CHAPTER-IV

Methodology
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4.1. DESIGN

A design is to the researcher what a blueprint is to an architect. It provides the researcher an opportunity for the comparisons required by the hypothesis and enables him to make a meaningful interpretation of the results of the study with the help of statistical analysis of the data.

The present study was conducted with the objectives to ascertain the differences between students of scheduled caste and general category in their emotional and social intelligence, educational aspiration, mental health and personality characteristic. For the statistical technique of mean SD and t-ratio were employed.

4.2. METHOD

In the present study descriptive survey method of investigation was employed which provides a method of investigation to study, describe and interpret what exists at present. Descriptive research studies are designed to obtain pertinent and precise information concerning the current status of phenomena and whenever possible, to draw valid general conclusions from the facts discovered. They are restricted not only to fact finding but may often result in the formulation of important principles of knowledge and solution of significant problems concerning local, state, national and international issues. Descriptive studies are more than just a collection of data, they involve measurement, classification, analysis, comparison and interpretation. They collect and provide three types of information: (1) of what exists with respect to variables or conditions in a situation. (2) of what we want by identifying standards or norms
with which to compare present conditions or what experts consider to be desirable, and (3) of how to achieve goals by exploring possible ways and means on the basis of the experience of others or the opinion of experts.

Survey studies are conducted to collect detailed descriptions of existing phenomena with the intent of employing data to justify current conditions and practices or to make more intelligent plans for improving them. Their objective is not only to analyze, interpret, and report the status of an institution, group, or area in order to guide practice in the immediate future, but also to determine the adequacy of status by comparing it with established standards. Some surveys are confined to gather all three types of information: (1) data concerning existing status, (2) comparison of existing status with the established status and standards, and (3) means of improving the existing status; while others are limited to one or two of these types.

4.3. SAMPLE

Most of the educational phenomena consist of a large number of units. It would be impracticable, if not impossible, to test, to interview or observe each unit of the population under controlled conditions in order to arrive at principles having universal validity. Some populations are so large that their study would be expensive in terms of time, money, effort, and manpower. Sampling is the process by which a relatively small number of individuals or measures of individuals, objects, or events is selected and analysed in order to find out something about the entire population from which it was selected. It helps to reduce expenditure, save time and energy, permit measurement of greater scope, or produce greater precision and accuracy. Sampling procedures provide generalizations on the basis of a relatively small proportion of the population.
A population refers to any collection of specified group of human beings or of non-human beings or of non-human entities such as objects, educational institutions, time units, geographical areas, prices of wheat or salaries drawn by individuals. Some statisticians call it universe.

After defining a population and listing all the units, a researcher selects a sample of units from the sampling frame. The process of such a selection is called sampling. In order to serve a useful purpose, sampling should be unbiased or representative. A good sample must be as nearly representative of the entire population as possible and ideally it must provide the whole of the information about the population from which the sample has been drawn.

Present study was conducted on a random sample of 713 BA (I) class students (general category = 456 and scheduled caste = 257) studying in degree colleges in Union Territory of Chandigarh. Description of final sample has been given in table 4.1.

**Table 4.1.**
**Description of Final Sample (N=713)**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of the Institution</th>
<th>General Category</th>
<th>Scheduled Caste Category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Government College Sector – 46, Chandigarh</td>
<td>126</td>
<td>54</td>
<td>180</td>
</tr>
<tr>
<td>2</td>
<td>G.G.D.S.D. College Sector – 32, Chandigarh</td>
<td>65</td>
<td>13</td>
<td>78</td>
</tr>
<tr>
<td>3</td>
<td>Govt. College for Girls Sector – 42, Chandigarh</td>
<td>72</td>
<td>59</td>
<td>131</td>
</tr>
<tr>
<td>4</td>
<td>M.C.M.DAV College Sector – 36, Chandigarh</td>
<td>22</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>5</td>
<td>Govt. College for Girls Sector – 11, Chandigarh</td>
<td>83</td>
<td>66</td>
<td>149</td>
</tr>
<tr>
<td>6</td>
<td>Govt. College for Men Sector – 11, Chandigarh</td>
<td>88</td>
<td>62</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>456</strong></td>
<td><strong>257</strong></td>
<td><strong>713</strong></td>
</tr>
</tbody>
</table>
4.4. TOOLS USED

A researcher will require many data-gathering tools or techniques which may vary in their complexity, design, administration and interpretation. Each tool is appropriate for the collection of certain type of evidence, or information. The researcher has to select from the available tools, which will provided data, she requires for the testing of the hypotheses. In some situations, she may find that the existing research tools do not suit her purpose and so she may have to modify them or construct her own. For this the researcher should familiarize herself with the nature, merits and limitations of the existing research tools, and should also develop skill in the construction and use of each of these research tools.

In the present study following tools were employed.

1. Emotional Intelligence Scale (Hyde, Pethe and Dhar, 2001).
2. Social Intelligence Scale (Chadha and Ganeshan, 2002).
3. Educational Aspiration Scale (Sharma and Gupta, 1997).
4. Mental Health Scale (Jagdish and Sriastava, 1983).
5. Personality Inventory (Misra, 2005).

4.4.1. Emotional Intelligence Scale (Hyde, Pethe and Dhar, 2001).

The author after consulting relevant literature developed 106 items. Each item was transferred on a card. A panel of 50 judges with postgraduate degree and more than 10 years of experience in their relevant fields was prepared. Definition of Emotional Intelligence was also written on a card along with necessary instructions for the selection of the items on the cards. The cards were placed before each judge who was contacted individually. The choice for categorization of each card was noted.
and the frequency of choice was calculated. The items, which were chosen 75% or more times, were spotted out. The 34 items thus chosen were administered on 200 subjects. The data was then tabulated and item total correlations were calculated. Items having correlation less than the value of .25 (p < .01) were dropped. The value is taken from Fisher (1950) table of correlation coefficients and their levels of significance. The final form of the scale constituted 34 items. The Hindi Version of the final items was prepared in consultation with 10 judges who were well versed with both, English as well as Hindi version. The inter-item correlations of the final items were also determined for English as well as Hindi version. The inter-item correlations of the final items were also determined.

**Reliability**

The reliability of the scale was determined by calculating reliability coefficient on a sample of 200 subjects. The split-half reliability co-efficient was found to be 0.88

**Validity**

Besides face validity, as all items related to the variable under focus, the scale has high content validity. It is evident from the assessment of judges/experts that items of the scale are directly related to the concept of Emotional Intelligence. In order to find out the validity from the co-efficient of reliability (Garrett, 1981), the reliability index was calculated, which indicated high validity on account of being 0.23.

**Factors of Emotional Intelligence**

The scale was administered on 200 subjects and the scores obtained were subjected to factor analysis and ten factors were identified. These are: self awareness, empathy, self motivation, emotional stability, managing relations, integrity, self
development, value orientation, commitment and altruistic behaviour.

A. Self-awareness is being aware of oneself and is measured by items 6, 12, 18, 29. These items are "I can continue to do what believe in even under severe criticism". I have my priorities clear, "I believe in myself, and "I have built rapport and made and maintained personal friendship with work associates". This factor is the strongest and explains 26.8 percent variance and has a total factor load of 2.77. The correlation of this factor with total score is 0.66.

B. Empathy is feeling and understanding the other person and is measured by items 9, 10, 15, 20 and 25. These are "I pay attention to the worries and concerns of others". I can listen to someone without the urge to say something". I try to see the other person's point of view". I can stay focused under pressure, and "I am able to handle multiple demands". This factor explains 7.3 percent variance with a total factor load of 3.11. The correlation of the factor with total score is 0.70.

C. Self motivation is being motivated internally and is measured by 2, 4, 7, 8, 31 and 34. These items are "People tell me that I am an inspiration for them," I am able to make intelligent decisions using a healthy balance of emotions and reason, ... I am able to assess the situation and then behave, ....I can concentrate on the task at hand inspite of disturbances, "I think feelings should be managed, and" I believe that happiness is an attitude." This factor accounts for 6.3 percent variance and total factor load of 3.28. Its correlation with total score is 0.77.

D. Emotional stability is measured by items 14, 19, 26 and 28. These are "I do not mix unnecessary emotions with issues at hand," I am able to stay composed in both good
and bad situations,”. I am comfortable and open to ‘novel ideas and new information and “I am persistent in pursuing goals despite obstacles and setbacks”. This factor explains 6.0 percent variance with a total factor load of 2.51. The correlation of this factor with total score is 0.75.

E. Managing relations are measured by 1, 5, 11 and 17. The statements that measure this factor are, “I can encourage others to work even when things are not favourable.” I do not depend on others’ encouragement to do my work well, “I am perceived as friendly and outgoing, and” I can see the brighter side of any situation”. This factor explains 5.3 percent variance with a total factor load of 2.38. The correlation of this factor with total score is 0.67.

F. Integrity is measured by items 16, 27, and 32. “I can stand up for my beliefs”. “I pursue goals beyond what is required of me” and “I am aware of my weaknesses” are the statements that measure this factor. This factor explains 4.6 percent variance with a total factor load of 1.88.

G. Self-development is measured by items 30 and 33 which are “I am able to identify and separate my emotions and” “I feel that I must develop myself even when my job does not demand it”. This factor explains 4.1 percent variance with a total factor load of 1.37.

H. Value orientation is measured by items 21 and 22. The statements are. “I am able to maintain the standards of honesty and integrity” and “I am able to confront unethical actions in others”. The factor explains 4.1 percent variance with a total factor load of 1.29.

I. Commitment is measured by the items 23 and 24. ...I am able to meet commitments and keep promises and “I am
organized and careful in my work” measure this factor. This factor accounts for 3.6 variance with a total factor load of 1.39.

J. Altruistic behaviour is measure by the items 3 and 13. The items are “I am able to encourage people to take initiative, and “I can handle conflicts around me”. It explains 3.0 percent variance with a total factor load of 1.3.

Uses of the Scale: The scale can be used for research and survey purposes. It can also be used for individual assessment. It is self-administering and does not require the services of highly trained tester. It is eminently suitable for group as well as individual testing.

Instructions for Administration and Scoring:

1. The instructions printed on the response sheet are sufficient to take care of the questions which are asked.

2. No time limit should be given for completing the scale. However, most respondents should complete it in about 10 minutes.

3. Before administering the scale, it is advisable to emphasize orally that responses should be checked as quickly as possible and sincere cooperation is sought for the same. The responses should be kept confidential.

4. It should also be emphasized that there is no right or wrong answer to the statements. The statements are designed to understand the differences in individual factors to various situations. The scale is meant to know the difference between individuals and not meant to rank them as good or bad.

5. It should be duly emphasized that all statements have to be responded to and no statement should be left unanswered.
6. Though the scale is self-administering, it has been found useful to read out the instructions printed on the responses sheet to the subjects.

7. Manual scoring is done conveniently, hence no scoring key is provided.

8. Each item or statement should be scored 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree.

4.4.2. Social Intelligence Scale (Chadha and Ganesan, 2002)

Social Intelligence Scale has been developed by Chadha and Ganesan (2002). The initial selection of dimensions that measure social intelligence were determined on the basis of the judgement of 25 experts in the field of behavioural sciences. In order to construct the scale, the dimensions of social intelligence were selected in a scientific manner. Accordingly, sixteen relevant and meaningful dimensions of social intelligence were selected and defined. These were then given to a group of 25 experts and 13 of these dimensions were unanimously accepted. These were further given to 10 experts to be rated on a five point rating scale ranging from very relevant to irrelevant. The experts were also asked to rank the dimensions from most relevant to least relevant. Following this, a final list of 8 dimensions was selected and retained for final inclusion in the scale. Their operationally defined structure was as under:-

A. **Patience**: Calm endurance under stressful situations.

B. **Cooperativeness**: Ability to interact with others in a pleasant way to be able to view matters from all angles.

C. **Confidence Level**: Firm trust in oneself and ones chances.

D. **Sensitivity**: To be acutely aware of and responsive to human behaviour.
E. **Recognition of Social Environment**: Ability to perceive the nature and atmosphere of the existing situation.

F. **Tactfulness**: Delicate perception of the right thing to say or do.

G. **Sense of Humour**: Capacity to feel and cause amusement; to be able to see the lighter side of life.

H. **Memory**: Ability to remember all relevant issues; names and faces of people.

**Table Showing Number of Items Retained under Each Dimension in the Final Scale**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Number of Items Retained</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Patience</td>
<td>8</td>
</tr>
<tr>
<td>B Co-operativeness</td>
<td>11</td>
</tr>
<tr>
<td>C Confidence</td>
<td>8</td>
</tr>
<tr>
<td>D Sensitivity</td>
<td>9</td>
</tr>
<tr>
<td>E Recognition of Social</td>
<td>3</td>
</tr>
<tr>
<td>Environment</td>
<td></td>
</tr>
<tr>
<td>F Tactfulness</td>
<td>7</td>
</tr>
<tr>
<td>G Sense of Humour</td>
<td>8</td>
</tr>
<tr>
<td>H Memory</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
</tr>
</tbody>
</table>

**Reliability**

The reliability of the scale was determined by split-half and test-retest techniques taking a sample of 150 (75 males and 75 females). The following results were obtained :-
### Table Showing Reliability Co-efficient of Various Factors of Social Intelligence

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Split-Half Reliability Co-efficient</th>
<th>Test-Retest Reliability Co-efficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Patience</td>
<td>0.93</td>
<td>0.94</td>
</tr>
<tr>
<td>B Co-operativeness</td>
<td>0.91</td>
<td>0.91</td>
</tr>
<tr>
<td>C Confidence</td>
<td>0.89</td>
<td>0.90</td>
</tr>
<tr>
<td>D Sensitivity</td>
<td>0.90</td>
<td>0.93</td>
</tr>
<tr>
<td>E Recognition of Social Environment</td>
<td>0.95</td>
<td>0.95</td>
</tr>
<tr>
<td>F Tactfulness</td>
<td>0.91</td>
<td>0.84</td>
</tr>
<tr>
<td>G Sense of Humour</td>
<td>0.90</td>
<td>0.92</td>
</tr>
<tr>
<td>H Memory</td>
<td>0.96</td>
<td>0.97</td>
</tr>
</tbody>
</table>

**Validity**

The techniques of validity used to validate this scale were (1) Empirical validity (2) Cross validation. Empirical validity was found to be .70 whereas overall cross validation was .80.

**Instructions for Administration and Scoring**

The instructions printed on the test are sufficient to take the test. Scoring was done with the help of instruction given in the manual.

**4.4.3. Educational Aspiration Scale (Sharma and Gupta, 1997)**

The present scale has been designed to measure educational aspiration level of normal individuals. This test has been developed by **Sharma and Gupta (1997)**. This test has been divided into eight lists. Each list has further ten options (except...
Every student has to tick one best possible answer. The description of lists is given as under:

**List I:** It contains a list of examinations which is given below. People who pass these examinations get recognition in society but some exams get more social recognition in comparison to others. The students is asked to tick on the exam which he/she can pass definitely depending on his power to do hard work, social, economic and cultural situations, qualification, memory and other factors affecting the examination. The list is given below:

1.1 ___ Cambridge High School Exam 1.6 ___ B.A.
1.2 ___ B.Lib. 1.7 ___ Dip. In Journalism
1.3 ___ M.Tech. 1.8 ___ Indian Navy Exam
1.4 ___ P.M.T. 1.9 ___ B.Sc. (Textiles)
1.5 ___ Middle School Board Exam 1.0 ___ B.E. (Mining)

**List II:** It contains a list of ten exams which get recognition in society but some exams get more recognition and some get less. If somebody asks the students which exam is best in order to get social recognition, where he/she will tick.

2.1 ___ Indian Military Academy Exam 2.6 ___ Board Primary Exam
2.2 ___ B.V.Sc. 2.7 ___ M.D.
2.3 ___ H.S(Hons.) 2.8 ___ M.Sc. (Agr.)
2.4 ___ A.C.F. 2.9 ___ M.A.
2.5 ___ M.Ed. 2.10 ___ Ph.D.

**List III:** List of examinations is given below. These exams get recognition in society, some exams get more recognition, while others get less. The student is asked to tick one such exams which he/she rates best and will be able to pass definitely after twenty years keeping in mind his qualification, capacity to do hard
work, social, economic and cultural circumstances, memory and other factors affecting examination.

3.1 Polytechnic Exam 3.7 F.A.A.Sc. (Fellow of the Australian Academy of Science)
3.2 B.E. (Elect) 3.8 F.L.A. (Fellow of the Library Association)
3.3 M.Sc. 3.9 M.Phil. in Social Science
3.4 I.T.I. 3.10 Ph.D.
3.5 C.A.
3.6 MCA

**List IV:** This list contains ten examinations which get recognition in society, some get more recognition while others get less recognition. If you were asked which exam you would rate best and wish to pass after twenty years, which exam you would tick mark. The list is given here:

4.1 M.Sc. 4.7 B.Sc.
4.2 M.B.B.S. 4.8 L.L.B.
4.3 F.C.S. (Fellow of Chemical Society) 4.9 M.S.
4.4 B.E.d. 4.10 D.Lit
4.5 M.Phil
4.6 Chartered Accountancy Exam

**List V:** A list of examinations is given below, which get recognition in society, some get more recognition and some get less. Which exam you would tick mark if you were asked the best exam and which every person should aim to pass. Tick mark that exam out of the list given below:

5.1 M.Lib. 5.7 F.I.E. (Fellow of Institute of Engineers)
5.2 B.I.D. (Bachelor of Industrial Design) 5.8 Science Talent Search
5.3 F.E.R (Red Cross Firs Aid Exam)
List VI: It contains 11 examinations which get recognition in society, some get more and some get less. Tick mark that exam which you can pass definitely and which you rate best depending upon your capacity to do hardwork, social, economic and cultural circumstances, qualification, memory and other factors affecting examinations. The list is as follows:

6.1 __ M.J. 6.6 __L.L.M.
6.2 __ B.Sc. 6.7 __ B.J.
6.3 __ A.C.F. (Asstt. Conservator of Forest) 6.8 __ I.A.S.
6.4 __ B.B.A. 6.9 __ B.A.M.
6.5 __ B.C.E. 6.10 __ B.A.M.
6.11 ___ PCS

List VII: A list is given below. You have to tick one such exam which you think best and you would pass definitely after twenty years depending upon your qualification, capacity to do hard work, and other factors affecting examination. Tick mark in front of that exam.

7.1 __ M.Tech. 7.7 __M.Phil. in Humanities
7.2 __ B.Com. 7.8 __ M.A.
7.3 __ D.Sc. 7.9 __ Dip. In Lib.
7.4 __ D.C.L. (Doctor of Civil Law) 7.10 __M.Sc. (Tech.)
7.5 __ B.E. (Mech.)
7.6 __ Ph.D.

List VIII: It contains ten examinations which get recognition in society. Some get more recognition and some get less recognition.
If somebody asks you which is best exam which you would wish to pass after twenty years, which exam you would tick mark? Tick mark that exam.

8.1 __ L.L.B. 8.6 __ B.E. (Tech.)
8.2 __ B.Ed. 8.7 __ B.A.M.S.
8.3 __ M.B.B.S. 8.8 __ B.Lib.
8.4 __ B.E. (Elect.) 8.9 __ B.E. (Computer)
8.5 __ B.E. 8.10 __ B.P.Ed.

**Reliability:** The reliability of the scale was determined with the help of test-retest technique and it was found that the scale has .65 as coefficient of reliability.

**Validity:** The validity of the scale was determined with the help of content validity. The scale was given to five judges along with its procedure of scoring. All the five judges agreed on the content as well as scoring method.

**Instructions for Administration and Scoring:** Instructions for the students were given on the first page of the scale. These instructions were read by the investigator before administering the scale. Time to complete this scale was 30 minutes including instructions to the subjects. Scoring was done with the help of instructions given in the manual. Scores were same for all the lists which were as follows 9 for 1.1, 6 for 1.2, 8 for 1.3, 2 for 1.4, 7 for 1.5, 0 for 1.6, 5 for 1.7, 3 for 1.8, 1 for 1.9 and 4 for 1.10.

**4.4.4. Mental Health Scale (Jagdish and Srivastava, 1983)**

The present scale has been designed to measure mental Health (positive) of normal individuals. The contents of statements were mainly taken from available literature on mental health.
particularly including Maslow and Mittel Mann, 1951, Fromm, 1955, Johoda 1958 and Buch, 1972. Besides few items from existing tests pertaining to psychological well being were also incorporated in the list of statements. The scale consisting of 72 statements is related to following 6 dimensions:

1. **Positive Self Evaluation (PSE):** It includes self confidence, self acceptance, self identity, feeling of worthwhileness, realization of one’s potentialities, etc.

2. **Perception of Reality (PR):** It is related to perception free from need distortion, absence of excessive fantasy and a broad outlook on the world.

3. **Integration of personality (IP):** It indicates balance of psychic forces in the individual and includes the ability to understand and to share other people's emotions, the ability to concentrate at work and interest in several activities.

4. **Autonomy (AUTNY):** It includes stable set of internal standards for one's action, dependence for own development upon own potentialities rather than dependence on other people.

5. **Group Oriented Attitudes (GOA):** It is associated with the ability to get along with others, and ability to find recreation.

6. **Environmental Mastery (EM):** It includes efficiency in meeting situational requirements, the ability to work and play, and the ability to take responsibility and capacity for adjustment.
Reliability of Inventory

The reliability of scale by split half method using odd-even procedure has been given as below:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Dimensions of Mental Health Scale</th>
<th>Reliability Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Positive Self Evaluation</td>
<td>.75</td>
</tr>
<tr>
<td>2.</td>
<td>Perception of Reality</td>
<td>.71</td>
</tr>
<tr>
<td>3.</td>
<td>Integration of Personality</td>
<td>.72</td>
</tr>
<tr>
<td>4.</td>
<td>Autonomy</td>
<td>.72</td>
</tr>
<tr>
<td>5.</td>
<td>Group Oriented Attitudes</td>
<td>.74</td>
</tr>
<tr>
<td>6.</td>
<td>Environmental Competence</td>
<td>.71</td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>.73</td>
</tr>
</tbody>
</table>

Validity

Construct validity of scale is determined by finding coefficient of correlation between scores on mental health scale and General health questionnaire (Goldberg 1978). It was found to be .54. It is noteworthy here that high score on general health questionnaire indicates poor mental health.

Scoring

In the present scale 4 alternative responses have been given to each statement i.e. Always, Often, Sometimes and never while scoring 4 scores to ‘Always’, 3 scores to often, 2 scores to (Sometimes) Rarely and 1 score to ‘never’ marked responses as to be assigned for positive statements whereas 1, 2, 3, and 4 scores for ‘Always’, Often, Rarely and Never respectively in case of negative statement. The area wise detail of statements is presented in the following table.
### Item Numbers Included in Various Dimensions of Mental Health Scale

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Dimensions of Mental Health</th>
<th>Items</th>
<th>Positive</th>
<th>Negative</th>
<th>Tot</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Positive Self Evaluation (A)</td>
<td>1*, 7*, 13*, 19, 23*, 20</td>
<td>06</td>
<td>04</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7, 32, 38, 45, 51</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Perception of Reality (B)</td>
<td>6, 8, 14*, 24*, 35*, 41, 46*, 52</td>
<td>04</td>
<td>04</td>
<td>0</td>
</tr>
<tr>
<td>3.</td>
<td>Integration of Personality (C)</td>
<td>2*, 9*, 15*, 18*, 20, 25*, 28*, 33*, 36*, 40*, 47*, 53*</td>
<td>01</td>
<td>011</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>Autonomy (D)</td>
<td>3*, 10*, 29, 42*, 48*, 54</td>
<td>02</td>
<td>04</td>
<td>0</td>
</tr>
<tr>
<td>5.</td>
<td>Group Oriented Attitudes (E)</td>
<td>4, 11*, 16*, 21*, 26, 30*, 39, 43, 49*, 55*</td>
<td>04</td>
<td>06</td>
<td>1</td>
</tr>
<tr>
<td>6.</td>
<td>Environmental Mastery (F)</td>
<td>5*, 12, 17*, 22*, 31, 34, 37, 44, 50, 56</td>
<td>07</td>
<td>03</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>32</strong></td>
<td><strong>5</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Negative Items

Present inventory is used for measuring mental health as it covers various spheres of individual life. This is widely used inventory in industrial and educational fields. This inventory was considered suitable in the present investigation.

**Interpretation**

Interpretation of scores is made on the basis of norms given in the manual. High scores indicate good mental health and vice versa.

**4.4.5. Personality Inventory (Misra 2005)**

After reviewing the tools and critical examination of the meanings of various traits, it was decided by the author to construct a personality inventory for measuring twenty personality traits which are as follows:
<table>
<thead>
<tr>
<th></th>
<th>1. A</th>
<th>Experimental</th>
<th>Vs.</th>
<th>Conventional</th>
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<tr>
<td>2. B</td>
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<td>7. G</td>
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<td>Less inquisitive</td>
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<td>8. H</td>
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<td>10. J</td>
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<td>16. P</td>
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<td>Vs.</td>
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<td>17. Q</td>
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<td>Vs.</td>
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<td>18. R</td>
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<td>19. S</td>
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<td>Vs.</td>
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<td>20. T</td>
<td>Conscientious</td>
<td>Vs.</td>
<td>Unscrupulous</td>
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</tbody>
</table>

Operational definitions of the 20 personality traits are as follows:

(A) EXPERIMENTAL vs. CONVENTIONAL
H - Performs experiments to study what happens and gain new knowledge,
L - Follows what has been customary.

(B) EMOTIONALLY STABLE vs. EXCITABLE
H - Is balanced and controls emotions.
L - His feelings get easily stirred up.

(C) SPIRITUAL vs. MATERIALIST
H - Believes in and cares for religious or spiritual things.
L - Cares for material things.
(D) SOCIABLE vs. SELF CENTERED
H – Is fond of the company of others and shows friendliness.
L – Interested chiefly in oneself and one’s own affairs.

(E) ADAPTIVE vs. RIGID
H – Is more able to adapt to circumstances.
L – Is inflexible and more firm and does not compromise.
H – Refers to high group individual with score > P_{50}
L – Refers to low group individual with score ~ P_{50}

(F) CONFIDENT vs. APPREHENSIVE
H – Is more competent and has more self confidence.
L – Is more uneasy and worried about future unhappy feelings and failures.

(G) MORE INQUISITIVE vs. LESS INQUISITIVE
H – Desires to know more and asks for information.
L – Avoids being more inquisitive.

(H) RELAXED vs. TENSE
H – Feels more comfortable and less stress/strain.
L – Is more anxious, troubled, fearful, depressed and disappointed.

(I) AFFECTIONATE vs. UNDEMONSTRATIVE
H – Is more sympathetic and warm hearted and expresses emotions.
L – Does not express experiences and feelings of affection or interest.

(J) PERSISTENT vs. CASUAL
H – Is hard working
L – Is less cautious, irregular and likes to take more rest.

(K) SELF CRITICAL vs. HAPPY – GO – LUCKY
H – Tends to find fault in one’s own behaviour and deeds.
L – Is carefree and takes what fortune brings.

(L) SUPPORTIVE vs. INHIBITIVE
H – Helps others in a constructive way.
L – Hinders and restrains others.

(M) INDEPENDENT vs. GROUP DEPENDENT
H – Is self governing, controlled by other persons and likes acting or thinking on one’s own lines.
L – Depends on others.

(N) ENTHUSIASTIC vs. LETHARGIC
H – Is more motivated, energetic and full of enthusiasm.
L – Lacks energy and feels tired and uninterested.

(O) ASSERTIVE vs. HUMBLE
H – Insists upon one’s rights and authority and expresses one’s views the force.
L – Has a modest opinion about oneself and one’s position and expresses his views in a feeble tone.

(P) MORE ANALYTICAL vs. LESS ANALYTICAL
H – Examines things in order to learn about them.
L – Avoids analyzing situations and things and is not ready to listen to arguments and suggestions.

(Q) FORTHRIGHT vs. CROOKED
H – Is straight forward.
L – Is not straight forward.

(R) DIVERGENT vs. CONVERGENT
H – Turns away from the accepted or given path or opinion.
L – Conforms to the opinion or path accepted by most of the persons.
(S) DOMINANT vs. SUBMISSIVE
H – Considers oneself as having more influence, control or authority on others.
L – Yields to the control or authority of others.

(T) CONSCIENTIOUS vs. UNSCRUPULOUS
H – Is more righteous, does what is morally right and obeys laws.
L – Evades being more dutiful and just.

**Reliability and Validity**

Split half and test – retest reliability for the twenty personality trait scales were calculated. Split half reliability coefficients have been calculated for a sample of 85 undergraduate and post graduate students. Their values ranged from .4472 to .8109. Test-retest reliability coefficients were calculated for a sample of 30 students of B.A., M.A. and M.Ed. Their values ranged from .1931 to .8497.

Concurrent validity of the Personality Inventory was established against self rating. 30 students of M.A. and M.Ed. were asked to tell whether they possess every personality trait at a high, average or low level. A score of ‘3’ was given for ‘high’ judgement on the trait. A score of ‘2’ was awarded to those who said that they possess the trait in average amount. A score of ‘1’ was awarded to those who told that they possess the personality trait at a low level. Product moment coefficients of correlation were calculated between self rating score and personality inventory score for each trait. The values of validity coefficients ranged from .19 to .83.

**4.5. COLLECTION OF THE DATA**

Before collecting the data selection of colleges was done on the basis of randomization technique. After taking permission
from heads of institutions students of different sections in a particular college were selected randomly. Rapport was established with them and instructions given in the manual were read out for each tool. Students were encouraged to give correct information and they were told that these informs will remain confidential. They were asked to rate each and every statement. At the time of data collection, it was checked that they have answered all the statements.

Data was collected in 2 sittings and rest was given in between. Thus approximately 3 hours were spent in collecting data from each group. Scoring was done manually for each test as discussed under tools. Scores for each individual were obtained on the basis of these tests.

4.6. STATISTICAL TECHNIQUES EMPLOYED

1. Statistics, namely mean, SD and t-ratios were calculated to see the difference in the emotional and social intelligence, educational aspiration, mental health and personality characteristics of general and scheduled caste students.

2. Results were also shown with the help of bar-diagrams to have a quick glance at the results.