CHAPTER – III

METHODOLOGY

3.1. Problem:

“To compare scheduled caste and non-scheduled caste students in relation to achievement motivation, personality type and emotional intelligence”.

3.2. Objectives:

1. To study the effect of caste on students’ level of achievement motivation.

2. To study the effect of gender on students’ achievement Motivation.

3. To study the interactional effect of caste and gender on students’ level of achievement motivation.

4. To compare the personality type of students who belong to scheduled caste and non-scheduled caste.

5. To study the effect of gender on Students’ personality type.

6. To study the interactional effect of caste and gender on students’ personality type.

7. To study the effect of caste on students’ emotional intelligence.

8. To study the effect of gender on students’ emotional intelligence.
9. To study the interactional effect of caste and gender students’ emotional intelligence.

3.3. **Hypotheses:**

a) Students belonging to scheduled caste will be significantly low in their level of emotional intelligence as compare to those students who belong to non-scheduled caste.

b) There will be no significant difference between male and female on their level of emotional intelligence.

c) There will be no significant interaction between caste and gender in order to affect emotional intelligence of the subjects.

d) Students belonging to non-scheduled caste will be significantly higher on their achievement motivation as compare to students who belong to scheduled caste.

e) There will be no significant effect of gender on students’ Achievement motivation.

f) There will be no significant interaction effect between caste and gender in order to affect students’ level of achievement motivation.

g) Students belonging to scheduled and non-scheduled caste will be significantly differ in their personality (Introvert/Extrovert).

h) Male and female students will be significantly differ in their personality (Extrovert/Introvert).
i) There will be no significant interaction effect between personality type (introvert/ extrovert) and gender.

3.4. Methodology:

3.4.1. Sample

A stratified systematic sample of 400 college students with age range in between 18 to 25 from various colleges of Aurangabad was taken in for this study. The whole sample constituted with students from scheduled caste (eg. Mahar, Mang, Matang, Dhor and Chambhar (n=200) and non-scheduled caste (n=200) population. Both groups were made with equal number of male and female students. The distribution of total sample is depicted as follows-

Table 3.1

<table>
<thead>
<tr>
<th>Caste→</th>
<th>Gender</th>
<th>Scheduled</th>
<th>Non-scheduled</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>100</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>100</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>200</td>
<td>200</td>
<td>400</td>
</tr>
</tbody>
</table>
3.4.2. Variables

The variables in this part will be treated as follows:

 Independent Variables:-

➢ A: - Caste category

✓ A1: - Scheduled caste.
✓ A2: - Non-scheduled caste.

➢ B: - Gender

✓ B1: - Male
✓ B2: - Female

 Dependent Variables:-

➢ Achievement Motivation
➢ Personality type
➢ Emotional intelligence.

3.4.3. Research Design

2 X 2 Factorial design was employed viz depicted as follow:

Table 3.2

2 x 2 Factorial Design

<table>
<thead>
<tr>
<th>(A) Caste</th>
<th>Scheduled</th>
<th>Non-scheduled</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1B1</td>
<td>A1B1</td>
<td>A2B1</td>
</tr>
</tbody>
</table>

[76]
The four experimental groups depicted in above table are as follows;

A1B1 = Male Students belonging to Scheduled caste.

A1B2 = Female Students belonging to Scheduled caste.

A2B1 = Male, Students belonging to Non-Scheduled castes.

A2B2 = Female Students belonging to Non-Scheduled castes.

3.5. Tests & Tools:

Table 3.3

List of Tests

<table>
<thead>
<tr>
<th>Aspect studies</th>
<th>Test and scale</th>
<th>Developed by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement</td>
<td>Deo-Mohan A.M. (n-Ach.) Scale</td>
<td>Pratibha Deo &amp; Asha Mohan(1985)</td>
</tr>
<tr>
<td>Motivation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional intelligence</td>
<td>Emotional intelligence scale</td>
<td>Anukool Hyde, Sanjyot Pethe and Dhar</td>
</tr>
<tr>
<td>Personality</td>
<td>MPI</td>
<td>Jalota &amp; Kapoor</td>
</tr>
</tbody>
</table>
Description of the tests-

3.5.1. Deo-Mohan Achievement Motivation (n-Ach) Scale:

Achievement motivation is a variable which is used in many studies in education either as a main or a secondary variable or a moderator variable. The purpose in preparing this scale is to provide the researcher with such a tool which will be found to be handy and convenient for administration and scoring. Secondly, many scales and questionnaire that are available measure achievement motivation in particular field, academic motivation at the higher secondary, college or university level. A standard verbal measure which sufficiently measures the achievement motivation in general is desirable. The present scale is built to fulfil that need. Thirdly, for validating the projective test of achievement motivation, the verbal scale will be found useful and valuable instrument.

The present scale is developed by Pratibha Deo & Asha Mohan in 1985. The scale consists of total 50 items in which 13 are negative and 37 are positive. The scale is self rating type and can be administrate in a group with five points to rate viz always, Frequently, Sometimes, rarely and Never. The scoring device was simple stencil type. Two stencil keys are to be used one for positive items and one for negative items. A numerical weightage from 4 to 0 for positive in the above order of rating and the reverse of it for the negative items. The total score is the summation of all the positive and negative items scores. The minimum score obtained can be 0 and the maximum can be 200. Higher score indicating higher the achievement motivation within subjects.
The test-retest method was applied to obtain the reliability coefficient of the scale and found to be sufficiently high. As far as validity of this scale is concerned, it was established by the high-low discrimination method. The concurrent validity was also measured and found to be .54.

3.5.2. Emotional Intelligence Scale [EIS]:

This scale was developed by Hyde, Pethe and Dhar (2001). It contains 34 items, Ten factors of emotional intelligence are included in this scale. They are 1) Self-awareness 2) Empthy 3) Self-motivation 4) Emotional stability 5) Managing relation 6) Integrity 7) Self-development 8) Value orientation 9) Commitment and 10) Altruistic behavior. The split-half reliability co-efficient was found to be 0.88 and validity co-efficient is also very high i.e. 0.93.

3.5.3. Maudsley Personality Inventory (MPI):

The Maudsley Personality Inventory (MPI) is a brief, but standard, as well as an easily administrated and scored inventory which is designed for assessing Neuroticism-Stability and Introvert-extrovert dimension of personality. It is suitable for normal and abnormal adults and also for adolescents. This test can be used as a group or an individual test, for person of age 15 to 16 years and above. The vocabulary required is that of the average newspaper. Although no time limit is enforced in the testing but the short scale takes about 3-5 minutes while the long scale takes about 15 to 20 minutes. Items for serial number 1 to 12 given on the front page of the test booklet make the short scale, while all the 48 items of the booklet
constitute the long scale. Each of these items is answerable by making a tick mark into one of the three boxes, marked with “yes” “?” and “No”. Total 48 items of the test booklet are distributed among the two personality dimensions and scored as per given in the manual. Its Hindi and Panjabi version was prepared by s. s. Jalota and S. D. Kapoor in 1975. This test has a high reliability and validity measured by the test constructor.

3.6. Procedure:

3.6.1. Pilot Study

The Pilot study was conducted in order to decide the appropriateness of tests used and sample in conducting the final study. It was conducted on 40 male and female students belonging to scheduled and non-scheduled castes. On the basis of the pilot study few modifications were made, which are as under-

- Deciding the type of sampling for ease in further analysis
- The pilot study also gave direction about the coding method and the statistical procedures that could be used for final study

3.6.2. Main Study

The colleges to be visited were decided in the initial sampling, and then a written permission was sought out from the respective Principals after discussing the purpose of the present study. Accordingly, scheduled was fixed in each college and then students were approached.
The primary information will be gathered by giving personal information form to each student. On the basis of their personal information they were assigned in scheduled and non-scheduled caste groups. Mahar, Mang, Matang, Dhor and Chambhar caste were considered in scheduled caste. Both groups were made with equal number of male and female students. In order to obtain the raw data, the students were provided the Deo-Mohan Achievement Motivation (n-ach) Scale by Pratibha Deo & Asha Mohan(1985), Emotional Intelligence Scale (EIS) by Hyde, Pethe and Dhar (2001) and Maudsley Personality Inventory (MPI). To obtain the response the given tests were administrated one test at a time in order to reduce fatigue and boredom effect. To fill the test subjects were given general instructions belongs to each test. Data were obtained by using particular scoring pattern standardized for each test.

3.7. Statistical Analysis:

The data were analyzed as follows;

The mean with graphical representation for caste (scheduled & non-scheduled) and gender (Male & Female) on subjects’ achievement motivation, personality type and emotional intelligence.

A 2x2 factorial design was used viz. technique of Analysis of variance (ANOVA) in order to examine the role of main variables as well as their interaction effects subsequently on subjects’ achievement motivation, personality type and emotional intelligence.