CHAPTER-IV

OBJECTIVES, HYPOTHESES, PROCEDURE AND DESIGN OF THE STUDY
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Methodology of the study is as important as the study itself. The investigator should have a clear idea about the selection of sample, data gathering procedures, and the data analysis techniques so that the results obtained from the study could be generalised to a great extent. In the light of the theoretical framework and the review of related research studies discussed in the earlier chapters, the investigator was able to have a blueprint of this proposed study. This chapter deals with the objectives and hypotheses, tools and techniques used, and the general procedure adopted for completion of the present investigation.

However, to bring clarity of understanding the objectives and corresponding hypotheses, it was thought essential to report the independent and dependent variables of the study.

Independent variables of the study :

The present investigation was conducted including following independent variables :-

- Intelligence
- Socio Economic Status
- Parental Attitude
Dependent variable of the study:

The dependent variable of the present investigation was:

• Moral Reasoning

Objectives of the Study:

In order to systematically pursue the study the following objectives were framed:

1. To study the effect of value clarification on moral reasoning of boys.
2. To study the effect of value clarification on moral reasoning of girls.
3. To study the effect of value clarification on moral reasoning of both boys and girls.
4. To compare the effect of value clarification on the development of moral reasoning of boys belonging to different socio economic status.
5. To compare the effect of value clarification on the development of moral reasoning of girls belonging to different socio economic status.
6. To compare the effect of value clarification on the development of moral reasoning of both boys and girls belonging to different socio economic status.
7. To compare the effect of value clarification on the development of moral reasoning of boys at different levels of intelligence.
8. To compare the effect of value clarification on the development of moral reasoning of girls at different levels of intelligence.
9. To compare the effect of value clarification on the development of moral reasoning of both boys and girls at different levels of intelligence.

10. To compare the effect of value clarification on the development of moral reasoning of boys in relation to different types of attitudes of parents towards their children.

11. To compare the effect of value clarification on the development of moral reasoning of girls in relation to different types of attitudes of parents towards their children.

12. To compare the effect of value clarification on the development of moral reasoning of both boys and girls in relation to different types of attitudes of parents towards their children.

Hypotheses of the Study:

In order to realise the objectives stated above the following hypotheses were framed; some of which are expressed in directional form and others are expressed in null form. While doing so the investigator had the entire theoretical and empirical background of the related literature in view. Hypotheses which were backed up by clear theoretical and empirical evidence were stated in directional form, whereas those about which controversial findings were noticed or for which no theoretical back up could be obtained were stated in null form.

1. Value clarification has a positive significant effect on the development of moral reasoning of boys.
2. Value clarification has a positive significant effect on the development of moral reasoning of girls.

3. Value clarification has a positive significant effect on the development of moral reasoning of both boys and girls.

4. In the development of moral reasoning of boys through value clarification socio-economic status is not a significant factor.

5. In the development of moral reasoning of girls through value clarification socio-economic status is not a significant factor.

6. In the development of moral reasoning of both boys and girls through value clarification socio-economic status is not a significant factor.

7. In the development of moral reasoning of boys through value clarification intelligence is not a significant factor.

8. In the development of moral reasoning of girls through value clarification intelligence is not a significant factor.

9. In the development of moral reasoning of both boys and girls through value clarification intelligence is not a significant factor.

10. In the development of moral reasoning of boys through value clarification accepting attitude of parents is not a significant factor.

11. In the development of moral reasoning of boys through value clarification concentrating attitude of parents is not a significant factor.

12. In the development of moral reasoning of boys through value clarification avoiding attitude of parents is not a significant factor.
13. In the development of moral reasoning of girls through value clarification accepting attitude of parents is not a significant factor.

14. In the development of moral reasoning of girls through value clarification concentrating attitude of parents is not a significant factor.

15. In the development of moral reasoning of girls through value clarification avoiding attitude of parents is not a significant factor.

16. In the development of moral reasoning of both boys and girls through value clarification accepting attitude of parents is not a significant factor.

17. In the development of moral reasoning of both boys and girls through value clarification concentrating attitude of parents is not a significant factor.

18. In the development of moral reasoning of both boys and girls through value clarification avoiding attitude of parents is not a significant factor.

The Procedure of the Study:

In order to achieve the objectives stated above and to test the corresponding hypotheses a sample of 100 subjects belonging to various sections of the society and studying in 9th class of different schools from Bahadurgarh and surrounding rural areas was taken. While selecting the sample subjects both from rural and urban area were selected. Certain standardised moral dilemmas by Raths, Kohlberg and
others were chosen and were adapted in Hindi by the investigator himself as the sample included subjects from rural areas as well. In adaptation the original moral dilemma situations were given to a small sample of 15 subjects and the adapted version was given again to the same sample after a gap of 3 weeks. The correlation coefficient between the two tests was computed which was found to be .91. Statistically this correlation coefficient is highly reliable. To obtain data on independent variables of the present investigation like intelligence, socio-economic status and parental attitudes, group test of intelligence by S.S. Jalota, socio-economic status scale, by Rajeev Lochan, Kumari Shama Gupta and Narender Singh Chauhan and family relation inventory by G.P. Sherry were selected. The investigator himself visited different schools of Bahadurgarh and surrounding rural areas on different dates. Rapport was established with the subjects and they were clearly told that these tests had nothing to do with their achievement in the final examinations. It was further clarified that the data so collected would be used for research purposes only and their scores in the tests would be kept confidential. Before actually administering the test, proper instructions for filling up the answer sheets of different tests were given. In order to obtain Moral Reasoning Scores of the subjects under study five moral dilemmas were administered to each subject and their Moral Reasoning Scores was computed. In Keeping with the objectives of the study training in "value clarification" for one month in each school was given to all the subjects under study. During the course of training the investigator clarified values of the subjects through probing questions and illustrative examples. For value clarification of the subjects
five moral dilemma situations were used. These moral dilemmas were different from the ones used in pre test and post test. After the training was over the students were post tested on the moral dilemmas used in pre test to see the effect of training on development of moral reasoning. After obtaining data on all these variables the responses of the students were scored strictly according to the norms as provided in the tools used for the research in view of the study. Appropriate statistical techniques were applied and hypotheses were tested one by one.

Delimitations of the Study:

1. Sample:

   Since the study was intended to see the growth of moral reasoning among adolescents the sample was selected keeping in view the age norms pertaining to this period (Adolescence) of child's growth. Subjects age range was 14 to 15 years. The sample was drawn on cluster basis from various schools i.e. from a particular school the entire section of a particular class was included into the sample. In order to attain reasonable stratification schools were randomly selected from the town areas as well as the neighbouring rural areas. However, the investigator chose schools such as English Medium schools, Govt. schools and co-educational schools. In this way the Investigator was satisfied that the sample under study was adequately representative of the population of Bahadurgarh and its neighbouring rural areas. The sample selected for the present investigation comprised 100 subjects both boys and girls drawn from four schools of Bahadurgarh and
surrounding rural areas, 25 subjects from each school were taken for the experiment. The data were obtained from the following schools of Bahadurgarh town and the surrounding rural areas.

1. Golden Valley Senior Secondary School, Bahadurgarh (Jhajjar)
2. Triveni Senior Secondary School, Bahadurgarh (Jhajjar)
3. Govt. High School, Bamnoli (Jhajjar)
4. Govt. Senior Secondary School, Kanounda (Jhajjar)

Justification for taking a small sample:

On the face of it a sample of 100 students only for a Ph. D work may appear inadequate in general but since it is an experimental study it was not possible to have a bigger sample which could be unmanageable and would have consumed much more time. The nature of the study is that while imparting training in value clarification each subject was or had to be individually interrogated daily for quite some time. The second subject was taken only when the first subject showed reasonable understanding in clarifying the values. In this way the investigator had to spend three to four hours daily on imparting this training to subjects. From each school 25 subjects were taken and the training continued for one full month in each school. It is on these grounds that the investigator had to rest content on a sample of 100 students only.

2. Tools Used

To collect data on independent and dependent variables of the present investigation the following tools were used:


3. Family Relationship Inventory by G.P. Sherry.

4. Standardised Moral dilemmas developed by Raths, Kohlberg and others and adapted by the investigator himself.

3. Delimitations of the Concepts and Description of the tools used:

Growth of moral reasoning in a child depends upon a host of factors which vary with respect to place, time and individuals. Though, it is not possible to consider all such factors in a behavioural sciences research like this yet the effort has been made to study the effect of such factors which are most pertinent in an educational setting of the child. Keeping in view constraints of space and time the investigator delimited the study to the following concepts which are said to have a significant bearing upon moral reasoning of the child.

Intelligence:

It represents the intellectual capacity of the child to reason by analogy. To measure this capacity of the child; Group test of mental ability revised edition (1972) by S.S. Jalota was used. This is a well standardised test with established norms which are tabulated in the manual with full procedural details. Its reliability and validity have also been well established. It contains 150 items. This test is useful for a wide range of
chronological ages starting from childhood to adolescence. The scoring procedure is given in the manual which has been strictly followed in scoring the test booklets. The relevant hints for use of scoring keys for this revised 1972 edition of the test are given as under:

Use of scoring keys for the Revised (72) Test:

The General Key is the key for finding out the examinee's score of 'general mental ability' or intelligence from his answers given to the item of this test Revised 72. On the top row, the pages 1, 2, 3, 4 and 5 refer to the said pages in the test booklet. In some cells of each key, the top page row on the key has its lower line to be cut through, to help the anchoring of the given key with the corresponding row of the Answer sheet. On the key, there are two columns for each page. The first shows the correct answer in figures to the corresponding series of question items indicated on the answer sheet. To convert this key into a scoring stencil, the second column of the key under each page has blank cells. This column is to be cut out carefully from the top to the bottom row (both inclusive).

When we place this stencil key on the solved answer-sheet we will see the candidate's answers besides the correct answers given in the first column under the given page of this key. Now we can easily compare the correct answers on the key with the answers of the said items written by the candidate. It would be convenient to use a coloured (red) pencil to mark the wrong and also the unattempted items on the answer-
sheet by drawing a vertical, or up-down line from the top to the bottom of the said cell on the answer-sheet: we have to take care to avoid cutting through the candidate's answers figures. When two or more successive answers are wrong or not attempted by the given candidate, then we continue the up-down line through all those cells on the said answer-sheet. When we have scored the answer column for the first page (of the booklet) we count the number of the wrong and unattempted cells (or items) marked by us and subtract this number from 20 (the number of items on each page) and we write this score in the bottom cell of the answer sheet column. Same is done for all pages - columns on the given answer sheet. If any page is not attempted and the answer column is blank, then we may put a cross or a small horizontal line through the concerned last row for totals.

Now we add up the correct scores written by us in the last row for totals, and write them on the answer-sheet through the left lower cut out of the general key. We tick the appropriate stanine rank on the A.S. For finding out the V,N. and R scores, we have to cut out the spaces marked in dashes and cells marked upon the V,N and R sub-test analytic keys. Each key is used one by one on the answer-sheet already marked with the general key. We have to take one key and anchor the gaps in the top row with the corresponding line of the answer-sheet. We will also see the pace for writing the score for V (N or R) through the smaller cut out cell on the lower left margin of the key. We then count the correctly
scored items, and write the same on the answer sheet through the right hand marginal cut-out on the key.

Socio-Economic Status Scale:

The Socio-economic status is a very important concept being employed frequently in day to day matters. Nonetheless its determination is very complex and complicated. Different tests envisage its determination with weightage on one of the many factors that go to constitute its integrity.

The present socio-economic status scale has been constructed with a view to seek clarity of distinct aspects of social and economic statuses of an individual separately and integrally. The contention of Hurlock (1964) - The economic status of a family frequently determines what the family social status will be, does not appear to be appropriate and quite vocal in the Indian setting where a Pandit (Katha Vachak) or a Primary school teacher has a very high social status but he may not be financially well placed; whereas we may have a merchant or a miser money-lender having a very sound economic position but possessing no rank in the society.

Keeping this dilemma of the Indian socio-cultural setting in view it has been considered appropriate to determine social and economic status separately in the two areas of social and economic aspects, and then the two scores of different areas switched to one continuum or in standard scores, which can give the Socio Economic
Status of an individual. With this object the whole test envisages to determine nine types of statuses as stated below:

1. Social Status (ascribed)
2. Social Status (achieved)
3. Social Status (as a whole)
4. Economic Status (ascribed)
5. Economic Status (achieved)
6. Economic Status (as a whole)
7. Socio-economic Status (ascribed)
8. Socio-economic Status (achieved)
9. Socio-economic Status (as a whole).

Again the present scale will hold good equally in both urban and rural areas. In essence, the findings of this scale in different areas of socio-economic status are likely to bring to the fore some vital facts hitherto unexplored and not anticipated so far.

The various concepts and terms, used in the scale, need discussion for a clear understanding and interpretations.

**Status:**

By the term `status' we mean the recognition given to an individual by his group relations (Kelly, 1951). As a rule of conservation (Cooley, 1956) in terms of the sense of belonging (Park and Burgess, 1921) it is the result of ranking of a role by the group (Ogburn and Nimcoff, 1960) that determines for its possessions of a degree of respect, prestige.
and influence (Maclver et. al 1937). They are, thus, the ancient powers and privileges of the family bestowing prestige, authority and power (Mussen et al, 1963).

Societies have thus developed two types of distinct status - The ascribed and the achieved (Linton R, 1936; Cole et al, 1959; Ogburn and Nimcoff, 1960). The ascribed status is the recognition which a society gives to a person because of his position (Cole et al, 1959). It is assigned to individuals without any reference to their innate differences or abilities (Linton, R, 1936). Thus it can be predicted and ascertained since birth.

The achieved statuses are as minimum, those requiring special qualities although they are not necessarily limited to those. They are not assigned to an individual since birth but are left open to be filled through competitions (Linton R, 1936, Ogburn and Nimcoff, 1960) and individual efforts (Linton, R, 1936; Cole et al, 1959).

Social Status:

A social person is one who conforms to the three criteria of social development. He should behave in approved manner, play the role which society prescribes for him and possess favourable attitudes towards people and social activities (Hurlock, E.B., 1964).

'Social Status', therefore, is an indication of ones position of respect, prestige and influence in the social structure (Maclver & Page, 1937; Cole & Montgomery, 1959; Everette, M. Rogers, 1962) apart from
his personal attributes, (Maclver & Page, 1937) which may either inhibit or enhance an individual's access to sources of information and his willingness to deviate from group norms, (Everette, M. Rogers, 1962) and may even vary with the groups, (Cole & Montgomery, 1959).

**Economic Status:**

The word 'Economic' is used generally for the motives involving earning a livelihood, the accumulation of wealth and the like (Drever, J. 1964). The economic endeavor entails `cherishing of things because of their material value', (Spranger, 1928) and the pursuer, by virtue of this activity, carves for himself a place in society recognised as 'Economic Status'.

Economic Status, thus, stratifies modern population according to the amount and source of income which is usually derived from a set of occupational activities, the ownership of property or both, (Jones & Rossman, 1968).

**Socio-economic status:**

The 'Socio-economic Status' is obviously a blending of the two statuses as enumerated earlier. Though none of the two can exist without each other and yet they are distinctively different. Socio-Economic Status appear to be the resultant of the position of an individual in a society by virtue of a complex fusion of both of them, which often do not run parallel to each other in their own areas. This
intermingling takes place in an undefined and curious manner eventually
to present an indicator to 'Socio Economic Status'.

'Socio Economic Status' would, therefore, be a ranking of an
individual by the society he lives in, in terms of his material belongings
and cultural possessions along with the degree of respect, power and
influence he yields.

The first form of the scale was then developed with the help of
hierarchies as determined by the experts. This first form of the scale was
administered on a sample of twenty students, which indicated the different
types of difficulties in the process of administration, scoring, etc. By
removing and minimising these difficulties in the different aspects of the
scale This form of the scale can be understood easily with the help of
the table given below:-

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Area</th>
<th>Items</th>
<th>Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Social</td>
<td>2</td>
<td>5 for each item</td>
</tr>
<tr>
<td>2.</td>
<td>Family</td>
<td>4</td>
<td>5 for each item.</td>
</tr>
<tr>
<td>3.</td>
<td>Education</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>4.</td>
<td>Profession</td>
<td>14</td>
<td>-</td>
</tr>
<tr>
<td>A.</td>
<td>Doctors</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>B.</td>
<td>College Principals</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>C.</td>
<td>Administrators</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>D.</td>
<td>Forces (4)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>E.</td>
<td>Officers</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>F.</td>
<td>Lawyers</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>G.</td>
<td>Teachers</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>H.</td>
<td>Writers</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>I.</td>
<td>Business Personnels</td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>
The subjects or testees are asked to give responses for father, mother and himself (case) separately in the scale.

**Reliability and Validity:**

*Reliability*: The reliability of the test has been calculated by test and retest method. The scale was administered on a sample of 100 students and after 21 days it was re-administered on the same sample. The correlation between two scores was calculated by Spearman-Brown formula. The following reliability co-efficient correlations were found in seven areas and of the scale as a whole.

**TABLE - B**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Area</th>
<th>Co-efficient of Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Family</td>
<td>.72</td>
</tr>
<tr>
<td>2.</td>
<td>Social</td>
<td>.68</td>
</tr>
<tr>
<td>3.</td>
<td>Education</td>
<td>.82</td>
</tr>
<tr>
<td>4.</td>
<td>Profession</td>
<td>.76</td>
</tr>
<tr>
<td>5.</td>
<td>Caste</td>
<td>.92</td>
</tr>
<tr>
<td>6.</td>
<td>Total Assets</td>
<td>.67</td>
</tr>
<tr>
<td>7.</td>
<td>Monthly Income</td>
<td>.73</td>
</tr>
<tr>
<td>8.</td>
<td>Scale (as a whole)</td>
<td>.75</td>
</tr>
</tbody>
</table>
Validity: The content validity of this scale, since areas and then items are solely based on research proven items, is expected to be high and promising.

Scoring:

Scoring of the test is very easy and of a quantitative type. Scoring key provides the weightage score for each item. Every alternative of any of the item has only one weighted score which will serve to provide the score if any ticked mark (✓) is present in the horizontal plane for father, mother and case (i.e. the testee). The scoring key has to be placed vertically between the two assigned points on the test. The separate scores for each area are then to be totalled vertically. These totals of the scores for each separate area are there after to be put in big boxes provided at the vertical end of each area for father, mother and case.

The same process of scoring has to be followed in respect of each page of the scale. It has to be borne in mind very clearly that there are separate scoring keys for each page of the test and keys have been numbered accordingly.

When scoring of each page has been completed, the area-wise total score of father, mother and case is to be transferred on the last page of the test.
Analysis:

For analysis of different types of statuses or the desired status of the study, the researcher has to complete the test.

For this purpose, the researcher should convert the area-wise total of weighted scores for father, mother and case (Ref - Table No.1 of the test) into Z-scores, which are given at Mean 50 and of Standard Deviation 10.

Ref - Manual Table Nos. D.E. and F. Put these area-wise Z-scores corresponding to area-wise weighted scores for father, mother and case separately.

After the completion of the Table 2 of the test, the analysis of any status out of nine statuses or all of the nine statuses, can be done easily with the help of the chart given below:

<table>
<thead>
<tr>
<th>TABLE - C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas</td>
</tr>
<tr>
<td>Family</td>
</tr>
<tr>
<td>Social</td>
</tr>
<tr>
<td>Education</td>
</tr>
<tr>
<td>Profession</td>
</tr>
<tr>
<td>Caste</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

A. Social Status (ascribed) = Total of X and Y

B. Social Status (achieved) = ΣZ

C. Social Status (as a whole)= Total of A and B.
D. Economic Status (ascribed) = Total of $X'$ and $Y'$

E. Economic Status (achieved) = $\Sigma Z'$

F. Economic Status (As a whole) = Total D and E.

G. Socio-economic Status (Ascribed) = Total of A and D.

H. Socio-Economic Status (Achieved) = Total of B and E.

I. Socio-economic Status (As a whole) = Total of G and H.

NORMS:

For easy and meaningful interpretation of all nine types of statuses, norms are provided in the form of T-Scores. By consulting the Manual's tables (G and H of T scores), any status score can be interpreted in terms of T-scores. Thus a status score of 664 for the social status (ascribed) can be converted into a T-score of 8290, (Ref: Manual Table G) because the score of 664 comes between the 679.5 to 649.5. The researcher should place these T-scores in the Table No.3 on the test.

Family Relationship Inventory:

Family plays an important role in the educational and vocational progress of the children. Roe(1957) hypothesized that three types of parental attitudes- acceptance, concentration and avoidance are associated with vocational development of the students. She formulated a
number of hypotheses about the relationship of parental attitudes to the selection of an occupation. As a result of these attitudes which parents express towards their son and daughter, they develop certain attitudes towards the home environment.

The formation of attitude in the early stages of life plays a very significant role in the developmental process of individuals. Researchers have exerted much on various aspects of individuals' life responsible for the growth in the later stages of life but have not taken any step in developing certain models which determine the conditions of home environment for future development. There is a long felt need to search some appropriate tool for the measurement of parental attitudes towards children as perceived by them. It was in 1964 that Brunken and Crites devised Family Relation Inventory (FRI) especially for testing Roe's theory by measuring three types of perceived parental attitudes, namely, acceptance, concentration and avoidance. This instrument proved to be of great significance to the investigators and counsellors in studying the family relationship, Brunken (1965). Byers and Zaccaria (1968) and Medevene (1970) also used this test in their studies.

The present tool has been prepared on the basis of Brunken and Crites's 'Family Relation Inventory' in the Indian situations.

Uses of the Inventory:

The Inventory is intended for use with Hindi speaking school or college students of our country. It can be used for both sexes. It may well
discriminate the individuals who feel emotionally accepted, over protected or rejected by their parents. It is especially helpful to the school counsellors and clinical psychologists to identify the mal-adjusted cases.

Explanation of terms used:

It is desirable to explain the three terms used in inventory:-

Acceptance means that the parents consider the child as a fullfledged member of the family who needs a certain degree of independence and who has the capacity to assume responsibility. Parents having acceptance attitude towards their children neither concentrate their attention nor overlook their children. They encourage them to fulfil their potentialities as best as they can.

Concentration refers to attitudes of parents who devote a disproportionate amount of their time and energy to the direction and control of their children. They over protect them through restrictions upon their efforts to explore the environment. They place heavy demands upon them to perform beyond their capacities and to achieve ambitious goals.

Avoidance characterizes the disposition of parents, who either neglect or reject the child. They withdraw when the child approaches them for affection and love. They spend as little time as possible with the child. They fail to satisfy the child's physical needs or they openly abuse the child. In short, they manifest no positive interest in child or his activities. Examples: Each item has two forced choice alternative...
answers in the form of true and false. An example of each of the three categories is given below:

Acceptance: I realise that my father was very well aware about my ideas.

Concentration: My mother generally used to take decision regarding me.

Avoidance: My mother showed love and attention to me rarely.

Interpretation of Raw - Scores:

A high score in each area of the inventory indicates a high degree of one's feeling of being accepted, concentrated and avoided by his/her parents. The raw scores can be directly compared in the following way.

1. Means and S.Ds. of each Area - Individuals or groups raw scores can be directly compared with the means and S.D. of the population (Table 5) upon which norms are based. The means and S.Ds. of the normal and delinquents have also been provided in the table-4.

2. Stanine and percentiles - The raw scores can also be compared with the different categories of statnine and percentiles as provided in Tables 6 and 7.

3. T. Scores - The investigators are also advised to prepare T. Scores for the interpretation purposes.
Reliability: The test-retest reliability was determined on a sample of 100 intermediate students to whom the inventory was administered twice with an intervening period of three months. Means and S.Ds. of both test and retest situations were worked out and 't' values were calculated. The F values between the two situations were calculated.

As shown in Table 1, all the obtained 't' values are moderately high. The means of the scores sample for the various scales changed very little over the test-retest period. Only one significant C.R. value is found and deviations remained generally unchanged from practical purposes from one occasion to the other.

Validity:

Attempts were made to determine the validity of each item on the basis of the content analysis. However, it was considered further necessary to test the validity of the inventory scale wise which is explained in the manual.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Test Mean</th>
<th>S.D.</th>
<th>Retest Mean</th>
<th>S.D.</th>
<th>Co-efficient of Stability</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA</td>
<td>16.00</td>
<td>2.46</td>
<td>19.79</td>
<td>1.69</td>
<td>.54</td>
<td>3.88</td>
</tr>
<tr>
<td>FA</td>
<td>17.93</td>
<td>2.70</td>
<td>17.90</td>
<td>2.99</td>
<td>.42</td>
<td>.55</td>
</tr>
<tr>
<td>MC</td>
<td>13.72</td>
<td>2.12</td>
<td>14.20</td>
<td>1.43</td>
<td>.43</td>
<td>.30</td>
</tr>
<tr>
<td>FC</td>
<td>11.68</td>
<td>1.36</td>
<td>11.86</td>
<td>1.76</td>
<td>.51</td>
<td>.27</td>
</tr>
<tr>
<td>MA</td>
<td>10.18</td>
<td>4.18</td>
<td>09.58</td>
<td>2.38</td>
<td>.72</td>
<td>.11</td>
</tr>
<tr>
<td>FV</td>
<td>09.54</td>
<td>4.87</td>
<td>08.86</td>
<td>3.88</td>
<td>.81</td>
<td>.10</td>
</tr>
<tr>
<td>Total PA</td>
<td>37.30</td>
<td>4.17</td>
<td>37.28</td>
<td>4.94</td>
<td>.56</td>
<td>.99</td>
</tr>
<tr>
<td>Total PC</td>
<td>25.15</td>
<td>2.53</td>
<td>25.55</td>
<td>3.61</td>
<td>.44</td>
<td>.55</td>
</tr>
<tr>
<td>Total PV</td>
<td>19.90</td>
<td>8.50</td>
<td>18.52</td>
<td>7.41</td>
<td>.85</td>
<td>1.01</td>
</tr>
</tbody>
</table>
Inter Correlations of Scales: The correlations between three scales of the inventory were worked out to find out the extent of internal consistency. The 'r' values were computed between three scales separately for mother, father and the whole group.

TABLE 6.2 Inter Correlations of F.R.I. Scales for three sample
N = 200

<table>
<thead>
<tr>
<th>Scale</th>
<th>FA</th>
<th>MC</th>
<th>FC</th>
<th>MV</th>
<th>FV</th>
<th>TPA</th>
<th>TPC</th>
<th>TPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA</td>
<td>.44</td>
<td>.17</td>
<td>.16</td>
<td>-.54</td>
<td>-.64</td>
<td>.64</td>
<td>.12</td>
<td>-.74</td>
</tr>
<tr>
<td>FA</td>
<td>-</td>
<td>.16</td>
<td>.21</td>
<td>-.68</td>
<td>-.74</td>
<td>.59</td>
<td>.05</td>
<td>-.71</td>
</tr>
<tr>
<td>MC</td>
<td>-</td>
<td>-</td>
<td>.34</td>
<td>-.15</td>
<td>-.25</td>
<td>.19</td>
<td>.32</td>
<td>-.84</td>
</tr>
<tr>
<td>FC</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.17</td>
<td>.30</td>
<td>.32</td>
<td>.54</td>
<td>.06</td>
</tr>
<tr>
<td>MV</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.54</td>
<td>.44</td>
<td>.07</td>
<td>.58</td>
</tr>
<tr>
<td>FV</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.62</td>
<td>.18</td>
<td>.62</td>
</tr>
<tr>
<td>Total PA</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.37</td>
<td>.25</td>
</tr>
<tr>
<td>Total PC</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.17</td>
</tr>
<tr>
<td>Total PV</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

It appears that the two scales which are supposed to be diametrically opposed to each other are in inverse relationship in the above table. Fairly significant negative 'r' between acceptance and 'avoidance' scales and insignificant 'r' between the concentration and other scales could be seen.
Moral Dilemmas:

Before we go in further procedural details it would be proper to know what Moral Dilemma means. Moral Dilemma is a situation involving moral conflict, where the individual feels much difficulty in taking recourse to one or the other alternatives. The dependent variable of the present study is the moral reasoning score of an individual. For obtaining these scores five moral dilemma situations were used. These moral dilemmas which were used for obtaining pre-test an post test scores were standarized moral dilemma situations constructed by Raths, Kohlberg and others. For value clarification of the subjects similar five moral dilemmas were used which were different from the ones used for pre and post test. All the ten moral dilemmas are placed in the annexures of the study.

Scoring of these dilemmas was done strictly following the procedure given by Kohlberg and his associates in their Scoring Manual (1973). The scoring procedure is described as under:

Administration and Scoring

Rapport was established with subjects and necessary instructions were given to them. Each child's responses were scored according to Kohlberg's Scoring Manual (1973). All the moral issues were scored separately and then overall score was assigned taking into consideration scores for all the issues. The Moral Reasoning Score, which is a
weighted average of scores obtained in the different moral stages, was computed in the following way for each child:

(a) The total score for each stage was obtained by adding the scores on each of the 10 issues (Parental Affection Vs Duty, Obedience Vs Self-interest, Helping Vs Interfering others, Rights to property Vs, concerns for life, concerns of affection Vs Distributive justice, life Vs Contract promise, Stealing Vs Life, Life Vs Law, Affectionate Vs Interference, Mercy Killing (Euthanasia) Vs Duty).

(b) The scores obtained by the child on the various stages were converted into percentage.

(c) The percentages were multiplied with their respective stage numbers to obtain the weighted scores.

(d) The sum total of the scores thus obtained is the Moral Reasoning Score.

Statistical Design for analysis of data:

After having administered the test and scoring the same in accordance with the procedures given in respective manuals of the given tools the data were obtained. These data were subjected to statistical techniques in keeping with the objectives and corresponding hypotheses of the study. For analysis of the data 't' values were computed to find out the significance of difference between means of various groups as warranted by the hypotheses between pre-test and post-test in each case. The
dependent variable in each case was moral reasoning score of the subjects. The analysis was got done at the Council For Social Development, New Delhi. The results thus obtained were interpreted by the investigator systematically which are presented in Chapter-V of the present study. These results were discussed in the light of theoretical background pertaining to development of moral reasoning in a social setting and also vis-à-vis findings of other investigators in the field. At many places, the investigator observed a difference between the findings of other investigators and the present study. In such cases plausible reasons were presented for the disconcordance observed. At places such differences were also explained on the ground of general psychological theories of child development especially the moral development as also on the basis of common sense logic and experiences of the present investigator. Chapter VI deals with discussion part of the findings. After that the main findings and conclusions of the present work were enumerated and educational implications of the same were hypothesised.