CHAPTER 4
METHODOLOGY
The purpose and aim of the present study 'The role of family environment and parent-child relationship in happiness disposition' was to find out the contribution of various factors of family environment with parent-child relationship in happiness among Himachali population and Nepalese settlers settled in Himachal Pradesh. To meet the objective of the study, the following methodology was adopted for carrying out the research.

The goal of the present chapter is to clarify:

1) Design of the study
2) Sample selection and data collection
3) Tools used
4) Procedure
5) Scoring and statistical analysis

DESIGN

The present investigation was designed to study the relationship of various factors of family environment i.e. cohesion, expressiveness, conflict, independence, achievement orientation, intellectual cultural orientation, active recreational orientation, moral religious emphasis, organization and control, and parent child relationship separately for father and mother. i.e. protecting, symbolic punishment, rejecting, object punishment, demanding, indifferent, symbolic reward, loving, object reward and neglecting with happiness among adolescent students of two different samples i.e. Himachali and Nepalese settler with equal number of boys and girls. Hence, correlational design was used to see the relationship between these variables and happiness. It was further subjected to step wise regression
analysis to find out the exact variance explained by the above mentioned factors in happiness. Finally, ANOVA (analysis of variance) was applied to verify if there were significant difference between samples i.e. Himachal Boys, Himachali girls, Nepalese settler boys and Nepalese settler girls on the variables under study i.e. on happiness, family environment and factors of parent-child relationship.

SAMPLE

For the purpose of carrying out the study, a sample of 400 subjects comprising of equal number of boys and girls and between Himachali and Nepalese settler was selected randomly. The subjects taken belong more or less to the same socio-economic status i.e. average middle class and within the range of 13-15 years.

Total Sample

(N = 400)

Himachali Group
(N = 200)

Boys
(N = 100)

Girls
(N = 100)

Nepalese Settler Group
(N = 200)

Boys
(N = 100)

Girls
(N = 100)

Fig. VII: Showing the Graphical representation of the sample
RESEARCH TOOLS USED

In the present study, the following tools have been used:

1) Chinese Happiness Inventory (Lu & Shih, 1997).
2) Family Environment Scale (Moos & Moos, 1994)

CHINESE HAPPINESS INVENTORY (LU & SHIH, 1997)

Happiness was measured by the Indian adaptive version of Chinese Happiness inventory (CHI). This is a newly developed 48 item measurement tapping general subjective experience of happiness for Indian people. Three basic elements of happiness concept namely positive affect, absence of negative affect and overall satisfaction towards life was covered. Moreover, it also covers the distinctive sources of happiness of the Indian people based on extensive qualitative ground work.

The cronbach alpha of the Chinese happiness inventory was 0.95; the one month test-retest with the sample of 46 under-graduate students was 0.66 and the 2.5 years test-retest with community adults was 0.40 concurrent validity was evidenced by its correlation of 0.62 with the life satisfaction scale (Diener, Emmons, Larson and Griffin, 1985), 0.67 with composite measures of domain satisfaction, 0.48 with a measure of positive affect and 0.52 with lack of happiness' scale (reversely scored) in the emotional instability adjustment questionnaire (Eysenck and Eysenck, 1975).
Instructions

For the Chinese Happiness Inventory (CHI) following instructions were given to the subjects.

There are 48 groups of statements you are required to read each group of statements carefully and then pick one statement in each group which best describes the way you have been feeling in the past one year, roughly including today.

Scoring

The scoring is direct. The scores are given before the statement ranging from 0 to 3. If the subject had indicated his reaction for the first statement where the 0 was written before the statement, the score for that item was taken as 0. Likewise score of all the items were taken. The total happiness score was obtained by summing up all the scores of 48 items.

FAMILY ENVIRONMENT SCALE

The family environment scale is used to describe family social environment. It is composed of 10 subscales that measure the actual, preferred and expected social environment of families. The 10 sub-scales of family environment assess three underlying sets of dimensions: relationship dimension personal growth dimension and system maintenance dimension. The descriptions of these sub-scales are as follows:

Relationship Dimension

- Cohesion (C): cohesion subscale measures the degree of commitment, help and support family member provide for one
another, for example: the way they support one other, the amount of energy they put into what they do at home, and how much felling of togetherness is in the family.

- **Expressiveness (EX):** The sub-scale taps the extent to which family members are encouraged to act openly and to express their feelings directly.

- **Conflict (CON):** This sub-scale measures the amount of openly expressed anger, aggression and conflict among family members.

### Personal Growth Dimension

- **Independence (IND):** The independence sub-scale measures the extent to which family members are assertive, are self-sufficient and make their own decisions.

- **Achievement Orientation (AO):** The achievement orientation sub-scale taps the extent to which activities (such as school and work) are cast into an achievement oriented or competitive framework.

- **Intellectual Cultural Orientation (ICO):** It assesses the degree of interest in political, social, intellectual and cultural activities.

- **Active Recreational Orientation (ARO):** This sub-scale taps the extent of participation in social and recreational activities.

- **Moral Religious Emphasis (MRE):** It measures the degree of emphasis on ethical and religious issues and values.
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System Maintenance Dimension

- Organization (ORG): It measures the importance of clear organization and structure in planning family activities and responsibilities.
- Control (CTL): It assesses the extent to which set rules and procedures are used to run family life.

FES HAS THREE FORMS

- The real form (Form R) measures people's perception of their current family environment.
- The ideal form (Form I) measures people's preferences about an ideal family environment.
- The expectations form (Form E) measures people's expectations about family.

In the present study, Form R has been used. Form I and Form E are parallel to Form R; that is, each of the 90 items in form I and Form E corresponds to an item in Form R.

The internal consistencies (Cronbach's Alpha) for each of the ten sub-scales are all in an acceptable range and vary from moderate for independence and achievement orientation to substantial for cohesion, organization, intellectual cultural orientation and moral religious emphasis. The internal consistencies and test-retest reliability of the 10 family environment scale (FES) subscales are as follows:
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Table IV

Form R internal consistencies and test retest reliability for each of the 10 FES subscale

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subscale</th>
<th>Internal Consistency</th>
<th>Test-Retest Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Cohesion</td>
<td>.78</td>
<td>.44</td>
</tr>
<tr>
<td>2.</td>
<td>Expressiveness</td>
<td>.69</td>
<td>.34</td>
</tr>
<tr>
<td>3.</td>
<td>Conflict</td>
<td>.75</td>
<td>.43</td>
</tr>
<tr>
<td>4.</td>
<td>Independence</td>
<td>.61</td>
<td>.27</td>
</tr>
<tr>
<td>5.</td>
<td>Achievement Orientation</td>
<td>.64</td>
<td>.32</td>
</tr>
<tr>
<td>6.</td>
<td>Intellectual Cultural Orientation</td>
<td>.78</td>
<td>.44</td>
</tr>
<tr>
<td>7.</td>
<td>Active-recreational Orientation</td>
<td>.67</td>
<td>.33</td>
</tr>
<tr>
<td>8.</td>
<td>Moral-religious emphasis</td>
<td>.78</td>
<td>.43</td>
</tr>
<tr>
<td>9.</td>
<td>Organization</td>
<td>.76</td>
<td>.42</td>
</tr>
<tr>
<td>10.</td>
<td>Control</td>
<td>.67</td>
<td>.34</td>
</tr>
</tbody>
</table>

Instructions

Following instructions were given to the subject:

There are 90 statements, and they are statements about families. You are to decide which of these statements are true of your family and which are false. Make all your marks on the separate answer-sheet attached with the booklet. If you think the statement is true of your family, mark 'X' in the box labeled T (True). If you think statement is false or mostly
false of your family, mark 'X' in the box labeled F (False). Remember, we would like to know what your family seems to you. So do not figure out how other family members see your family, but do not give your general impression of your family for each statement.

Scoring

Scoring is done with the help of template. Items are arranged so that each column of responses constitutes one of the sub-scales. The scores simply counts the number of X's showing through the template in each column and enters the total in R/S (raw score) box at the bottom.

PARENT-CHILD RELATIONSHIP SCALE

The scale was adapted from the revised Roe-seigalman, Parent-child relationship questionnaire measures characteristic behaviour of parents as experienced by their children. The theoretical importance of the child’s perception of the parent’s behaviour for understanding socio-psychological personal development has been emphasized by a number of social scientists (Armentrout, 1972; Bronfenbrenner, 1961; Garmezy; Clarke & Stoncker, 1961; Sears, Maccoby & Levin, 1957; Sullivan, 1953). Their main focus is on the issue that it is the subject who interprets the interaction between himself and his parent who is pertinent for him, it is his own definition of the situation that is significant. It is also observed that the parental behaviour affects the child’s ego development only to the extent and in the form in which he perceives it (Gecas; Thomas & Weigert, 1970).
Methodology

The two basic principles underlying a study of parental factors are:

a) That the parents act differently towards their children depending upon the sex of the child, and
b) Patterns of socialization differ according to social cultural process factors.

The variables of reward and punishments used extensively in the laboratory studies have been successfully adopted in the process of socialization research and a rich haul of other variables like the 'love-oriented punishment' or 'object-oriented reward' and such combinations of attributes widen the scope of reward and punishment variables in a socially oriented way and involve such objects like:

a) The strength and extent of mother-daughter/son relationship.
b) The strength and extent of father-daughter/son relationship
c) The nature of discipline
d) Amount of permissiveness
e) Warmth is parent-child interaction and so on.

Tool Description

The data available on the items of the scale can be grouped into fairly universal dimensions of children's experience of family interaction with the two parent factor. The tool contains 100 items categorized into ten dimensions namely:

- Protecting (Pro): The defending attitude overtly expressed in the acts of guarding, sheltering and shielding the child from
situation or experiences perceived to be hostile, oppressing and harmful.

- **Symbolic Punishment (SP):** Symbolic punishment means by which parents show their temporary annoyance with the child.

- **Rejecting (REJ):** Behaviour evident in renouncing the child in aversion. The disposition is indicated in being disdainful and in outright refusal of the child.

- **Object-punishment (OP):** Physical means by which parents show their temporary annoyance with the child.

- **Demanding (DEM):** Expression of authority and claim with imperious command over the child, executed in the exercise of overall control.

- **Indifferent (IND):** The expression of unconcerned apathetic, passive behaviour and functioning without either importance or interest in the child.

- **Symbolic Reward (RD):** Symbolic expression of appreciation for emotional, psychological security of the child, indicate parents acceptance of the child which is a precursor of the child to achieve, aspire and advance.

- **Loving (LOV):** Expression of fondness, devoted attachment and amiableness shown to the child.

- **Object-Reward (OR):** Physical, tangible expression of appreciation for emotional, psychological security of the child, indicate parents acceptance of the child which is a precursor for the child achieve, aspire and advance.
Neglecting (NEG): A careless slighting treatment indicated in accustomed omission and deliberate disregard towards the child which might leave the child to devalue himself.

Items of the scale are arranged in the same order as the dimensions and they rotate in a cycle through the scale. Each respondent score the tool for both father and mother separately. Items are common for both the parents except for three items which are different in the father and mother forms due to the nature of variation in paternal and maternal relationship with children.

The test-retest reliability coefficient ranged from .770 to .871 for boys sample and .772 to .873 for the girls sample over the ten sub-scales. The table V gives the summary of test-retest reliability coefficients. All the coefficients of correlations are statistically significant at a level of confidence being p < .01.

### Table V

Test-retest coefficients of correlation on ten parent-child relationship dimensions of father and mother forms

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Dimensions (Sub-scales)</th>
<th>Father Form Boys N = 96</th>
<th>Girls N = 93</th>
<th>Mother Form Boys N = 96</th>
<th>Girls N = 93</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Protecting</td>
<td>.871</td>
<td>.832</td>
<td>.873</td>
<td>.862</td>
</tr>
<tr>
<td>2.</td>
<td>Symbolic Punishment</td>
<td>.809</td>
<td>.840</td>
<td>.802</td>
<td>.720</td>
</tr>
<tr>
<td>3.</td>
<td>Rejecting</td>
<td>.816</td>
<td>.783</td>
<td>.811</td>
<td>.783</td>
</tr>
<tr>
<td>4.</td>
<td>Object-Punishment</td>
<td>.854</td>
<td>.771</td>
<td>.850</td>
<td>.842</td>
</tr>
<tr>
<td>5.</td>
<td>Demanding</td>
<td>.784</td>
<td>.792</td>
<td>.821</td>
<td>.801</td>
</tr>
<tr>
<td>6.</td>
<td>Indifferent</td>
<td>.792</td>
<td>.770</td>
<td>.772</td>
<td>.824</td>
</tr>
<tr>
<td>7.</td>
<td>Symbolic Reward</td>
<td>.782</td>
<td>.842</td>
<td>.786</td>
<td>.794</td>
</tr>
<tr>
<td>8.</td>
<td>Loving</td>
<td>.775</td>
<td>.813</td>
<td>.814</td>
<td>.789</td>
</tr>
<tr>
<td>9.</td>
<td>Object-Reward</td>
<td>.807</td>
<td>.863</td>
<td>.802</td>
<td>.778</td>
</tr>
<tr>
<td>10.</td>
<td>Neglecting</td>
<td>.825</td>
<td>.871</td>
<td>.789</td>
<td>.804</td>
</tr>
</tbody>
</table>
Methodology

Face validity of the scale was already established at the development stage. Construct validity of the scale was attempted by correlating data from a sample of ninety. Three secondary school students on the PCR scales with the data obtained on Bronfenbrenner parent behaviour questionnaire (Siegelman, 1965). 

The PCR scales were administered on different language sample groups for establishing concurrent validity of the scales. All the correlation values are found to be significant at .01 percent level of confidence. These results provide ample credence to the statistics in reliability and validity of the PCR scales.

Table VI

Coefficient of correlation on Hindi-English and Kannada English forms of PCR scales

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>PCR Scale</th>
<th>Concurrent Form of PCR Scales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>English-Hindi N = 75</td>
</tr>
<tr>
<td>1.</td>
<td>Father from</td>
<td>Ranged from .731 to .812</td>
</tr>
<tr>
<td>2.</td>
<td>Mother from</td>
<td>Ranged from .688 to .721</td>
</tr>
</tbody>
</table>

Instructions

Following instructions were given to the subjects, 'please read out each statement in your booklet and write your answers in the columns of your father and mother. The questionnaire consists of 100 items and it is
Methodology

95-point rating scale (1 → rarely, 2 → seldom, 3 → sometimes, 4 → quite often, and 5 → very often).

Scoring

Rating of this scale are made on five point scale ranging from 'very often' to 'very rarely weighted 5, 4, 3, 2 and 1 on the scale points. The scale is scored separately for each of the parent thus every respondent obtains ten scores for father form and ten for mother form on the ten dimensions of the scale. Each sub scale yields of score found by summing the scores of ratings on each item of the sub-scale. The scale has been found to be very useful and effective both as product and presage variable in the analysis of problems involving social, psychological and school factors.

STATISTICAL ANALYSIS

Appropriate statistical techniques were applied taking into consideration the objectives of the study and the same are given below:

STAGE ONE: comprised of the descriptive data of all the subjects on different variables taken in the study. This includes the results of means and standard deviations.

STAGE TWO: comprised of correlational analysis to find out the relationship between happiness ten factors of family environment i.e. cohesion, expressiveness, conflict, independence, achievement orientation, intellectual cultural orientation, active recreational orientation, moral religious emphasis, organization and control and ten factors of parent-child
relationship i.e. protecting, symbolic punishment, rejecting, object-punishment, demanding, indifferent, symbolic reward, loving, object-reward and neglecting, separately for father and mother.

STAGE THREE: includes the stepwise regression analysis to see the best set of predictors for happiness in all the samples. The order of entry of the predictor variables into step-wise regression was on the basis of the value of correlation.

STAGE FOUR: includes ANOVA (Analysis of Variance) to find out the significance of difference between different groups and genders.