CHAPTER III

PRESENT INVESTIGATION

One of the early attempts at measuring self can be traced back to 1949, when Sheerer constructed a scale to measure attitudes towards the self (Lowe, 1961). Since then there has been an increase in the number and kind of measures currently being described in the literature. Accurate measurement of the self-concept can not only aid personal development but can also facilitate research (Pound et al, 1977). The worth of research in any field obviously depends in large part on the success with which the investigator has measured the variables he is trying to relate (Wylie, 1974).

Self report instruments have been mainly used to elicit information about the self. This is due to the fact that the subject's perception of the self, i.e., his thoughts, feelings, ideas are not directly observable. Wylie (1974) has extensively reviewed the self-concept measures and elucidated many of the methodological problems that accompany their construction and use (for details, chapter II). However, in the present study efforts were directed towards overcoming at least some of the major shortcomings described in the literature.

In the Indian set up there are a few attempts at
constructing tools on some aspects of self. (e.g., Kakkar, 1965; Basavanna, 1975). A few investigators like Sharma (1969) and Rastogi (1979) have attempted to study several aspects of the self at the same time. Such attempts however are relatively few. Thus a need was felt for such a study.

In trying to overcome some of the shortcomings, due consideration was given to the fact that meagre attempts have been made so far to apply factor analysis in the validation of a tool. Hence, it was decided to use factor analysis as an indirect mode of validating the scales developed with expert help.

According to Crandall (1973) for many of the scales that are published, very little information about reliability is provided. When reliability coefficients are mentioned, they are primarily of the inter-judge or split-half type, rather than the test-retest kind. To overcome this criticism it was decided to compute a test-retest reliability coefficient over a period of three months.

Another criticism levelled against some of the tools is that they do not have an equal number of positive and negative items to control for acquiescence. Studies on the acquiescence response set, show that upto 25% of the variance, i.e., a sizeable component of test scores of scales whose statements are all worded in a single direction is due to acquiescence (Jackson and Messick,
1957; Couch and Kenniston, 1960). In the present study it was decided to control acquiescence by including an equal number of positively and negatively worded items where the subjects have to indicate 'yes' to some items and 'no' to others in order to obtain a high score.

According to Wylie (1974) no procedural means to control for taking or more subtle social desirability effects are reported for some scales. To control for this response set a social desirability scale was decided upon, along with other scales. As research evidence reveals that anonymity helps control social desirability effects, anonymity of the subject to control for this set was thought of.

It has been pointed out that wording of statements in an absolute form, thereby forcing the subjects to choose between two extremes may not describe the attitudes or perceptions of self accurately. Also, information would be lost if only yes/no responses are provided. Hence a Likert type, five point scale was decided upon.

Wylie (1974) indicates that providing a label for each point on a point scale is not enough. Quantitative labels, provided for each scale point would facilitate the uniformity of interpretation among subjects. Hence in the present study quantitative labels of 100% of the time for 'Strongly Agree' to 0% of the time for 'Strongly Disagree' was decided upon. This was thought to ensure,
at least to a certain extent the use of the same psychological metric by the subjects.

Some of the scales have a pervasive item overlap among their subscales which leads to a very high level of inter correlation among the subscales. It was planned that no item would be included in more than one subscale.

When the various self-concept instruments which are considered to be global in nature were factor analysed by several investigators, they found evidence for more than one factor (e.g., Schuldermann and Schuldermann, 1969 a, 1969b). This highlighted the multidimensional nature of self-concept (Franks and Marolla, 1976; Prescott, 1978; Fernandes, Michael and Smith, 1978; Moran, Michael and Dembo, 1978; Shoemaker, 1980). Hence it was decided to evolve a comprehensive tool covering as many aspects of self as possible.

Objectives of the investigation:

The objective of the present study was to evolve a comprehensive scale for assessing self-concept, covering the multiple aspects for the general adult population in the Indian set up.

A try out was to be made regarding the utility of the tool thus developed in the clinical set up.

The stepwise procedure was as follows:

Ste. 1: An attempt was made to scrutinise the available
existing empirical tools (more than 55) on various aspects of self.

Step 2: Those aspects of the self that were considered important in understanding the clinical population, along with key concepts used in the literature were considered for the present study.

Step 3: The items were then examined carefully to eliminate overlapping items, those that were not culturally relevant and those that were ambiguous or vague. An attempt was made to edit and or reword the complex items, while retaining the core content.

Step 4: The format of the different items was checked and efforts were directed towards converting those that differ into the statement form. A fairly uniform set of items for tapping the various aspects of self were thus arrived at.

Step 5: The items were then scrutinised by a professor of English to check (1) whether the sentence format was correct (2) whether the items that were simplified retained their core content (3) whether the items when converted to the statement form retained their core content.

Step 6: 50% of the items were positively worded and 50% negatively worded to control for acquiescence response set.

Step 7: A Likert type, five point scale was decided upon.
**Step 8:** The selected items for the subscales were then given to five judges with more than 10 years of clinical experience for (1) judging the meaningfulness of the items for the Indian set up, (2) judging the comprehensibility of the items, (3) judging whether the items represent the claimed aspects of self (4) checking the suitability of the format of the statement to the response categories, (5) checking whether the changes effected in the sentences were appropriate.

**Step 9:** The items about which there was total agreement among three or more judges were retained for the subscales.

**Step 10:** The format of the scale (to be called Self-Concept Scale) included the first three items of one subscale followed by the next three items of another subscale and so on.

**Step 11:** A Demographic Data Sheet for relevant biographical details and instructions for the Self-Concept Scale was prepared.

**Step 12:** A pilot study was then undertaken to check the comprehensibility of the items in the scale.

**Step 13:** The Self-Concept Scale was administered to a larger sample from the general population and scored.

**Step 14:** A correlation matrix was prepared using scores of all the subjects in the sample. Only those scales that had high intercorrelations amongst the items were retained.
An attempt at reduction of items in each scale was made.

**Step 15**: The data on the 4 subscales were subjected to factor analysis for the purposes of validating the Self-Concept Scale.

**Step 16**: The 80 item Self-Concept Scale comprising of 4 subscales was again administered to a second sample and the data subjected to factor analysis.

**Step 17**: Norms were established and T scores were calculated.

**Step 18**: The scale was then administered to a clinical sample.

**Validity**: The content and constructive validity of the tool were explored. The procedures for validation were, in the process of tool construction itself e.g., validation by judges, factor analysis, the capacity of the tool to discriminate the normal and clinical groups.

**Reliability**: Test-retest reliability coefficient was calculated using product moment correlation over a 3 month period.

**Statistical analysis**: The statistical procedures that were employed were:

1. Correlations
2. 't' tests
3. Factor analysis.

**Sample**: The sample for the pilot study comprised of 30 subjects.
from the general population within the precincts of Bangalore city. The inclusion criteria were as follows:

Age: Between 20 and 39 years (both inclusive)
Sex: An equal representation of both sexes
Education: A minimum education of 10 years and above.

Since the tool to be developed was in English, care was taken to see that the subjects were conversant with English.

Individuals with a history of mental illness or a major physical illness were not included in the sample. The same criteria held good for the subsequent normal samples.

The first try out of the tool was on a fairly large sample comprising of 328 individuals (the details of the sample are given in chapter IV). After the data were statistically analysed, the final format of the tool was tried out on another sample comprising of 430 individuals. The data thus obtained served as the normative data.

A group of 45 individuals were selected from the above group and administered the same tool over a 3 month period to arrive at a test-retest reliability coefficient.

The test was then tried out on a group of 60 psychiatric patients drawn from the out patient and in patient units of the National Institute of Mental Health and Neuro Sciences, Bangalore.