CHAPTER XI

METHOD

For the purposes of the investigation a sample of Housewives, career women and the women entrepreneurs were interviewed and administered a number of instruments. For every subject a biographical data sheet was also given to obtain biographical data required for understanding characteristics of the sample. The biographical data sheet is given in appendix. Every subject included in the sample were personally interviewed by the investigator in their home or the office depending upon the convenience of the subjects. Adequate effort was made to establish rapport by informally discussing topics of interest to the subjects and their personal life. The visit to the home necessitated the investigator to make contacts with other family members of the subjects included in the study. The field investigations and the informal discussions had by the investigator with the subject in particular and members of her family in general furnished sufficient information on socio-cultural setting of the sample studied.
Analysis of variance followed by Honestly significant Differences were used to test the hypotheses relating to the differences between the House-wives and Career women, and between House-wives and Women Entrepreneurs. Discriminent analysis was also done on the scores of the $S$ on the various instruments to find out the characteristics that are dominant in each group.

The procedure used in the study are presented below under the following headings.

INSTRUMENTATION

IDENTIFICATION OF SAMPLING FRAME FOR THE MAIN STUDY

PILOT STUDY

ADOPTION OF BEM SEX ROLE INVENTORY (BESRI)

THE MAIN SAMPLE

THE STATISTICAL ANALYSES.

INSTRUMENTATION:

The following section describes instruments which were used in the study. The instruments used were
The I-E Locus of Control Inventory
(I+-E I; Venkatapathy, 1983)

The Protestant Ethic Scale
(PES; Mirels and Garrett, 1971)

The Probabilistic Orientation Questionnaire
(POQ; Narayanan, 1983)

The Holland Personality Inventory
(HPI; Narayanan, 1981)

The Sex Role Inventory
(SRI; Developed by the present investigation)

The Alienation Questionnaire
(AQ; Vendal, 1984).

In administering these questionnaires the instructions and also the items were rendered in English and Tamil or Kannada. The English and Tamil versions of instructions and Questionnaires were used on the sample from Coimbatore while English and Kannada versions of instructions and on the sample from questionnaires were used in Bangalore. It is to be noted that the majority of the subjects had their education in English medium in their colleges while others have had Tamil or Kannada as their medium of instructions in their educational institutions. The educated women in Coimbatore and Bangalore are bilinguals and the common usage of language in communication among educated in
Coimbatore and Bangalore is essentially a mixture of English and mother-tongue. These subjects will find it difficult to understand any material if they are delivered in queen's English or chaste Tamil or Kannada. For this reason both the versions were provided to the subjects.

THE INTERNAL-EXTERNAL LOCUS OF CONTROL INVENTORY
(I-E I, Venkatapathy, 1983).

The Internal-External locus of control inventory (I-E I, Venkatapathy, 1983) purports to measure Internal and External locus of control (Rotter, 1966) of an individual. The internal locus of control refers to the individual's perception that the events happen to him or her are dependent on his or her own behaviour. The External locus of control refers to the degree to which an individual perceives that the events that happen to him or her are the result of fate, luck, chance or power beyond one's personal control and understanding.

The I-E consists of a total number of 33 items of which 5 items are selected from Rotter (1966), 11 from Levenson and Miller (1976) and 17 generated by the author of the inventory. Equal number of items are included in the inventory to represent the three dimensions
viz., 'Internal', 'Powerful others', and 'Chance'.
The items measuring 'internality' are grouped into one
and named internal scale (I-scale). The items measuring
"Powerful others" are grouped into one and named powerful
other scale (P-scale) and the items measuring 'Chance'
are grouped into one and labeled chance scale (C-scale).

The inventory requires the respondent to indicate
his or her agreement or disagreement with the statement
expressed in each item on a six point rating-scale. The
response continuum of the I-E I has six steps dispersed
equally over the entire continuum ranging from 'accept
totally' to 'do not accept totally', the points spread
between the two extremes are labelled 'I accept totally',
'I accept to certain extent', 'I do not accept to a little
extent', 'I do not accept to a little extent', 'I do
not accept to certain extent', and 'I do not accept totally'.

Reliability:

Split half reliabilities of the I, P, and C scales
of I-E I are found to be .77, .68 and .73 respectively
as found on a sample of 30 male entrepreneurs (Venkata-
for the I, P and C scales
of .59, .73 and .69/ respectively on a sample of 30 drivers
using split-half method, Michael (1985) found reliability
coefficients for the I, P and C scales of .94, .95 and .94 respectively on a sample of 40 employed and unemployed graduates using split-half method.

Validity:

The items of the inventory is reported to have adequate face validity and good discriminability (Venkatapathy, 1983). The I-E I scores are also found to be systematically and meaningfully related to scores on the Probabilistic Orientation Questionnaire (Narayanan et al., 1984). The I-E I scores are found to be meaningfully related to the characteristics of entrepreneurs (Rao, 1975; Venkatapathy, 1983).

Instruction:

In administering I-E I the respondents are asked to read the instructions printed on the first page of the inventory silently and were encouraged to get their doubts cleared, if any, regarding the way of answering the items. As far as possible the investigator sticks on to reading verbatim the relevant portions of the printed instruction to clarify and any doubts raised by the S. Explanations are kept at the minimum. The instructions run as follows.
"Given below are a few statements reflecting the attitudes and believes of people. Read each statement carefully. We want to find out how far these statements reflect your attitudes and beliefs.

You may kindly indicate the extent the statements reflect your attitudes and beliefs by making a tick (✓) mark appropriately on the rating scale that follow each of the statements. If you entirely agree with the content of the statement, you may make a tick mark at the left extreme of the rating scale where it is written, "I accept totally". If you entirely disagree with the statement you may make a tick mark at the right extreme of the rating scale where it is written, "I totally do not accept". In the same manner you may indicate the extent you agree or disagree with the content of the statements by appropriately making the tick mark at any one of the six steps of the rating scale following each statement. Be careful not to omit any statement. There is no 'RIGHT' or 'WRONG ANSWERS' in this context. Answer as quickly as possible and do not spend too much time on a single statement!"

Scoring:

Three scores Viz., I-Score, P-Score and C-Score are obtained in scoring the I, P and C scales of the I-E I. For each scale, the response made by the S
on the six point rating scale for each item of the scale were checked and cumulated to obtain the score on the scale conceived. The response indicating complete agreement with the statement is given a score of 3, the response indicating agreement with the statement to 'certain extent' is given a score of 2, and the response indicating agreement with the statement to a 'little extent' is given a score of 1. The response indicating disagreement with the statement to 'a little extent' is given a score of 1, the response indicating disagreement with the statement to a 'certain extent' is given a score of -2, and the response indicating complete disagreement with the statement is given a score of -3. The maximum score possible on any of the three scales of the I-E is

\[ 11 \times 3 = 33 \] and minimum score possible is \[ 11 \times (-3) = -33. \]

In the present study a constant of 25 was added to the score of the individual on each of the scales to facilitate obtaining scores with only positive values.

Rationale:

Locus of control expectancies appear to reflect general perception about the nature of one's social cultural and economic world. The I-E scale used to one population may lack reliability and validity in another (Driver, 1974; Duke, Shaheen and Nowicki, 1974; Wolk and Kurtz, 1975; Rotter, 1975). Cultural differences in the distribution of scores obtained using I-E scale
are also reported by investigators (Carment, 1974; Stephens, 1971). Hence, care was taken to select an inventory that is not affected by cultural bias in the measurement of I-E orientation, for the purposes of the study.

Rotter’s I-E scale uses a forced choice format for giving responses and force the subject to opt for one type of answer to another in responding to items, Lev\textsuperscript{e}nson’s (1974) Attitude \textsuperscript{\textcopyright} Statement Survey (LASS) offers an alternative to using I-E scale for measuring I - E — Locus of control. In the present study, an instrument developed on the population of the study, which allows relatively more freedom for Ss to choose between alternative responses to an item, was chosen to measure I-E orientation (Venkatapathy, 1983).
THE PROTESTANT ETHIC SCALE (Mirels & Garrett, 1971):

The Protestant Ethic Scale (PES) aims to measure an individual's attitude towards work value. The PES developed by Mirels & Garrett (1971) was made use of to assess the attitude towards work in terms of individual's disposition to accepting the Protestant Ethic ideology (Weber, 1930). The PES consists of nineteen attitudes statements selected by Mirels and Garrett (1971) through a series of factor analytical investigations. Of the nineteen items contained in the PES three are fillers. They are used to contain the response biases of the respondents. Each item requires the respondent to indicate his acceptance or rejection of its statement by giving a 'Yes' or 'No' answer.

RELIABILITY:

The PES is reported to have a reliability of .70 as assessed by Kuder-Richardson formula by Mirels & Garrett (1971) on a sample of 117 male college undergraduates. Michael (1985) reports that a PES has a reliability coefficient of .96 as found on a sample 40 employed and unemployed graduates using split-half method. Venkatapathy (1984) reports that PES has a reliability coefficient of .69 as found on a sample of 57 male entrepreneurs using split half method.

VALIDITY:

The PES has been found to have systematic relationship with a number of psychological measures. The
scores of PES are found to be positively correlated with the scores of SVIB as investigated on a sample of 54 male and 55 female students (Mirels & Garrett, 1971). Positive correlations between scores of PES and occupations demanding concrete pragmatic approval of work and negative correlations between scores of PES and typical humanistic values have also been reported. (Mirels & Garrett, 1971).

INSTRUCTIONS

The PES was administered individually to the Ss. The Ss were instructed to read the instructions carefully given in the first page of the test, and to get their doubts; if any, clarified before beginning to answering the item of the scale. The instructions run as follows.

Please read the following statement carefully, Record your responses in the appropriate space provided in the answer sheet. If you agree with the statement mark a '✓' mark on 'Yes' and if you disagree with the statement mark 'X' on 'No' feel free to answer all the questions. This is not a test of intelligence or aptitude. Answer all the items. Don't spend too much of time, work as fast as you can.
SCORING:

The score of the S on the PES is obtained by cumulating the number of statements he/she had endorsed on the scale. The more the score on PES, the more is the Protestant Ethic of the S. The maximum possible score on the scale is nineteen and minimum is zero.

RATIONALE:

Mirels and Garrett (1971) has framed PES to obtain a measure of an individual's attitude towards work value. It is found to have face validity, reliability and high discriminability and has a simple format. Hence, it has been chosen to measure the Protestant Ethic of the Ss in this investigation.

THE PROBABILISTIC ORIENTATION QUESTIONNAIRE (Narayanan, 1982)

The Probabilistic Orientation Questionnaire (POQ) Narayanan (1982) aims to measure the probabilistic orientation of the individual. Probabilistic Orientation accounts for individual differences in attitudes and perception and can be regarded as a variable of personality. The questionnaire originally consisted of 40 items developed by (Narayanan, 1982) using item analysis. The items were reduced to 30 in further studies by having only the items that best discriminated the high and the low
criterion groups on probabilistic orientation on the basis of their phi-co-efficients (Narayanan, 1983). A few investigations (Narayanan, 1983; Devi, 1982; Jayaraj, 1984) have asked the Ss answering the POQ to show their agreement or disagreement to the content of the items by giving a simple yes or no answer. Govindarasu (1984) has preferred to ask the Ss to give their responses to POQ on a 7 point rating scale.

RELIABILITY:

The POQ is reported to have a reliability of 0.83 on 40 items questionnaire by Narayanan (1982) on a sample of 60 adults following split-half method. Devi (1982) using POQ on a sample of 30 clerks and officers in bank found POQ to coefficients on the samples just cited, reliability of 0.63 & 0.37 respectively using split half technique. Subsequent revision of POQ has been done by Narayanan (1983) and the revised questionnaire contains only the 30 most discriminating items out of the 40 items originally selected. The revised questionnaire has been used in recent investigation by Jayaraj (1984), Govindarasu (1984) Michael (1985), and Indumathi (1985). These investigators have used split half method to determine the reliability co-efficients of the revised POQ and the co-efficients reported by them are 0.49, 0.76, 0.86 and 0.96 respectively.
VALIDITY:

The POQ is found to be having adequate face validity and discriminability (Narayanan, 1982, 1983). It has been found to be meaningfully related to EPI, MMPI, HPI, SSI, death anxiety, Locus of control and PES.

INSTRUCTIONS:

In administering POQ the respondents are asked to read carefully the instructions given in the questionnaire. The investigator clarified the doubts of the Ss, if any, before they proceed to answering the items. The instruction contained in the POQ is as follows. "Given below are a series of statements reflecting the common ideas and opinions. Read each statement carefully and decide whether you agree or disagree. If you agree with the given statement underline the answer 'Yes', if you disagree with it, underline the answer 'NO'. Give your first reactions and not your long drawn throughout answers. This is not a test of your intelligence or aptitude. There is no right or wrong answers. Answer all the statements".

SCORING:

The score of the S on POQ is obtained by cumulating the number of scores earned by him/her over the 30 items of the questionnaire. When the S endorses the probabilistic orientation contained in an item, she earns a score of 1 and
no score is given if he does not endorse the orientation. The maximum score possible for S on the questionnaire is 30 and the minimum is zero. More the score on POQ, more the probabilistic orientation is assumed on the part of the subject.

RATIONALE:

Probabilistic orientation is conceived to be one of the expectancy variable in the present study. It is regarded to be a characteristic of individual in Indian culture. It contains limited number of questions developed on the population of the present study. It is claimed to have adequate reliability and validity. Hence, it has been chosen to use for the present study to assess Probabilistic orientation.

THE HOLLAND PERSONALITY INVENTORY: (Narayanan, 1981)

The Holland Personality Inventory (HPI) (Narayanan, 1981) attempts to measure the personality dimensions of an individual as identified by Holland (1975). The HPI consists of 56 items selected from MMPI which yield measures of the six dimensions of personality viz., 'Realistic', 'Investigative', 'Artistic', 'Social', 'Enterprising', and 'Conventional'. In the present study only thirty items of the fifty six items of the HPI (Narayanan, 1981) that are selected and used by Venkatapathy (1984) in his investigations are used. The HPI adapted by
Venkatapathy provides a shorter instrument compared to the one used by Narayanan. It also ensures equal representation for all the six dimensions of personality being measured. The items of the HPI present scope to give answers to each item by giving a simple 'yes' or 'No' answer.

RELIABILITY:

The HPI is reported to be having adequate reliability and validity by Narayanan (1981). The R, I, A, S, E and C scales of HPI were found to have reliability co-efficients of .65, .65, .80, .68, .61 and .67 respectively by Narayanan (1981) on adult sample. Venkatapathy (1984) found co-efficients reliability of .66, .57, .55, .59, .67 and .62 for R, I, A, S, E and C scales using odd-even split half method. The data were obtained on a sample of 30 entrepreneurs in his study.

VALIDITY:

The HPI is found to have an adequate face validity and have minimum difficulty co-efficient (Narayanan, 1981). The R, I, A, S, E and C scales of HPI is found to correlate with R, I, A, S, E and C scales of vocational preference inventory developed by Balakrishnan (1979) to the extent of .69, .22, .34, .32, .17 and .05 respectively.

INSTRUCTION:

HPI was administered to the Ss and they were asked
to read carefully all the instructions given in the front page and their doubts, if they had, were cleared before they started answering the inventory. The instructions are as follows.

Given below are a few statements reflecting one's preferences. If you feel that anyone of the following statements reflect your own preferences then put a '✓' mark on 'Yes' and if you feel that it does not coincide with your preferences, put a 'X' mark on 'No'. Your responses will be kept under strict confidence. Feel free to answer all the items. There is no right or wrong answers and there is no time limit, Hence, work as fast as you can.

SCORING:

The six scores viz., R-score, I-score, A-score, S-score, E-score and C-score are obtained in scoring the RIASE and C dimensions of HPI. For each scale the number of statements endorsed by the respondent as 'Yes' constitute the score of the respondent on the particular scale. Thus maximum score possible for each scale of HPI is five, minimum is zero.

RATIONALE:

Vocational inventories have been identified as
personality inventories and vice versa by Holland (1973).
Holland has developed his vocational preference inventory to assess personality dimensions based on vocational choice. (Balakrishnan, 1999) has modelled his vocational preference inventory after Holland. It is contended by the present investigation that application of vocational preference inventories to assess personality among adults may create artifacts especially in the Indian socio-cultural conditions where occupational mobility is very much restricted. An adult woman in South Indian culture tends to regard items of vocational preference inventory as asking for unrealistic responses. This has been revealed in the informal discussions the investigator had with a cross section of women prior to undertaking the present investigation. Hence a direct measurement of the personality dimensions conceived by Holland is preferred. The Holland personality inventory constructed on the conceptual framework of Holland and developed on the population of Coimbatore, the site of the present research seems to satisfy the need for an instrument for measuring the personality dimensions bearing on vocational choice in the present study.

THE SEX ROLE INVENTORY (SRI)

In the present study the Bem's (1974) sex role inventory (BSRI) has been adopted and the adopted version of the inventory is named the Sex Role Inventory (SRI).
The SRI purports to measure the 'feminine' 'masculine' and 'androgynous' dimensions of personality of the individual. In this section, the format and Psychometric properties of the BSRI are described. The details of adaptation of the BSRI into SRI in the present study are given elsewhere (on pages 191-200 of this thesis).

The BSRI consists of 60 items of three sets of 20 adjectives or adjectival phrases that provide estimate of masculinity (M), Femininity (F) and Social Desirability (SD). In answering the BSRI the S is asked to use a 7 point rating scale to indicate how often each characteristic referred to in the inventory describes himself or herself. The 7 point rating scales ranges from 'never or almost never true' to 'Always or almost always true'. The steps on the rating scale are labeled and numbered, and equal interval is assumed to exist between two consecutive adjacent points of the scale.

RELIABILITY:

Bem (1974) has reported data on reliability of BSRI. The M, F and SD scales have been found to have high degree of internal consistency as shown by coefficient Alpha computed for all the scales separately on data obtained on a sample of 444 male and 279 female university students, and 117 male and 77 female students of junior
college in United States. The r's obtained for the M,F, and SD scales are .86, .80 and .75 respectively for the college sample, and .86, .82 and .70 respectively for the junior college sample. The reliability of the androgyny difference score was found to be .85 when coefficient alpha was computed for the highly correlated Androgyny difference scores. The M,F, Andro and SD scales have been reported to have reliability co-efficients of .90,.90,.93 and .89 as found on a sample of 28 male and 28 female normative sample using test-retest after a four week interval.

VALIDITY:

The items of the BSRI have adequate face validity and discriminability (Bem,1974). Women who were in management and business are reported to have as expected, larger scores on androgyny scale (Stevens, 1983).

SCORING:

Bem has defined androgyny score as student's t-ratio for a difference between persons masculine and feminine self endorsements. She derives androgyny score by finding the difference between an individual's masculinity and femininity scores normalized with regard to the standard deviations of his or her masculinity and femininity scores. In the absence of computer facilities Bem recommends
that one can utilize the simple androgyny difference score ie., Femininity minus Masculinity as the index of androgyny. She suggests that empirically the t-ratio score and the different scores are virtually identical \((r = .98)\). She also has given a method to approximate a t-ratio value by multiplying the androgyny difference score by a conversion factor of 2.332 which has been derived empirically from her combined normative sample of 970 students at two different colleges in US (Bem, 1974). In view of the complex nature of scoring and the socio-cultural factor confounding the conversion factor for obtaining the androgyny score Bem's scoring procedure was not adopted in the present study. A scoring scheme was exclusively developed assuming the conceptual model of androgyny held by Bem in the present study.

The sex role is very much loaded with cultural norms, values, expectations and beliefs. As such the BSRI could not be validly used in its original form to assess masculinity femininity and androgyny of the population investigated in the present study. However, the BSRI suggests a valid Psychometric model for measuring the dimensions in the present investigation. The scoring of Androgyny scale suggested by Bem was not adopted. In view of these considerations the BSRI items were taken for further investigation with regard to their role-measuring for the
population studied, and an attempt was made to adapt BSRI to suit the population in Coimbatore and Bangalore. The details of the adaptation of BSRI into SRI are given elsewhere. (Pages 191-200 of this thesis).

THE ALIENATION QUESTIONNAIRE (AQ; Vendal, 1981):

The Alienation Questionnaire developed by Vendal (1981) purports to measure an individual's alienation following the conceptual frame given by Seeman (1959). The aspects of alienation covered by the AQ included powerlessness, meaninglessness, normlessness, isolation and self-estrangement.

The AQ has been developed from the items of Minnesota Multiphasic personality inventory (Hathaway and McKinley, 1967) on the basis of the item analysis. The 'item pool' used to derive the items of the scale consisted of 76 MMPI items pertaining to the dimensions of alienation already described. The responses of 200 secondary school students to the 76 items were subjected to an item-analysis by the author (Vendal, 1981). On the basis of the results of the analysis the author has identified 20 items having adequate level of popularity and discriminability and developed the AQ.
RELIABILITY:

Split-half reliability of AQ on a sample of students using Spearman Brown formula was found to be .91. Devi (1982) found a reliability of .83 and .43 on two separate samples of clerks and Bank officers. Michael (1985) reported a reliability of .73 on a sample of 40 employed and unemployed graduates using split-half method. Indumathi (1985) found a reliability of .96 on a sample of 30 clerks using split-half method.

VALIDITY:

The scores of AQ is found to have adequate face validity and discriminability (Vendal 1984) and it was found to have a systematic relationship with a number of Psychological variables (Vendal, 1984; Narayanan & Venkatagchal, 1980; Subramanian, 1980; Devi, 1982; Venkatapathy, 1984; Michael, 1985; Indumathi, 1985).

INSTRUCTION:

While administering the AQ the respondents are instructed to read the instructions given on the first page of the questionnaire which runs as follows;

Read the following statements of day-to-day happenings. If the statement is true to
you tick the word 'true' and if it is false, tick the word 'false'. Mark your answers in the answer sheets given to you separately. There are no right or wrong answers. Give your exact and true answers. Answer all the statements.

SCORING:

The items of the AQ are so worded that a 'true' answer to any items indicates alienation on the part of the respondent. In scoring AQ, a score of 'One' is given for 'true' response, and 'Zero' for 'false' response given by S to each item. The sum of the scores earned by the S on the 20 items of the questionnaire indicates the level of alienation experienced by the respondent. The maximum score possible on the questionnaire is 20, and minimum score possible is zero. Higher the score on the AQ higher is the alienation on the part of the respondent.

RATIONALE:

A few questionnaires are available that attempt to measure alienation (Kohn, 1976; Vendal, 1984). Kohn's Inventory is highly loaded with values relating to industrial setting and hence was not preferred to assess alienation of women (house-wives) in the present study. The AQ has been developed following the conception of Seeman was preferred for the present research. It consists
of simple statements drawn from MMPI. It has been found to be reliable and also to relate meaningfully to a set of psychological variables as reported by a number of investigators. (Vendal, 1987; Narayanan & Venkatachalam, 1980; Subramanian, 1980; Devi, 1982; Venkatapathy, 1984; Michael, 1985; Indumathi, 1985).

The conceptual efficacy, applicability to studying the problem of the present study and high reliability of the AQ had special appeal to this investigator and hence, the AQ was selected to obtain a measure of alienation of the Ss in the study.

IDENTIFICATION OF THE SAMPLING FRAME FOR THE MAIN STUDY

An Advisory Committee (AC) was formed for the purpose of identifying a purposive sampling frame of Housewives. The AC consisted of twenty persons was equally drawn in number from Coimbatore and Bangalore. The persons constituting the AC were selected on the basis of their extensive knowledge of and association with the people of the community. All the members of AC were settled either at Coimbatore or Bangalore and continue their living in the regions continuously for more than a generation i.e., 3 decades.
The AC consisted of a social worker and a legal practitioner, 4 Engineers retired from public works department, Tamil Nadu Electricity Board, and Public sector industry, principal retired from a local college, a professor retired from service, 2 teacher retired from service from a higher secondary schools, 2 accounts officers retired from life insurance corporation and Accounts General's Office, 4 Assistant Professors working in colleges and a secretary, a vice president and a president respectively from Lion's Club, Jaycees and a Lady's Club in the city and a lady doctor in active medical practice. There were 3 male members and 11 female members in the AC. The academic qualifications of the members ranged from bachelor degree to PhD. There were five arts and science graduates, six master of Arts or sciences. The teachers have a bachelor's degree, in science and a degree in education. All the Engineers have a bachelor's degree in Engineering. The lady doctor has a bachelor's degree in medicine and surgery. The professor has a PhD degree. The age of the members of the advisory committee varies from 48 to 76 years. All the members are highly sociable, are engaged in active social service and attend to any social function in the community and are 'popular in their neighbourhood'. They are living in the areas scattered over the city in Coimbatore and Bangalore. It could be fairly said that the members of AC taken together know almost
every family in the localities where they come from. The investigator individually met each of the 20 members of the AC and appraised them that the investigator is in need of contacting house-wives for a research on their lifestyle. They were further asked to supply to a list of names and addresses of housewives well known to them in selecting a representative sample. For the purposes of identification the members of the AC was asked to adhere to the operational definition of housewife adopted in present study. A housewife is defined to be a female person who is married and living with her family and is not engaged in a gainful employment either on a full-time or part-time basis.

The members were given sufficient time to prepare the list and the lists containing the names and addresses of housewives given by them were made use of in arriving at the sampling frame for the present study. The list finally arrived at by the investigator was based on avoiding duplications in the list given by individual members contains 200 names equally distributed between Coimbatore and Bangalore and constitute the sample frame of Housewives in the present study.

To identify the career women to be included in sampling frame for career women another Advisory Committee (AC) was formed, having 14 from Coimbatore and 14 from Bangalore. All the members had an adequate knowledge of and contact with
local community. The AC consisted of 4 Personal Relation Officers from Private & Public sector industries, 4 Labour Welfare Officers from govt and private companies, 5 bank manager of nationalized banks, 4 Associate professors of govt and private colleges, 3 Headmistresses of local secondary high schools, 3 sales managers of pharmaceuticals, one consultant of an Engineering firm, one bank officer, one scientific officer from forest department, one health officer and one commercial tax officer. There were 17 males and 11 female members in the AC. The academic qualifications of the members ranged from bachelor degree to PhD. There were 4 graduates of Arts & Science, 20 postgraduates of Arts & Science, 2 PhDs one doctor having degree in medicine and surgery and one engineer having a bachelor's degree in engineering. The age of the members of the advisory committee varies from 40 to 54 years. All the members were in service and held good positions; They have been living in the areas scattered over the city in Coimbatore and Bangalore. It could be fairly said that the members had an extensive knowledge of the career women. The investigator individually met each of the 28 members of the AC and told them that she was in need of contacting career women for a research on their life style. They were further asked to supply a list of names, residential addresses and office addresses of career women well known to them.

For the purposes of identification of career women
the members of AC was asked to adhere to the operational definition of Career women adopted in the present study. A Career women is operationally defined for the present purposes as a female person, who is married and living with a family and having a full time gainful employment.

The members were given sufficient time to prepare the list which contained the name, home addresses and the work place addresses of the Career women. The list were collected from them and was used in arriving at the sampling frame for the present study. The list finally arrived at by the investigator was based on avoiding duplications found in the list given by individual members containing 200 names equally distributed between Coimbatore and Bangalore. thus obtained constitute the sample frame of career women in this investigation.

To identify the entrepreneurs, another advisory committee members of the committee was constituted, and the were selected on the basis of their extensive knowledge of, experience and association with the entrepreneurs. The AC3 consisted of 5 officers from Small scale industries, District Small Scale Industry Association and National Alliance of Young Entrepreneurs (AWAKE) 5 members from, Rotary Club, Lions Club and inner wheel, 4 Bank managers from nationalized banks, one bank officer, 4 women entrepreneurs running a small scale enterprises, 2 dealers from Interio/ painting & paints and 2 editors of womens' weekly were consulted.
There were 14 females and 8 males members in AC. The academic qualifications of the members ranged from bachelor's degree to post-graduate degree. 15 of them had a bachelor's degree in arts or science, 5 of them had master's degree either in arts or science. One had a bachelor's degree in engineering and two had diplomas in interior decorations. The age of the members of the advisory committee varied from 35 to 53 years. All were some way or other connected with business enterprises and had a wider opportunity to have contacts with women entrepreneurs.

The Investigator individually met each of the 21 member of the advisory committee and appraised them that she was in need of contacting women entrepreneurs for a research on their lifestyle. They were further asked to supply a list of names, residential addresses and business addresses of the women entrepreneurs well known to them.

For the purposes of identification of women entrepreneurs the members of advisory committee were asked to adhere to the operational definition of women entrepreneur adopted in the present study. A women entrepreneur is operationally defined for the present purposes as a female person, who is married, living with a family and running a small scale industries (Whose
capital investment should not be more than 20 lakhs) of her own.

The members were given sufficient time to prepare the list which contained the names, residential addresses and the business addresses of the Women entrepreneurs. The lists were collected from them and were used in arriving at the sampling frame for the present study. The list finally arrived at by the investigator was based on avoiding duplications in the list given by individual members contains 145 names equally distributed between Coimbatore and Bangalore and constitute the sample frame of women entrepreneurs in this study.
THE PILOT STUDY

As has been elaborated in the earlier section the present study has chosen a set of psychological instruments to obtain measures of variables involved in the hypotheses. The I-E I, the PES, the POQ, the HPI and the AQ have been found to be applicable on Indian cultural populations. The BSRI has been adopted to suit the present population. Before collecting data to test the hypotheses, it was considered essential to ascertain the applicability of the instruments to the population being studied. Further, the investigator needed to formulate a feasible programme of research within time constraints. A pilot study prior to the main investigation provides experience to a beginner in research which will reinforce confidence of the investigator. It also improves the skills needed for conducting tests on the part of the investigator. A pilot study may reveal any shortcomings in the procedure used in collecting data and may contribute to have fine control over data collection procedure. This will enhance local control (Fisher, 1950) in the research design. In view of these considerations, a pilot study was undertaken with the following specific objectives.

1. To ascertain the feasibility of adhering to the procedures of administration, including instructions formulated and used by the other
investigators in administering the various instruments in the present study.

2 To obtain a time estimate for administering the instruments in the final study.

3 To find out the reliability estimates of the different tests as applied to samples representing the population to be investigated.

4 To adopt the BSRI to the present cultural setting.

The pilot study was done in two phases. The first phase was confined to the first three objectives, cited above. The second phase was devoted to realise the objective last stated in the section above.

SAMPLING FRAME FOR THE PILOT STUDY:

Since the main study envisaged investigating samples of House wives, Career women and Women entrepreneurs belonging to two regions, viz., Coimbatore and Bangalore it was considered necessary to evolve a sampling frame that adequately covers the population being investigated in the main study. Since the pilot study does not envisage testing the hypotheses, rather mainly confined to testing the psychometric properties of the instruments selected, the sampling frame to be used for selecting the samples was
confined to a narrow range of individuals listed by a purposive selection.

To start with, the investigator prepared a list of women known to her personally and classified them into the three different classes viz., housewives, career women and women entrepreneurs, spread over the two regions. Consultations were also made with residents of the localities about individuals who fulfill the criteria set for classifying the groups being listed. Thus, several names belonging to the three classes residing in the two regions were obtained and listed. The names were reviewed again and short listed in such a manner that each category to be investigated contained only 10 individuals. The sampling frame so evolved contained 60 individuals.

PILOT STUDY SAMPLE:

A systematic random sample of five individuals were drawn from each strata arising out of the three classes spread over the two regions. The final sample included only the individuals occupying even serial numbers on the lists. Thus, there were 30 individuals chosen as sample to be used in the pilot study. The age of the Ss in the sample ranged from 24 to 40 years. The mean and SD for the age of the sample are 30.53 years and 2.56 years. The Ss had either a bachelors or masters degree. All of them were leading a
normal life in that no stress or severe problems was reported by them at the time of the pilot study.

ADMINISTRATION OF INSTRUMENTS:

The I-EI, the PES, the POQ, the HPI and the AQ were individually administered to the Ss in the same order. Prior to administering the tests the S was engaged in a casual conversation on topics of her interest and the investigation was able to form authentic interpersonal relationship with the S.

The Ss were not informed about the specific aims of the study. However, they were given the information that they are participating in a research in psychology which required adequate co-operation on their part. The Ss were assured of the confidentiality of their responses. The time taken by each S to complete each of instruments was duly noted using a stop watch. Besides, the investigator also kept a verbatim record of questions and doubts raised by Ss while the instruments were administered to them. No hard and fast rules were followed with regard to administering the instruments in sessions. As many as 27 of the Ss required two sessions, 2 Ss required 3 sessions and only one required just one session to complete all the instruments.
ANALYSIS OF DATA OBTAINED IN PILOT STUDY:

The verbatim record of transaction that took place during administering the instruments was reviewed and examined to see whether the Ss had any special difficulty in taking the instruments and signs of understanding their instructions as expected of them. The qualitative analysis of information cited above showed that the procedure of administration including the order of the presentation of the test and instructions used in the pilot study were found to be applicable for the sample studied. Hence, it was resolved to adhere to the same procedures of administration in collecting data in the main study as well. Secondly, the time record kept for each instruments was analysed. The Mean and SD for time taken by the sample to complete each instrument are shown in table 1 given on the next page.

Assuming that the Ss to be investigated in the final stages of this investigation will also follow the same distribution of time for taking the various instruments the limits for the time estimates was calculated. The mean time taken to complete instrument by the pilot study sample is taken as the minimum time required by the S to complete an instrument in the main study. The maximum time required by a S to complete an instrument in the main study is estimated by adding three times the standard deviation of the time taken by Ss in the pilot
This study is also shown in the table. These estimates were used to work out of time budget for collecting data on 240 Ss for the final study. The minimum time required by a subject to complete an instrument in the main study is over estimated in the above procedure. This was done as a precaution to avoid any contingency in the administration in the main study.

Table 1

Mean and SD for the time taken

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Instruments</th>
<th>Range</th>
<th>M Mint</th>
<th>SD Mint</th>
<th>M +3SD Mint</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I-E-I</td>
<td>5.00-10.00</td>
<td>8.00</td>
<td>1.56</td>
<td>12.68</td>
</tr>
<tr>
<td>2</td>
<td>PES</td>
<td>2.30-4.30</td>
<td>3.47</td>
<td>0.64</td>
<td>5.79</td>
</tr>
<tr>
<td>3</td>
<td>POQ</td>
<td>4.00-7.00</td>
<td>5.25</td>
<td>0.83</td>
<td>7.74</td>
</tr>
<tr>
<td>4</td>
<td>HPI</td>
<td>2.00-4.00</td>
<td>3.00</td>
<td>0.72</td>
<td>5.16</td>
</tr>
<tr>
<td>5</td>
<td>AQ</td>
<td>1.30-4.00</td>
<td>3.13</td>
<td>0.81</td>
<td>5.56</td>
</tr>
</tbody>
</table>

Thirdly, the responses of the Ss to each item of the instruments were separately scored in order to work out reliability coefficients for each of the instruments. After scoring each item of an inventory, two scores were obtained by cumulating separately the odd and even numbered items. The two scores representing scores on the two values of the inventory were then correlated with each other using product moment correlation. The correlations thus obtained between
the values were corrected to obtain reliability co-efficient for the entire test using Spearman-Brown prophecy Formula. The correlations and the reliability co-efficients for each of the instruments are shown in the following table.

Table 2

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Name of the test</th>
<th>Correlation</th>
<th>Reliability Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I-E-I Internal Scale</td>
<td>.82</td>
<td>.90</td>
</tr>
<tr>
<td></td>
<td>Powerful Scale</td>
<td>.63</td>
<td>.77</td>
</tr>
<tr>
<td></td>
<td>Chance Scale</td>
<td>.43</td>
<td>.60</td>
</tr>
<tr>
<td>2</td>
<td>PES</td>
<td>.74</td>
<td>.85</td>
</tr>
<tr>
<td>3</td>
<td>POQ</td>
<td>.74</td>
<td>.85</td>
</tr>
<tr>
<td>4</td>
<td>HPI R-scale</td>
<td>.50</td>
<td>.67</td>
</tr>
<tr>
<td></td>
<td>1-scale</td>
<td>.44</td>
<td>.61</td>
</tr>
<tr>
<td></td>
<td>A-scale</td>
<td>.67</td>
<td>.81</td>
</tr>
<tr>
<td></td>
<td>S-scale</td>
<td>.46</td>
<td>.63</td>
</tr>
<tr>
<td></td>
<td>E-scale</td>
<td>.54</td>
<td>.71</td>
</tr>
<tr>
<td></td>
<td>C-scale</td>
<td>.34</td>
<td>.51</td>
</tr>
<tr>
<td>5</td>
<td>AQ</td>
<td>.96</td>
<td>.97</td>
</tr>
</tbody>
</table>
The coefficients presented in table 2 show that all the reliability coefficients are respectively high. The reliability coefficients of the I-E-I scales range from .60 to .90. The reliability coefficient of the FES is .85 and the for POQ it is .85. The reliability coefficients of HPI scales range from .51 to .81 and the reliability coefficient of AQ is .97 respectively. The simple format of the instruments, the use of standardised and tested instructions, the simple wording of the questions, the use of mother tongue and English in the instruments, the individual administration followed in the pilot study may be regarded to have construed the high order of reliability coefficients of the instruments. It is concluded that all the instruments chosen have high reliability as found on the sample used in the pilot study. Hence, it was resolved that the same mode of administration, including the order of presentation of the tests, and the instructions followed in the pilot study shall be retained for the main study as well.
ADAPTATION OF BSRI TO THE PRESENT POPULATION:

In order to realise the fourth objective set for the pilot study, adaptation of BSRI was undertaken. There are reasons for adapting the BSRI to the present population instead of using it as it is, in the present study.

Firstly, the BSRI as already pointed out elsewhere, will least serve the purpose of obtaining measures of masculinity, femininity and androgyny if it is used in its original format. Because, by very definitions the sex roles are mediated by cultural norms and prescriptions. The role prescriptions involved in BSRI have been derived from an sample alien to Indian population. Hence, it is essential not to apply Bem's role prescriptions, as they are, to present population. Though the BSRI cannot and shall not be used as it is on the present population of Indians in this study, the items included in it do reflect the important spectrum of behaviour usually studied, under the sex roles. Hence, it is feasible to retain the original items and adapt them to present population. The adaptation might help one obtain data which could be meaningfully compared with the data obtained within the frame work of the BSRI. Secondly, the Psychometrics of the scoring of the items in BSRI is based essentially on the responses of Ss in USA. Besides, it is much complicated in its present form. In view of these considerations it was resolved to adapt BSRI items to the present sample and also to evolve a
simple meaningful scoring procedure to score the responses to obtain elegant measures of masculinity, femininity and androgyny. The adaptation of BSRI formed the second phase of the pilot study.

SELECTION OF ITEMS TO BE INCLUDED IN SEX ROLE INVENTORY:

In order to adopt the items of BSRI to the present population, it was decided to have its items examined by psychologists who are competent enough to judge the face validity of the item to assess the sex typed characteristics. For this purpose a panel of 15 psychologists and psychiatrists who are working either in an academic set up or hospital set up was drawn by the investigation in consultation with the supervisor of this thesis. Letters were written to each of these experts to provide their expert counsel on assessing the validity of the BSRI items as applicable to present population. The letters
individually addressed to the experts, is given in appendix. Only 7 of the 15 experts approached responded to the letter of the investigator. The position, qualification, age and sex of the experts who responded to the letter are given below.

**Table 3**

Panel of Experts who judged the items of BSRI for their face validity for present population

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Positions</th>
<th>Qualifications</th>
<th>Sex</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Clinical Psychologist, Mental Hospital, Madras</td>
<td>MA, DM &amp; SP</td>
<td>M</td>
<td>47</td>
</tr>
<tr>
<td>2</td>
<td>Psychiatrist, Institute of Mental Health, Madras</td>
<td>MBBS</td>
<td>F</td>
<td>65</td>
</tr>
<tr>
<td>3</td>
<td>Reader in clinical Psychology, University of Madras</td>
<td>MA, DM &amp; SP, PhD</td>
<td>M</td>
<td>43</td>
</tr>
<tr>
<td>4</td>
<td>Professor and Head, Dept of Clinical Psychology, National Institute of Mental Health and Neuro Sciences, Bangalore</td>
<td>MA, DM &amp; SP, PhD</td>
<td>M</td>
<td>52</td>
</tr>
<tr>
<td>5</td>
<td>Professor and Head, Dept of Psychology, Bangalore University</td>
<td>MA, DM &amp; SP, PhD</td>
<td>F</td>
<td>50</td>
</tr>
<tr>
<td>6</td>
<td>Associate Professor, Dept of Psychology, Bangalore University</td>
<td>MA, DM &amp; SP, PhD</td>
<td>F</td>
<td>45</td>
</tr>
<tr>
<td>7</td>
<td>Associate Professor, Dept of Psychology, Bangalore University</td>
<td>MA, DM &amp; SP, PhD</td>
<td>M</td>
<td>44</td>
</tr>
</tbody>
</table>
The acceptance and rejection of the items as indicative of masculine or feminine sex type characteristics by the experts were tabulated and scrutinized. The number of judges approving the items of BSRI as having validity to assess sex typed characteristics indicative of masculininity and femininity are given in the table.

Table 4

Approval of the items by the panel of experts

<table>
<thead>
<tr>
<th>Sl.</th>
<th>Items considered to measure masculinity</th>
<th>No. of experts approving</th>
<th>%</th>
<th>Sl.</th>
<th>Femininity</th>
<th>No. of experts approving</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Self reliant</td>
<td>7</td>
<td>100</td>
<td>1</td>
<td>Yielding</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Defends own beliefs</td>
<td>2</td>
<td>28.57</td>
<td>2</td>
<td>Cheerful</td>
<td>4</td>
<td>57.14</td>
</tr>
<tr>
<td>3</td>
<td>Independent</td>
<td>6</td>
<td>85.71</td>
<td>3</td>
<td>Shy</td>
<td>6</td>
<td>85.71</td>
</tr>
<tr>
<td>4</td>
<td>Athletic</td>
<td>4</td>
<td>57.14</td>
<td>4</td>
<td>Affectionate</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Assertive</td>
<td>3</td>
<td>42.14</td>
<td>5</td>
<td>Flatterable</td>
<td>3</td>
<td>42.85</td>
</tr>
<tr>
<td>6</td>
<td>Strong personality</td>
<td>7</td>
<td>100</td>
<td>6</td>
<td>Loyal</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>7</td>
<td>Forceful</td>
<td>6</td>
<td>85.71</td>
<td>7</td>
<td>Feminine</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>8</td>
<td>Analytical</td>
<td>3</td>
<td>42.85</td>
<td>8</td>
<td>Sympathetic</td>
<td>4</td>
<td>57.14</td>
</tr>
<tr>
<td>9</td>
<td>Has leadership qualities</td>
<td>7</td>
<td>100</td>
<td>9</td>
<td>Sensitive to the needs of others</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>Willing to take risks</td>
<td>6</td>
<td>85.71</td>
<td>10</td>
<td>Understanding</td>
<td>6</td>
<td>85.71</td>
</tr>
<tr>
<td>11</td>
<td>Makes decisions easily</td>
<td>7</td>
<td>100</td>
<td>11</td>
<td>Compassionate</td>
<td>2</td>
<td>28.37</td>
</tr>
<tr>
<td>12</td>
<td>Self-sufficient</td>
<td>2</td>
<td>28.57</td>
<td>12</td>
<td>Eager to soothe hurt feelings</td>
<td>6</td>
<td>85.71</td>
</tr>
<tr>
<td>13</td>
<td>Dominant</td>
<td>6</td>
<td>85.71</td>
<td>13</td>
<td>Soft spoken</td>
<td>2</td>
<td>28.57</td>
</tr>
<tr>
<td>14</td>
<td>Masculine</td>
<td>7</td>
<td>100</td>
<td>14</td>
<td>Warm</td>
<td>3</td>
<td>42.85</td>
</tr>
<tr>
<td>15</td>
<td>Willing to take stand</td>
<td>3</td>
<td>42.85</td>
<td>15</td>
<td>Tender</td>
<td>2</td>
<td>28.57</td>
</tr>
<tr>
<td>16</td>
<td>Aggressive</td>
<td>6</td>
<td>85.71</td>
<td>16</td>
<td>Gulliable</td>
<td>6</td>
<td>85.71</td>
</tr>
<tr>
<td>17</td>
<td>Acts as a leader</td>
<td>7</td>
<td>100</td>
<td>17</td>
<td>Childlike</td>
<td>6</td>
<td>85.71</td>
</tr>
<tr>
<td>18</td>
<td>Individualistic</td>
<td>4</td>
<td>57.14</td>
<td>18</td>
<td>Does not use harsh language</td>
<td>6</td>
<td>85.71</td>
</tr>
<tr>
<td>19</td>
<td>Competitive</td>
<td>6</td>
<td>85.71</td>
<td>19</td>
<td>Loves children</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>20</td>
<td>Ambitious</td>
<td>3</td>
<td>42.85</td>
<td>20</td>
<td>Gentle</td>
<td>6</td>
<td>85.71</td>
</tr>
</tbody>
</table>
As seen in the table the items purporting to measure masculinity and femininity have been endorsed to be having face validity for the present population at least by six of the seven experts who scrutinize the items. These items were taken and polled and they are given below.

**TABLE 5**

Items approved by the Panel of Experts

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Masculine items</th>
<th>Feminine items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Self reliant</td>
<td>Yeilding</td>
</tr>
<tr>
<td>2</td>
<td>Independent</td>
<td>Shy</td>
</tr>
<tr>
<td>3</td>
<td>Strong personality</td>
<td>affectionate</td>
</tr>
<tr>
<td>4</td>
<td>forceful</td>
<td>feminine</td>
</tr>
<tr>
<td>5</td>
<td>has leadership qualities</td>
<td>sensitive to the needs of others</td>
</tr>
<tr>
<td>6</td>
<td>willing to take risks</td>
<td>understanding</td>
</tr>
<tr>
<td>7</td>
<td>makes decisions easily</td>
<td>eager to soothe hurt feelings</td>
</tr>
<tr>
<td>8</td>
<td>Dominant</td>
<td>gulliable</td>
</tr>
<tr>
<td>9</td>
<td>Masculine</td>
<td>Childlike</td>
</tr>
<tr>
<td>10</td>
<td>Aggressive</td>
<td>Does not use harsh language</td>
</tr>
<tr>
<td>11</td>
<td>Acts as a leader</td>
<td>Loves children</td>
</tr>
<tr>
<td>12</td>
<td>Competitive</td>
<td>Gentle</td>
</tr>
</tbody>
</table>

The 24 items shown in table 5 are regarded to be possessing adequate validity for measuring the sex typed characteristics in the present population. The items pertaining to male sex typed characteristics are grouped
into one to constitute the masculinity scale; the items pertaining to female sex typed characteristics are grouped into one to constitute the femininity scale. The Masculinity scale and the femininity scale constitute one inventory and named the Sex Role Inventory (SRI).

Having selected the items to measure the masculinity and femininity the investigator proceeded to ascertain the feasibility of requiring the respondents to indicate the responses in terms of simple 'Yes' and 'No' answers, using a five point rating scale and using a seven point rating scale. The items were administered to 30 women belonging to the present population and the subjects were asked to indicate the prefered mode of answering the items out of the three modes (Yes, No; 5 point rating; and 7 point rating) available to them. The data so collected show that all the subjects prefer to use a simple 'Yes' or 'No' type of answering to other modes of answering.

The number of items endorsed by the subject as indicative of the characteristic of herself constitute the score of the subject on the scale concerned. The SRI was made use of to obtain scores of masculinity and femininity independently. The score of the S on M-scale is called the M-score and the score on F-scale, the F score. Based on the rationale of considering androgyny
as a state of possessing the masculine and feminine sex
type characteristics in equal proportions, a scoring
scheme was evolved to obtain score for each individual
on androgyny. The score obtained for a S on androgyny is called
the andro-score is called. Since the procedure suggested
by Bem for scoring responses for androgyny is complex
and based on conversion score obtained on a population
different from the one studied in the present investigation,
an alternative method was developed for obtaining scores
on Androgyny. The method developed is described elsewhere
in this thesis.

RELIABILITY OF THE SRI:

In order to test the reliability of SRI a Purposive
sample was chosen. The sample consisted of 30 women drawn
from Housewives, Career women and Women entrepreneurs in
Coimbatore. There were equal number of Housewives, Career
women and Women entrepreneurs in the sample. The age of
the Ss range from 24 to 35 years with a mean of 28.07
years and SD of 3.08 years. All of their were college
educated. The socio-economic status of the Ss could be
reasonably termed as 'middle class'.

The SRI was individually administered to the Ss
following instructions.
Given below are a number of characteristics. Read them one by one carefully. Consider each item and find out whether it would apply to you: you or not. If you consider an item as pertaining to you, put a tick mark on 'Yes' and if not, put a tick mark on 'No' printed adjustment to the item in the questionnaire

The items of SRI constituting the masculinity scale were split into two groups based on their serial position on the scale; the odd numbered items were grouped into one group to constitute the first half and the even numbered items were grouped into one group to constitute the second half of the scale. In the same manner the items constituting the femininity scale were split into two half scales, the odd numbered constituting the first half and the even numbered items constituting the second half. The two half-scales of the M-scale and F-scale were scored separately.

SCORING:

The 24 items of SRI are scored separately to obtain three scores viz., M-score, F-score and Andro-score.

The M-score is obtained by cumulating the endorsement made by the S of the items pertaining to the characteristics relating to masculinity. The maximum M-score possible on SRI is 12.
The F-score is obtained by cumulating the endorsement made by the S of the items pertaining to the characteristics relating to femininity. The maximum F-score possible on SRI is 12.

For obtaining andro-score, the proportion of the masculine and feminine characteristics endorsed by the S is taken into account. When the difference in proportions between the endorsements made by the S of masculine responses and feminine responses is significant as tested against null hypotheses using appropriate t-test, the S is given no score on androgyny. When the proportions just cited are not significantly different from one another as shown by the t-value \( t > 2.20, \text{ df } 22, P \leq 0.05 \), the andro-score is obtained by simply cumulating the F-score and the M-score and dividing the sum obtained by 2.

In practice, the matrix of 12 x 12 in which the cells contain the androgyny scores pertaining to different proportions of M and F-scores is made use of for reckoning the score of the S or androgyny.

DETERMINING RELIABILITY COEFFICIENTS:

The scores of the Ss on the two halves of the M-scale were calculated using product-moment correlation and the correlation was corrected with Spearman Brown prophecy.
Formula for obtaining reliability coefficient of M-scale. Following the same procedure the reliability coefficients of F-scale was determined.

The reliability of the scoring procedure used for obtaining andro-score, the two andro scores obtained using the first halves and second halves of M and F-scales were correlated using product moment correlation and the reliability coefficient was obtained using Spearman Brown Prophesy Formula. The test of proportions of the M and F responses was suitably modified considering the total number of items constituting each half.

The reliability coefficients obtained for M-scale, F-scale, and the procedure used for obtaining andro-score are found to be .96, .98 and .98 respectively. All the coefficients are very high. The coefficients seem to be acceptable and valid in view of the fact that the items have been very carefully selected by the panel of experts and that they were administered individually to the Ss under a condition of relationship which was highly authentic.

The SRI, since has been found to have adequate validity and reliability, was retained to obtain androgyny score for each S in the present investigation.
RESULTS OF THE PILOT STUDY:

The data collected from the Ss included in the sample for the final study was analysed with reference to the objectives of the pilot study. The data obtained in the pilot study sufficiently show that it is feasible to adhere to the procedures of administration including the instructions formulated by other investigators and used in the pilot study in administering the various instruments, in the main study as well. Secondly, the time estimates based on the information collected in the pilot study reveal that it requires nearly one hour for the investigator to collect data on all the instruments from each S. Considering the time required for each S to complete the instruments and the time available to the investigator to complete the investigation, it was decided that it will be feasible to restrict the size of the samples to be studied in this investigation to 240 individuals. Thirdly, the reliability coefficients of the instruments used in this study are found to be adequate for the purposes of the investigation and suggest that all the instruments could be retained for collecting data to test the hypotheses in the main study. The SRI has been found to be capable of providing valid and reliable measures of the Ss' sex-type characteristics. Hence, it was decided to use SRI in the present investigation to obtain measures of masculinity, femininity and androgyny of the Ss.
SELECTION OF SAMPLE FOR THE MAIN STUDY:

The samples of Housewives, Career Women and Women Entrepreneurs were drawn from the sample frames obtained from the ACs. The selection of individuals into a particular sample from the relevant sample frame was done using lottery method. For this purpose, the names contained in the sample frame concerned were written on small slips of papers of equal size, rolled uniformly and put into an urn. The urn was vigorously rotated and the slips from it were drawn one by one without replacement. The names of the Ss to be included in a particular sample was read from the slips one by one. Firstly, the investigator collected 80 Women from each of the three groups herein conceived. Viz., House Wives, Career Women and Women Entrepreneurs, equally drawn from Coimbatore and Bangalore. After collecting the samples of individuals thus, she went ahead collecting additional samples of containing 5% of the size of the samples selected in order to have a waiting list of Ss who could be relevantly included in the sample to substitute Ss dropping from participating in the investigation for one reason or the other. The additional samples were exclusively used to compensate any loss in size of the samples proposed to be investigated in the main study. The constitution of the additional samples enabled the investigator to collect data on all the instruments from eighty house wives, eighty career women and eighty women entre.
preneurs, equally drawn from Coimbatore and Bangalore, as planned in this investigation.

PROCEDURE USED FOR ADMINISTERING THE INSTRUMENTS IN THE MAIN STUDY:

The procedure used in administering the instruments in the pilot study was retained in the main study as well. Special care was taken by the investigator to establish sufficient rapport with the Ss prior to administering the instruments. The nature of hypotheses of the study were not revealed to the Ss and the Ss were encouraged to respond to the instruments freely and frankly. The investigator refrained strictly from making any comment or digression while administering the instruments that might affect the seriousness of the Ss responding to the instruments. All the Ss who have completely responded to all the instruments in the investigation were cooperative and had authentic relationship with the investigator.

As envisaged at the conclusion of pilot study a few Ss included in the sample dropped out from the investigation at varying stages.

Among entrepreneurs one claimed to be too busy to participate in the investigation and refused participation and 2 could not complete all the instruments due to disruptions caused by unexpected travel connected with business. One
Career Women and One Housewife left the study due to unexpected contingencies in their time schedule. One Housewife was not interested to participate in psychological investigation and refused participation. 2 Career women who began to respond to the instruments enthusiastically lost interest soon and excused themselves out. As already mentioned the loss of Ss in the sample originally selected was compensated by substituting Ss drawn from additional frame referred to in the previous pages. The S to be substituted for a drop out in the sample was selected from the additional sample using lottery method.

The data used for testing the hypotheses for the present study pertain to the data collected from the 80 Housewives, the 80 Career Women and 80 Women Entrepreneurs drawn equally from Coimbatore and Bangalore on the instruments administered in the present investigation.

STATISTICAL ANALYSIS:

The data collected using the different instruments on the variables of interest on the groups of Housewives, Career women and Women Entrepreneurs was subjected to appropriate statistical analyses. The main objective of the analysis was to test the hypotheses with regard to the differences possible between the housewives and career women, and the house wives and the women entrepreneurs.
The detail description of the sample drawn from Coimbatore and Bangalore given in sample description elsewhere shows that the subsamples from the two regions are not homogenous. It is possible that these differences might confound the results relating to the hypotheses. Therefore, it was decided to give provision to assess the possible effect of possible differences and also the possible interaction between the differences between groups and the regional differences in the analyses. Hence the data were classified into $3 \times 2$ factorial arrangement involving the three groups compared and the two regions from which the samples came from.

Finally a discriminant analysis was considered to be in order (Green, 1978). The analysis is used to study the relations among the variables in different samples. Discriminant equations were formed to describe the composition of variables in housewives, career women and women entrepreneurs on the fifteen variables selected in the present investigation.

SUMMARY AND CONCLUSIONS:

This chapter provides the method used in the present study to test the hypotheses. Herein
are described the instrumentation, sampling frame for the main study, the pilot study including the procedures used for adopting BSRI the nature of sampling used in selecting the main sample and statistical analyses applied in this investigation.