CHAPTER - III : PROBLEM AND PROCEDURE

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3.1. **Introduction:**

Mood-altering substances like Ganja, heroin, LSD and synthetic drugs have been in use for ages. In the past such drugs were mainly used to promote gaiety and fellowship havoc, affecting generation after generation of young boys and girls. Newer and more potent hallucinatıon have appeared on the drug scene, Angel's Dust or Brown Sugar being the most recent. What alarming is that they are filtering down to highly vulnerable sections of society including school and college children.

The previous chapter contained detailed account of the researches on drug-abuse carried out in the past and in recent times in western countries as well as in India. Apart from giving him an insight into the problem this has also helped the investigator in planning the present research more accurately and efficiently.

It is observed that planning is a necessary adjunct even for an ordinary day-to-day work. It is a need for the modern age. And when a work is spread over a number of days, many months, planning must be at a core if the work is to be completed without any confusion or disarray. The present investigation is a multi-dimensional study. Hence every core must be taken in preparing and executing the plan to arrive at definite and valid conclusions.
their personality patterns. The prevalent rate of psychoactive drug in India is appreciably lower in rural areas, but it is higher in modern metropolitan cities, as well as urbanised areas of the country. It is obviously observed that the drug problems is often associated with the process of urbanisation and modernization. As a developing country, India is very much in the throes of these process and hence the drug scene in the country needs to be watched carefully and consciously. Drug abuse may become burning problem in coming days. Hence the aim of the present study was to find out the causes of drug abuse and also try to study the personality patterns of users.

3.3 Problem of the Study:

The main aim of the present investigation has been to study the personality traits of drug uses in context of certain demographic variables and also to study the social factors related to the addictors. The exact problem of the present study run thus: "An inquiries into personality traits of University Students in relation to addiction with Socio-psycho variables."

3.4 Objectives of the Study:

The main objectives of the study are as under:

(1) To study and compare the personality patterns among addicts and non-addicts students.

(2) To study the effects of sex, if any, on personality pattern of students.
(3) To study the effect of habitat, if any, on personality patterns of students.

(4) To study the effect of socio-economic status, if any, on personality patterns of students.

(5) To study the effect of some social factors on addicts and non-addicts as well as on sex, habitat and SES, of the students.

3.5 Formulation of Null-hypotheses:

It is fact that the hypotheses in any research work is very important. Without hypotheses, the research would go astray. It is said that the null-hypothesis is the mariner's compass of the research. That is why the investigator has formulated hypotheses in null form whenever they are appropriate. The following four null hypotheses were formulated while the fifth null-hypothesis was of a general nature pertaining to the interactive effects on the independent variables for personality traits under Cluster 1 to 4.

HO.1: There is no significant difference between the mean scores on personality traits under Cluster 1-4 of male and females students.

HO.2: There is no significant difference between the mean scores on personality traits under Cluster 1-4 of addicts and non-addicts.
HO.3: There is no significant difference among the mean scores on personality traits under Cluster 1-4 of rural, urban and hostellian students.

HO.4: There is no significant difference between the mean scores on personality traits under Cluster 1-4 of high SES and low SES.

HO.5: There is no significant interaction between/among the various independent variables upon the personality traits under Cluster 1.

3.6 Variables:

The present investigation was designed to study the effect of four independent variables shown as below:

A: Independent variables:

(1) Sex (A): Subjects of both sexes were included viz., (i) Male ($A_1$) and (ii) Female ($A_2$).

(2) Addiction (B): Subjects were included at two levels, viz., (i) Addictors ($B_1$) and (ii) Non-addictors ($B_2$).

(3) Habitat (C): Three areas of residence of subjects were included viz., (i) Rural ($C_1$), (ii) Urban ($C_2$) and (iii) Hostellian ($C_3$) students.

(4) Socio-economic Status (D): Subjects were selected from two SES levels, viz., (i) High SES ($D_1$) and (ii) Low SES ($D_2$).
In nutshell, the above variables can be tabulated as under:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of the Variable</th>
<th>Nature of Variable</th>
<th>Nomenclature</th>
<th>Levels</th>
<th>Measuring tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sex</td>
<td>Independent Variable</td>
<td>A</td>
<td>A&lt;sub&gt;1&lt;/sub&gt; Male</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A&lt;sub&gt;2&lt;/sub&gt; Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Addiction</td>
<td>-do-</td>
<td>B</td>
<td>B&lt;sub&gt;1&lt;/sub&gt; Non-addictor</td>
<td>Questionnaire</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B&lt;sub&gt;2&lt;/sub&gt; Addictor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Habitat</td>
<td>-do-</td>
<td>C</td>
<td>C&lt;sub&gt;1&lt;/sub&gt; Rural</td>
<td>Questionnaire</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C&lt;sub&gt;2&lt;/sub&gt; Urban</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C&lt;sub&gt;3&lt;/sub&gt; Hostellian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>SES</td>
<td>-do-</td>
<td>D</td>
<td>D&lt;sub&gt;1&lt;/sub&gt; High SES</td>
<td>Questionnaire</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D&lt;sub&gt;2&lt;/sub&gt; Low SES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Personality Assessment</td>
<td>Dependent variable</td>
<td>-</td>
<td>Personality Cluster 1 Prof. A.S. Patel's</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 16 Personality Factor Questionnaire</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 Questionnaire</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

B: Dependent Variable:

The investigator has measured personality traits under four cluster of subjects. The scores achieved by each subject on four personality traits cluster, were considered as a dependent variable for data analysis.
The other ad-hoc comparison were also sought to be
tested by forming cross-breaks having two dimensions. That is
by controlling one factor. Thus $\chi^2$ test involving $2 \times 2$ contin-
gency table would be employed.

3.7 Selection of Experimental Design:

The question was posed as to which experimental
design be selected. The experimenter's stated objectives among
others were as under:

1. He wanted to study the main effect as well as the inter-
action effect of the four independent variables together
with the linear trend of habitat levels.

2. He wanted to execute the experiment as speedily as he could,
regardless of cost.

3. He realized that controlling human factor was a difficult
task.

4. He wanted to analyse the data in a straight forward manner
without any ambiguity.

Looking to the above objectives, many experimental
designs would come forward to claim for their right viz.,
Randomized Block Design, Repeated Measures Design, Factorial
Design and others. All would satisfy some of the above objec-
tives but Factorial Design would satisfy all and sundry objec-
tives of the experimenter. There are also drawbacks of the
factorial design in considering the cost and large number of sample size required for experiment.

Looking to the above discussion, the experimenter choose to go for factorial design of $2 \times 2 \times 3 \times 2$ dimensions in order to arrive at valid conclusions. The twenty four cells of the experiment would demand large sample size. In order to face this difficulty and to enhance the experimental speed, the experimenter choose to go with a smaller cell size of the factorial design. Many researches have been cited where the cell size of the complex factorial design has been 10 or even less. Thus, the cell size for $2 \times 2 \times 3 \times 2$ factorial design had kept at 7 without having any risk in the interpretations of the results. It is now highly desirable that the whole experimental design together with treatment should be given in a tabular form as a ready reckoner. Table 3.2 gives the schematic representation of the $2 \times 2 \times 3 \times 2$ factorial design.

The above design is called Ex-post facto design because the personality factors have been shown by the students before the survey has been undertaken. Kerlinger called this type of design as ex-post facto. Thus, the 4 independent variables and their levels are shown in the schemata on Table 3.2.
Table 3.2

Factorial Design (2 x 2 x 3 x 2)

n = 168, n = 7

<table>
<thead>
<tr>
<th>SEX</th>
<th>MALE</th>
<th>FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Non-addictor</td>
<td>Addictor</td>
</tr>
<tr>
<td></td>
<td>Non-addictor</td>
<td>Addictor</td>
</tr>
<tr>
<td></td>
<td>Non-addictor</td>
<td>Addictor</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
</tr>
<tr>
<td></td>
<td>Hostellian</td>
<td></td>
</tr>
</tbody>
</table>

Legend:
- H = High
- L = Low
- S = Sex
- E = Economic Status
3.8 **Sample:**

In the initial stage, a sample of 600 students was taken randomly from colleges of Delhi University. Since the study aimed at four main variables namely: (i) two levels of sex i.e., male and female, (ii) two levels of addiction i.e., addicts and non-addicts, (iii) three levels of habitat i.e., rural, urban and hostellian students and (iv) two levels of socio-economic status i.e., higher and lower. It was necessary to take a large sample to cover all the four variables.

(i) **Sex:**

The aim of the study has been to compare male and female population with respect to their drug addiction patterns. However, it was thought the role of women in our society is getting new status then it has any affect on drug addiction or not was studied.

(ii) **Addiction:**

Under the heading of addiction of students addicts and non-addicts were included. College students were taken from various faculties like Arts, Commerce, Science, Pharmacy, Law, Medical and Engineering, but they were not classified as faculty-wise for analysis. Since we were more interested only in addiction levels of students.

(iii) **Habitat:**

One of the purpose of the study has been to compare various habitat of students. Hence rural, urban and hostellian
students were included in the study.

(iv) Socio-economic status level:

The sample has been selected also keeping in view the variable of socio-economic-status to understand its impact on personality traits. The investigator has included the following question for getting information on answer-sheet.

What according to you, is social status of your family?

--- Higher --- Middle --- Lower.

Thus, the SES groups were categorised then as under, based on actual income and their own perception of social status:

Higher SES group: Rs. 15,000 or more annual income — higher social status.

Lower SES group: Rs. 5,000, or below annual income and lower social status.

3.9 Tool:

For the present investigation, two tools were used, namely (i) Personality Assessment Scale (PAS) and (ii) Social Attitude Questionnaire.

A: General Description of the Personality Assessment Scale (PAS):

Personality Assessment Scale was constructed and standardized by Prof. A.S. Patel, M.S. University of Baroda.
The test is meant for college students. The age range for the population was 14-20. The test was standardized on 2000 students drawn as sample from colleges situated in urban and rural areas of western region of the country, including Gujarat, Maharashtra and Rajasthan States. The sample included girls as well as boys from different faculties. The population was drawn from different socio-economic strata of the society. Thus the sample was sufficiently large.

The test measures the sixteen personality traits. There are sixteen section, each of which was selected after it was duly subjected to statistical analysis. Moreover, it is a group test which enhance its usability.

B: Psychometric properties of the Personality Assessment Scale (PAS):

(i) The items included in the test were selected on the basis of Kelley's 2770 method. The items having the difficulty index ranging from 20 to 80 per cent and the discrimination value more than 0.2 have been found place in the test.

(ii) The reliability of the test has been established by two different methods, namely the test-retest and split-half method. The reliability coefficients found out by these two methods are 0.89 and 0.78 respectively.
(iii) For establishing the validity of the test similar test (Dr. Kapoor's Personality Test) was given to a group of 100 college students. The validity coefficient was found to .58.

Looking to the above characteristics of the test, it could be said that the test is quite reliable and valid for measuring the personality traits of college students.

C: Social Variable Questionnaire:

The questionnaire for the present study has to aim at bringing out factual information as well as opinions on pertinent issues. In doing so, it needs to be oriented to the social-cultural conditions and to the psychotropic drugs traditionally in local markets. Further, in order to bring evidence to bear upon the hypotheses formulated earlier, it has to cover many more data from the areas of drug-use. These may include namely, Personal data, family data, companionship data, psychological data, environmental data and drug data.

Based on the above, a questionnaire was prepared with the help of experts. The items relating to drug-use and social opinions were placed towards the end of the questionnaire. It consists of 20 questions. The mean time required to complete it was 30 minutes.
3.10 Procedure:

Prof. A.S. Patel's Personality Assessment Scale (PAS) was administered simultaneously to a group of 20 to 25 subjects (students) of different colleges of Delhi University. After completion of PAS, social questionnaire was also given to the students.

Precautions were taken during the administration that, it was administered after first long recess whenever possible to avoid fatigue. The administration work was carried out within four months' span. This span was necessary because the original sample comprised of 800 subjects.

Originally, the data were collected on a sample of 800 subjects, to include students from rural, urban and hostellians both boys and girls of non-addictors as well as addicts groups, belonging to low socio-economic status. Out of these only 168 subjects were retained for the purpose of statistical analysis, so as to fit in the cells of \(2 \times 2 \times 3 \times 2\) factorial design used to study the four main variables, as shown earlier. The sample for social variable was 800 subjects.

3.11 Statistical Analysis:

Responses on different personality traits under Cluster 1 - 4 of subjects forming a \(2 \times 2 \times 3 \times 2\) factorial Design were scored as per procedure (Appendix ___) and
analysed by the statistical technique of analysis of variance in order to study the main as well as interaction effects of the four variables viz., non-addictor and addictor, sex, habitat and SES, as in a factorial design. After such analysis of variance showing the overall differences among the variable levels, the same data obtained were further subjected to another statistical techniques viz., to study the significance of the difference between any, to specific groups in pair formed by different level of variable found to be significant by the F test. Further $X^2$ test was also used for finding out the significant responses on social variables.

All these results have been tabulated in appropriate tables and graphs and discussed in the next chapter of thesis. The last chapter summarises the work undertaken, alongwith the main findings, pertaining to the contribution of the factors under study. Some implications and suggestions have also been involved at the end.