CHAPTER II

METHOD AND PROCEDURE
This chapter includes the design of the study, sample procedure, tools used, administration of tests and data collection, scoring procedure and statistical techniques used.

Design of the Study

It is necessary to adopt a systematic procedure to collect the necessary data which helps to achieve the objectives and to test the hypotheses of the study. The present study was designed to find the relationship of vocational choices with personality traits, achievement motivation, occupational information and parental involvement at high school stage. The method of investigation used is descriptive exploratory survey coupled with the techniques of correlations and comparison between groups.

According to Best (1981), descriptive research describes what is, it involves the description, recording, analysis and interpretation of conditions that exist. It involves some type of comparison or contrast and attempts to discover relationships between existing non-manipulated variables.

Smith and Glass (1987), state that the fundamental purpose of descriptive survey research is to describe the
characteristics or variables in populations by directly examining samples.

Best (1981), describes that the survey is an important type of study. It involves a clearly defined problem and definite objectives. It requires expert and imaginative planning, careful analysis and interpretation of the data gathered and logical and skillful reporting of the findings.

The study is also correlational in approach. Smith and Glass (1987), state that in correlational studies, the intent of the investigator to relate or predict rather than establish cause must be interpreted from the statements of questions, hypotheses and conclusions. They further state that correlational studies serve two broadly conceived purposes. The first is building theory about phenomena by better understanding the constructs, what they consist of and how they relate to other constructs. The second is to enable us to predict one variable from another (or several others). If the two variables correlate with each other and the researcher knows an individual's status on one of them, then that person's status on the second variable can be forecast or predicted.

In light of the above description, the present study is descriptive in the sense that it aims at exploring the nature and distribution of variables, as such it describes the vocational interest patterns, personality
traits, achievement motivation, occupational information and parental involvement of adolescents.

It is exploratory in the sense that though much work has been done in this field, the vocational choices of adolescents as related to the variables under study is relatively less explored.

The present study is a survey, as it has definite objectives, analysis and interpretation of the data gathered and skillful reporting of the findings.

The study involves bivariate and multivariate correlations to find the correlates and predictors of vocational choices at high school stage, multiple regression analysis involves the prediction of a criterion variable from two or more predictor variables.

In this study, factor analysis was also applied. Factor analysis is an advanced variety of correlational study. As per Smith and Glass (1987), factor analysis is a way of simplifying and reducing a large number of bivariate correlations into a more parsimonious set of factors.

The study also involves the comparison of two sub-samples, dividing the total sample on the basis of sex and nature of schools viz. government and privately managed English medium schools.

The field of investigation for the study was the specified high schools of Chandigarh (U.T.) under the C.B.S.E. system.
Sample of the Study

In accordance with the complex nature and objectives of the study, the nature and type of the sample was also quite varied. The techniques employed for the sampling of the study were essentially stratified, non-probability, purposive in nature.

According to Rummel (1964), stratified sampling is the procedure of dividing the population into sub-populations or domains of study, called strata and then selecting a sample within each.

Aggarwal (1988), states that a popular method to increase the precision is stratification of the main population into a number of sub-populations, each of which is homogeneous with respect to one or more characteristics. There are various factors on which stratification is often done. Selection of these factors depend upon the nature of the study, the various dimensions included therein and the nature of the population to be used for the purpose.

Since the selection of units in these kinds of samples is based on judgement and not on equal or known probability, the same as a class are known as non-probability sampling methods, (Aggarwal 1988).

In purposive sampling, the actual selection of the units to be included in the sample in each group is done purposively rather than by random method. Aggarwal (1988),
states that purposive samples are chosen in the light of available information, with reference to one or more given characteristics.

The present study demanded different samples according to the various objectives of the study i.e.

1. The sample for the major study.
2. The sample for the development and standardization of the two scales viz. Occupational Information Schedule and Parental Involvement Scale.

1. Sample for the Major Study

For the major study, total sample consisted of 403, IX class students, studying in 5 government model high schools and 5 privately managed english medium schools under the C.B.S.E system. The representativeness of the sample was ensured with respect to the nature of schools, class, section, sex, medium of instruction, curricular system and the locale of the school.

Chandigarh is a well-planned, modern city, which is developed into two phases, dividing the town into sectors from 1 to 30 in the first phase and the second phase includes the sectors from 31 onwards. Each sector is equipped with all essential amenities like schools, hospitals, primary health centres, post offices, banks and markets. On the whole, Chandigarh has many schools. There
are two types of govt. high schools in Chandigarh viz. govt high schools and govt. model high schools. The investigator has selected purposely govt. model high schools, as these schools have english as a medium of instruction and are co-educational, and follow the C.B.S.E. system.

In total there are 9 govt. model high schools and 35 privately managed english medium schools in Chandigarh under the C.B.S.E. system. For the study, 5 govt. model high schools and 5 privately managed english medium schools were selected purposely from different locales and phases of Chandigarh. All the 10 schools, selected for the study, were co-educational in nature.

At present, there are 3 government model high schools in phase I and 6 government model high schools in phase II. When the tests were being administered to the sample, there were 5 govt. model high schools in phase I and 6 govt. model high schools in phase II. Two of the govt. model high schools of Sector 16 and Sector 20 have now been converted into govt. model senior secondary schools. For the study, the 3 govt. model high schools from phase I and 2 govt. model high schools from phase II were selected.

There are 28 privately managed english medium schools in phase I and 7 such schools in phase II under the C.B.S.E. system. While keeping in view the above mentioned criterion, the 3 privately managed schools from phase I and 2 such schools from phase II were selected.
Further the representativeness of the sample was done with respect to the selection of sections from each school. In each school there were 2-4 sections in IX class. The range of students was from 33 to 54 in each section. For the purpose of investigation, only one section from each school was taken, making efforts to select the section with approximately equal number of boys and girls in that section.

Thus, the total number of students for the present study was 403, out of which the number of boys was 219, which is 54.31% of the total sample. The number of girls was 184, which is 45.65% of the total sample. The break-up of the sample has been given vide Table 2.1.
<table>
<thead>
<tr>
<th>S. NO.</th>
<th>NAME OF THE SCHOOL</th>
<th>Section</th>
<th>Class</th>
<th>Total</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Govt. Model High School Sector 32-D,</td>
<td>A</td>
<td>IX</td>
<td>47</td>
<td>26</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Chandigarh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Govt Model High School Sector 35-D,</td>
<td>A</td>
<td>IX</td>
<td>35</td>
<td>22</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Chandigarh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Govt. Model High School Sector 16,</td>
<td>C</td>
<td>IX</td>
<td>54</td>
<td>25</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Chandigarh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chandigarh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Govt. Model High School Sector 20,</td>
<td>A</td>
<td>IX</td>
<td>39</td>
<td>24</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Chandigarh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>St. Anne Convent School Sector 32-D,</td>
<td>A</td>
<td>IX</td>
<td>38</td>
<td>16</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Chandigarh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Guru Nanak Public School Sector 36,</td>
<td>C</td>
<td>IX</td>
<td>33</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Chandigarh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Manav Mangal High School Sector 21-C,</td>
<td>A</td>
<td>IX</td>
<td>47</td>
<td>26</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Chandigarh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chandigarh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Moti Ram Arya Sec. Model School Sector</td>
<td>A</td>
<td>IX</td>
<td>39</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Sector 27-A, Chandigarh.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL NUMBER</td>
<td></td>
<td></td>
<td>403</td>
<td>219</td>
<td>184</td>
</tr>
</tbody>
</table>

70
Sample for Item Analysis of the Occupational Information Schedule and Parental Involvement Scale

For the development and standardization of Occupational Information Schedule and Parental Involvement Scale, same sample was used. The try-out of the first draft of the Occupational Information Schedule and Parental Involvement Scale was restricted to the sample of 84 IX class students, consisting of both girls and boys. The criterion adopted for the selection of sample for item analysis of both the scales was the same, as adopted for the selection of sample for the major study.

As for the major study, 5 govt. model high schools and 5 privately managed english medium schools under the C.B.S.E. system were purposively selected. Out of 5 govt. model high schools, one govt. model high school Sector 19-C and out of 5 privately managed english medium schools, only one school i.e. Moti Ram Arya Sec. School Sector 27-A, was taken. These two schools were selected from the same locale. The break-up of the sample for the Occupational Information Schedule and Parental Involvement Scale has been given vide Table 2.2. The total number of students was 84, out of which 48 were boys and 36 girls.
### TABLE NO. 2.2

Break-up of the Sample for Item Analysis of the Occupational Information Schedule and Parental Involvement Scale

<table>
<thead>
<tr>
<th>S.NO.</th>
<th>NAME</th>
<th>CLASS</th>
<th>SECTION</th>
<th>TOTAL</th>
<th>BOYS</th>
<th>GIRLS</th>
</tr>
</thead>
</table>
Tools Used

For the collection of relevant data for the present study, the following tests were used:

1. Vocational Interest Record by Bansal and Srivastava (1975) was used to find the vocational interest patterns of adolescents.

2. High School Personality Questionnaire (H.S.P.Q.) by Cattell (1963) Form A was used to study the personality traits of the adolescents.

3. Deo-Mohan Scale (1986) for Achievement Motivation was used to study the achievement motivation of the adolescents.

4. A locally constructed schedule measuring occupational information of the students was prepared by the investigator.

5. To study the parental involvement, a relevant scale was locally prepared by the investigator.

1. Vocational Interest Record by Bansal and Srivastava (1975)

The Vocational Interest Record by Bansal and Srivastava (1975) was used to study the vocational interest patterns of adolescents. The preliminary form of the vocational inventory had 176 items related with different vocations and vocational activities distributed in eight
vocational areas. The items of different vocations related with different vocational activities were selected with the help of the careful study of the relevant literature and from some popular tests in this field. The preliminary forms of Vocational Interest Record were submitted to a group of 20 judges. The vocations and some activities related with vocations, which were not approved by the judges, were discarded.

In the final Vocational Interest Record there are 128 vocational subjects and activities of different faculties and are distributed in eight vocational fields.

**TABLE 2.3: The Vocational Fields and Symbols and Number of Items:**

<table>
<thead>
<tr>
<th>S.NO.</th>
<th>VOCATIONAL INTEREST AREAS</th>
<th>SYMBOLS</th>
<th>NO.OF ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>AGRICULTURE</td>
<td>AG</td>
<td>16</td>
</tr>
<tr>
<td>2.</td>
<td>ARTISTIC</td>
<td>AR</td>
<td>16</td>
</tr>
<tr>
<td>3.</td>
<td>COMMERCIAL</td>
<td>CO</td>
<td>16</td>
</tr>
<tr>
<td>4.</td>
<td>EXECUTIVE</td>
<td>EX</td>
<td>16</td>
</tr>
<tr>
<td>5.</td>
<td>HOUSEHOLD</td>
<td>HH</td>
<td>16</td>
</tr>
<tr>
<td>6.</td>
<td>LITERARY</td>
<td>LI</td>
<td>16</td>
</tr>
<tr>
<td>7.</td>
<td>SCIENTIFIC</td>
<td>SC</td>
<td>16</td>
</tr>
<tr>
<td>8.</td>
<td>SOCIAL</td>
<td>SO</td>
<td>16</td>
</tr>
</tbody>
</table>
Bansal and Srivastava (1975), in their manual remark that the interests are the result of interaction between an organism and its environment. Individual's performance on any interest record is also a reflection on the environment of which he is a member. So it was a great problem for the investigator to find a suitable test for exploring the vocational interest patterns of adolescents in Indian conditions. No doubt, there are so many tests available to see the vocational interests of the adolescents, but they are all developed and standardized in foreign countries. The investigator ultimately used the Vocational Interest Record by Bansal and Srivastava (1975) which has been developed and standardized in Indian conditions. Keeping in view the resources and employment potential of the region, vocations in it are quite common and within the understanding of the subjects.

The Vocational Interest Record has been developed for use with school and college students. It is highly suitable for the age group of the sample for the present study. This test has been prepared both in Hindi and English. For the present study, the English version of the test was used. It is a self-administering and individual test.

Reliability

The reliability co-efficient have been found by two methods: (1) Split half method and (2) Test retest method.
The reliability co-efficient obtained by split half method ranged from .73 to .83 for different vocational areas. The reliability co-efficient obtained by test retest method ranged from .74 to .86 for different vocational areas.

Validity

The items on the different vocations and activities related with vocations were selected with the help of the careful study of the relevant literature and the preliminary form was submitted to a group of 20 judges for scrutiny. However, the validation criterion used for this test was to correlate the scores of the present vocational interest record with the teacher's ratings. The co-efficient of correlations ranged from .38 to .70 for different vocational areas.

Norms

Norms for high school and undergraduate classes are given in the manual. The norms are separately given for girls and boys. The norms are in stanine grades which are standardized at nine point scale.

(2) High School Personality Questionnaire
[H.S.P.Q., (Cattell 1963) Form A] :

High School Personality Questionnaire (H.S.P.Q.) by Cattell (1963) Form A was used to study the personality traits of the adolescents. The High School Personality
Questionnaire (HSPQ) is an objectively scorable test devised by Cattell (1963) to give the most complete coverage of personality possible in a brief time. It is a tool known worldwide for measuring 14 distinct and factorially independent dimensions or traits of personality of children from the age group 11+ to 18 years. The HSPQ is a standardized test that can be given within a class period, to single individuals or in groups to yield a general assessment of personality development.

The HSPQ was chosen out of all the available personality questionnaires and inventories mainly because of the significant relationship of the traits it mentions with vocational fitness, occupational placement and success. It has been used in diversified cultures and each of the 14 scales brings an entirely new piece of information about the person, a condition not found in many alleged multidimensional scales. It is suitable for the age-group of the sample in the present study. It can be administered in 40 to 50 minutes.

Reliability

Test retest method was applied to obtain the reliability co-efficient of the scale, which was repeated on several occasions. The reliability co-efficient, for 14 personality traits ranged from .50 to .69, in a retest after
six months. The co-efficient of reliability are sufficiently high and the scale can be considered as reliable.

Validity

As far as the validity of the scale is concerned, once factors are established, their correlations with any number of external criteria can be found and used as concrete validities. The direct concept validities of the HSPQ scales ranged from .57 to .77 for 200 high school boys and girls.

(3) Deo-Mohan Achievement Motivation (n-Ach) Scale (1985)

Deo-Mohan Achievement Motivation (n-Ach) Scale (1985) was used to study the achievement motivation of the adolescents. To prepare the present scale, an effort was made to study factors suitable for measuring the achievement motivation. The preliminary draft of the present scale was prepared with 115 items. For item analysis and item discrimination values, Johnson's U.L.I. method was applied, taking 27% upper-lower achievers out of a group of 46 boys and girls. Out of the 115 items, those which yielded negative or zero values were rejected outright. Finally, 50 items were chosen after careful scrutiny having the distribution as follows:
<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Factor</th>
<th>No. of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Academic Motivation</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>Need for Achievement</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>Academic Challenge</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>Achievement Anxiety</td>
<td>1</td>
</tr>
<tr>
<td>5.</td>
<td>Importance of Grades/Marks</td>
<td>2</td>
</tr>
<tr>
<td>6.</td>
<td>Meaningfulness of Task</td>
<td>4</td>
</tr>
<tr>
<td>7.</td>
<td>Relevance of School/College to future goals</td>
<td>2</td>
</tr>
<tr>
<td>8.</td>
<td>Attitude towards education</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td>Work Methods</td>
<td>5</td>
</tr>
<tr>
<td>10.</td>
<td>Attitude towards Teachers</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>Interpersonal Relations</td>
<td>4</td>
</tr>
<tr>
<td>12.</td>
<td>Individual Concern</td>
<td>2</td>
</tr>
<tr>
<td>13.</td>
<td>General Interests</td>
<td>4</td>
</tr>
<tr>
<td>14.</td>
<td>Dramatics</td>
<td>2</td>
</tr>
<tr>
<td>15.</td>
<td>Sports etc.</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

In the final scale out of 50 items, 13 are negative and 37 are positive items. Hindi version of the scale was also prepared for the convenience of the respondents. For the present study, English version of the scale has been used.
Reliability

Test retest method was applied to obtain the reliability co-efficient of the scale. Taking different sets of sample, the administration of the scale was repeated on several occasions. The results are given below:

<table>
<thead>
<tr>
<th>Sample</th>
<th>N</th>
<th>Interval</th>
<th>r</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Group</td>
<td>51</td>
<td>4 weeks</td>
<td>.69</td>
<td>.01</td>
</tr>
<tr>
<td>Males</td>
<td>33</td>
<td>5-6 weeks</td>
<td>.67</td>
<td>.01</td>
</tr>
<tr>
<td>Females</td>
<td>50</td>
<td>5-6 weeks</td>
<td>.78</td>
<td>.01</td>
</tr>
</tbody>
</table>

These co-efficients of reliability are sufficiently high and the scale can be considered as reliable.

Validity

As far as the validity of the scale is concerned, in the first instance, the item validity established by the high-low discrimination method was accepted as the validity of the whole measure. Besides, this scale was also used for validating the projective test of achievement motivation. The co-efficient of correlation between the scale and the projective test was observed to be .54 which speaks for the validity of the scale also, the validity being of the concurrent nature. Finally, the scale scores were also correlated with the scores obtained by administering the
Aberdeen Academic Motivation Inventory of Entnistle (1968) yielding a co-efficient of correlation as 0.75 for a mixed sample of 93; this correlation is high enough to establish the validity of the scale.

(4) Occupational Information Schedule

A schedule measuring occupational information of the students was locally constructed and standardized by the investigator herself. It was used to find out whether the occupational information helped the adolescents to gain insight concerning the choice of appropriate vocations for themselves, to review their vocational choice in the light of his potentiality and the requirements for the job. It consisted of 35 highly discriminating items. These items have been classified in 6 categories:

(a) Personal Sources
(b) Friends/Siblings
(c) Parents
(d) School/Teachers/Counsellors
(e) Occupational Information Service
(f) Other Sources

The number of items in each category varies from 2 to 12. The response pattern is yes or no. Subjects are required to tick mark the answer that comes to his/her mind, giving the first response. There is no time limit to complete the test and there is no right or wrong answer.
In order to establish the reliability of the test, the techniques of test-retest method and internal consistency were employed.

For the validation of the Occupational Information Schedule, the techniques of content validity, internal consistency and factorial validity were employed.

The final form of the Occupational Information Schedule has been presented vide Appendix B. The detailed description of Occupational Information Schedule has been given in chapter III.

(5) Parental Involvement Scale

To study the parental involvement of adolescents, the Parental Involvement Scale was locally constructed and standardized by the investigator herself. It was used to find out how parents perform their role as per the vocational plans of their children are concerned. It consisted of 45 highly discriminating items. These items have been classified in 4 categories:

(a) Parental involvement w.r.t. general welfare and general interests of the children, discipline and interactions with one another.

(b) Parental involvement w.r.t. leisure time activities.

(c) Parental involvement w.r.t. academic growth.

(d) Parental involvement w.r.t. vocational plans.
The number of statements in each category varies from 6 to 20. The response pattern is a three-point self-rating scale. Subjects are required to tick mark in one of the responses True, False and Uncertain, in accordance with his/her choice and applicability. There is no time limit to complete the test and there is no right or wrong answer.

In order to establish the reliability of the test, the techniques of test-retest and internal consistency were employed.

For establishing the validation of the scale, the techniques of content validity and internal consistency were employed. The final form of the Parental Involvement Scale has been presented vide Appendix D. The detailed description of Parental Involvement Scale has been given in Chapter IV.

Administration of Tests and Data Collection from Students

The data for the present study were collected personally by the investigator herself. The data collection was done in two stages. In the first stage, data were collected for the try-out of preliminary draft of Occupational Information Schedule and Parental Involvement Scale. The details are given in Chapter III and IV respectively.

After having finalized the two scales, data were collected for the major study, over a sample of 403
students. The students were approached personally through the heads of the institutions. The permission of the concerned head of the institution was sought and timings were fixed with the concerned head of the institution and teacher incharge as well.

As the tests were lengthy, it was not possible to administer all of them together. Therefore, the tests were administered in two sessions, spread over a period of two to three days in each school. At first, Vocational Interest Record was administered which was followed by HSPQ and Achievement Motivation Scale. A separate date was fixed for the administration of Parental Involvement Scale and Occupational Information Schedule.

The purpose of the visit was explained to the students. They were also assured that the information received from them would be used only for research purpose. All possible efforts were made to make the students feel at ease. After establishing a good rapport the respondents were given booklets and answer sheets. the instructions were read aloud and explained to the students, as per manual for each test.

The investigator was present there all the time to answer their queries, to satisfy their curiosity and motivate them to answer the questionnaires carefully. All efforts were made to get maximum co-operation of the
students. After completing one test, the answer sheets and booklets were collected and another test was given to the students with a sufficient gap.

The tests were administered on 416 students, only 403 students completed all the tests.

Scoring Procedure

The data collected with the help of various tools as Vocational Interest Record, H.S.P.Q. and Deo-Mohan Achievement Motivation Scale were scored strictly in accordance with the directions given in their respective manuals.

A detailed description of scoring procedure followed for Occupational Information Schedule and Parental Involvement Scale has been given in Chapters III and IV respectively.

Statistical Techniques Used

Depending on the various objectives of the study, different statistical techniques had to be employed to analyse the data at different stages of investigation viz.

1. The techniques used for the development and standardization of the Occupational Information Schedule and Parental Involvement Scale and

2. The techniques employed for analysing the data collected for the major study.
1. Statistical Techniques used for Standardization of the Occupational Information Schedule and Parental Involvement Scale

a. Item Analysis

For the item analysis of the Occupational Information Schedule and Parental Involvement Scale, 'Pearson Product-Moment Co-efficient of Correlations' were worked out in order to find out Item-item correlations and correlations of items with total test scores separately for each category of the scale.

b. Upper Lower Indices (ULI)

Upper lower indices (ULI) were worked out by following Johnson's formula (vide Guilford 1954, P.425) for item discrimination and item analysis of the first draft of Occupational Information Schedule and Parental Involvement scale.

c. Reliability of the Occupational Information Schedule and Parental Involvement Scale

For the test - retest reliability of the Occupational Information Schedule and Parental Involvement Scale, 'Pearson Product Moment Co-efficient of Correlations' (Formula 30 was used vide Garrett, 1961, P. 143) were worked out.
d. Validity of the Occupational Information Schedule and Parental Involvement Scale

To establish the validity of the Occupational Information Schedule, the techniques of content validity, internal consistency and factorial validity were employed.

For the validation of the Parental Involvement Scale, the techniques of content validity and internal consistency were employed.

2. Statistical Techniques used for the Major Data

a. Descriptive Analysis

Measures of central tendency such as means, standard deviations, skewness and kurtosis were worked out to study the nature and distribution of the variables and the figures and profiles were prepared to know the vocational interest patterns of the adolescents.

b. Bivariate Analysis

The Product moment co-efficient of correlations were worked out to obtain the nature and extent of relationship between personality traits, achievement motivation, occupational information, parental involvement and vocational interest areas of the adolescents.
c. Multivariate Analysis

Multiple Correlations and Regression Analysis

In order to find the predictors of vocational choices from among the independent variables of personality traits, achievement motivation, occupational information and parental involvement, multiple regression co-efficients and multiple correlations were computed.

d. Factor Analysis

Principal-axes method of factoring and varimax rotation of factors was employed to study the underlying factor structure and to locate and identify certain factors of vocational interests in the light of personality traits, achievement motivation, occupational information and parental involvement.

e. Differential Analysis

T Ratios

The T test was employed

I. To compare the boys and girls on the variables of vocational choices, personality traits, achievement motivation, occupational information, parental involvement and vocational interest areas of the adolescents.
II. To compare govt. school boys and girls on the variables of vocational choices, personality traits, achievement motivation, occupational information and parental involvement.

III. To compare privately managed school boys and girls on the variables of vocational choices, personality traits, achievement motivation, occupational information and parental involvement.

IV. To compare govt. school boys and privately managed school boys on the variables of vocational choices, personality traits, achievement motivation, occupational information and parental involvement.

V. To compare govt. school girls and privately managed school girls on the variables of vocational choices, personality traits, achievement motivation, occupational information and parental involvement.

Thus with the help of the above statistical analysis, the investigator could draw some conclusions testing various hypotheses. Results were obtained from IB-MPC XT of the Computer centre, Panjab University, Chandigarh (U.T.). The detailed results and analysis are presented in Chapters V and VI.