CHAPTER III

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Psychology is a science; hence every research study should be done scientifically. Present study mainly deals with emotional intelligence and some of the etiological factors of emotional intelligence. From the relevant literature it appears that development of emotional intelligence is mainly a function of environmental factors. Hence, four factors gender, family environment, area of living (culture) and socio-economic status were treated as independent variables; and it was assumed that the other factors were kept constant.

Sample selection was done using scientific sampling technique. Only those tools, which were having high psychometric characteristics, were used for data collection. Suitable research design was used and data were treated by appropriate statistical techniques for testing the hypotheses given on following pages. In sum; the study was carried out scientifically.

3.1 Aim of the Study

In present study four factors were considered as independent variables. They are namely; family environment, area of living (Culture), socio-economic status (SES), and gender. Emotional intelligence is treated as dependent variable. Considering these, the study is aimed at finding out the relative importance of family environment, area of living, SES and gender on the development of emotional intelligence.

3.2 Problem of the Study

To search relative importance of gender, family environment, area of living, (culture) and socio-economic status on the development of emotional intelligence
3.3 Objectives of Study

There are five broad objectives and a few specific objectives, which serve as guidelines to carry out the study systematically. These objectives are as follows:

1. To search the extent to which males and females differ from each other on the intrapersonal awareness.

2. To study the importance of family environment in the development of intrapersonal awareness, and find out whether Ss from favorable family environment and those from unfavorable family environment differ significantly from each other or not.

3. To search the influence of area of living (culture) on intrapersonal awareness and find out whether the Ss belonging to different areas of living differ significantly on intrapersonal awareness or not.

4. To search the extent to which HSES and LSES Ss differ from each other on intrapersonal awareness.

5. To find out the extent to which males and females differ from each other on interpersonal awareness.

6. To assess the influence of family environment on the development of interpersonal awareness, and find out whether Ss with favorable family environment and Ss with unfavorable family environment differ significantly from each other or not.

7. To measure the influence of area of living (culture) on interpersonal awareness and find out whether the Ss coming from different areas of living differ significantly from each other on interpersonal awareness or not.

8. To search the extent to which HSES and LSES Ss differ from each other on interpersonal awareness.
9. To search the extent to which males and females differ from each other on intrapersonal management.

10. To examine the importance of family environment in the development of intrapersonal management, and search whether the Ss from favorable family environment and those from unfavorable family environment differ from each other significantly or not.

11. To assess the influence of area of living (culture) on intrapersonal management and find out whether the Ss belonging to different areas of living differ significantly from each other on intrapersonal management or not.

12. To search the extent to which HSES and LSES Ss differ from each other on intrapersonal management.

13. To search the extent to which males and females differ from each other on the interpersonal management.

14. To study the effect of family environment on the development of interpersonal management, and find out whether the Ss with favorable family environment and those from unfavorable family environment differ from each other significantly or not.

15. To search the influence of area of living (culture) on interpersonal management and find out whether the Ss belonging to different areas of living differ significantly on interpersonal management or not.

16. To search the extent to which Ss from HSES and LSES differ from each other on interpersonal management.

17. To search the extent to which males and females differ from each other on emotional intelligence.

18. To assess the effect of family environment on the development of emotional intelligence, and find out whether Ss from favorable family
environment differ significantly from those coming from unfavorable family environment or not.

19. To search the influence of areas of living (culture) on emotional intelligence and find out whether Ss belonging to different areas of living differ significantly on emotional intelligence or not.

20. To search the extent to which Ss from HSES and LSES differ from each other on emotional intelligence.

21. To search whether urban males coming from HSES and favorable family environment differ significantly from rural females coming from LSES and unfavorable family environment on intrapersonal awareness.

22. To assess interpersonal awareness of urban males with HSES and favorable family environment is significantly differ from rural females with LSES and unfavorable family environment or not.

23. To search whether intrapersonal management of urban males having HSES and coming from favorable family environment significantly differ from rural females having LSES and coming from unfavorable family environment or not.

24. To assess urban males coming from HSES and favorable family environment develop significantly better interpersonal management than rural females coming from LSES and unfavorable family environment or not.

25. To search males brought up in urban culture, coming from HSES and having favorable family environment and females brought up in rural culture, coming from LSES and having unfavorable family environment differ significantly on emotional intelligence or not.
3.4 Hypotheses of Study

Since, there are four independent variables and five dependent variables, several hypotheses could be framed and tested. They are given below. Assuming that the other factors are kept constant; it is hypothesized that:

1. Males develop significantly better intrapersonal awareness than the females.

2. The Ss coming from favorable family environment develop significantly better intrapersonal awareness than the Ss coming from unfavorable family environment.

3. Area of living (culture) plays significant role in the development of intrapersonal awareness; the Ss born and brought up in urban culture develop significantly better intrapersonal awareness than those brought up in rural culture.

4. The Ss coming from HSES background develop significantly better intrapersonal awareness than the Ss coming from LSES, background.

5. Males develop significantly better interpersonal awareness than the females.

6. The Ss coming from favorable family environment develop significantly better interpersonal awareness than the Ss coming from unfavorable family environment.

7. The Ss brought up in urban culture differ significantly from the Ss coming from rural culture in interpersonal awareness.

8. The Ss coming from HSES background develop significantly better interpersonal awareness than the Ss coming from LSES, background.

9. Males develop significantly better intrapersonal management than the females.
10. The Ss coming from favorable family environment develop significantly better intrapersonal management than the Ss coming from unfavorable family environment.

11. The Ss brought up in urban culture differ significantly from the Ss brought up in rural culture in intrapersonal management.

12. The Ss with HSES background develop significantly better intrapersonal management than the Ss coming from LSES, background.

13. Males develop significantly better interpersonal management than the females.

14. The Ss coming from favorable family environment develop significantly better interpersonal management than the Ss coming from unfavorable family environment.

15. The Ss brought up in urban culture differ significantly from the Ss coming from rural culture in interpersonal management.

16. The Ss coming from HSES background develop significantly better interpersonal management than the Ss coming from LSES, background.

17. Females develop significantly better emotional intelligence than the males.

18. The Ss coming from favorable family environment develop significantly better emotional intelligence than the Ss coming from unfavorable family environment.

19. The Ss brought up in urban culture differ significantly from the Ss brought up in rural culture in emotional intelligence.

20. The Ss coming from HSES background develop significantly better emotional intelligence than the Ss coming from LSES, background.
21. Urban males coming from HSES and favorable family environment develop significantly better intrapersonal awareness than rural females coming from LSES and unfavorable family environment.

22. Interpersonal awareness of urban males with HSES and favorable family environment is significantly better than rural females with LSES and unfavorable family environment.

23. Intrapersonal management of urban males having HSES and coming from favorable family environment is significantly better than that of rural females having LSES and coming from unfavorable family environment.

24. Urban males coming from HSES and favorable family environment develop significantly better interpersonal management than rural females coming from LSES and unfavorable family environment.

25. Males brought up in urban culture, coming from HSES and having favorable family environment develop significantly better emotional intelligence than females brought up in rural culture, coming from LSES and having unfavorable family environment.

3.5 Sample

First, 544 urban students and 544 rural students studying in different higher secondary schools from Kolhapur district of Maharashtra were approached. The sample was equally divided into male and female subjects and for both urban and rural locale. The ratio of urban and rural students was also 1:1. Therefore, the initial sample for the study was comprised of total 1088 subjects.

However, for the final analysis the effective sample consisted of 544 Ss only. While classifying the Ss in the 16 classified groups many Ss were deleted randomly in order to keep the cell frequency of the classified groups equal.
For Data Collection

Following tools were used for measuring variables treated in the study. Psychometric properties of the instruments were found adequate. Details of selected instruments are given below:

1. **Emotional Intelligence Inventory (EII-MM):**

   This inventory was constructed and standardized by S.K. Mangal and Shubhra Mangal (2007). It is a self report inventory. It has been designed for 16+ year's age of school, college and university students for the measurement of their emotional intelligence, with its four branches namely:
   - **Intrapersonal awareness:** knowing about one’s own emotions
   - **Interpersonal awareness:** knowing about other’s emotions
   - **Intrapersonal management:** managing one’s own emotions
   - **Interpersonal management:** managing other’s emotions

   Each branch consists of 25 items; thus whole inventory contains total 100 items. Each item has two alternatives ‘Yes’ and ‘No’, subject has to choose any one response out of these. This test is self administering inventory having a very simple scoring; it can be done by manually or with the help of stencil, as one score for presence of emotional intelligence and zero score for absence of emotional intelligence. The maximum obtained score is 100 and minimum is zero. A higher score of the individual in the respective branch as well as overall emotional intelligence shows a higher level of emotional intelligence and vice versa. Approximately 30-40 minutes are required to answer this inventory. The authors had given standardized procedure in the manual of the inventory. Reliability of the inventory reported by the author ranges from 0.89 to 0.92 measured through three different methods. Validity of the inventory has been established by adopting two different approaches namely; factorial and criterion related approach. Adequate validity was found by both approaches.
2. **Family Environment Inventory (FEI):**

For the assessment of family environment of the subjects ‘Family Environment Inventory’ (FEI) was used. It is constructed by Harpeet Bhatiya and N. K. Chadha (1993). This inventory is based on the ‘Family Environment Scale’ by Moos (1974). It was designed to measure the family environment of the subjects having 17 to 50 years of age. The inventory consists of three broad dimensions and each dimension is divided into various sub dimensions namely; a) Relationship Dimension (Cohesion, Expressiveness, Conflict and Acceptance and Caring), b) Personal Growth Dimension (Independence and Active-Recreational Orientation), and c) System Maintenance Dimension (Organization and Control). The inventory consists of 69 items, some of them are positive and some are negative. Each item is associated with five alternatives that are ‘Strongly Agree’, ‘Agree’, ‘Neutral’, ‘Disagree’, and ‘Strongly Disagree’. Scoring procedure of the inventory is given and it is very easy. For positive items, respectively 5,4,3,2, and 1 score is to be given for ‘Strongly Agree’, ‘Agree’, ‘Neutral’, ‘Disagree’, and ‘Strongly Disagree’ responses of subjects and for negative items scoring becomes vice versa. A higher score of the individual in the respective sub dimension shows a favorable family environment and lower score shows unfavorable family environment, but for the sub dimension ‘Conflict’ high score is indicative of low conflict and vice versa. The overall reliability of the inventory reported by the author is 0.95 (Spearman-Brown formula) as well as reliability calculated for each sub dimension by Split-half method and it is ranging from 0.48 to 0.92. Both face and content validity were tested and were found adequate.

3. **Socio-Economic Status Scale:**

This scale was constructed by D.S. Janbandhu. It is a short scale consisted of 12 questions only. It was revised in 2011. The questions are of either close end or multiple choices in nature. It demands only factual information about the social, economic and educational status of the family of individual. The reliability coefficient was measured by test-retest method, was 0.83; and
validity coefficient was 0.73. This scale is widely used in the field of research in psychology.

3.7 Procedure of Data Collection

After selecting sample and finalizing tools for collecting data permission was taken from heads of the institutions of the prescribed schools to administer the inventories on the students of 11th and 12th standard. Seating arrangement of the subjects was made in a class room. Sufficient distance was kept between two subjects, so that one could not peep into the responses written by other subjects. A group of 15-25 subjects were called in each setting.

Once, the subjects took their seats they were explained importance and purpose of the study. Through informal talk, good rapport was established with the subjects, and they were assured that their identities and responses given by them would be strictly kept confidential, and will not be disclosed anywhere. Thus, they were assured to give their responses comfortably and honestly. When it was observed that the subjects were eager to take the scales, copies of ‘Socioeconomic Status Scale’ were distributed among them.

This was a simple scale and only factual information was demanded here. Filled copies were collected from the subjects.

After completion of first scale booklets of ‘Emotional Intelligence Inventory’ (EI) along with response sheets were distributed among subjects. They were asked to write their responses in response sheet without consulting each other. They were instructed as per guidelines given in test manual.

After the completion of the inventory, the response sheets along with test booklets were collected.

Finally, booklet of ‘Family Environment Inventory’ (FEI) and its response sheets were distributed among the subjects and standard instructions given to the subjects.
After completion of the inventory, response sheets along with the test booklets were collected. Between the second and third instrument ten minutes rest was given to the subjects.

Similar procedure was adopted in collecting data from different groups.

3.8 Variables under Study

**Independent Variables:**

a) Gender (Male and Female)

b) Family environment (Favorable FE - Unfavorable FE)

c) Area of living (Rural and Urban)

d) Socio-economic status (High SES - Low SES)

**Dependent Variable:**

a) Intrapersonal awareness

b) Interpersonal awareness

c) Intrapersonal management

d) Interpersonal management

e) Emotional intelligence

3.9 Research Design

Since four independent variables were used and each was varied at two levels a $2 \times 2 \times 2 \times 2$ factorial design was used. Cell frequency was kept equal in each classified group.
3.10 Statistical Treatment of Data

First the data were treated by mean and standard deviation. Secondly, four way Analysis of variance was used. Finally the data were treated by Scheffe’s Post-Hoc Test of multiple comparisons.

3.11 Discussion

Results were discussed considering statistical values and finding and earlier research studies.