CHAPTER-III

METHODOLOGY

Human search is a shared search. Every searcher adds to the existing knowledge. Researcher is the original contribution to the existing stock of knowledge. The advancement in knowledge is different in different reams, sometimes altogether new facts are discovered, for instance transition from Plane Geometry Solid Geometry or from Newtonian Physics to Einsteinium Physics or from Corpuscular theory of light, from Ptolemaic Geocentric conception of the universe to Copernican Heliocentric conception of the universe. Contribute to knowledge may be made by the discovery of new relations of facts. In simple terms “research means a movement from the known to unknown”. Intellectual curiosity to know the truth is the propelling force behind taking up research.

A method is a way in which an activity is done. It can be describe as step-by-step procedure followed in the execution of a research project. Research work cannot be carried out successfully without a sound methodology and setting of the study. From the above mentioned definitions it is clear that research is concerned with pure economic phenomena, it aims at finding out the old or new facts through scientific method, which is based on logic and systematic steps. Through research we can find out economics facts by means of scientific method only.

To be very precise, any research can perform its role only, on the solid foundation of scientific method. Have a researcher describe the statement of the problem. Specific objectives of the study describe the sampling procedure of various tools of data collection. Research Methodology is a way to systematically solve this research problem. It is a plan and process.
comparing researcher’s decision about how to proceed for collection of data, computing data and analyze this same for a given study which aims at fulfilling the purpose of study without wasteful expenditure and time, money and energy.

Science begins with observation of its final validation. The first and foremost criterion of research is an existing storage of knowledge. The second important elements of scientific investigation are to find out the cause and effect relationship between or among different factors. The meaning of social research also purports to convey observation of social facts and derivation of inference on the basis of logic cause and effect relationship.

Research is the art of inquiry. Like any other art involves imagination and the skillful use of techniques. Its objectives are to discover truth, to explain the unintelligible by revealing new facts, or by conceiving a new idea or a theory, logically acceptable and capable of systematizing the extent knowledge of some particular field of phenomena. Researches, therefore, widens, deepens and increase our mastery over it. Research is a scientific pursuit of truth.

**Statement of Problem:**
The present investigation attempts to “A Comparative Study of Value, Personality and Mental Health among Scheduled Caste and Non-Scheduled Caste College Students”

**Objectives:**
Following objectives are clarified with reference to the nature of problem.

1. To study and compare the values differences among Scheduled Caste & non Scheduled Caste College students.
2. To study and compare the personality dimensions among Scheduled Caste & Non Scheduled Caste College students.

3. To study and compare the state of mental health among Scheduled Caste & Non Scheduled Caste College students.

**Operational Definition:**

Variables which are used in this study are defined below in separate captions.

**Values:** values contain cognitive and affective elements and have a selective or directional quality; they are internalized. Preference, judgment, and action are commonly explained in terms of values.

**Personality:** Personality is a person's unique behavioral and cognitive patterns; OR, a person's unique consistent pattern of thinking, feeling, and acting.

**Mental Health:** A state of well-being in which every individual realize his or her own potential, can cope with the normal stress of life, can work productively and fruitfully, and is able to make contribution to her or his community.

**Scheduled Caste:** The “Scheduled Castes” is the legal and constitutional name collectively given to the groups which have traditionally occupied the lowest status in Indian society and the Hindu religion which provides the religious and ideological basis for an “untouchable” group, which was outside the caste system and inferior to all other castes.

**Non Scheduled (General) Caste:** Forward Community and General Class is a term used in India to denote groups of people who do not
qualify for any of the positive discrimination schemes operated by the government of India.

**Hypothesis:**

There is a little doubt that the hypothesis is important and indispensable tools of scientific research. They are tentative answers to the research problems. They are expressed in the form of a relation between independent and dependent variables. They are tentative conjectures because their veracity can be evaluated only after they have been tested empirically. When a researcher suggests a hypothesis, he or she has no assurance that it will be verified. Hypothesis can be derived deductively from theories, directly from observations, intuitively or from a combination of these. Thus, the hypothesis is the most powerful tool that man has invented to achieve dependable knowledge.

For the present research process, the following null hypothesizes are formulated:

1. There is no significant difference between scheduled caste college students and non schedule caste college students regarding theoretical value.
2. There is no significant difference between male scheduled caste college students and male non scheduled caste college students regarding theoretical value.
3. There is no significant difference between female schedule caste college students and female non schedule caste college students regarding theoretical value.
4. There is no significant difference between urban scheduled caste college students and urban non scheduled caste college students regarding theoretical value.
5. There is no significant difference between rural scheduled caste college students and rural non scheduled caste college students regarding theoretical value.
6. There is no significant difference between male-urban scheduled caste college students and male-urban non schedule caste college students regarding theoretical value.
7. There is no significant difference between male-rural-scheduled caste college students and male-rural-non scheduled college students regarding theoretical value.
8. There is no significant difference between female-urban scheduled caste college students and female-urban non scheduled caste college students regarding theoretical value.
9. There is no significant difference between female-rural-scheduled caste college students and female-rural-non scheduled caste college students regarding theoretical value.
10. There is no significant difference between scheduled caste college students and non schedule caste college students regarding economic value.
11. There is no significant difference between male scheduled caste college students and male non scheduled caste college students regarding theoretical economic value.
12. There is no significant difference between female schedule caste college students and female non schedule caste college students regarding theoretical economic value.
13. There is no significant difference between urban scheduled caste college students and urban non scheduled caste college students regarding theoretical economic value.
14. There is no significant difference between rural scheduled caste college students and rural non scheduled caste college students regarding theoretical economic value.

15. There is no significant difference between male-urban scheduled caste college students and male-urban non schedule caste college students regarding theoretical economic value.

16. There is no significant difference between male-rural-scheduled caste college students and male-rural-non scheduled college students regarding theoretical economic value.

17. There is no significant difference between female-urban scheduled caste college students and female-urban non scheduled caste college students regarding theoretical economic value.

18. There is no significant difference between female-rural-scheduled caste college students and female-rural-non scheduled caste college students regarding theoretical economic value.

19. There is no significant difference between scheduled caste college students and non schedule caste college students regarding aesthetic value.

20. There is no significant difference between male scheduled caste college students and male non scheduled caste college students regarding aesthetic value.

21. There is no significant difference between female schedule caste college students and female non schedule caste college students regarding aesthetic value.

22. There is no significant difference between urban scheduled caste college students and urban non scheduled caste college students regarding aesthetic value.
23. There is no significant difference between rural scheduled caste college students and rural non scheduled caste college students regarding aesthetic value.

24. There is no significant difference between male-urban scheduled caste college students and male-urban non scheduled caste college students regarding aesthetic value.

25. There is no significant difference between male-rural-scheduled caste college students and male-rural-non scheduled college students regarding aesthetic value.

26. There is no significant difference between female-urban scheduled caste college students and female-urban non scheduled caste college students regarding aesthetic value.

27. There is no significant difference between female-rural-scheduled caste college students and female-rural-non scheduled caste college students regarding aesthetic value.

28. There is no significant difference between scheduled caste college students and non schedule caste college students regarding social value.

29. There is no significant difference between male scheduled caste college students and male non scheduled caste college students regarding social value.

30. There is no significant difference between female schedule caste college students and female non schedule caste college students regarding social value.

31. There is no significant difference between urban scheduled caste college students and urban non scheduled caste college students regarding social value.
32. There is no significant difference between rural scheduled caste college students and rural non scheduled caste college students regarding social value.

33. There is no significant difference between male-urban scheduled caste college students and male-urban non schedule caste college students regarding social value.

34. There is no significant difference between male-rural-scheduled caste college students and male-rural-non scheduled college students regarding social value.

35. There is no significant difference between female-urban scheduled caste college students and female-urban non scheduled caste college students regarding social value.

36. There is no significant difference between female-rural-scheduled caste college students and female-rural-non scheduled caste college students regarding social value.

37. There is no significant difference between scheduled caste college students and non schedule caste college students regarding political value.

38. There is no significant difference between male scheduled caste college students and male non scheduled caste college students regarding political value.

39. There is no significant difference between female schedule caste college students and female non schedule caste college students regarding political value.

40. There is no significant difference between urban scheduled caste college students and urban non scheduled caste college students regarding political value.
41. There is no significant difference between rural scheduled caste college students and rural non scheduled caste college students regarding political value.

42. There is no significant difference between male-urban scheduled caste college students and male-urban non schedule caste college students regarding political value.

43. There is no significant difference between male-rural-scheduled caste college students and male-rural-non scheduled college students regarding political value.

44. There is no significant difference between female-urban scheduled caste college students and female-urban non scheduled caste college students regarding political value.

45. There is no significant difference between female-rural-scheduled caste college students and female-rural-non scheduled caste college students regarding political value.

46. There is no significant difference between scheduled caste college students and non schedule caste college students regarding religious value.

47. There is no significant difference between male scheduled caste college students and male non scheduled caste college students regarding religious value.

48. There is no significant difference between female schedule caste college students and female non schedule caste college students regarding religious value.

49. There is no significant difference between urban scheduled caste college students and urban non scheduled caste college students regarding religious value.
50. There is no significant difference between rural scheduled caste college students and rural non scheduled caste college students regarding religious value.
51. There is no significant difference between male-urban scheduled caste college students and male-urban non schedule caste college students regarding religious value.
52. There is no significant difference between male-rural-scheduled caste college students and male-rural-non scheduled college students regarding religious value.
53. There is no significant difference between female-urban scheduled caste college students and female-urban non scheduled caste college students regarding religious value.
54. There is no significant difference between female-rural-scheduled caste college students and female-rural-non scheduled caste college students regarding religious value.
55. There is no significant difference between scheduled caste college students and non schedule caste college students regarding personality.
56. There is no significant difference between male scheduled caste college students and male non scheduled caste college students regarding personality.
57. There is no significant difference between female schedule caste college students and female non schedule caste college students regarding personality.
58. There is no significant difference between urban scheduled caste college students and urban non scheduled caste college students regarding personality.
59. There is no significant difference between rural scheduled caste college students and rural non scheduled caste college students regarding personality.

60. There is no significant difference between male-urban scheduled caste college students and male-urban non schedule caste college students regarding personality.

61. There is no significant difference between male-rural-scheduled caste college students and male-rural-non scheduled college students regarding personality.

62. There is no significant difference between female-urban scheduled caste college students and female-urban non scheduled caste college students regarding personality.

63. There is no significant difference between female-rural-scheduled caste college students and female-rural-non scheduled caste college students regarding personality.

64. There is no significant difference between scheduled caste college students and non schedule caste college students regarding mental health.

65. There is no significant difference between male scheduled caste college students and male non scheduled caste college students regarding mental health.

66. There is no significant difference between female schedule caste college students and female non schedule caste college students regarding mental health.

67. There is no significant difference between urban scheduled caste college students and urban non scheduled caste college students regarding mental health.
68. There is no significant difference between rural scheduled caste college students and rural non scheduled caste college students regarding mental health.
69. There is no significant difference between male-urban scheduled caste college students and male-urban non schedule caste college students regarding mental health.
70. There is no significant difference between male-rural-scheduled caste college students and male-rural-non scheduled college students regarding mental health.
71. There is no significant difference between female-urban scheduled caste college students and female-urban non scheduled caste college students regarding mental health.
72. There is no significant difference between female-rural-scheduled caste college students and female-rural-non scheduled caste college students regarding mental health.

**Research Design:**

There are several methods of data collection. A systematic and scientific methodology, which is refer to as research design (Festinger and Katz, 1970; Selttiz et al, 1959) determines the correctness and accuracy of the obtained results. The most valid and reliable methods of scientific investigation is one characterized by observing the affect of experimentally manipulated variables while the extraneous, systematic or relevant variable are under control and other variables possibly introducing errors are minimized, if not totally eliminated.

The present study is not possible experimentally because of nature of investigation. The researcher adopted the quantitative descriptive research for gaining the objectives of the study. Quantitative Descriptive research
includes data collection through questionnaire quantification of this response of the respondents and fact finding of different kinds. The major purpose of quantitative descriptive research is description of the state of affairs, as exists at parents. Quantitative Descriptive research involves collecting data in order to test hypothesis or to answer questions concerning the current status of the subjects of the study. It is the survey quantitative research in which the event has already occurred and the effect of the variable will be studied by qualitative analysis.

All most all research designs are complex. When, the researcher wants to study simultaneously two or more independent variables. The investigator selects factorial design. A factorial design is the most common way to study the effect of two or more independent variables, in a factorial design; all levels of each independent variable are combined with all levels of the other independent variables to produce all possible conditions.

The $2 \times 2 \times 2$ factorial design of the present study is as under. There are 8 cells in the following table each cell contains 30 subjects.

<table>
<thead>
<tr>
<th>Category</th>
<th>SC College Students</th>
<th>Non SC College Students</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Rural</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Urban</td>
<td>Urban</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>30</td>
<td>30</td>
<td>120</td>
</tr>
<tr>
<td>Female</td>
<td>30</td>
<td>30</td>
<td>120</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>60</td>
<td>N= 240</td>
</tr>
</tbody>
</table>
Variables:

a) Independent Variable

All those variables which have significant influence on results of research and directly or indirectly manipulated by the researcher are called independent variables.

On the basis of above clarification and nature of problem following independent variables are include in present study.

1) Two categories of college students i.e. scheduled caste and non-scheduled caste college students.

2) Gender: - Male & female college students.

3) Urban college students & Rural college students.

b) Dependent Variable

A dependent variable is what you measure in the experiment and what is affected during the experiment. The dependent variable responds to the independent variable. It is called dependent because it "depends" on the independent variable.

Dependent variables are as under-

1) Values of college students.

2) Personality dimension of college students

3) Mental health status of college students.

Population: A research population is also known as a well-defined collection of individuals or objects known to have similar characteristics. All individuals or objects within a certain population usually have a common, binding characteristic or trait.
“The entire group from which the sample is selected is called population or universe” P.V. Yung (1966)

The population of the present study consisted of the students studying in various colleges of Anand and Vadodra district.

**Sample:** A sample is simply a subset of the population. The concept of sample arises from the inability of the researchers to test all the individuals in a given population. The sample must be representative of the population from which it was drawn and it must have good size to warrant statistical analysis. The main function of the sample is to allow the researchers to conduct the study to individuals from the population so that the results of their study can be used to derive conclusions that will apply to the entire population. It is much like a give-and-take process. The population “gives” the sample, and then it “takes” conclusions from the results obtained from the sample.

For the present research work researcher has selected 240 students with the help of random sampling technique. Further they were classified in to 2 groups i.e. scheduled caste (120) and non scheduled caste (120). The categorization and details of sample selection is given in following table.

<table>
<thead>
<tr>
<th>Category/Gender</th>
<th>SC College Students</th>
<th>Non SC College Students</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>Male</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Female</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>
Tool:

The tools for the present study were selected in a manner to achieve an optimum level of confidence by the investigator for the objectives of the study. Since the study principally contained three variables namely values, personality dimension, mental health, therefore such tools were decided to be choosing as could validity and reliably measure these variables. The investigator after screening a number of available tests finally selected the following tools to collect the data:

1) **Study of Values Test (SVT)**

This test was developed by Dr R K Ojha and Dr Mahesh Bhargava, The main aims of this test is to measure the six basic interest or motives in personality: the Theoretical, Economic, Aesthetic, Social, Political and Religious. This type of classification is based upon Spranger’s Type(s) of Man.

The present scale is designed for the use of college students, studying in graduate and post graduate classes. It is also useful for adults who have equivalent qualification for service and business.

The Study of Values Test (SVT) is self-administering. It consist a number of statements based upon a familiar situation. The test has two parts- First part consists of 30 items with two alternative answers and second part consist of 15 items with four alternative answers. In all there are 45 statements with 120 alternative answers. Roughly 20 alternative answers belong to each of the six values. The subject records his performances numerically by the side of alternative answers.
Values Defined

The manual of 1960 revision of ‘Study of Values’ by Allport-Vernon-Lindzey has given a definition of each values as conceived by Spranger.

a. The Theoretical Value  
b. The Economic Value  
c. The Aesthetic Value  
d. The Social Value  
e. The Political Value  
f. The Religious Value

Scoring

The Study of Values is self-scoring. Administered and scoring can be completed within one and a half hour. The test is so constructed that it can be scored by the subject himself or by the examiner.

Reliability

The Internal Consistency of the scale is determined by Split-half method. The items for each value were divided into 2 sub scales. The product-moment correlations are given in Table-I.

Split-Half Reliability

<table>
<thead>
<tr>
<th>S No</th>
<th>Values</th>
<th>Revised Form</th>
<th>Old Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Theoretical</td>
<td>.78</td>
<td>.60</td>
</tr>
<tr>
<td>2</td>
<td>Economic</td>
<td>.81</td>
<td>.65</td>
</tr>
<tr>
<td>3</td>
<td>Aesthetic</td>
<td>.76</td>
<td>.54</td>
</tr>
<tr>
<td>4</td>
<td>Social</td>
<td>.82</td>
<td>.66</td>
</tr>
<tr>
<td></td>
<td>Political</td>
<td></td>
<td>Religious</td>
</tr>
<tr>
<td>---</td>
<td>-----------</td>
<td>---</td>
<td>-----------</td>
</tr>
<tr>
<td>5</td>
<td>.83</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.84</td>
<td>.70</td>
<td></td>
</tr>
</tbody>
</table>

**Validity**

Table 2 shows correlations obtained for a sample of 500 male & 500 female graduate & post graduate students.

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th></th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Theoretical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Economic</td>
<td>-.26</td>
<td>-.10</td>
</tr>
<tr>
<td>3</td>
<td>Aesthetic</td>
<td>-.11</td>
<td>-.30</td>
</tr>
<tr>
<td>4</td>
<td>Social</td>
<td>-.10</td>
<td>.28</td>
</tr>
<tr>
<td>5</td>
<td>Political</td>
<td>-.12</td>
<td>.30</td>
</tr>
<tr>
<td>6</td>
<td>Religious</td>
<td>-.13</td>
<td>.38</td>
</tr>
</tbody>
</table>

There is a positive association between economic-social values, and between economic-political values, and between economic-religious values in male. But in female, there is a positive association between economic-religious values, and aesthetic-religious values, and between social-religious values. In both the groups the degree of correlations low.
2) Singh’s Differential Personality Inventory (SDPI) developed by Dr Arun Kumar Singh & Ashish Kumar Singh at Department of Psychology, Patna University, Patna(Bihar). The Singh’s Differential Personality Inventory (SDPI) formerly known as Differential Personality Scale measuring only nine dimensions is a heterogeneous measure of personality, which now measures ten dimensions of personality. The ten major dimensions with its meaning in brief are presented below:

i. Decisiveness
ii. Responsibility
iii. Emotional Stability
iv. Masculinity
v. Friendliness
vi. Hetero Sexuality
vii. Ego-strength
viii. Curiosity
ix. Dominance
x. Self-concept:

The present personality scale has altogether 150 items. The total number of items in each of the ten dimensions has been presented.

Scoring
The scoring is done with the help of the scoring stencil prepared separately for the ten personality areas on then scoring key. When a response of an item given by the testee tallies with the response of item given in the scoring key or when his/her tick mark is shown in the circle of the scoring key it is given a score of 1. In case, the response given by
the testee does not tally with the response given in the scoring key, a score of zero is awarded.

**Reliability**

Singh’s Differential Personality Inventory (SDPI) has both test-retest reliability and internal consistency reliability. For calculating test-retest reliability the test has been administered twice with a gap of 14 days on an unselected sample of 100. The test-retest reliability coefficient ranges are from .73 to .86. Which were high and significant indicating that the different dimensions of the scale have sufficient temporal stability. Likewise the internal consistency reliability has been calculated by both odd-even method as well as first half vs. second half method. All reliability coefficients internal consistency as well as temporal stability has been presented.

**Validity**

Singh’s Differential Personality Inventory (SDPI) has been validated against a number of criteria. In doing so, the scale yielded highly satisfactory validity. Some of the important criterion against which the scale has been validated are presented below:

1) It has been validated against the scores of Bell Adjustment Inventory as adapted by Mohsin and Shamshad (1970). The obtained correlation coefficients between each ten dimension as well as five areas of Bells Adjustment Inventory were negative which ranged from -.02 to -.077. Some of the values were significant at or beyond .05 level and some were significant at or beyond .01 level. Inventory also yielded Satisfactory validity coefficients against some ratings.

2) It has also been validated against a number of personal and biographical variables. Most of the chi-square values were
significant at or beyond .05 and .01 level which, themselves, provide evidence for high validity of the scale.

3) **Mental Health Check List (MHC)** was constructed and standardized by Dr. Pramod Kumar, at Department of Psychology, Sardar Patel University, Vallabh Vidyananagr in 1992, it is a view to provide a handy tool for identifying person with poor mental health and in need of psycho-diagnostic help. The final form of the Mental Health Check List (MHC) consists of 11 items and 6 mental and 5 somatic presented in a 4-point rating format.

**Scoring:** A numerical value of 1,2,3 and 4 is assigned to the 4 response categories i.e. for ‘Rarely’, ‘At times’, ‘often’ and ‘Always’, respectively. The total score varies from 11 to 44, showing the highest to the lowest (poorest) mental health status of the person.

**Reliability:** The split half reliability, correlating the odd-even items (applying the Spearman-Brown formula for doubling the test length), has been found to be .70 (N=30) with an index of reliability of .83 (Garret, 1961).

The test retest reliability has also been studied. It has been found to be .65 (N=30) with an index of reliability of .81 (Table 3). The retest was given with a time interval of two weeks.

The r-values of .70 and .65, respectively, have been found to be significant at .01 level of Confidence, showing that the test is reliable both in terms of its internal consistency and stability of scores.

**Validity:** The face validity of the MHC appears to be fairly high as items were prepared by asking teachers of psychology to list all such symptoms which, according to them, showed poor mental health.
On the current validity was adequately assured as only those symptoms which showed 100 percent agreement amongst the judges regarding their relevance to the study of mental health were selected.

Of these, only those items which gave a fairly high discrimination values, i.e. .30 or above, following item-analysis were finally included in the check-list.

**Procedure of Data Collection:**

To conduct this study, the researcher used 'survey method' of research. Descriptive research studies are designed to obtain pertinent and precise information concerning the current status of any phenomena (Garrett, 2006). They collect and provide the type of information of what exists with respect of variables or conditions in a situation.

The investigator with great interest planned the data gathering soon after selecting sample and finalizing for the research. The investigator with prior permission of the head of the colleges personally and establish a good rapport with subjects. Then researcher explained the importance of research work and collected the data after ensuring the confidentiality of them. Each subject was given a questionnaire one after another. All were requested to read all statements one after the other and give their responses in the responses column by choosing appropriate responses for each statement, which they feel correct and appropriate. All the subjects were explained the purpose of the study and what is expected in the questionnaire given to them. They were requested to avoid mutual consultations. Whatever they had doubts, the investigator clarified and explained to them clearly. Time was not limited. The respondents were requested not to leave any item unanswered and incomplete.
**Scoring:**

Scoring of the obtained data was done with help of respective manuals available for the test in the present study. The data have been arranged in the respective tables according to the statistical test applied.

**Statistical Analysis:** In the present study to find out the significant difference between Scheduled Caste & Non Scheduled Caste College Students. ANOVA (Analysis of variance) factorial design 2 x 2 x 2 was used, similarly, to find out the various significance levels among different variables.