Chapter 3

Methodology
CHAPTER-3

RESEARCH METHODOLOGY

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DESIGN:

On the basis of literature reviewed on related topics, the problem of the present investigation has been selected. The main purpose of the present investigation is to trace the personality factors of women in relation to value pattern, locus of control and frustration-tolerance. Hence, it is a descriptive study based on psychometric evaluation of working, non-working, married and unmarried women. Socio-economic class and educational level are not considered as part of the present study but sample consists of graduate equivalents from upper middle class.

In the present investigation there are four independent variables, namely marital status, working status, socio-cultural environmental status and age. Marital status is treated on two levels – married and unmarried women. Working status is treated on two levels - working and non-working women. Socio-cultural environmental status is treated on two levels - high cosmopolitan community and moderate cosmopolitan community. Age is treated on two levels – younger age group and older age group.

VARIABLES:

The group comparisons will be made on the bases of following dimensions.

Marital Status-
Marital status of the subject is studied under two sub-groups.
1. Married women
2. Unmarried women

Working Status-
Along with marital status their working condition is studied under two groups.
1. Working women
2. Non-working women

The city wise and age wise comparisons is made to explore significant differences in value pattern, locus of control and frustration-tolerance.
Socio-cultural Environmental Status-
The third dimension is socio-cultural environmental status. It is divided in two groups.

1. High cosmopolitan community (Mumbai)
2. Moderate cosmopolitan community (Ahmedabad)

Age Group-
The forth dimension is age group which is studied under two groups.

1. 20 years to 29 years
2. 30 years to 39 years

From the main groups mentioned above following sub-groups are considered for the purpose of cross comparison.

1. Married working – Unmarried working
2. Married working – Married Non-working
3. Married working – Unmarried non-working
4. Unmarried working – Married non-working
5. Unmarried working – Unmarried non-working
6. Unmarried working – Unmarried non-working

As secondary elaboration of variable status further comparison is made on the base of locus of control and frustration-tolerance.

Locus of Control-

Another dimension considered is the internality and externality of control. Following are the categories which are made on the basis of the standardized norms of the English version of the Indian adaptation (Raval, 1988) of Rotter’s scale of Locus of Control.

1. Internal – 1 - 9
2. Moderate – 10 - 13
3. External – 14 - 23
Level of Frustration-tolerance-

The level of frustration tolerance which is studied under four groups on the basis of group conformity rating (GCR).

1. 0-50
2. 50-75
3. 75-100

In regards to reaction to frustration, the direction and the type of frustration is studied. Value pattern include six different values namely, social, economical, aesthetic, theoretical, political and religious.

OPERATIONAL DEFINITIONS:

The operational definitions in terms of level at which the particular variables are treated are mentioned below.

1. Marital status:

Marital status is treated at two levels – married and unmarried women

Married –
The term married is applied to legal and religious bonding continued till today. The contract marriage, divorcees, widows or separated are not included in the present study.

Unmarried –
The label of unmarried is usually given to a woman in her late thirties and forties but in the present study the term unmarried is used in relation to her role multiplicity and its related stress. Unmarried is not applied to legal and religious bonding, long term commitment or contract.

2. Working Status:

Working status is treated at two levels – working and non-working condition.

Working women-
Full time paid occupation including self employed and salaried woman with adequate working condition and responsibilities was taken into consideration.

Non-working women-
Woman who was completely house bound, not involved in any paid or unpaid occupation or activity was considered.

3. Socio-cultural environmental status:

It is assumed that various socio cultural environmental conditions have different kind of lifestyle, goals, stress, role play and frustration management. Taking this into consideration socio cultural environmental status is treated at two levels.

High cosmopolitan community and Moderate cosmopolitan community-
The term cosmopolitan refers to the heterogeneity amongst the community in terms of nationality, religion, provincial and cultural diversities. With respect to above definition, this concept is largely accepted that the city of Mumbai is highly cosmopolitan compared to Ahmedabad. Hence, women from Mumbai were regarded as highly cosmopolitan and women from Ahmedabad were regarded as moderately cosmopolitan.

4. Age:

Age is treated at two levels - younger age group and older age group. On the basis of the differences in their expectations, role, coping strategies, goals etc., these two groups were taken into consideration.

5. Locus of control:

Internal, External and Moderate locus of control- all these levels have their own way to respond to external and internal reinforcement, which ultimately leads to differences in priorities, values, adjustment and frustration. On the basis of the theoretical ground these three levels were considered.
6. Value pattern:

Value pattern described by Allport G. W. was taken as authentic psychological construct. The definition of basic six values given by the test constructor is discussed in the theoretical review. Value pattern refers to the relative strength of each value on the value profile of the individual and group.

7. Level of Frustration–tolerance:

Level of frustration tolerance is considered on the basis of Group Conformity Rating (G.C.R.). It is treated at four levels based on the quartiles- 1, 2, 3 and 4 quartiles of the percentage.

8. Direction of Frustration:

Direction of frustration is treated at three levels based on the description given in the manual- E-A, I-A, M-A.

9. Type of Frustration:

Type of frustration is treated at three levels based on the description given in the manual- O-D, E-D, N-P.

SAMPLE:

The sample consists of 120 subjects. They are equally divided into four groups keeping in mind their marital status and working status, i.e. 30-married working women, 30- married non-working women, 30- unmarried working women and 30 unmarried non-working women. It was an incidental sample within the frame work mentioned below. The sample was selected equally from two different socio-cultural communities, i.e. Mumbai and Ahmedabad. The range of their age group was between 20 to 40 years. The sample was approached by door to door visit and then scrutinized as per the criteria. Upon their consent and prior appointment the test was administered.
Sample break up:

<table>
<thead>
<tr>
<th>Groups</th>
<th>Married</th>
<th></th>
<th>Unmarried</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>H.C.C</td>
<td>M.C.C</td>
<td>H.C.C</td>
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<td>Working</td>
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<td>15</td>
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</tr>
<tr>
<td>Non-working</td>
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<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

Age range: 20 to 40
Literacy level: Graduates and post graduates
Socio-economic status: Approximately within the range Middle and upper-middle class

DESCRIPTION OF THE TOOLS:

The following tools were used for the measurement of the dependent variables:

1. Indian adaptation of Study of Values test by Allport, Vernon and Lindsey (1960) was used to measure the basic value orientation and the relative strength of each value compared to others as one of the important dimensions of personality (P.H. Raval, 1983).

2. Indian adaptation of Rotter’s Internal-External Locus Of Control test was used to measure the external locus of control of the subject (P.H. Raval, 1985).

3. The Indian adaptation of the Rosenzweig Picture frustration Test-Adult Form (Pareek Udai, 1968) was used to measure the frustration tolerance of the subjects.
Study of Values:

The main purpose of this test is to measure generalized and dominant interests. The Study of values (Allport et al) is based upon six categories of values, as classified by Eduard Spranger. The items are intended to measure the relative prominence of the subject’s interests, for the purpose of classifying individual’s values. The six categories are: theoretical (truth), aesthetic (harmony), economic (usefulness), social (altruistic love), political (power) and religious (unity). The classification is directly based on Eduard Spranger’s Type of Men (37), which defends the view that the personality of men is best known through a study of their values or evaluative attitudes.

According to this classification, the dominant interest of the theoretical man is discovery of truth; the economic man is interested in what is useful; the aesthetic man values form and harmony most; the highest value of the social type is love of people; the political man is interested primarily in power; the religious man places the highest value on unity, in an effort to comprehend the cosmos as a whole. Since it is undesirable for those who take the test to know much about its theoretical basis beforehand, any mention or discussion of these six values should be differed until the test has been taken.

The scale is designed primarily for use with college students, or with adults who have had some college or equivalent education. The test consists of 24 questions, based upon a variety of familiar situations under each of which a subject is required to select – from paired alternatives (Part I) and from multiple choices-responses (Part II) which are indicative of degrees of the six types of values. In all there are hundred and twenty answers, twenty of which refer to each of the six values. The subject records their preferences numerically by the side of each alternative answer. The scores on each page are then added and the totals transcribed onto the Score Sheet. The page totals belonging to each of the six values are then summed. After applying simple corrections these six total scores are plotted on a profile, so that we may see the significance of individual’s standing on all the values simultaneously.

There is no time limit given but most subjects require about twenty minutes to complete the test. Although they should not be stopped before finishing, they should be discouraged from spending too long a time over the questions.
It is assumed that these six values are “natural” type, or that they include all possible value groups, or that individuals can be classified entirely under one or another. As a matter of fact, each and every individual has some level of value in each category. Most of the people have a mixture of two or more of these value groups, some values being stronger and more dominant than others in each person.

Unlike most tests of personality, the present scale aims to measure more than a single variable. It does not, however, measure the absolute strength of each of the six values, but only their relative strength. In interpreting the results, therefore, it is necessary to bear in mind that they reveal only the relative importance of each of the six values in a given personality, not the total amount of “value energy” or drive possessed by an individual. It is quite possible for the highest value for a generally apathetic person to be less intense and effective than the lowest value of a person in whom all values are prominent and dynamic.

Comparison of Old Form and Revised Form:

The study of values was originally published in 1931. The present revision offers certain improvements without changing the basic purpose of the test or limiting its scope of usefulness. The definition of “social” value has been made more specific. There is simplification in wording and a modernization of certain items in the revised form. The scoring of the revised scale is more economically of time and labor.

Correlations between the old form and the revised form are all significantly high. These correlation based on the sample of fifty male college students, are provided by Dr. Dorothy Sporrl of the American International College.

Reliability:

The reliabilities obtained by various methods seem satisfactory, especially in view of the fact that each value is measured by only twenty questions. Internal consistency of the scale is determined by two methods- split-half reliability and item analysis. The mean reliability coefficient was 0.82 for the Revised Form, as opposed to 0.70 for the Old form. The item analysis shows a positive correlation for each item with the total score of its value, significant at 0.01 level of confidence.

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Validity:

According to the principal studies of Cantril and Allport (6), Decker (11), Duffy (12), Golden (15), Harris (17), McCarthy (22), Schaefer (32) and Stone (39), the Old Form of the test had more extensive external validation. Newcomb’s finding shows that college education of a special type changes value profiles in the expected direction (25); Postman-Burner-McGinnies discovered that personal values correlate with the rapid perception of value-related words (28); Schooley’s finding shows that the profiles of married couples are similar (33).

Norms:

To consider the high and low score for each value the normative norms in terms of range indicating upper and lower limit is provided for men and women. In the same way outstandingly high and low scores are also indicated for both genders on each value.

Note:

Since the original norms are too old and also culturally susceptible the norms are not used in the present study and not presented here. During the initial try out it was observed that the items of the tests have a lot of relevance and merits in the present cultural scenario. But the norms may not be relevant for the present age.

Indian adaptation of study of values

In the Indian adaptation a lot of cultural diversity is observed in the range of scores which does not fulfill the requirement to establish the empirical norms. Hence it is advised by the test constructor to use the theoretical norms in order to get rid off any cultural diversities or biases. In the graphic presentation of the value profile the theoretical score of forty is used for comparison. The validity and reliability closely follows the original figures. Hence it is not repeated here.
Locus of control:

It is also referred to as internal v/s external control. The construct was first outlined by Rotter (1966). It has been defined as follows. When a reinforcement is typically received by the subject as being contingent upon his action, we term such a belief as a belief in internal control, but when it is typically perceived as not being entirely contingent upon her action but upon luck, chance, or powerful others, we term such as a belief in external control.

The construct of locus of control is not a typological one. It is not the case that people are either internally or externally controlled. It is a continuum and people can be ordered along that continuum. It should be emphasized that the behavior of an individual in any given situation is determined by many converging factors. But for the sake of convenience we will refer to internals and externals.

Since its inception, the construct of locus of control has been variously researched on. Attempts have been made to study the antecedents of locus of control i.e. how Internal-external beliefs develop. Child and parental relationships, child-rearing practices have been contrasted (i.e. Chance 1965, Davis and Phares 1969) social class and locus of control have been correlated (white and black samples were compared by Lefcourt and Ladwig 1966). The general role of culture has been examined by Hsich et al (1969), Jessor et al (1968) and Parsons et al (1970). Penk (1969) and Grandall et al (1965) found that as the child develops he becomes a more effective human being and thus increases his belief in internal control.

The construct of locus of control has along been established as a solid predictor of mental and physical health. Individuals who accept responsibility for most events in their lives are more likely to be healthy and productive than individuals who believe that external factors control such events (J. D. Long, R. L. Williams, P. Gaynor and D-Clark, 1988). In a study that contrasted the lifestyle habits of college students who were high and low on different dimensions of locus of control a significant interaction was obtained between the high-low group variable and the four areas of lifestyle habits (health, work, leisure and social)
The Indian Adaptation of Rotter Internal - External Locus of Control (1966):

The scale is self-administered and can be completed in 15 minutes. It has been used with adolescents and older subjects, and most frequently with college students. No upper or lower age limits have been established. The test consists of 23 items, plus six filler items (item no. 1,8,14,19,24,27), sampled widely from different life situations. Each item would provide an adequate sampling of situations in which internal-external attitudes might be expected to affect behavior. This is a forced-choice instrument, which consists of 29 pairs of statements, 23 of which are scored. One point is given for each statement selected. Scores can range from zero (most-internal) to 23 (most-external). Middle score is treated as median value.

Internal locus of control refers to the perception of positive and/or negative events as being a consequence of one’s own actions and thereby under personal control. Internally controlled persons feel that reinforcement which they receive occur primarily because of their own purposeful behavior. External locus of control refers to the perception of positive and/or negative events as being unrelated to one’s own behavior in certain situations and therefore beyond person’s control. Externally controlled person believes that reinforcements are under the control of powerful others, luck, chance, fate etc. “Externals” believe that their life is ruled by factors beyond their control.

Rotter (1966) reported that two factor analyses had been done- one by himself and the other by Franklin (1963). The results were much the same. Each received one general factor which accounted for much of the total scale (variance 53 percent in Franklin’s analysis) and several additional factors which involved a few items and which accounted for very little variance. Rotter’s Scale is shown to be more multidimensional than the analysis of Rotter and Franklin (Gurien et al 1969, MacDonald and Treng 1971, Mirels, 1970, Minton 1972).

Reliability:

An internal consistency co-efficient (Kuder Richardson 1966) for the two subgroups of Rotter’s (1966) sample, test-retest reliability coefficients were computed with a value of - 72 for 60 college students after one month (for males r = - 60 for female r = - 61).
Indian adaptation of Rotter's locus of control scale (Raval P., 1985) was administered on randomly selected sample of 500 undergraduate students (250 males and 250 females). The age range of the students was from 18 years to 25 years with a mean age of 21-24 years. In order to obtain test-retest reliability, it was re-administered to the same sample group after an interval of 4 weeks. However, only 345 persons were available for the purpose.

Reliability of the Indian Adaptation of Rotter's locus of control scale -

<table>
<thead>
<tr>
<th>Method</th>
<th>N</th>
<th>r</th>
<th>Index of Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Split-half</td>
<td>500</td>
<td>.78</td>
<td>.88</td>
</tr>
<tr>
<td>Test-retest</td>
<td>345</td>
<td>.73</td>
<td>.85</td>
</tr>
</tbody>
</table>

Validity:

Over 50% of the internal-external Locus of control investigations have employed the Rotter's scale. It is not possible to list all the findings here. Detailed literature reviews are available (Joe 1972, Lefcourt 1972, Minton 1967, Rotter 1966). The literature does indicate that there are individual differences in perception above one's control, over one's destiny and that the Rotter's Scale is sensitive to these differences. Hersch and Scheibe(1967) found non-significant correlation between I-E total score and three different measures of intelligence, Sticland(1968) found non-significant correlation between Rotter's locus of control scale and Marlowe Crowe Social Desirability Scale.

Rotter reports that correlation with Marlowe-Crowe Social Desirability Scale ranges from - .07 to .35 and more recent studies have uncovered high coefficients (Altrocchi et al 1963; Father 1967; Hielle 1971; Macdonald 1972). The Indian adaptation of the test closely follows this in terms of items, reliability and validity.

Rosenzweig Picture Frustration Study:

"The Rosenzweig P-F study may be said to be a controlled projective technique, primarily intended to measure reactions to frustrating situation" (Pareek, U., 1959). "It is assumed as a basis for the P-F study that the subject unconsciously or consciously identifies himself with the frustrating
individual in each picture situation and projects his own bias in the replies give" (Pareek, U., 1959).

The Picture-frustration study technique was developed as a result of experiments on repression and frustration, carried out of a desire to explore certain aspects of frustration theory and secondarily out of his interest in projective methodology.

The various investigations by Rosenzweig (1936, 1938a, 1943) led to a theory of frustration (Rosenzweig, 1938a, 1944) which formed the basis of explorations in the direction of frustration reactions. Rosenzweig’s test for frustration had an earlier and simpler version (Rosenzweig, 1943), the first section of which was developed into a full-fledged technique, the picture association method. In order to specify his own technique, he termed it as “Picture-Association Study for assessing reaction to frustration”, which was shortened to “Picture-Frustration Study” and is now popularly known as the P-F Study.

The test was first introduced in 1944. According to Rosenzweig (1945), “This technique stands mid-way in design between the word-association and the thematic apperception technique. It thus retains some of the objective advantages of the word-association test, while at the same time, approaching to a degree, the moral aspect of personality, which the T.A.T. is intended to probe” (Rosenzweig, 1945).

Rosenzweig P-F Study represents a limited projective procedure for disclosing certain patterns of response to everyday stress that are broadly applicable in both normal and abnormal adjustment, (Rosenzweig, 1945). The original Adult form of 1944 was later revised in 1948 and was then followed by the Children’s Form in 1948.

The P-F study consists of 24 cartoon-like drawings, each of which represents an every day frustrating situation that involves two persons. One character in the drawing is shown saying something that either frustrates or helps to describe the frustration of the other individual. The subject is required to respond by writing the reply that she thinks the thwarted person would probably give.
Reliability:

Inter-scorer reliability of the P-F study has been shown repeatedly to be high (around 85% - Clarke, Rosenzweig, Fleming, 1947). Retest reliability of the instrument has been demonstrated to vary for the several categories and for the G.C.R. but the correlations are, in general, statistically significant, especially for those categories that relate to direction of aggression (Rosenzweig, Ludwig, Andelman, 1975).

Validity:

Validity (construct, criteria – related and pragmatic) has been examined in numerous investigations (Nencini and Misiti, 1956: Pichot and Danjon, 1955). The majority of reports are favorable, more so than for most other projective techniques, in part, in doubt, because the P-F is scored more objectively and statistical norms for various ages and for some qualitative conditions are available (Bjerstedt, 1965). The pragmatic relevance of the method has been demonstrated in research on behavior disorders (Davids and Oliver, 1960); psychosomatic conditions (Guyotat and Guillaumin, 1960), Crime and delinquency (Kaswan, Wasman and Freedman, 1960; Rauchfleisch, 1973; Rosenzweig, 1963), vocational selection (Guion and Gottier, 1965; Van Dam, 1970) and various interpersonal areas (Grygier, 1954).

The Indian Adaptation Of The Rosenzweig Picture-Frustration Study (Adult Form):

The original children’s form of the Rosenzweig P-F Study was adapted for use in India by Udai Pareek in 1958. Encouraged with the results of the Children’s Form, the Adult Form was also adapted and standardized. The Adult Form is designed for subjects aged 13 years and above.

The Indian Adaptation tries to retain the original situations with as little modifications as necessary to make the situations acceptable in the Indian culture. However, more changes were needed in the Adult Form than were made in the Children’s Form. Changes are made in the paraphernalia of the pictures, e.g. clothing and furniture; changes were made in the captions of some pictures; some situations had to be completely changed. Like the original study the Indian Adaptations consists of twenty four cartoons like
drawings representing frustrating situations. Each depicts two persons who are involved in a mildly frustrating situation of common occurrence. The figure at the left of each picture is shown saying something that either frustrates or helps to describe the frustration of other individual, or which are themselves actually frustrating to him. The person on the right is always shown with a blank caption box above his head. Facial features and other expressions of personality are deliberately omitted from all the pictures to facilitate projective structuring by the subject. The subject is instructed to examine the situations one at a time and write in the blank box or on another blank response sheet provided, the first appropriate reply which enters his mind.

The situations are both ego-blocking and superego-blocking types. Ego-blocking situations are those in which some obstacle, personal or impersonal, interrupts, disappoints, deprives, or otherwise, directly frustrates the subject. Superego-blocking represents some accusations, change, or incrimination of the subject by someone else.

Constructs:

To define a response set of the Subject, score are assigned to each response under two main categories: Direction of Aggression and Type of Aggression.

Under Direction of Aggression fall:

a) Extragression (E-A), in which aggression is turned onto the environment;

b) Introgression (I-A), in which aggression is turned by the subject upon himself;

c) Imgression (M-A), in which aggression is evaded in an attempt to gloss over the frustration.

Under the Type of Aggression fall:

a) Obstacle-dominance (O-D), in which the barrier that occasions the frustrations stands out in the responses;

b) Ego-defensive (E-D), in which the ego of the subject predominates;
d) Need-persistence (N-P), in which the solution of the frustrating problem is emphasized.

From the combination of the six interrelated categories there are nine possible scoring factors (and two variants, E and I). These factors serve for the actual scores to be assigned. A subject’s usual pattern of reaction to frustration is thus a factor which results from a combination of direction and type in response.

Besides direction and type of aggression, the Group Conformity Rating (G.C.R.) is also obtained. It is a measure of conformity of an individual’s score to the model responses of the group. This measure is considered as indicating of frustration tolerance. Higher GCR score is it interpreted as higher level of frustration tolerance.

Reliability:

Inter-scorer reliability is quite high, the percentage of agreement increasing to 98 after discussions. Reliability coefficients both for matrix reliability and item reliability are quite high. Stability coefficients range from .27 to .82 and consistency values from 46 to 74.

Validity:

To determine the validity of the Indian adaptation (on the lines of Angleino’s study), P-F scores were compared with teachers'/lecturers’ ratings on the categories of E, I and M. The correlations were very low. No significant difference was found among the three classified groups of individuals (good adjustment, poor adjustment with behavior problems), on E, I and M. This reveals an absence of any agreement between rating and P-F scores which may be due to unreliability of ratings.

PROCEDURE:

The purpose of the research was explained to the participants and their willingness to participate in the research was also verified. The data was collected with door to door visit. Adequate rapport was established and subject was made comfortable. Necessary instructions and material for the test was given to the subject. The subject was asked to read the instruction given at the top of the each form and answer the questions truthfully and as
carefully as possible. She was told not to linger on over questions but to give
first reaction to it.

Three tests were administered in a single session. Single session took
approximately one and half hour. First the Indian adaptation of Rotter's
locus of control was given. After a pause of ten minutes the study of value
test was given. Then Indian adaptation of P-F study was administered after a
pause of ten minutes.

There was no time limit given. The tests were administered with two rest
pauses in between the tests to avoid any feeling of fatigue and boredom and
to sustain the interest and motivation of the subject.

Scoring for all these tests was done in conformity with the laid down
procedures in the manuals of respective tests. Thereafter the data was
statistically treated and analyzed in accordance with the objectives of the
study.

DATA ANALYSIS:

The data collected is analyzed by using two broader approaches i.e.
quantitative and qualitative. More then one method of analyzing the data
provided the broader possibility of tracing the differences and similarities on
given variables.

Qualitative Approach:

One of the objectives of this study is to prepare the value profiles of
working, non-working, married and un-married women. This objective was
obtained by preparing the profiles based on the mean score on each factor of
total sample as well as sub groups.

The comparative bar-diagram are plotted for each value, locus of control,
GCR, three directions of frustration and three levels of frustration on the
mean score of total sample, groups and sub groups.
Quantitative Approach:

All hypotheses related to values, locus of control frustration-tolerance, direction of frustration and level of frustration were tested by using series of t-tests. To study the groups and sub-groups interactions one-way, two-way and three-way analysis were used as per the suitability to the group concerned. Independent variables were marital status, working status, socio-cultural environmental status and age group. Significant main effects and interactions were analyzed using Post Hawk test of significance.

Inter correlation of each dependent variable was tested for each group and sub-groups. On the basis of that correlation matrix was formed.

Note:

The details of analyses correspond to the elaborated list of hypotheses in chapter -1.