistency of the scale. Wylie (1974) brings to light the difficulties in establishing discriminant validity due to the pervasive item overlap among scales. Crites (1965) queries "....... What are the particular advantages of this instrument over its long line of predecessors, e.g., the 'Bills Index of Adjustment and values, the various published Q sorts etc.'
Conversely, Suinn (1972) feels that despite its drawbacks, the TSCS is useful, "... as a means of screening clients for pathology". He concludes by saying that, "In all, the TSCS offers great potential as a promising clinical instrument".

**PERSONAL ORIENTATION INVENTORY (POI)**

- Shostrom (1966)

"Over the past 15 years the empirical investigation of self actualisation has been dominated by a single measuring device, the Personal Orientation Inventory (POI)" (Forest and Sicz, 1981). Shostrom (1966, 1974, 1980) constructed the POI to measure values and behaviour based on Maslow's theory of self-actualisation. It consists of 150 paired choice items. The content of the scales is based on value judgement problems identified by psychotherapists over a five year period. The POI consists of two major scales, Time Competence and Support. The other ten subscales are (1) Self Actualising Value (2) Existentiality (3) Feeling Reactivity (4) Spontaneity (5) Self Regard (6) Self Acceptance (7) Nature of Man (8) Synergy (9) Acceptance of Aggression and (10) Capacity for Intimate Contact.

Klavetter and Mogar (1967) report test-retest reliability coefficients ranging from .52 to .62 for all the scales over a one week interval. Wise and Davis (1975) report test-retest coefficients of .75 and .88 over a two week interval for Time Competence and Support Scales respectively. Icardi and May (1968) report test-retest
coefficients ranging from .32 to .74 over a 50 week interval. The internal consistency estimates as reported by Schafer and Jones (1977) range from .34 to .84 for all the scales.

Factor analytic studies by Silverstein and Fisher (1968) and Tosi and Hoffman (1972) yielded 3 similar factors in both the studies. In a subsequent study by Lorr and Knapp (1974), factor analysis yielded 15 factors of which only 10 were interpretable. The authors concluded that the factors were quite complex. On the basis of the Self Actualising Value scale Wright and Wyant (1974) arrived at 9 factors, of which 5 factors corresponded to components of Maslow's self-actualisation theory. Goodstein and Dollar (1978) comment that the pervasive item overlap among subscales "precludes any meaningful factor analytic investigations".

A number of studies have shown POI scores to be negatively related to neuroticism (Knapp, 1965) and pathology (Shostrom and Knapp, 1966), positively related to emotional stability (Knapp, 1965; Knapp and Comrey, 1973) and to self-concept (Russell, 1974; Wills, 1974). Mattocks and Jew (1974) reported a positive relationship between self-actualisation and the concept of a well adjusted person. Studies have also shown POI to discriminate between actualising and non-actualising individuals, and between actualising and hospitalised psychiatric patients. (Shostrom 1964; Fox, Knapp and Michael, 1968). Walker (1977) found that the student group studied by him did not reach the self
actualisation range defined by Shostrom. The vast data that has been accumulated on POI has been compiled by Knapp (1976).

Coan (1972) states that there appears to be no construct validity data, for the subscales of POI and also criticises the wording of the statements in an absolute form. Raanan (1973) refers to the 'transparency' effect where studies have reflected that the profiles in the 'fake good' condition were not representative of self actualised individuals. Details regarding the cultural bias of POI are not mentioned in the manual. Tosi and Lindawood (1975) opine that the number of scales could be reduced and that the item overlap poses a serious problem. However Bloxom (1972) feels that this problem could be alleviated if only the two major scales were used by themselves. To quote Raanan (1973) "POI, may provide an interesting focus for a therapeutic intervention but would be of extremely limited value as either a diagnostic or research instrument".

Shostrom (1975) as cited in Forest and Sicz (1981) developed a new measure of self-actualisation called the 'Personal Orientation Dimensions (POD)' consisting of 13 scales with 20 non overlapping items, in each scale. Test-retest coefficients for the scales ranged from .53 to .79 over a one week period. Correlations between POI and POD (similar scales) ranged from .50 to .70 (Knapp and Knapp, 1978). A positive significant relationship of self-actualisation (POD) to emotional health was reported by Jansen,
Knapp and Michael (1979), Bonk, Knapp and Michael (1978) report that POD was sensitive to changes following a counsellor training program, thus giving support to the construct validity of the tool. However, Forest and Sioz (1981) feel that a number of 'defects remain uncorrected', like low reliabilities, wording of the items and number of scales. They point out that a number of items of POI appear in the POD (around 76%) wherein the problems of POI may resurface in POD. A major drawback in the use of POD is that the POD answer sheets are to be forwarded to Educational and Industrial Testing Services for scoring, which increases the cost of research.

A short measure of self-actualisation consisting of 15 items was devised by Jones (1980). The author claims it to be a reliable and valid measure.

INTERNAL-EXTERNAL SCALE (I-E Scale)

- Rotter (1966)

The Internal-External Scale (I-E scale) was developed by Rotter (1966) to measure individual differences in a generalised belief in internal-external control. According to the author the James-Phares scale used to measure the construct of internal-external control was expanded by Liverant, Seeman and Rotter to include items relating to various areas like achievement, affection, general, social and political attitudes. The initial version of the scale comprised of 100 forced choice items. The scale was item analysed and
factor analysed and reduced to 60 items by Liverant.

A further item analysis of the scale by the author revealed that "...... the subscales were not generating separate predictions". Hence, those items measuring more specific areas were omitted, and administered to a large group of subjects. Such of those items correlating highly with Marlowe-Crowne Social Desirability Scale were eliminated and the scale was reduced to 23 items. The final version of the scale consisted of 29 items (forced choice) including 6 filler items.

The author reports relatively stable internal consistency estimates for the scale ranging from .65 to .79. Test-retest reliability coefficients ranged from .49 to .83 (over a range of 1 to 2 months).

A factor analysis of the scale yielded one general factor covering the major part of the variance.

A number of investigators have attempted to show that the locus of control beliefs are not homogeneous, and have challenged Rotter's (1966) assumption that it measures one unidimensional bipolar factor. That locus of control construct is multidimensional has been proved by several investigators through factor analytic studies (e.g., Gurin, Gurin, Lae and Beattie, 1969; Mirels, 1970; Joe and Jahn, 1973; Collins, 1974; Viney, 1974; Procuik, 1977).

There is evidence showing that Rotter's Internal-External item pairs do not constitute the opposite end of a
bipolar dimension (Klieber, Veldman and Manekar, 1973). When the items were split and the external and internal choices were used separately in a Likert format 3 factors emerged i.e., (1) external items referring to chance or luck, (2) external items referring to nonluck, and (3) non luck items. Lefcourt (1984) points out that several investigators are constructing goal specific locus of control measures, e.g., Paivina and Christie (1981) have constructed scales that are concerned with each of 3 spheres (1) non social environment (2) social environment (3) larger political milieu.

COOPERSMITH SELF ESTEEM INVENTORY (SEI)

- Coopersmith (1967)

The Self Esteem Inventory (SEI) (Coopersmith, 1967) was developed in conjunction with an extensive study in children. The SEI is extremely popular and has been widely used in individual assessments, classroom screening, programme evaluation and for clinical and research purposes. Most of the research work and published information is with regard to the School Form and the School Short Form for children. The Adult Form consisting of 25 items was adapted from the School Short Form (Coopersmith, 1981). This form is used with persons aged sixteen and above. The correlation of total scores on the School Short Form and the Adult Form exceeds .80 for three samples of high school and college students (N=647). Currently very little information is available with regard to research on the Adult Form.
SELF SOCIAL SYMBOLS TASK


Long, Henderson and Ziller (1970) employed a nonverbal topological representation in their measure entitled the Self Social Symbols Task. The assumption underlying this task is that individuals are able to communicate various aspects of their self-concepts and their self social interactions by topological representation. The self relevant constructs measured are 1) Self-esteem, 2) Social interest 3) Identification, 4) Egocentricity, 5) Power, 6) Complexity 7) Individualism, 8) Realism, 9) Preference.

Self-esteem refers to the importance attributed to the self in comparison with others. In order to study the various constructs, circles representing self or others are used. For e.g., the subject is required to choose a 'self circle' from a vertical or a horizontal line of 6 circles. Self-esteem is inferred from the position of the self circle chosen.

Split-half reliability for Horizontal Self-esteem for different samples as given by the authors range from .53 to .80. A test-retest reliability of .54 is reported.

As evidence for construct validity Long, Henderson and Ziller (1970) cite a number of studies where the circle position was indicative of self-esteem. Ziller and Grossman (1967) while studying neuropsychiatric patients found that they had higher self centrality; but lower self-esteem,
social interest and identification with others, as compared with the normals.

Wylie (1974) and Burns (1979) point out that the authors allude to the ideas of many theorists, which are vague and incomplete. They also contend that convergent and discriminant validity find little support in this instrument and need to be researched upon extensively. Froehle and Zerface (1971) assert that several factors other than self-esteem may determine the arrangement of circles. However the authors claim that this tool proves useful with subjects who may not be very articulate with regard to their self conceptions and also that social desirability will have little or no effect of their responses. According to Burns (1979) "...... it is an unusual, simple and ingenious method, and its potential warrants its being investigated and refined further".

**ADJECTIVE GENERATION TECHNIQUE**

- Allen and Potkay (1973)

Another technique useful in providing a phenomenological perspective is the Adjective Generation Technique used by Allen and Potkay (1973). The subject is required to give five adjectives that best describe him/her. The adjectives thus generated are then compared with a set of 355 adjectives previously judged in terms of their favourability on a seven point scale (Anderson, 1968). Allen and Potkay (1973) provide another list of 1,700 adjectives,
ratios of which act as weights for the adjectives generated by the subject. A mean score calculated provides a measure of the favourability of the subjects self description. A test-retest reliability of .41 over a 2 week period and .74 over a 'longer period' is reported by the authors. In terms of construct validity a correlation of .40 was produced with the self-regard subscale of POI (Shostrom, 1966).

**TEXAS SOCIAL BEHAVIOUR INVENTORY (TSBI) - An Objective Measure of Self-esteem.**

- Helmreich and Staff (1974).

In 1969, Helmreich, Staff and Ervin commenced the development of the Texas Social Behaviour Inventory (TSBI), an objective measure of self-esteem which was completed by 1974. The original item pool was reduced to 32 items on the basis of factor and item analysis. Items dealt with aspects of personal worth and social interaction. Each item has five response alternatives.

The authors claim that the scale is almost orthogonal for males to the Marlowe-Crowne Social Desirability Scale (Crowne and Marlowe, 1960) and shows a modest although significant correlation (r .32) for females.

A factor analysis of the scale yielded one large factor, and with an oblique rotation, resulted in four factors for males - confidence, dominance, social competence, and social withdrawal. For females the factors were confidence,
dominance, social competence and relations to authority figures. The authors also claim that the TSBI has proved effective in predicting interpersonal attraction in laboratory studies.

To arrive at a shorter version the scale was split into 2 parallel forms with 16 items in each. (TSBI - A and TSBI - B) Both the forms correlated highly (TSBI - A .973 for males and .974 for females, TSBI - B .973 for males and .977 for females) with the original scale. Factor analysis of the two scales, yielded factor structures similar to those obtained in the original scale. The TSBI is effective in predicting interpersonal attraction in laboratory studies (Helmreich, Aronson, and Lefan, 1970; Kimble and Helmreich, 1972).

NOWICKI-STRIKLAND INTERNAL-EXTERNAL CONTROL SCALE


In an effort to overcome some of the shortcomings of the existing locus of control scales, Nowicki and Duke (1974) developed the Nowicki-Strickland Internal-External Scale for adults. The scale comprising of 40 items to be answered yes or no based on the Nowicki-Strickland Internal-External Control Scale for children. The items were constructed with a view to make them comprehensible for subjects with a 5th grade reading level.

The authors report a split-half reliability ranging from .74 to .86 and test-retest reliability of .83 over a six week period.
Support for the discriminant validity of the scale comes from the fact that the scores are reportedly negatively related to social desirability or intelligence test scores. As a support for the construct validity of the scale, significant correlations were found between the scores of this scale with Rotter's I-E Scale. The scale was also found to be successful in differentiating the hospitalised schizophrenics from the hospitalised nonpsychotics and staff workers.

**INTERNAL-EXTERNAL SCALE (I-E Scale)**

- Levenson (1974)

A revision of the Rotter's I-E Scale by Levenson (1974) resulted in the construction of three new scales of 8 items each, namely, Internal, Powerful Others and Chance (I, P, C) to be answered on a Likert format. They measure belief in chance expectancies as separate from powerful others orientation. Item analysis of the scales with several pretest groups indicated that all the items in the three scales, were successful in distinguishing between high and low scores.

Internal consistency estimates were .64, .77 and .78 while test-retest reliabilities over a one week period were .64, .74 and .78 for the I, P and C scales respectively.

The items of the three scales were subjected to factor analysis and three main factors were identified i.e., I, P and C giving evidence for validity of the scales.
A Measure of Self-Esteem

- Good and Good (1975)

For the use of adult and adolescent population Good and Good (1975) devised a Measure of Self-Esteem, employing essentially the same definitions as that of Coopersmith (1967). The initial item pool consisted of 32 items written by the authors, with true/false as the response categories. The scale was administered to a sample of 158 undergraduate students. After an item analysis 5 items were dropped because of their poor item total correlation. The remaining 27 items were subjected to another item analysis. A split-half reliability coefficient of .81 is reported by the authors.

The Personal Attribute Inventory (PAI)

- Parish, Bryant and Shirazi (1976)

The personal Attribute Inventory was constructed by Parish, Bryant and Shirazi (1976) as an evaluative-affective measure. The inventory comprises of 50 positive and 50 negative adjectives from Gough's (1952) Adjective Check List (ACL). The subjects are required to select 30 adjectives which are most descriptive of themselves.

The authors report test-retest reliabilities of .90, .94, .95 on three occasions over a one week period.

Criterion-related validity with Westie Scale was .46 and with the Evans check list it was .55 and .66 respectively.
When PAI and ACL were administered to a sample of 100 subjects, significantly high correlations at .001 level were found between the PAI and the Favourablity (r .65) Unfavourablity subscales (r .77) (Parish and Bads, 1977). The authors claim that this study offers evidence for considering PAI as a reliable and concurrently valid measure of self-concept. According to them, since PAI is intended to assess evaluative responses it may be a better measure of self-concept than the Favourablity and Unfavourablity subscales of the ACL since the intended objective of both instruments is to ascertain one's evaluation of oneself. However they state that further research may be needed regarding the utility of the PAI as a self-concept scale.

**INTER OUTER SELF ESTEEM SCALE**

- Shea (1977)

To determine whether there were two dimensions, i.e., outer and inner (Franks and Marolla, 1976) of self-esteem Shea (1977) devised a scale comprising of 36 items. All the items in the scale were subjected to factor analysis yielding 5 factors. Since it was postulated by the author that the inner and outer dimensions would be correlated, the 5 factors retained were rotated by a promax solution to oblique structure. The 5 factors accounted for 51% of the total variance. Of the 5 factors, 2 were found to be clearly interpretable following the promax rotation. On the first factor, six items loaded positively and four items
loaded negatively. This was defined as the 'outer self-esteem'. The third factor was defined by four items which loaded negatively and seven items which loaded positively as an 'inner self-esteem' factor. Thus nine items that best defined the outer source factor and eleven items that best defined the inner source factor were scored for each subject.

Reliabilities computed by the Kuder - Richardson formula were .86 for the outer scale and .87 for the inner scale, and .90 for the two combined scales. A correlation of .56 between the two scales revealed a moderate degree of relationship between inner and outer scores.

According to the author, construct validity for the two scales was indicated first by a self rating by subjects. Thirty subjects were asked to rate their level of self-esteem by checking one of seven possible responses ranging from very low to very high. The correlations between this measure and outer and inner scales were .70 and .77 respectively. An additional indication of construct validity was the relationship between both scales and the stability scale, as stability or anxiety has traditionally been associated with self-esteem. (Coopersmith, 1967). Correlations were .47 and .43 for the inner and outer scales respectively.

The author states that more evidence would be needed to show that the scales actually measure sources of self-esteem, and that a distinction can be made between source and level of self-esteem.
The Personal Opinion Survey (POS) was developed by Coan and Fairchild (1977) to assess various aspects of the experience of control. According to them "This experience - the sense that one actively chooses, successfully wills, or achieves mastery over himself and the circumstances in which he finds himself - is obviously one of the most fundamental features of human awareness".

An initial inventory of 130 true - false items was constructed covering a wide range of content areas. This inventory was subjected to factor analysis, resulting in 18 factors. Subsequently, a second inventory was devised which included highly loaded items from the initial inventory as well as freshly constructed items. It was administered to 100 subjects and the data were subjected to item analysis. Based on this analysis certain items were retained and combined with certain additional items and were subjected to another item analysis. Finally, the items from a third item analysis were subjected to factor analysis which yielded such factors. They are, (1) Achievement through conscientious effort, (2) Personal confidence in ability to achieve mastery, (3) Capacity of mankind to control its destiny vs. supernatural power or fate, (4) Successful planning and organisation, (5).Self-control over internal processes (6) Control over large scale social and political events, (7) Control in immediate social interaction. These seven factors constituted the seven scales of the inventory amounting to 120 items.
The authors report test-retest reliability coefficients ranging from .67 to .83 over a 3 month interval for all the scales.

Coan and Fairchild (1977) report that research thus far, using this tool has revealed a tendency for its scales to be positively associated with variables involving emotional control and negatively associated with variables suggesting anxiety, distress or emotional sensitivity.

**SELF ESTEEM QUESTIONNAIRE**

- Watkins (1978)

Watkins (1978) added a new dimension to the construction of self esteem scales by taking into consideration, the value or salience of the items in determining the overall self-conception. According to Wylie (1968) "Summing implies that each item has equal salience for the subjects self-regard, a most questionable and unsupported assumption". Thus in the development of the instrument, eleven areas like social, religious, health, leisure and so on, based on Moore's data was considered. The subjects were asked to rate the importance of these eleven life areas on a 5 point scale and themselves on each area. Self-esteem was then calculated using a formula.

A pilot self-esteem questionnaire SE (Q) of 52 items was prepared using responses to Moore's question as a guide. After an item analysis, 18 items constituted the final SE(Q). A test-retest reliability of .50 over a period of 8 weeks
for SE (R) and for SE (Q) an internal consistency coefficient of .64, test-retest reliability of .86 over a 3 week period was reported.

In considering the validity of the tool, results show that social desirability (SD) is significantly related to responses on SE (Q) (r = .73 with SD scale). By the use of multitrait-multimethod analysis, convergent validity was established, but not discriminant validity. Factor analysis of SE (Q) yielded two factors i.e., evaluation of ones (a) social relationships (b) abilities, thus disproving SE (Q) as a global measure. A revised SE (Q) of 13 items was finally prepared based on the above results.

SELF-GOAL-OTHER DISCREPANCY SCALE (MSGO)
- Miskimins (1979)

The Miskimins Self-Goal-Other Discrepancy Scale (MSGO) was devised by Miskimins (1979) for measuring self-concept. The three letters S, G, and O refer to the Self-concept (SC), the Goal Self Concept (GSC) and the Perceived responses of others (PRO) respectively. According to the author, "Operationally the self-concept takes the form of the constellation of actional and verbal behaviours which persons direct towards themselves". Similarly, "... the Goal Self Concept takes the form of the constellation of actional and verbal behaviours which persons direct towards themselves as they would like to be". The perceived responses of others according to the author, "... takes the form of the constellation of actional and verbal behaviours which persons
direct toward themselves as they feel others view them" (Miskimins, 1979).

Two forms of MSGO were developed. MSGO I is used for self or large group administration. This form is applicable for the older and well adjusted individuals because of the complexity of the format. The MSGO II is more appropriate for younger subjects, the educationally disadvantaged and those with psychological impairment.

MSGO I has 20 items, as a result of an item analysis. The scale has five general, five social, five emotional items. Along with the above there are five personal items where the subjects are required to provide their own constructs and make the ratings. Each item consists of three nine point scales labelled SC, GSC and PRO with two polar constructs at each end. In addition the subjects are required to provide their own constructs and make the ratings. A number of discrepancy scores are derived using three aspects of the self and 4 categories of items. MSGO II consists of 16 items, 4 in each category.

The test-retest reliability coefficients for 38 selected MSGO I variables ranged from .24 to .87, the most reliable aspect of the scale being the total discrepancy score (r = .87).

The 38 discrepancy scores from MSGO I were subjected to factor analysis with orthogonal rotation yielding seven factors. The first 4 factors were used due to their considerable representation. The factors provide evidence for
the sound internal structure and construct validity of the tool.

The discrepancy scores on MSGO, especially the SC-GSC emerged as the highest predictor of anxiety. From the correlations with MMPI, it is clear that MSGO I reflects to some extent the psychopathology as measured by MMPI, especially in the scales of depression, psychasthenia, schizophrenia and social introversion.

There are several studies which give added support to the construct validity of MSGO. MSGO successfully differentiated the psychiatric patients from the normals on 19 of the 28 variables. The tool was efficacious in discriminating patients with various degrees of psychopathology. Miskimins (1967) found that neurotics were characterised by high Self Goal discrepancy and schizophrenics by high Self Others and low Self Goal discrepancy. Miskimins, Braucht (1971) studied the relationship between various self-concept configurations and a large number of psychiatric symptoms in psychiatric patients. MSGO yielded five factors. Factor I was related to self ideal discrepancy and all symptoms suggestive of neurosis. Factor 2 was associated with superior intelligence, high general information and no depressive thoughts. Factor three was associated with no delusional thought, good organisation and no impairment of effectiveness. Factor 4 was related to symptoms suggestive of psychosis. Factor 5 was related to regression, delusion, hallucination and inappropriate behaviour. Berry and Miskimins (1972) in
in their study indicate a relationship between MSGO and length of hospitalisation. In another study by Wilson, Braucht and Miskimins (1971) suicide attempters were characterised by high total tension and discomfort, high self-goal discrepancy and high self other discrepancy.

The author on the basis of research evidence claim that the validity of MSGO I and also MSGO II is well established.

**THE SOCIAL SELF ESTEEM INVENTORY**

- Lawson, Marshall, McGarth (1979)

An attempt was made by Lawson, Marshall and McGarth (1979) to develop a scale which was more situation specific as against the several tools which are global in nature. The initial item pool for the Social Self Esteem inventory consisted of 76 items. The items in the scale had 6 response alternatives. The scale was administered to a sample of 265 subjects. The data were subjected to a factor analysis followed by varimax rotation. The analysis yielded a weak, general factor covering 23.4% of the total variance, and a number of unique factors. The data were then subjected to and iterative item - total correlation analysis to effect 'factorial purification'. Only those items exhibiting the highest correlations were retained. The scale finally consisted of 30 items, balanced for bias towards affirmation or negation. A factor analysis performed on 30 of the items of the scale yielded a general factor which covered 39.7% of the variance.
Test-retest reliability was computed for all items over a 4 week period and the coefficients ranged from .33 to .88.

**PERSONALITY INVENTORY**

- Altman and Wittenborn (1980)

Altman and Wittenborn (1980) studied formerly depressed and remitted patients. Hundred and thirty four self-descriptive statements thought to characterise the depression-prone personality were administered to 88 remitted formerly depressed depressed women, and 88 normal controls matched on several variables. It was found that 62 items of 134 discriminated the above two groups. Five factors emerged when those 62 items were subjected to factor analysis of which low self-esteem was one factor.

Cofer and Wittenborn (1980) included 35 self discrep-tive items along with the 15 marker items which discriminated significantly between the two groups in Altman and Wittenborn's (1980) study and administered them to a group of remitted depressives and normal subjects. All the 15 marker items and 14 of the 35 new items discriminated the two groups significantly. When the data was subjected to factor analysis, 3 factors emerged and low self-esteem was one of them.

The Personality Inventory used by Zemore and Brettel(1985) had 40 items of which 20 items belonged to the subscale of low self-esteem. The items were from Altman and Wittenborn's
and Coffer and Wittenborn's (1980) studies. All the items were self referent items to be answered on a four point scale.

In order to determine whether the same factors as in Coffer and Wittenborn's study would emerge, Zemore and Brettel (1983) subjected all the 40 items to a factor analysis. The first three factors extracted accounted for 39% of the variance and the factor structure of Coffer and Wittenborn's (1980) was replicated.

**Culture Free Self Esteem Inventory**

- Battle (1981)

The Culture Free Self Esteem Inventory constructed by Battle (1981) contains 40 items and 4 subscales measuring the perception of one's worth. They are (1) General self-esteem, (2) Social self-esteem, (3) Personal self-esteem, (4) Lie scale. Of the 40 items, 8 items belong to the lie scale. The items are divided into two groups: those which indicate high self-esteem, and those which indicate low self-esteem, the response format being Yes/No.

The test-retest reliability quoted by the author for the total sample was .81; and for males and females .79 and .92 respectively. Analysis of internal consistency for subscales revealed .78 for general self, .57 for social self, .72 for personal self and .54 for lie scale. In another study by Ludwig, Blau and Lenihan (1981) internal consistency coefficients computed revealed general self = .76 social self = .20, personal self = .60 and lie = .51.
Except for the social self where the reliability is weaker than what was reported by Battle, all the others are closely comparable.

The author claims adequate content validity. When the items were subjected to a principal component analysis with varimax rotation, only general self and lie subscales could be replicated (Ludwig et al, 1981). The item structures of the personal and social subscales could not be replicated. An analysis of the item response frequencies showed that 3 items had no response variance and 11 items had very poor response variance. The authors attribute this lack of variance to social desirability or the construction of questions. The tool was used by Battle (1981) to study the association between depression and self-esteem. The findings indicated clearly that, as self-esteem increases depression decreases.

Ludwig et al (1981) state that further work is needed before questions regarding reliability and validity can be answered.

SELF-ESTEEM INDEX


The Self Esteem Index, consisting of 12 items, was devised by MacKinnon (1981). The items have a Likert type five point rating scale. Of the 12 items only one item is negatively worded which does not adequately control for acquiescence response set. The author reports a reliability
coefficient (alpha) of .76, and in larger studies it might approach .80.

When the items in the scale was subjected to a principal component analysis with varimax rotation, three factors emerged - (1) a self-esteem component, (2) a feeling of competence component and (3) a stability of self component.

In a study using this tool by Varkey and Sathyavathi (1984) it was found that schizophrenics and manics had a significantly lower self-esteem than normals, whereas in another study, the scale failed to discriminate between a group of neurotics, schizophrenics and normals, (Rajini, 1982). However the neurotic subjects had a significantly lower self-esteem as compared with the normal subjects in a study by Sathyavathi and Thomas (1984).

Other tools that are worth mentioning are (1) Sense of Personal Worth Scale from California Test of Personality (Thorpe, Clark and Tols, 1953), (2) Self Acceptance Scale from California Psychological Inventory (Gough, 1957; Megargee, 1972), (3) Janis and Field Feelings of Inadequacy Scale (Janis and Field, 1959), (4) Low Self Esteem Scale from a self rating Depression Inventory (Hunt, Singer and Cobb, 1967), (5) Barksdale Self Esteem Inventory (Barksdale, 1973; Dagenais, 1981), (6) Self Esteem Scale from Jackson Personality Inventory (Jackson, 1977), (7) The Sliding Person Test, a non-verbal measure of self-esteem (Karmos, 1979; Karmos and Karmos, 1979).
Indian Studies:

Having examined the major tools from other countries, some of the tests in India will be considered below.

Self Acceptance Inventory

- Kakkar (1965)

The Self Acceptance Inventory was developed by Kakkar (1965). The Inventory is comprised of 34 items, adapted from the Self Acceptance Scale of California Psychological Inventory. The author re-designed and standardised the scale, on groups of graduates, post graduate students and secondary teacher trainees.

The inventory was initially tried on 50 secondary teacher trainees and a simple index of discrimination between high scorers and low scorers was arrived at. The inventory is mainly self administered with True/False response alternatives.

The test-retest, split-half, and Kuder Richardson reliability coefficients were .94, .94 and .77 respectively.

The inventory was validated against an independent criterion i.e., a rating scale, yielding a correlation coefficient of .79 for males and .86 for females. The author states that self-acceptance correlates significantly with teaching skill and intellectual efficiency.

The item analysis confirmed that the test items are satisfactory and that they cover a wide talent range. The
author claims that the item correlations are valid and that the test is internally consistent.

PERSONALITY WORD LIST (PWL)
- Deo (1965)

The Personality Word List (PWL) constructed by Deo (1965) consists of 210 adjectives used to assess the perceived self, ideal self and self-ideal discrepancy. Deo and Walla (1966) developed another scale, named Self Concept List (SCL), consisting of adjectives mostly drawn from the PWL. The adjectives were converted into the statement form to render them more comprehensible. The adjectives in the SCL were categorised into 6 dimensions of personality similar to that of PWL (Bhalla, 1968). They are - (1) Intelligence, (2) Emotional adjustment, (3) Social adjustment, (4) Character, (5) Aesthetic, (6) Neutral. There are two types of keys - positive key meant for traits or words which are socially desirable and a negative key for those which are undesirable, as judged by several judges.

Convergent and discriminant validity is reportedly high for different dimensions of personality on PWL and SCL.

SELF RATING INVENTORY
- Sinha and Singh (1968)

The Self Rating Inventory was devised by Sinha and Singh (1968) to measure the self-concept of criminals. An attempt was made to cover a broad range of needs, attitudes,
and behavioural tendencies which were relevant to the criminals. The inventory comprised of 15 items of which five were favourable, 5 social and 5 unfavourable personality traits. The items consisted of 1, 2 or 3 word concepts in Hindi. The different categories of traits were jumbled together. Two separate forms were printed, one for measuring 'private self' and the other for measuring 'social self'. Each subject rated himself on a 5 point scale once on each form with an hour's interval between the two ratings. The frames of reference for making the self rating and instructions were different on both occasions, and each one was designed to yield a different type of self-concept.

Split-half reliability was computed for the private self and social self forms separately. The ratings of 100 non-criminals were used for Spearman Brown-odd-even reliability. The reliability indices were .76 and .72.

On the basis of self ratings under two frames (private and social) two measures namely self-esteem and social esteem were derived.

Results showed that the criminals had lower self-esteem than the normals and criminals also had a strong tendency to perceive themselves as possessing more of undesirable traits.

The criminals had a lower social esteem than non criminals, and believed that others saw more of undesirable traits in them than the non criminals. The criminals also
had more social conflict than the non criminals.

**SELF CONCEPT INVENTORY (SCI)**

- Sharma (1969)

The Self Concept Inventory (SCI) was standardized by Sharma (1969) on the pattern of Bills's IAV. The items were selected from Deo's personality Word List and Bills's IAV. Only those items which were comprehensible by average higher secondary students, unambiguous and effective in differentiating between the subjects were selected. A pretest of these items led to the elimination of certain items and resulted in an item pool of 171 adjectives. The positive and negative connotations of the adjectives were empirically established. The 171 items were reduced to 88 items finally. This form was termed as SCI (X Form). After an item analysis of the SCI (X Form) the final form comprising of 69 items was arrived at.

Test-retest reliability coefficients of .81, .72 and .84 were reported for self-concept scores, self ideal discrepancies and self acceptance respectively (SCI, X Form).

Ten judges (psychologists) were required to identify the adjectives in terms of the following dimensions of self concept i.e., Intelligence, Character, Sociability, Emotionality, and Aesthetic ability, thereby establishing content validity of SCI. The scores on SCI correlated significantly with Deo's Personality Word List, giving evidence for the convergent validity of the tool.
The Central Bureau of Educational and Vocational Guidance (1974) developed the Svata Sambodh Soochi containing 54 items in Hindi. There are three forms namely, real self, social self and ideal self used for purposes of guidance and counselling.

**SELF CONFIDENCE INVENTORY (SCI)**

- Basavanna (1975)

The Self Confidence Inventory (SCI) was constructed by Basavanna (1975) to estimate the phenomenological level of self confidence among adolescents and adults. The author envisages it as a 'generalised phenomenological construct which encompasses several areas of an individual's self experience and his perceived adequacy or otherwise thereof' (Basavanna, 1975). This inventory provides a measure of self confidence within the framework of contemporary self theory.

The SCI consists of 100 statements which have to be answered as either true or false. It yields one general measure i.e., an index of an individual's level of self confidence.

The odd-even split-half reliability was calculated for a sample of 200 subjects drawn randomly from the original
group of 900. The reliability coefficients as computed by the Spearman-Brown formula, was found to be .94. Validity was established in terms of item validity and construct validity. Item analysis indicated that the obtained estimates of biserial correlation coefficients ranged from .74 to .30.

Further, several hypothesis concerning the self confidence construct were derived from self theory and put to test (Basavanna, 1971; Aruna, 1975). In general satisfactory construct validity is reported in the manual.

Zolfagharí (1982) found that the neurotic and the schizophrenic groups differed significantly (.01 level) on the self confidence index from the normal group. The two clinical groups did not differ significantly. Kapoor (1984) while studying visually handicapped persons, found that those who were employed had greater self confidence as compared to those who were unemployed.

**SELF ESTEEM INVENTORY**

- Prasad and Thakur (1977)

The Self-Esteem Inventory was standardised by Prasad and Thakur (1977). Initially 65 items were constructed in Hindi on the basis of literature and by consulting teachers in psychology and other disciplines. The items were submitted to 10 judges for assessment. Thirty items which had the agreement of 6 or more judges constituted the final form. Two identical sets of statements having different instructions were used to assess personally perceived self
and socially perceived self. Split-half reliability coefficients of .82 and .78 and test-retest reliability coefficients of .89 and .66 were reported for personally perceived self and socially perceived self respectively.

**SELF CONCEPT SCALE**

- Rastogi (1979)

The Self-Concept Scale was developed by Rastogi (1979). Hundred and three items relating to 10 constructs were collected from various scales, literature, and from discussions with teachers and experts. The constructs were (1) Health, Vigour, (2) Abilities, (3) Self Confidence, (4) Self Acceptance, (5) Worthiness, (6) Past and Future, (7) Belief and Conviction, (8) Sealing off Shame and Guilt, (9) Sociability and (10) Emotional Maturity.

The 103 items were given to 53 experts to rate the degree of favourability and unfavourability on a 9 point rating scale, following Thurston's method of equal appearing intervals. Sixty items having low and high Q values were selected and administered to a sample of 400 on a 5 point rating scale.

A split-half reliability of .87 is reported for the scale.

**SEMANTIC DIFFERENTIAL SCALE**

- Harigopal (1979)

The author hypothesises that "... cultural relativity differentially influences the relationship between self-
ideal disparity and personality factors" (Harigopal, 1979). An attempt was made to construct a Semantic Differential Scale, to suit the Indian culture. Adjectives or traits for the tool were selected from the essay descriptions of 270 subjects and research studies. All the scales which had an 80% unanimous agreement among 3 judges were retained. Thus, 34 scales were analysed using centroid and varimax rotation method. The first 7 factors covered 70% of the total variance. The factors were labelled as (1) Functional - non functional evaluation, (2) Socially evaluative dimension, (3) Moral ethical, (4) Potency, (5) Reactivity, (6) Anxiety, (7) Motility. The author claims high discriminative validity for all the scales. It is found that high and low self ideal disparity subjects differ significantly on number of personality factors.

INTERNAL EXTERNAL LOCUS OF CONTROL SCALE (I-E)
- Valecha, Sridhar and Nandagopal (1980)

The Internal External (I-E) Locus of Control Scale was devised by Valecha, Sridhar and Nandagopal (1980). The scale was intended to measure the extent to which an individual believes that he is self motivated and directed (internal frame of reference) or the extent to which he believes that the environment (luck, fate, chance, powerful others) plays a dominant role in influencing his behaviour. The initial item pool consisted of 76 items, some of them were from Rotter's Internal-External Scale. After a pilot study 54 items were selected and administered to a sample of 785 subjects (educational and industrial sample).
Forty five items including 11 filler items were selected for the final scale after an item analysis.

The I-E score differentiated normal controls from psychiatric patients at a significant level in a few studies, (Rajini, 1982; Varkey and Sathyavathi, 1984; Sathyavathi and Thomas, 1984) where it was found that the psychiatric patients were more externally controlled in contrast to the normals who were internally controlled.

Some of the tools on adolescents and children are Self Perception Inventory (Bhatt, 1974), Self Concept Scale for Children (Singh and Singh, 1977) and Self Esteem Inventory (Thomas and Raj, 1984).

Apart from the above mentioned tools, there are others which are standardised for use with children and adolescents. They are:

1. Self Concept Scale (Lipsitt, 1958)
2. Self Concept Report Scale (Combs, Soper and Eourson, 1963)
3. Children's Self Concept Scale (Piers and Harris, 1964)
4. Young Children's Self Concept Instrument (Wattenberg and Clifford, 1964)
5. Bledsoe Self Concept Scale (Bledsoe, 1964)
6. How I See Myself Scale (Gordon, 1966)
7. Self Image Questionnaire (Offer, 1974) and
8. Hare Self Esteem Inventory (Hare, 1975).

There are some academic self concept measures as well. They are:
(1) **Academic Self Concept Scale** (Payne and Farequhar, 1962)

(2) **Self Concept as a Learner Scale** (Wastjen, 1963).

(3) **Dimensions of Self Concept** (Michael and Smith, 1976; Fernandes, Michael and Smith, 1978).

(4) **Primary Self Concept Inventory** (Tershen, 1977)

(5) **Self Description Questionnaire** (Marsh, Relich and Smith, 1983).

Attempts have been made to devise self-concept instrument for the occupational set up. e.g., Ghiselli Self Description Inventory (Ghiselli, 1971).

All the above mentioned tools are self report instruments with the exception of one (Longeal, 1970). According to Wylie (1974) self report techniques are the most preferred and the only type most appropriate for self-concept measurement, despite their various drawbacks. As Spanier (1976) puts it "methodological problems inherent in the use of paper pencil measures can only be minimised, never eliminated". However Freeman (1950) looks at the positive side of self report techniques and claims that this method is of inestimable value "...... in so far as inventories actually get at aspects of personality that are beyond impression made upon observers ...... they are the more valuable instruments". In fact one can say that while an individual's covered feelings are necessary to understand and explain behaviour, the problems faced by a self-concept researcher is common to all those trying to measure constructs in any of the psychosocial areas. The
value of research thus lies in understanding the drawbacks and attempting to overcome them to the extent possible. Efforts have been directed towards this end by several investigators in this area, of which Wylie's work (1961, 1968, 1974) is most outstanding. Her excellent critical review of the self-concept instruments cautions one against the various pitfalls in tool construction. Wylie (1968) reported that for 80% of the tools reviewed no information was available in published sources concerning their construct validity, for inferring the conscious self-concept, since the problems of measuring self referent attitudes are essentially those of establishing construct validity. However a review by Shavelson et al (1970) indicates that the position became a little better subsequently.

Some of the drawbacks encountered most frequently in the tools already mentioned will be briefly given below:

The situations to which the items refer to are not specified by researchers. Fiske (1966) contends that the error variance increased because of lack of structure. Shrauger (1972) and Simpson and Boyle (1975) found that global estimates of self-esteem did not predict performance in various situations, whereas more specific measures did. However tools during 1950's and 60's largely ignored this aspect. Currently, situation specific tools having relatively homogeneous items pools that measure self worth in situations
resembling those for which the performance is predicted are developed (e.g., Helmreich and Stapp, 1974; Shea, 1977; Lawson et al, 1979; Battle, 1981).

Another additional problem according to Wylie (1974) is that the instructions do not specify a common reference group for the subjects responding to the questionnaire. The response categories are also not given quantitative labels and hence one is not assured of the fact that any two subjects are using the same psychological metric. Sometimes, the subject has to decide the meaning of the item for himself/herself - especially when the items are in the form of adjectives alone. When all these or even some of these factors have influenced the responses, the inter 'subject' or 'group' comparisons made may be misleading. The inter 'subject' differences observed may be due to some of the aspects mentioned above and not due to the construct being measured.

Social desirability is another aspect which is an active source of error in a majority of the self report instruments. Several investigators, however, view this aspect differently (details in chapter IV). Investigators who have not given due consideration to this aspect are (e.g., Bills et al, 1951; Phillips, 1951; Worchel, 1957; La Forge and Suczek, 1957; Rosenberg, 1965). High correlations were also reported between Butler and Haigh's Q sort and Social desirability scores by Myers (1963) and Stone and Winkler (1964).
Some scales do not have an equal number of positive and negative items to control for acquiescence response set e.g., Phillips (1951), Bills (1951) and Worcel (1957). However some of the investigators have taken adequate care to control for this response set. (e.g., Rosenberg, 1965; Pitts, 1967; Helmreich and Stapp, 1974 and Lawson et al, 1979).

Another major failing with most existing measures on self is that they do not even attempt to take into account the value system of the individual. Wylie (1961) points out that "summing (of scores) implies that each item has equal salience for the subject's self regard; a questionable and unsupported assumption". Watkins's (1978) Self Esteem Questionnaire is a major breakthrough in this direction.

With regard to the degree of restriction of responses forced choice format (e.g., Q sort) imposes limitations on subject's ability to present his self-concept accurately. As referred to by Livson and Nichols (1956) and Jones (1956), subjects do not spontaneously choose a quasi normal distribution. An unstructured format like that of Kuhn and McPartland (1954) is disliked by subjects (Spitzer et al, 1966) who prefers a more structured format. Wylie (1974) points out that a point scale is best suited for self-concept measurement.
Pervasive item overlap when found among the sub-
scales of instruments lead to a very high level of inter-
correlation among the subscales. e.g., Factor analysis of
Tennessee Self Concept Scale (1965) did not support the
discriminant validity of the tool. Information is lacking
or either discouraging with regard to both convergent and
discriminant validity of tools. e.g., ICL (La Forge and
Suczek, 1955), SAI (Worchel, 1957) and ACL (Gough and Heilbrun,
1965).

One of the most important failings according to Wylie
(1974) is that most of the tools are left unexplored by
factor analysis. Very few tools, have been subjected to
more than one internal factor analysis. e.g., IAV (Bills,
1951) Semantic Differential (Osgood et al, 1957) and ACL
(Gough and Heilbrun, 1965). In the current scene researchers
are beginning to use factor analysis to evolve new tools
and to evaluate the existing tools, (e.g., Waikins, 1978;

Multitrait - multitrait matrices (MTMM) are not
used to evaluate convergent and discriminant validity. The
use of MTMM was at a bare minimum till 1974 where Wylie
reports only two studies directly concerned with the conv-
ergent and discriminant validity of self-concept measures.
(Silber and Tippet, 1965; Tippet and Silber, 1965).
Presently, studies using MTMM to evaluate validity are on
the increase. Some of them are by Winne, Marx and Taylor

Reliability information provided by the authors is meagre (e.g., Le Forge and Suczek, 1950; Worchel, 1957). According to Crandall (1973) very few investigators give information regarding the test-retest reliability of their tools. Later investigators however, are remedying the situation by reporting adequate test-retest reliability and internal consistency coefficients for their tools.

Researchers who use discrepancy scores in their scales to derive self concept scores are faced with an additional problem (e.g., Bills et al, 1951; and Gough and Gough and Heilbrun, 1965). There is considerable evidence showing that the subjects do not differ with regard to the ideal self-concept ratings, (e.g., Hillson and Worchel, 1957; Rapaport, 1958) but differ significantly in their actual self scores. Thus the discrepancy score actually reflects a discrepancy between the subjects concept of-himself and the cultural norm but not the ideal self. Judd and Smith (1974) and Burns (1979) subjected scores of self-concept and ideal self-concept to factor analysis, the analysis produced 2 factors of self-concept and 3 factors of ideal self concept - and the factors differed in their scale composition. Whereas Sharma (1970) feels that the self concept scores and the self ideal discrepancy scores "...... have different labels but approach the same construct of personality". These findings raise serious
questions about the appropriateness of computing the discrepancy score.

As already pointed out, the most extensive critical review regarding the methodological issues so far in the area of self-concept measurement has been that of Wylie (1961, 1974). Fisher (1975) comments, "In the course of her literature, Wylie rarely cites a publication without dissecting it into shambles. .... We are obliged to Wylie for the effort she has put into assembling the self-concept literature. However she has approached her task with a super critical attitude that is nihilistic. .... Her image of how one should go about developing new knowledge is off the mark and only distantly related to how it happens in real life".

On the whole, all the drawbacks ultimately affect the construct validity of the tool. However, one cannot be too optimistic in eliminating all the shortcomings. One can just hope to reduce some of them. Such an attempt was made in the present investigation.