RESEARCH METHODOLOGY
CHAPTER- III

RESEARCH METHODOLOGY

This chapter contains a detailed outline of methodological plan followed during the study. Different sub heads are:

3.1 Design of the study.
3.2 Locale of the Study
3.3 Sample of the Study
3.4 Operationalisation and Measurement of Variables.
3.5 Tools used for Measurement
3.6 Data Collection
3.7 Statistical analysis

3.1 Design of the Study

The present study was undertaken with the objective to focus upon the 'Teen-aged Girls' of 'School' and 'College'. The girls were divided on the basis of their 'Academic Achievement' thereby, making six groups i.e. 'Low', 'Medium' and 'High Achievers' from 'School' and 'College'. The 'Total Sample of Girls' was also divided on similar lines making three more groups ('Low', 'Medium' and 'High Achievers' from 'Total Sample') totalling to nine groups. Three more groups were formed namely 'Over-all' Girls from 'School', 'College' and 'Total sample of Girls' consisting of all the 'teen-aged girls from respective streams.

Thus, the study was designed with (a) three 'Sections' of 'Teen-aged Girls' i.e. 'School', 'College' and 'Total Sample'; (b) three levels of 'achievement' i.e. 'Low', 'Medium' and 'High Achievers', and (C) 'Over-all' Girls (Combined study). The 'Teen-aged Girls' from 'School', 'College' and 'Total Sample' were also compared on all the variables irrespective of their academic achievement. A flow diagram of design of the study is depicted in Fig. 3.1.
The design of the study elaborates the strategy adopted in classifying and evaluating the 'Teen-aged Girls' from 'School' and 'College' in three 'Achievement Groups' through each 'Section of Girls'.

It depicts various possible permutations and combinations forming the basis of evaluation which are (a) comparison among the three 'Achievement Groups' within each 'Section' (b) group wise inter-section comparison among the three 'Sections' (c) inter-section comparison of 'Overall Group of Girls'.

**Fig. 3.1 Design of the Study**
3.2 Locale of the Study

To carry out the present research 'Teen-aged Girls' from 12th standard were chosen from the private schools situated at Hisar, and college girls were taken from Government College Hisar studying in the 2nd year of their graduation.

3.3 Sample of the Study

The initial sample of this study consisted of 479 subjects of which 250 were from 'School' and 229 from 'College'. All the subjects were matched on intelligence and variables of age and finally a sample of 150 each was chosen for the present investigation.

3.4 Operationalisation and Measurement of Variables

The variables investigated in the present study along with their operationalisation and measurement procedures have been discussed here.

3.4.1 Independent Variables: 'Family Relationship', 'Youth Problems' and 'Impulsiveness' were taken as independent variables for the purpose of the present investigation.

3.4.1.1 Family Relationship: 'Family Relationship Inventory' (FRI) given by Dr. G. P. Sherry and Dr. J.C. Sinha (2000), English version was used for the measurement of 'Family Relationship'.

Home environment provides cognitive, emotional and social support to a person for the all round development of ones composite personality. A self-dependent, healthy, confident and decisive person is the result of quality home environment and his/her relations with parents.

Family plays an important role in the educational and vocational progress of the children. Roe (1957) hypothesized that three types of parental attitude viz. 'Acceptance', 'Concentration' and 'Avoidance' are associated with the vocational development of the students. As a result of these attitudes which parents express towards their son and daughter, they develop certain attitudes towards home
environment. The formation of attitude in the early stages of life plays a very significant role in the developmental process of individuals.

Various dimensions of ‘Family Relationship’ are ‘Acceptance’, ‘Concentration’ and ‘Avoidance’ by parents. The operational definitions of these dimensions are as follows.

3.4.1.1 **Acceptance**: It means that the parents consider the child as the full fledged member of the family who needs a certain degree of independence and who has the capacity to resume responsibility. Parents having acceptance attitude towards their children neither concentrate on nor outlook their concerns. They encourage them to fulfill their potentialities as best as they can.

3.4.1.1.2 **Concentration**: It refers to attitude 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. It implies "prevention of independent behaviour and prolongation of infantile care". They place heavy demands upon them to perform beyond their capacities and to achieve ambitious goals.

3.4.1.1.3 **Avoidance**: It characterizes the dispositions 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.

3.4.1.2 **Youth Problems**: The test given by Dr. (Mrs.) Mithilesh Verma (2004) to measure ‘Youth Problems’ contains 80 statements belonging to four area viz. family problems, school/college problems, social problems, and personal problems and over sensitivity.

Teen-age is the transitional phase of life between childhood and adulthood in which a person relinquishes the childish activities and strive to assume certain responsibilities related to his/her own development, and simultaneously starts looking for his/her place/status in society. Due to these vital issues he/she feels himself/herself surrounded by many intricacies of life. While searching an independent place in this complex environment one faces many types of
problems viz. 'Family Problems', 'School-college Problems', 'Social Problems', and 'Personal Problems'. The operational definitions along with the sub-areas covered have been discussed below.

3.4.1.2.1 Family Problems: Such problems pertain to parental indifference, parental strict supervision and lack of freedom, criticism and lack of recognition by parents, demands by family, interference, parental dominance, negative discrimination between sons and daughters, rejection from parents, fear of parents, projection by parents, lack of affiliation, over dependence over parents, inter-generation gap in ideology and sibling relations.

3.4.1.2.2 School-college Problems: These problems refer to fear of college activities; fear of teachers; rejection and indifference by teachers; incompetence of teachers; harsh, rude and sarcastic behaviour of teachers; isolation; difficulties in teaching subjects and other handicaps at school/college.

3.4.1.2.3 Social Problems: The area pertains to social inferiorities and social isolation.

3.4.1.2.4 Personal Problems and Over Sensitivity: Illogical fears; depression; health and constitution; beauty consciousness; manners and habits; present and future career; personal handicap; frustrations; feelings of failures, and inferiorities are covered under this area.

3.4.1.3 Impulsiveness

From different perspectives of personality theory, 'Impulsiveness' has been identified as a personality trait (Barratt, 1965). A number of factor analytic studies have demonstrated the multi-faceted characteristics of 'Impulsiveness' as a personality trait. Twain (1957) suggested four factors that reflect 'Impulsiveness'. These are flexible motor control, positive progressiveness, action oriented on self-rating scale i.e. aggressive instability and tenacious self-control.

Barratt (1965) identified six factors of 'Impulsiveness'. These are represented by sub-sets of items on the Barratt 'Impulsiveness Scale'. They include motor control, intra-individual, variability impulse interest, risk taking, impulsive inter personal relationship and cognitive impulsive control.
In a more recent factor-analysis of self descriptive items, Eysenck and Eysenck (1977) identified for factors of ‘Impulsiveness’ in the broad sense i.e. narrow ‘Impulsiveness’ (IMPN), risk taking (Risk), non-planning (Noplan) and liveliness (Live).

Some researchers have taken broader view of the pervasive characteristic of ‘Impulsiveness’ as dominating a personality. Shapiro, (1965) have included various kinds of personality disorders such as the psychopathic, alcoholics and other drug addicts in impulsive styles. Wishnic (1976) defined the impulsive personality as a person with destructive character disorder and focused on certain types of criminals and addicts. ‘Impulsiveness’ was considered as one of the components of extraversion sociability being the other one. On the basis of the above discussion it may be concluded that ‘Impulsiveness’ is a personality trait, which includes quick behaviour, risk taking activities, lack of emotional control, non-planning, liveliness and hyperactivity. As everyone recognizes, personality behaves in a totally different manner. On one hand, the persons who are introvert do not easily engage in social activities, while on the other, an extravert person attempts to develop new relationship with others.

The ‘Impulsiveness Scale’ by Dr. S.N. Rai and Alka Sharma (1988) used in this study classifies the components of ‘Impulsiveness’ into five broad categories. The definitions of these are as below.

3.4.1.3.1 Narrow meaning of Impulsiveness: This component refers to the activation on the spur of the moment; no consideration for future consequences; quick behaviour such as quick to move, quick to make up mind, quick to voice option, rapid decision and action, short reaction time, lack of reflective ness and lack of self control.

3.4.1.3.2 Risk taking and sensation seeking: This includes daring and risk taking behaviour, excitement and seeking sensation etc.

3.4.1.3.3 Lack of Planning: It comprises of lack of fore-thought, lack of planning, readiness to begin work without a carefully constructed plan, and a need of a lot of supervision etc.

3.4.1.3.4 Hyperactivity: It pertains to restlessness, over-reactiveness, excessive motor activity and low frustration tolerance.
3.4.2 Dependent Variable

3.4.2.1 Academic Achievement: The scores of the final examination of the students were taken as academic achievement.

3.5 Tools used for Measurement: Various tools employed for this study are discussed below.

3.5.1 Family Relationship Inventory

'Family Relationship Inventory' (FRI) given by Sherry and Sinha (2000), English version, contains 150 items classified into three patterns of mother and father separately. There is no fixed time limit for the responses. Usually respondents take 40 to 50 minutes in filling the whole inventory. It can discriminate the individuals who feel emotionally accepted, over protected or rejected by their parents. The tool is based on Brunken and 'Crites's Family Relationship Inventory' (1964) adapted in the Indian conditions. Brunken and Crites's (1964) developed FRI especially for testing Roe's theory by measuring three types of perceived parental attitudes.

The test measures three components viz. 'Acceptance', 'Concentration' and 'Avoidance' in respect of mother and father. The 'Acceptance' component has 25 items for mother and 25 items for father. While the 'Concentration' component has 21 items for mother and 20 items for father. The number of items in relation to mother and father on 'Avoidance' are 31 and 26, respectively. Each item has two response alternatives, that is, true and false. Scores assigned to the option 'true' is one and to 'false' is zero.

3.5.2 Youth Problem Inventory

This test given by Verma (2004) contains 80 statements belonging to four area viz. family problems, school/college problems, social problems, and personal problems and over sensitivity. A number of sub areas are covered under each main area. Area 'A' has 31 items; 'B' has 20 items; 'C' has five items, and 'D' has 24 items. Each item has three response alternatives, that is, true, partially true
and false. Score assigned to the options 'true' is two; to the partially true is one, and to the 'false' is zero.

3.5.3 Impulsiveness Scale

The scale by Rai and Sharma (1988) was employed to test the 'Impulsiveness'. It contains 30 items. Each item of the scale has two alternative responses. The response indicating 'Impulsiveness' is scored as one and response indicating no 'Impulsiveness' is scored as zero.

3.6 Data Collection/Administration of Scales

On the very first day of the visit to the respective institute, all the students were clubbed together and were informed about the purpose of the study. A rapport was established, and well conducive atmosphere was created.

One questionnaire was given per day after taking them into confidence that the information's so generated would be kept confidential and would not be used for any other purpose. After filling the personal details, the students were requested to turn the page to read the instruction carefully and were enabled to understand the questions by explaining the example quoted by the author.

3.7 Statistical Analysis

The present research was an attempt to study the relationship of 'Youth Problems', 'Family Relationship', and 'Impulsiveness' with 'Academic Achievement' of 'Teen-aged' 'School' and 'College Girls'. The mean scores were compared using paired sample 't' test to know the difference in the levels of 'Youth Problems', 'Family Relationship', and 'Impulsiveness' among different 'Achievement Groups' of 'Teen-aged Girls' formulated on the basis on their 'Academic Achievement'.

Correlations were computed between 'Youth Problems' – 'Academic Achievement', 'Family Relationship' - 'Academic Achievement', and 'Impulsiveness' - 'Academic Achievement' for the assessment of impact of different variables on 'Academic Achievement' of 'Teen-aged Girls'. Furthermore,
regressions and multiple regressions of dependent variables were drawn on independent variables and thus regression coefficients were calculated for each dimension of independent variables, and 'F' values were computed using 'Analysis of Variance' (ANOVA).

Interrelationship between 'Youth Problems'- 'Family Relationship'; 'Youth Problems' - 'Impulsiveness', and 'Family Relationship' - 'Impulsiveness' were computed to know dependency on each other, and thereafter, regressions and multiple regressions were drawn and regression coefficients were calculated whenever deemed fit.

Thus, all the 'Teen-aged Girls' were evaluated in respect of the status of 'Youth Problems', 'Family Relationship' and 'Impulsiveness'; and their relationships with 'Academic Achievement' and inter-relationships therein.