CHAPTER IV
CHAPTER IV

RESEARCH METHODOLOGY

A research design consists of a number of steps. Research is an important part of any science. Researches supply data for theorising or preparing laws with a view to bring about solution to practical problems. Thus, it is the amount of research output which is responsible for development of a particular field. The main purpose of research is to discover facts, establish relationships between them and explain situation and events so as to lead to rational generalization and wherever possible to help to predict constitute the process of research. With aforesaid objectives the research methodology of this study has been designed.

DESCRIPTION OF POPULATION

As discussed earlier (Chapter - I) that there are 427 tribes living in the different parts of India. According to 1971 census the population of tribals constitute 6.94% of the total Indian population. They are living in the forests, hills, plateau and naturally isolated regions. These tribal communities live in ecologically marginal areas of India and they differ in race, language, education, economy and levels of socio-cultural integration. Considering the general features of their ecological (1) ecological system, (2) traditional economy, (3) the supernatural beliefs, and practices, and (4) recent impacts, the tribes of India may be classified into six cultural types. They are:

(1) Forest - hunting type
(2) Primitive hill - cultivation type
(3) Plains agriculture type
(4) Simple Artisan type
(5) Cattle - herd type
(6) Industrial - urban workers type
In the present study only two tribal groups (Tharus and Gonds) of the State of Uttar Pradesh were taken for the detailed study. The scheduled tribes and other non-scheduled tribal groups of Uttar Pradesh living in scheduled areas in the Himalayan, sub-Himalayan and Terai regions as well as in forests and isolated pockets in Bundelkhand, conform the definition of tribe.

According to Hasan (1971) that every hundredth citizen of Uttar Pradesh is a tribal. According to 1971 census the scheduled tribes population of Uttar Pradesh is 198,578 against the total population of Uttar Pradesh 88,341,144. They reside in three well defined areas.

(1) Hill Zone:

In the hill zone comprising of Garhwal and Kumaon Divisions including border districts of Pithoragarh, Chamoli and Uttar Kashi, well-known Bhotia, Jaunsari and their types, as well as Raji Jaunsari are found.

(2) Terai - Bhabhar Zone:

Bhoxas and Tharus are found in this zone. The zone includes terai belts in Gorakhpur, Gonda, Bahraich, Lakhimpur-Kheri and Nainital districts. They are also found in Pauri, Bijnor and Dehradun districts.

(3) Southern Zone:

The southern zone consisting of Bundelkhand division, Allahabad district of Allahabad division and Varanasi and Mirzapur districts of Varanasi division adjoining the State of Madhya Pradesh has the largest number of tribes namely Agaria, Bhil, Bhuinya, Chero (Baiga), Ghasia, Gond (Majhwar), Kol, Korwa, Oraon (Dhangar), Parahiya, Panika, Pathari, and Sahariya.

By far the largest concentration of tribals both in number and types are found in Mirzapur district, which alone accounts for more than one fourth of the total tribal population of Uttar Pradesh,
Pithoragarh, Lakhimpur - Kheri, Dehradun, Banda are other districts with sizeable tribal population.

So far as racial classification of these tribes is concerned, the tribes of the high altitudes in the Hill Zone and Terai - Bhabhar zone came from a Mongoloid stock. The Khasas of the Himalayan region in the Hill zone belong to an Indo-Aryan stock, while the remaining Jaunsari and their types are of Dom extraction or mixed descent. Among the tribes of Southern zone, the Mirzapur group of tribes including Gond and Kol who have spread in other districts too, come from a Munda-Dravidian stock.

In the present study only two tribes of Uttar Pradesh namely Tharu of Lakhimpur-Kheri district and Gond of Mirzapur district were selected. Out of these two tribes Tharu is a tribe of Terai region whereas Gond is a tribe of plain cum forest region.

**SAMPLE**

Sample is a part of population. A population is the aggregate of all the cases that conform to some designated set of specification. The requirement of any sample is that it shall be representative of population. The representative in the sense that every member of the population is equally likely to be drawn into the sample. Since it was neither possible nor necessary to take a census of the whole population of the tribals, therefore, with aforesaid purpose a sample of the working population was taken for studying their personality characteristics. The sample design used in the present study was 'Quota' sampling.

Two hundred tribal (100 Tharus and 100 Gonds) and two hundred non-tribal youth were matched on the variables age, education, sex and socio-economic status (100 non-tribal youth of closest geographical region were matched with Tharus and 100 non-tribal youth of closest geographical region with Gonds). The sample distribution of the sample is as under:
<table>
<thead>
<tr>
<th>GROUPS</th>
<th>TRIBALS N</th>
<th>NON-TRIBALS N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribal Group No. 1</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Tribal Group No. 2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>TOTAL</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

TOTAL = 400

In the present study only males were selected. Respondents were in the age range of 16-25 years. Tharus available in the terai area of Lakhimpur-Kheri district and Gonds from Mirzapur district were selected for the present study. One hundred tribal youth were taken from the closest geographical region of Tharus of Lakhimpur-Kheri district. Similarly, one hundred non-tribal youth were taken from the closest geographical region from where the Gonds of Mirzapur district were taken. Thus both tribal groups taken in this study were from the above mentioned districts of Uttar Pradesh.

Tharus are found in the terai regions of Lakhimpur-Kheri, Gonda, and Nainital districts of Uttar Pradesh and also in the terai regions of Nepal. Gond is numerically the biggest Indian tribe. Gonds are found in the forest regions of Madhya Pradesh, Maharashtra, Orissa, and Southern Uttar Pradesh. The Tharus of terai area are of Mongoloid extraction and from the shape of eyes and of the high cheek bones, the nose, and their yellow brown complexion, should be regarded differently from the Munda-Dravidian speaking tribes of Mirzapur. Thus these two tribal groups are racially and ecologically different.

STATEMENT OF HYPOTHESES

A hypothesis may assert certain facts or characteristic that may occur in a particular situation. A hypothesis, therefore,
is essentially tentative likely to be modified during the investiga-
tion if the facts discovered in the course of the enquiry demand it. Its defined purpose is to indicate the direction of the investi-
tigation and to suggest what facts are to be collected.

In the present study it was planned that interpretation of data will be done under four main headings. They are:
(i) Tribals and non-tribals, (ii) Tharus and their non-tribal controls, (iii) Gonds and their non-tribal controls, and (iv) Tharus and Gonds. The hypotheses of the present study were formulated separately for all the aforesaid categories.

Following hypotheses have been formulated on the basis of past studies conducted by anthropologists and sociologists (Mazumdar, 1937, 1938; Srivastava, 1958; Dube, 1968; Sarkar, 1972; Singhania, 1950-51; Vidyarthi, 1968 and several others). In the formulation of the hypotheses the observations of researcher have been also taken into account. Taking into consideration the above facts, following broad hypotheses are proposed to be studied in the present investigation.

**Hypotheses About Tribals and Non-Tribals**:

1) Tribal youth are more reserved, detached, critical and cool than their non-tribal counterparts.

2) Tribal youth are emotionally less stable than non-tribal youth.

3) Tribal youth are more humble, mild, accommodating and conforming than their non-tribal controls.

4) Tribal youth are more sober, prudent, serious and taciturn than their matched non-tribal youth.

5) Tribal youth are more conscientious, persevering, and rule-bound than their non-tribal counterparts.

6) Tribal youth are more shy, restrained, diffident and timid than non-tribal youth.
7) Tribal youth are less tough-minded and realistic than non-tribal youth.

8) Tribal youth are more trusting, and adaptable than non-tribal youth.

9) Tribal youth are more practical, careful and conventional than their non-tribal counterparts.

10) Tribal youth are more forthright, natural and sentimental than non-tribal controls.

11) Tribal youth are more placid, self-assured and confident than non-tribal youth.

12) Tribal youth are more conservative, respect established ideas and tolerant of traditional difficulties than their non-tribal counterparts.

13) Tribal youth are more group-dependent than non-tribal youth.

14) Tribal youth are more controlled than their non-tribal counterparts.

15) Tribal youth are more relaxed and unfrustrated than non-tribal counterparts.

16) Tribal youth are more authoritarian than their non-tribal counterparts.

17) Tribal youth are more rigid than non-tribal controls.

Hypotheses About Tharus and Their Non-Tribal Controls:

18) Tharus are less outgoing than their non-tribal counterparts.

19) Tharus are more emotionally stable and calm than their non-tribal controls.

20) Tharus are less assertive and independent than non-tribals.

21) Tharus are more sober, prudent and serious than their non-tribal counterparts.
22) Tharus are more conscientious than non-tribal controls.
23) Tharus are less venturesome, less socially-bold and less uninhibited than their non-tribal counterparts.
24) Tharus are more self-reliant and realistic than non-tribal counterparts.
25) Tharus are less suspicious and self-opinionated than their non-tribal controls.
26) Tharus are more practical and tend to be more anxious to do the right things than their non-tribal controls.
27) Tharus are less shrewd than their non-tribal counterparts.
28) Tharus are more placid and more serene than non-tribals.
29) Tharus are more conservative than non-tribals.
30) Tharus are more group-dependent than their non-tribal counterparts.
31) Tharus are more controlled and more socially precise than non-tribal controls.
32) Tharus are less tense and less frustrated than non-tribal counterparts.
33) Tharus are less authoritarian than their non-tribal controls.
34) Tharus are more rigid than their non-tribal counterparts.

Hypotheses About Gonds and Their Non-Tribal Controls:
35) Gonds are more warm hearted and easy going than non-tribals.
36) Gonds are emotionally less stable than their non-tribal counterparts.
37) Gonds are more assertive and more aggressive than non-tribal controls.
49

38) Gonds are more happy-go-lucky, more gay and more enthusiastic than non-tribals.
39) Gonds are more conscientious than their non-tribal controls.
40) Gonds are more venturesome and uninhibited than non-tribals.
41) Gonds are less tender-minded, less dependent and less sensitive than non-tribal controls.
42) Gonds are more suspicious and more self-opinionated than their non-tribal counterparts.
43) Gonds are less imaginative and less wrapped up in inner urgencies than their controls.
44) Gonds are more calculating than their non-tribal controls.
45) Gonds are more apprehensive, worrying, depressive and troubled than their non-tribal controls.
46) Gonds are more conservative and tolerant of traditional difficulties than non-tribals.
47) Gonds are more group-dependent than their non-tribal counterparts.
48) Gonds are more controlled than their non-tribal controls.
49) Gonds are more tense and more excitable than non-tribals.
50) Gonds are more authoritarian than their non-tribal counterparts.
51) Gonds are more rigid than their non-tribal controls.

Hypotheses About Tharus and Gonds:

52) Tharus are more reserved, detached and cool than Gonds.
53) Tharus are more emotionally stable than Gonds.
54) Tharus are more humble, mild, accommodating and conforming than Gonds.
55) Tharus are less happy-go-lucky than Gonds.

56) Tharus are more conscientious, persevering, staid, rulebound and of stronger superego strength than Gonds.

57) Tharus are more shy, restrained, diffident and timid than Gonds.

58) Tharus are tender-minded, dependent and sensitive than Gonds.

59) Tharus are less suspicious than Gonds.

60) Tharus are more practical, careful and conventional than Gonds.

61) Tharus are more forthright, natural and sentimental than Gonds.

62) Tharus are less apprehensive and less troubled than Gonds.

63) Tharus are less experimenting, less critical, and less analytical than Gonds.

64) Tharus are more group dependent than Gonds.

65) Tharus are more controlled and socially precise than Gonds.

66) Tharus are less tense, less frustrated, less driven and less over-wrought than Gonds.

67) Tharus are less authoritarian than Gonds.

68) Tharus are more rigid than Gonds.

**TOOLS OF DATA COLLECTION**

The present study is aimed to study some personality characteristics of tribal and non-tribal youth. Authoritarianism and rigidity have also been studied. For studying above mentioned characteristics following three major tools were used in the present study.

1) Raymond B. Cattell and Herbert W. Eber's Sixteen Personality Factor Questionnaire (Form E) as adapted in Hindi by S.D. Kapoor (1970).
2) An Indian adaptation of California F-scale prepared by L.I. Bhushan (1976).


Description of these tools is given below:

**SIXTEEN PERSONALITY FACTOR QUESTIONNAIRE (FORM - E)**

The Sixteen Personality Factor Questionnaire (16 PF) represents a deliberate attempt to sample the total personality sphere discovered by the factor analytic studies of Cattell (1957, 1965) and his associates. The test enjoyed a good deal of popularity in the area of personality measurement. Besides its wide applications in U.S.A. and Western Europe (Cattell & Nesselroade, 1965; Cattell, et al., 1961; Cattell & Warburten, 1961), the 16 PF has also been used in a number of cross-cultural investigations involving various cultural groups. Jalota (1967) has applied it to Indian students, while Tsujioka & Cattell (1965) have reported data on a Japanese version of the test and Kline (1967) has given the English form to a group of Ghanaian students. Apart from these studies Mehryar (1972) prepared a Persian translation of Form A of the 16 PF Test and studied the personality patterns of Iranian boys and girls.

In the present study 16 PF Questionnaire (Form E) prepared by Cattell & Eber and as adapted in Hindi by S.D. Kapoor (1970) was administered upon both the tribal and non-tribal subjects. The 16 PF Questionnaire is an objectively scorable test devised by basic research in psychology to give the most complete coverage of personality possible in a brief testing time. The personality factors measured are not just peculiar to the 16 PF Test. They have been established as unitary, psychologically meaningful entities in many researches in various life situation. These sixteen dimensions or scales are essentially independent; that is to say, the correlation between one and another is usually quite small. Therefore, having a certain position on one does not prevent the person's having any position whatever on any other. Thus, each of the sixteen scales bring an entirely new piece of information about the person, a condition not found in many alleged multi-dimensional
scales. The detailed informations of Sixteen Personality Factors are available in 16 PF Handbook and in the Manual for Forms A and B.

The personality factors measured by Form E, are the same as those included in Forms A, B, C, and D, they are also essentially the same as factors represented at younger age levels by the High School Personality Questionnaire (HSPQ), the Children's Personality Questionnaire (CPQ) and the Early School Personality Questionnaire.

Eight items are provided for each of the sixteen factors, making one hundred and twenty-eight items in Form E. The questions are arranged in a cyclic order determined to plan to maximum convenience in scoring by stencil.

Answers are recorded on a separate answer sheet. Form E utilizes a two-alternative "Forced-choice" answer format. The two-choice design of Form E minimizes confusion for the persons of limited educational background. Since various forms of the 16 PF are now available, evaluation of personality characteristics can be enhanced by the selection of the most appropriate Form (s) for a particular circumstance. The 16 PF (Form E) is most appropriate for the low literate subjects. However, oral administration, even with the examiner's marking the answer sheet, is relatively rapid and permits the evaluation of persons with very limited competence. In the present study the selection of "Form E" was made to study the personality characteristics of tribals and non-tribals because of their low educational level.

Rationale for Deleting the Factor B:

In the present study Factor B (Less Intelligent versus More Intelligent) was not studied. Questions pertaining to Factor B were crossed out before administering the test. The study was conducted with a presumption that there is no significant cross-cultural difference between tribal and non-tribal youth with reference to intelligence (Factor B). Thus the personality differentials of Tribal and Non-Tribal youth have been studied on fifteen personality factors only. It was also considered that in view of the brevity and untested nature of the 16 PF intelligence scale (Factor B),
however, group differences in this respect may better be ignored (Mehryar, 1972). Hence, only fifteen personality factors were taken into consideration.

**INDIAN ADAPTATION OF CALIFORNIA F-SCALE**

The California F-scale developed by Adorno, Frenkel-Brunswik, Levinson and Sanford (1950), is a psychological test for measuring the anti-democratic personality, or authoritarianism. The F-scale is composed of nine clusters or sub-scales related to the nine hypothetical variables each of which is supposed to be expressive of authoritarianism. According to authors, these variables are thought as going together to form a single syndrome, a more or less enduring structure in the person that renders him receptive to anti-democratic propaganda.

The adapted F-scale contains 34 items, in which 28 were positive and 6 were negative items. Negative items were included to control acquiescence response bias or a tendency of 'Yes-saying'. Six categories of responses from 'strongly agree' to 'strongly disagree' are provided in instructions. The 'neutral' (neither 'agree', nor 'disagree') has not been mentioned in order to force the subject to rate his judgement in terms of agreement or disagreement. For positive items, the responses 'strongly agree', 'agree', and 'slightly agree' are scored 7, 6, and 5 respectively. Similarly the responses 'slightly disagree', 'disagree' and 'strongly disagree' are scored 3, 2, and 1 respectively. For the negative items the scoring is reversed, i.e., a score of 1 for 'strongly agree' and 7 for 'strongly disagree'. In either case an omission of response to an item is accepted as subject's inability to force his judgement in agreement or disagreement and is scored 4. Thus the score per item ranged from 1 to 7. Subject's F-score or authoritarianism is indicated by the total of his scores obtained against all the 34 items. Thus the possible scores on the adapted scale ranged from 34 to 238 with higher score indicating greater degree of authoritarianism. The items of the Hindi version are found to be highly discriminative. A split-half reliability coefficient of .77 and test-retest reliability coefficient of .72 have been reported for the
adapted scale. The adapted F-scale has been validated against the original scale in English. Besides, the new scale possesses predictive and construct validities. Thus Indian adaptation appears to be a reliable and valid measure of authoritarianism.

The F-scale has been widely applied as a research tool and has been related to a variety of attitudinal and behavioural variables. The F-scale has been used in a number of cross-cultural investigations. Meade & Whittaker (1967) administered F-scale to College students in India, Hong Kong, Rhodesia, Arabia, Brazil, and the United States whereas Gough (1974) applied it to different cultural groups. Christie & Garcia (1951) studied sub-cultural variation in authoritarianism. Considering above mentioned facts, the F-scale was used in the present study to measure the degree of authoritarianism in tribal and non-tribal youth.

HINDI VERSION OF WESLEY RIGIDITY SCALE

Wesley Rigidity Scale (WR) is a questionnaire measure of personality rigidity. Wesley selected 90 items from paper-pencil test of personality which are thought to be indicative of rigidity. Wesley also constructed some original items. Five clinical psychologists rated each item in terms of degree of rigidity i.e. high, moderate, low. On the basis of these ratings 50 items were selected which were indicative of a high degree of rigidity. These items were, then mixed with 17 filler items selected from M.M.P.I. and P.T. scales. Thus there were altogether 67 items in the earlier version of WESLEY RIGIDITY Scale. Later on Wesley revised this scale and selected only 41 items for the final scale. However, this scale was modified by different psychologists (Katz., 1952; Zelen & Levitt, 1954; Moldawasky, 1951; Chowen, 1960) from time to time.

On the basis of his findings Chowen (1960) made it clear that consistent with the general contention of Zelen & Levitt, the 12 items scale approximates in factor make up to the long scale. But items of Factor II are unrepresented, they are not included either in the short form or long form scale. So both the scales
can not be claimed as satisfactory measure of rigidity and either form of the scale is not unidimensional. This factorially analysed scale is also not unidimensional. It consists of three factors and certain items lead highly as more than one of these. For this reason, Chowen (1960) included these un-represented items which were thought to be indicative of rigidity. This scale consists of 27 items. Thus it replaced the 12 items scale because it was not regarded as a satisfactory substitute of 41 items scale. Factor analytic score of this scale reveal more information about each individual than the total scores, though it is not unidimensional. For the first time, factor scores of the scale measures the extent to which different types of rigidity operate in an individual.

Considering all these facts and the usefulness of this scale, it was selected as a measure of rigidity in this study. A Hindi version of this scale was developed by L.K. Singh (1974). Thus in the present study Hindi version of Wesley Rigidity Scale by L.K. Singh was used to measure the degree of rigidity among tribal and non-tribal youth. Hindi version of the scale contains 27 true-false type items. In this scale 5 items are negative and rest are positive items. True answer for positive items and false answer for negative items were given one score each. On the other hand false answer for positive items and true answer for negative items were given zero. The maximum score on this scale is 27, and minimum score is zero. Higher the score, higher the degree of rigidity. The split-half reliability of the Hindi version was .78 when corrected by Spearman - Brown Formula. The coefficient between the English and Hindi versions of the WR scale was .89. Thus the present form of WR scale appeared to be sufficiently reliable and valid tool to justify its use in the present study. Workability of the above mentioned tools in the context of tribal groups was tested before the actual administration.

SCORING PROCEDURE AND STATISTICAL TECHNIQUES

Scoring of Sixteen Personality Factor Questionnaire (Form E) was done as per procedure laid down in the Manual of the 16 PF Questionnaire. The scoring of Indian adaptation of California
F-scale and of the Hindi version of Wesley Rigidity Scale was also done as the procedure laid down by L.I. Bhushan (1976) and by L.K. Singh (1974) respectively. Descriptive statistics like Mean was calculated. In order to find out whether tribal and non-tribal groups differed significantly on above mentioned personality characteristics the analysis of variance was used.