CHAPTER 4

METHOD
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Universe and Sample

Our universe under the study is of higher secondary school students. For the sake of this study it was decided to go in for a sample from the population of the school students available across both urban and rural areas of Durg district of Chhattisgarh state. Therefore, the sample of the present study is comprised of students enrolled in class eleventh of different higher secondary schools located in Durg district. As it has already been mentioned in the previous chapter, that the present study consider the effect of locale or residential background of the subjects on the dependent variable i.e. emotional intelligence (EI). Therefore the subjects were equally and randomly selected from both the urban and rural areas for the purpose of data collection. For the selection of urban subjects eight hundred students studying in eleventh standard of different higher secondary schools located in urban sector of Durg district were approached and further, for the selection of rural subjects eight hundred students of eleventh standard belonging to different higher secondary schools located in rural areas of Durg district were selected. The sample was equally divided into male and female subjects for both urban and rural locale. Therefore, the initial sample for the study was comprised of total sixteen hundred subjects. These schools were located in different developmental blocks of Durg district and are affiliated to Chhattisgarh Board of Secondary Education. Regarding the selection of urban and rural subjects, one thing was most efficiently kept in mind that only those subjects were considered as urban and rural who were living in cities and villages for last twenty years (or more than that) respectively. In addition to this, the
subjects used for present study were having same age group. In this way the subjects matched according to their age group and sex.

At last 745 students were retained as final sample. Among those, as per the requirement of 2x2x2 factorial design (as explained further in ‘Design’ of the study) 560 students were selected for further analysis.

**Measures**

The following tools were used for the assessment of dependent and independent variables considered in the study. All of the following measures used, do confirm all the psychometric properties (Test booklets of each of these measures were enclosed in appendix-A).

**Dependent measure :**

1. **Mangal Emotional Intelligence Inventory (MEII) :**

   Emotional Intelligence Inventory has been designed by Mangal and Mangal (2004) for the measurement of emotional intelligence (total as well as separately) in respect of four areas or aspects of emotional intelligence namely, intrapersonal awareness (knowing about one’s own emotions), interpersonal awareness (knowing about other’s emotions), intrapersonal management (managing one’s own emotions) and interpersonal management (managing other’s emotions) respectively. Each of these dimensions consists twenty five items and the whole inventory contains total hundred items, to be answered yes or no. This is a self administrating inventory having a very simple scoring process, as one mark for presence of emotional intelligence and zero mark for its absence. A higher score of the individual in the respective areas as well as total, shows a higher level of emotional intelligence and lower score a lower level of emotional intelligence.
**Independent measures:**

1. **Aggression questionnaire:**

   The aggression questionnaire developed by Pati (1976) was used to measure the level of aggression in the subjects. The questionnaire consists of sixteen questions. Each question describes a situation, where some form of aggression or deviant behavior has occurred and also some persons who have responded to that in low to mildly aggressive, moderately aggressive and highly aggressive manners. The subject is requested to indicate the best appropriate response out of the given three responses elicited by the situation from persons described in the question. The scores were assessed as aggression proneness in the following four categories – low aggression proneness, mild aggression proneness, moderate aggression proneness and high aggression proneness.

2. **Eysenck’s Maudsley Personality Inventory (MPI):**

   The Hindi version of Eysenck’s Maudsley Personality Inventory as adapted by Jalota and Kapoor (1965, 1975) was used in the present research for assessing neuroticism-stability and extraversion-introversion dimensions of personality. It is a forty-eight item test. The items from 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 constitutes the long scale. There are total twenty four items belonging to neuroticism dimension in long scale and 24 items belonging to extraversion dimension in long scale. Similarly the neuroticism and extraversion dimensions of short scale were measured by 6-6 items respectively. The total composite neuroticism or extraversion score is simply the sum of raw scores on all the 24 items (each for neuroticism and extraversion) in the two dimensions.
3. Swatva Bodh Parikshan (SBP)- A test of self-concept:

For the assessment of self-concept of the subjects, “Swatva Bodh Parikshan”- a test of self concept, designed by Sherry, Verma and Goswami (1988) was used. It is a forty-eight item test, yielding scores in eight different dimensions of self-concept and on the total. Thus it provides eight separate measures of self-concept. The eight dimensions of self-concept as given in the test are- health and physique, temperamental qualities, academic status, intellectual abilities, habits and behavior, emotional tendencies, mental health and socio-economic status. A high score on this test indicates a bright self-concept while a low score shows a poor self-concept.

4. Home Environment Inventory (HEI):

“Home Environment Inventory” designed by Mishra (1989) was used for the assessment of home-environment of subjects. It is an instrument designed to measure the psychosocial climate of home as perceived by children. HEI has hundred items belonging to ten dimensions of home environment viz. control, protectiveness, punishment, conformity, social isolation, reward, deprivation of privileges, nurturance, rejection and permissiveness. Each dimension has ten items belonging to it. The instrument requires, subjects to tell the frequency with which a particular parent-child interaction behavior has been observed by them in their home. The individual is requested to tell whether a particular parental behavior (as mentioned in an item) occurs- ‘mostly’, ‘often’, ‘sometimes’, ‘least’ and never. There is no time-limit for this tool and it can be administered in individual or group settings.
5. Social Support Scale (SSS):

The social support scale (SSS) developed by Asthana and Verma (2005) was a good construct used to assess social support of the subjects. It measures perceived social support of individuals on a five point response format. This scale covers three aspects of social support viz. emotional support, informational support, and instrumental support. The scale provides a total support score as well as the score on the above three dimensions. This is a five point rating scale, having 35 items among which 25 were positively worded and 10 were negatively worded. High score on SSS are indicative of better perceived social support.

Design

Aim of the present study is to examine the effect of some psychosocial predictors on emotional intelligence of adolescent boys and girls. The present study is a research employing type-s independent variables and those include aggression, self-concept, extraversion, neuroticism, home-environment, and social-support. As it has been mentioned in the previous chapter, that additionally sex and locale effect have also been studied and for this purpose equal number of male and female individuals were selected from both the urban and rural background. Therefore, the study had included overall eight independent variables as predictor variables.

This is a correlational research in which emotional intelligence along with its dimensions is taken as dependent variable or outcome variable. In this way the study is objected towards investigating the role of above mentioned independent variables in the prediction of emotional intelligence. For this purpose 2x2x2 factorial “Ex-post facto” non experimental design is preferred, as the independent variables viz. aggression, self-concept, extraversion, neuroticism, home-environment, social-support, sex and locale
were to be varied at two levels i.e. low and high (for sex it is male and female, and for locale it is urban and rural), to study their main and interaction effects on the dependent variable i.e. emotional intelligence. This is made possible by considering one of the psychosocial variable as first independent variable, and sex and locale as second and third independent variables respectively. That means in each study sex and locale were taken as two common independent variables and any one of the psychosocial variables, as the third independent variable. The emotional intelligence scores of the subjects is taken as dependent variable. Therefore a 2x2x2 factorial design was employed to verify the relationship between emotional intelligence and the aforesaid independent variables or factors. This may be well explained as follows:-

(1) 2 Aggression (high/low) x 2 sex (male/female) x 2 locale (urban/rural)

(2) 2 Self concept (bright/poor) x 2 sex (male/female) x 2 locale (urban/rural)

(3) 2 Extraversion (high/low) x 2 sex (male/female) x 2 locale (urban/rural)

(4) 2 Neuroticism (high/low) x 2 sex (male/female) x 2 locale (urban/rural)

(5) 2 Home environment (favorable/unfavorable) x 2 sex (male/female) x 2 locale (urban/rural)

(6) 2 Social support (high/low) x 2 sex (male/female) x 2 locale (urban/rural)
In this way, overall six 2x2x2 factorial designs were employed on the obtained raw data. In order to compute three-way ANOVA, according to the above described format, the subjects were divided into low and high subgroups. For dividing the subjects into low and high levels, 37.5% subjects scoring low from the bottom and 37.5% subjects scoring high from the top (excluding the subjects falling within the semi-interquartile range) were considered as the subjects of low and high subgroups respectively, in each of the above mentioned independent variables. In this way a total of 560 subjects (280 high scorers and 280 low scorers) were obtained as final sample for computing each of the ANOVAs as mentioned above.

Further, stepwise multiple regression analysis technique is used independently for different dimensions of emotional intelligence and on the whole, by considering the data obtained on all of the 745 subjects. This will provide a dimension wise analysis of the impact that the predictor variables may exert on the criterion or outcome variable.

**Procedure**

After explaining the objectives of the research work permission was obtained from the principals of the selected schools to administer the questionnaires to the students of eleventh standard. To establish a good rapport with the subjects it was assured that their responses and identities would be strictly kept confidential and not disclosed anywhere. Thus they were made independent to give their answers comfortably and honestly, whatever they felt. In this way subjects were encouraged to give their proper cooperation during the testing.

In order to measure all the six variables, overall six different question booklets viz. emotional intelligence inventory, aggression questionnaire, Eysenck’s Maudsley personality inventory, self-concept test, home-
environment inventory, and social-support scale were provided to the subjects. The subjects were feeling somewhat difficulty, with a sense of tiredness in responding all of the six tests at a time, consecutively. Therefore, it was thought better to divide the whole process of responding of the questionnaires into two phases. In the first phase, three out of six questionnaires were provided to the subjects and rest of the three questionnaires were given in the second phase, followed by a short break of fifteen minutes. That was made quiet convenient for them to respond the test.

To begin the process for phase-one, the test booklets were distributed to the participants. Afterwards the printed instructions were explained to them. The participants were seated in group setting. A response sheet was provided with each booklet to all of the participants to mark their responses. They were asked to put their answers without consulting each other. The classroom where the test was conducted, was well organized and the seating arrangement was also made comfortable. After the completion of the test, the response sheets with the test booklets were collected back. The same process was repeated for the phase-two.

The participant students, principals, teachers, and other staff of the schools were given thanks for their cooperation and support. Afterwards, the scoring process was completed as prescribed in the test manuals. The obtained raw data was further analyzed by using appropriate statistical tools as presented in the next chapter. (The obtained raw data was enclosed in appendix-B).