CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY
CHAPTER 3

METHODOLOGY

3.1 RESEARCH DESIGN

The present study was designed to answer the basic question whether perceived Home-Environment, feeling of insecurity and approval motives influences on drug behavior. The variables were assessed and compared between drug addicts and Normal individuals with consideration of age.

The investigation was therefore, comprised of two parts. The first part centered around the investigation of perceived Home Environment, feeling of insecurity and approval motives vis-à-vis drug addiction and normal groups. The second part centered around the investigation of these factors with consideration of age vis-à-vis drug addict group and normal group.

3.2 SAMPLE

The sample of the present research is comprised of 100 drug addicts selected from various drug de-addiction centers of Delhi and normal individuals were selected from Delhi University and Aligarh Muslim University. Since the present research deals with the drug addict subjects, it was very difficult to adopt random sampling procedure. Therefore the most suitable purposive sampling procedure was followed. The basic assumption behind purposive sampling was to exercise good judgment and appropriate strategy to hand-pick the cases to be included in the sample and thus to develop sample that is satisfactory in relation to the present research requirement.
Drug addicts were selected from the very few drug de-addiction functional in Delhi. These centers are established by various Non Governmental Organizations (NGO's) of Government of India, Delhi Government and recognized by Ministry of Health Affairs. They treat drug addict individuals in OPD or admitted them for treatment in their centers. The present capacity of these institution is around 400-500, out of which 50 to 60 of them were admitted in various wards and rest used to come for treatment in OPD. However, this population is subject to change because many of them are relieved and many other are admitted in daily. Data for drug addicts were collected from two institutes namely, Institute of Human Behavior and Allied Sciences, Dilshad Garden, Delhi-110095 and SANYO Detox and De-addiction Clinic, B-44/45, Paryavaran Complex, Said-ul-Ajab, IGNOU Road, New Delhi-110030.

In the present study, 100 drug addicts were included in the sample from these institutions. Out of these 100 drug addicts, about 40 of them came here for the first time for treatment; rest came here for more than one time because of relapse or further treatment/therapy. For drug addicts, only those subjects were included in the sample who were on drugs for more than 3 years and willingly offered themselves for testing.

Both groups were also matched with respect to their age, as it may have affected the results. Mean age of drug addicts group was 31.8 years, while it was 30.07 for normal group. The Institutions selected for normal adults were from various colleges of New Delhi and Aligarh Muslim University. Only
those students and teachers were included in the sample who willingly offered themselves for testing.

Subjects of the both groups, drug addicts and normal adults, were matched on the other variable which could have influenced the dependent variable.

3.3 AGE

To match both groups, the age range was controlled, between 18 and 45 years in both groups, so that age factor may not affect the dependent variable. This age range was opted, because most of the drug addicts in drug de-addiction centers were in the age range of 18 to 45 years only. Therefore, to match both groups normal adults from various colleges of New Delhi and Aligarh Muslim University were also taken from the same age range.

3.4 SEX

The problem of drug addiction, as stated earlier in the first chapter, is more dominant among male adolescent. So considering the “availability” of the male subjects, it was decided to take sample of male drug addicts only. To match both groups only male normal adults from various colleges of New Delhi and Aligarh Muslim University were included for control group.

To assess and compare perceived Home Environment, feeling of insecurity and approval motive of drug addicts and normal subject with consideration of age, the sample was distributed as follows:
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<table>
<thead>
<tr>
<th>Addict group</th>
<th>Normal individual (or non-addict group)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25 years. N = 23</td>
<td>18-25 years, N = 33</td>
</tr>
<tr>
<td>26-35 years. N = 41</td>
<td>26-35 years, N = 40</td>
</tr>
<tr>
<td>36-45 years. N = $\frac{36}{100}$</td>
<td>36-45 years. N = $\frac{27}{100}$</td>
</tr>
</tbody>
</table>

3.5 **TOOLS**

In this research three questionnaires were used in this research.

3.6 **HOME ENVIRONMENT INVENTORY**

3.6.1 **Description of the Inventory**

HEI Contains 100 items related to ten dimensions of home environment (Misra. 1983). The ten dimensions are:

(A) **Control:** It indicates “autocratic atmosphere in which many restrictions are imposed on children by the parents in order to discipline them”.

(B) **Protectiveness:** It implies “Prevention of independent behaviour and prolongation of infantile care”.

(C) **Punishment:** It includes “Physical as well as affective punishment to avoid the occurrence of undesirable behavior”.

(D) **Conformity:** It indicates “Parent’s directions, commands, orders with which child is expected to comply by action”. It refers to “Demands to work according to parent’s desires and expectations”.

(E) **Social Isolation:** It indicates “Use of isolation from beloved persons except family members for negative sanctions”.

(F) **Reward:** It includes “Material as well as symbolic rewards to strengthen or increase the probability of desired behaviour.”
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(G) Deprivation of Privileges: It implies “Controlling children’s behaviour by depriving them or their rights to seek love, respect and childcare from parents”.

(H) Nurturance: It indicates “Existence of excessive unconditional physical and emotional attachment of parents with the child. Parents have a keen interest in and love for the child”.

(I) Rejection: It implies Conditional love recognizing that the child has no rights as a person, no right to express his feelings, no right to uniqueness and no right to become an autonomous individual”.

(J) Permissiveness: It includes “Provision of opportunities to child to express his views freely and act according to his desires with no interference from parents”. Each dimension has ten items.

The instrument requires pupils to tell the frequency with which a particular parent-child interaction behaviour has been observed by them in their homes, i.e., he/she is requested to tell whether a particular parental behaviour (as mentioned in an item) Occurs—Mostly, Often, Sometimes, Least, and Never.

There is no time-limit for this tool.

3.6.2 Scoring

The responses are to be given on the booklet itself. There are five cells against every item of the inventory. Each cell indicates the frequency of occurrence of a particular behaviour. The five cells belong to five responses namely. Mostly, often, sometimes, least, and never. The dimension to which a
particular item belongs has been indicated by alphabets near the serial number of the items. Assign 4 marks to ‘mostly’, 3 marks to ‘often’, 2 marks to ‘sometimes’, 1 mark to ‘least’, and 0 marks to ‘never’ responses. Count the marks assigned to A, B, C, D, E, F, G, H, I and J dimension-Statements on every page and then add the dimension-scores awarded to statements given on the five pages so as to get ten scores for the ten dimensions of HEI.

3.6.3 Reliability

The ‘Home Environment Inventory’ was administered to 113 students (54 boys and 59 girls) studying in intermediate classes of five schools. Split half reliabilities were worked out separately for all the ten dimensions of home environment. The split-half reliabilities (Corrected for length) for various dimensions of home environment are as follow:

TABLE 3-1

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Inventory Dimensions</th>
<th>Reliability Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Control</td>
<td>.879</td>
</tr>
<tr>
<td>B.</td>
<td>Protectiveness</td>
<td>.748</td>
</tr>
<tr>
<td>C.</td>
<td>Punishment</td>
<td>.947</td>
</tr>
<tr>
<td>D.</td>
<td>Conformity</td>
<td>.866</td>
</tr>
<tr>
<td>E.</td>
<td>Social Isolation</td>
<td>.870</td>
</tr>
<tr>
<td>F.</td>
<td>Reward</td>
<td>.875</td>
</tr>
<tr>
<td>G.</td>
<td>Deprivation of privileges</td>
<td>.855</td>
</tr>
<tr>
<td>H.</td>
<td>Nurturance</td>
<td>.901</td>
</tr>
<tr>
<td>I.</td>
<td>Rejection</td>
<td>.841</td>
</tr>
<tr>
<td>J.</td>
<td>Permissiveness</td>
<td>.726</td>
</tr>
</tbody>
</table>

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3.6.4 Validity

Home Environment Inventory has been found to posses content validity as measured with the help of views expressed by judges criterion related validity could not be established because of the lack of appropriate external criteria.

3.7 SECURITY INSECURITY SCALE (SIS)

3.7.1 Scoring

There are three alternative choices for every item (Always, sometimes, never) (Shah, 1989). The subject has to choose only one alternative. The scale contains both positive and negative statements. The statements No. 16, 19, 27, 30, 32, 39, 41 and 43 are positive statements (indicative of security) whereas remaining statements are negative in nature. As this scale in security indicative, therefore for positive statements scoring system is, Always-2, Never-0, Sometimes-1 and for negative statements, it is reversed e.g. Always-0, Never-2, and Sometimes-1.

3.7.2 Reliability

The final draft of the scale, consisted of 75 items, was administered among 600 randomly selected students of school (IX, X, XI and XII, N=350) and College, University (Post graduate, and graduate, N=250) levels of urban and rural centers of both the sexes. The test-retest and split half reliability coefficients (as shown in Table 3.5) were calculated for each group separately and the obtained values were found highly satisfactory.
### Table 3.2

**Values of Reliability Coefficients**

<table>
<thead>
<tr>
<th>Students</th>
<th>Test Retest Method</th>
<th>Split-half Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Secondary level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boy (N=200)</td>
<td>0.79</td>
<td>0.77</td>
</tr>
<tr>
<td>Girls (N=150)</td>
<td>0.76</td>
<td>0.71</td>
</tr>
<tr>
<td>Urban (N=150)</td>
<td>0.81</td>
<td>0.80</td>
</tr>
<tr>
<td>Rural (N=200)</td>
<td>0.74</td>
<td>0.76</td>
</tr>
<tr>
<td><strong>College/Uni. level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male (N=150)</td>
<td>0.84</td>
<td>0.79</td>
</tr>
<tr>
<td>Female (N=100)</td>
<td>0.81</td>
<td>0.70</td>
</tr>
<tr>
<td>Urban (N=175)</td>
<td>0.78</td>
<td>0.81</td>
</tr>
<tr>
<td>Rural (N=75)</td>
<td>0.69</td>
<td>0.74</td>
</tr>
</tbody>
</table>

### 3.7.3 Validity

In the preparation of preliminary draft, the careful study of relevant literature and the consideration of unanimous decision of 12 judges regarding the relevance and clarity of the statements, with various constructs of the security scale, confirm its content validity. The selection of items on the basis of highly significant discriminative index values (C-R Values) again ensured the item validity of the test. For the external validation of the test, the Security-Insecurity Inventory of Tiwari and Singh was administer. Among 75 randomly selected secondary level students and to the same 75 students this SS was also administered. The total scores obtained by the sample subjects in these two tests were correlated and the obtained value \(r=0.79\) was found statistically
highly significant. Thus the external validity of the test is also satisfactorily high.

3.8 APPROVAL MOTIVE SCALE (AMS)

3.8.1 Scoring

According to Tripathi (1980) sum of the scores of each item provide total score of a subject. However, the scores range are from 0 to 77. In this system of scoring larger score indicated greater strength of approval motive.

3.8.2 Reliability

It was defined as the correlation between scores obtained by a subject at two occasions reported by a period of 2 to 3 months. In the present work 120 Ss were retested. The correlation coefficient obtained from the two sets of scores was 0.80 with an index of reliability of 89.

Split-half Reliability: it is used to find out internal consistency of the measures. The items in the whole AMS have been divided into two odd and even categories. In order to determine split-half reliability, AMS was administered on large sample of 500 Ss the obtained correlation between scores on odd and even items was 0.82. Following spearman Brown prophecy formula a reliability index of 0.93 was obtained.

3.8.3 Validity

The AMS scale has satisfactory content validity, construct validity intrinsic validity and predictive validity.

Content validity: The AMS has content validity is evidenced by the selection of items and the agreement of the expert opinions on the content of
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items as true measure of approval motive. The selection of items with very high discriminating values, further assumes better selection of contents. Content validity is more systematic and more sophisticated, it is known as logical validity, course validity, and curricular validity. Content validity is no statistical. It is obviously important in achievement tests, but it can be also important with approval motive test. The content validity of AMS insures that its content covers a representative sample of the domain of phenomenon under consideration. The coverage of items of AMS deals with almost each and every important domain of approval motivated behaviour. AMS areas related to regulative behaviour, defensiveness social responsiveness, dependency, self-esteem social attraction social conformity, positive self-presentation, social approval on culturally sanctioned behaviors are included in this scale. The opinions of the experts were taken into consideration in acceptance of which items increased its content validity.

Intrinsic Validity: this type of validity shows the extent to which the obtained scores measure the true component of the test. It is indicated in terms of the index of reliability. The high value of test-retest as well as split-half reliability co-efficient of the AMS has considerable degree of intrinsic validity.

Predictive validity: evidence for this validity comes from several studies of the authors. The obtained results have shown that there is negatives relationship between cognitive complexity and approval motive. It has been found that Ss having high degree of approval motive show more susceptibility to verbal conditioning under positive as well as negative reinforcement conditions with
verbal and gestural cues. Differentials in social perception have also been noticed as a function of approval motive. High Approval motivated Ss were found to have high degree of religiosity as compared to low approval motivated Ss. On 16 PF test of Cattell HAG Ss displayed the characteristics of higher ego, super ego strength, affection, parmia, premsia and high strength of self-sentiment. In contrast, LAG Ss were found to show the characteristics of autia shrewdness, radicalism, self-sufficiency and high ergic tension. On Sinha Anxiety Scale HAG Ss manifest low level of anxiety and LAG Ss show high degree of anxiety. HAG Ss were found to be more adjusted as compared to LAG Ss. HAG Ss were found more externally controlled while LAG Ss were relatively more internally controlled reported that low status Ss are more internally controlled whereas high statuses Ss are more externally controlled. Further found that LAG Ss are more internally controlled and HAG Ss are externally controlled. On perceptual and social dependence it has been pointed out that HAG Ss were more dependent as compared to LAG Ss. On Prolonged deprivation scale HAG Ss were found less deprived less deprived while LAG Ss were more deprived. High approval group showed more conforming behavior as compared to low approval group. It has been reported that high approval group show more perceptual defense in contrast to low approval group. High approval subjects are more dependence prone as compared to low approval subjects.

Construct validity: the construct validity of AMS denotes to the extent that this scale measures the psychological construct as it is conceptualized in theoretical
scheme of related psychological concepts and constructs. The construct of approval motive implies that Ss high on the AMS shall be low on hostility measure. Suggest that HAG Ss may be an inhibiting factor in the expression of aggression. Reported a very high negative correlation ($r=-.76$) between approval and hostility. In Indian condition the relationship of approval motive and hostility has been to be negative ($r=-.361$, $N=250$). This correlations is significant .01 level.

3.9 PROCEDURE

After seeking permission from the Director of hospitals, the sample was drawn from two institutes, namely. Institute of Human Behavior and Allied Sciences, Delhi and Sanyo Detox and De-addiction Clinic, Delhi. The subjects came to the clinic to seem professional help. The sample was drawn over a period of seven months, during which the researcher worked as a trainee in de-addiction. the primary purpose of which was to became conversant with the programme and establish rapport with the subjects.

For administration of the tests, the psychiatrist and the social workers helped the researcher to identify those addicts who could read and write in English or in Hindi and those who could not read and write at all. Those who could not read and write either in English or in Hindi were left out. The respondents in the research were contacted individually by the researcher. Relevant information with regard to demographic and data was collected. Then the respondents were asked to fill all the questionnaire and were assured that their response, would be kept confidential.
Following manuals, instruction were given to the respondents. In case they did not understand some areas were free to ask question. There was no time limit. When all the questionnaire were completed, the test booklets and test form were collected with thanks. The same procedure was followed for normal (non-addicts) respondents.

3.10 STATISTICAL ANALYSIS

The statistical analysis to be used should be related to the research question which the investigator wishes to answer them. Independent t-test was applied to find out the significant difference between the mean score of addicts and non-addicts participants on the Home Environment and its subscales, on the security-insecurity and approval motives and their subscales. To answer the question "Are there significant differences between the mean score of the Home Environment and its subscales with consideration of age categories in addict and non-addict groups, one way ANOVA was applied and in order to find out which groups are significantly different, post Hoc of ANOVA was applied.

Similarly, for security-insecurity and its subscales as well as for approval motive and its subscales with consideration of age in addicts and non-addicts groups, one way of ANOVA and Post Hoc of ANOVA was applied to determine which groups exactly are significantly different on these scales.

Finally in order to answer to the question what is the logistic equation on the basis of independent variable, namely, approval motive, Home
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Environment, security-insecurity and age group, logistic regression was applied.

Finally, phi-correlation was applied to determine the correlation between the kind of approval motive (high and low) and groups (addicts and non-addicts) and chi-square was used to determine its significance.