CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

This chapter deals with the origin and development of the research idea, statement of the problem, significance of the study, aims and objectives of the present investigation, formulation of hypotheses, definitions of major concepts, preliminary results of the pilot study, dynamics of sampling strategy, description regarding the tools of data collection, actual collection of data and methods of statistical analysis.

ORIGIN AND DEVELOPMENT OF THE RESEARCH IDEA

The Researcher's interest in drug addicts and their families started way back in 1985, when he was in the United States for a Counselling Course. As part of the practicum of the course, he worked in a de-addiction centre, in close contact with addicts and their families. Later back in India, this interest was deepened and further strengthened by his six years experience as a counsellor in a de-addiction centre in Kerala. Here, family members of addicts were also given counselling. This proximity with drug addicts and their families for the past few years precipitated, hammered and moulded the intellectual rumination into a pursuable research issue.

STATEMENT OF THE PROBLEM

The use of psycho-active substances for obtaining relief from mental tension or physical discomfort or for attaining pleasure or new
experiences has been in vogue from time immemorial. Use of drugs in one form or another has been a common habit observed in most cultures throughout history. Addiction is often viewed as a symptom of pathology in the family. The addict is not viewed as an individual with problematic symptoms, but as belonging to a family with a problem. When an individual faces a problem, attention is to be given to the family because, more often than not, the family is the victim of an individual pathology and its members suffer grievously in the process. The family may well contribute to the problem in terms of its creation or perpetuation, or the barriers it poses in the path to recovery. In fact, the individual may at times be the victim of family pathology and may be merely acting out their pathology through his or her problem.

The locus of maladaptive behaviour of an individual has, traditionally, been seen as lying within the individual. A one-to-one relationship between the individual and a member of the helping profession has, therefore, been seen as the strategy to bring about needed changes. There is, often, a tendency, to work with the addict in isolation and to hold the family apart, almost as if it is the guilty party and the root cause of the addiction. Some view the family as a force that runs counter to the treatment, due to its ignorance about the manipulative behaviour and functioning of the addict, and seek to counsel it in order to increase its understanding about the addicts’ personality and behaviour and to give suggestion for possible ways of relating to the addict, thereby strengthening the possibility of recovery. The focus is still the addict. The family may contribute to the addictive tendency of the individual and the individuals’ addiction to drugs may bring about changes in the family. The family's
functioning as a unit, its ability to meet problems and to find solutions, the social contacts the family has, the attitudes of parents and siblings, the family atmosphere, the interaction in the family etc. are important when studying an addict. Thus family can be studied from many aspects which contribute to the pathology of individual. Since this is a vast area, the researcher has restricted the study to two of the important aspects interacting on the family and playing a major role in the pathology of the individual and the family viz. Family Functioning (Bloom 1985) and Social Support System (Vaux et al. 1986). It is now increasingly being realized that the treatment and rehabilitation of the drug addicts cannot be imparted meaningfully without gaining proper insights into the styles of functioning of the families from where they hail. Simultaneously it is also understood that the social support system prevailing in the family plays a major role in the treatment of drug addicts.

For the purpose of this research inquiry family functioning has been defined in terms of 15 independent but interacting variables namely Cohesion, Expressiveness, Conflict, Intellectual-Cultural Orientation, Active-Recreational Orientation, Religious Emphasis, Organization, Family Sociability, External Locus of Control, Family Idealization, Disengagement, Democratic Family Style, Laissez-faire Family Style, Authoritarian Family Style and Enmeshment. The variables studied under Social Support System are: emotional support, practical assistance, financial assistance, advise and guidance from significant person, family, friends and relatives. The family functioning with respect to relationships, maintenance and values in the family, and social support in the form of help, guidance and assistance received by the family are to be understood. These factors may contribute
to his or her condition and the addicts' condition in turn may affect these factors of the family. This poses the need to study the family in these aspects to understand the nature and dimensions of addiction.

SIGNIFICANCE OF THE STUDY

This study concentrates on the family functioning and the social support system of addict families. The Researcher wishes to make contributions towards prevention and treatment of drug addiction through this study.

1. By studying the family functioning of the addict families, prevention of drug addiction can be done by rectifying those functions of a family that predispose a family member to drug addiction.

2. Contributions can be made in the field of Family Therapy. Manipulating the variables of family functioning, better environment can be provided in the family, that will help in the recovery of drug addicts.

3. Further, the families of drug addicts can be helped to develop coping mechanisms by strengthening the social support system of the family.

4. Specifically, the findings of the study can go a long way in helping the Counsellors' functioning at the large number of Family Counselling Centres now being set up all over the country by Government of India.
OBJECTIVES OF THE STUDY

1. To study the demographic profile of drug addicts in the district of Ernakulam and Idukki.

2. To portray accurately the possible causes that have induced the drug addicts to drug abuse and the patterns of their drug abuse as reported by them.

3. To study the levels of family functioning of the addict families measured in terms of factors as Cohesion, Expressiveness, Conflict, Intellectual-Cultural Orientation, Active-Recreational Orientation, Religious Emphasis, Organization, Family Sociability, External Locus of Control, Family Idealization, Disengagement, Democratic Family Style, Laissez-faire Family Style, Authoritarian Family Style and Enmeshment.

4. To measure the extent of social support enjoyed by the addicts' family from family members themselves, relatives, friends and significant person.

5. To study a comparative group of non-addict families and to find out whether the addict families vary significantly from the former in terms of family functioning and social support.

HYPOTHESES

With a purpose of inquiry into the above objectives, the researcher formulated a number of hypotheses. The hypotheses were primarily centred
around the main themes of the study namely family functioning and social support. The following are the hypotheses:

1. Cohesion is lower in addict families than in non-addict families.

2. Expressiveness is lower in addict families than in non-addict families.

3. Conflict is seen higher in addict families compared to non-addict families.

4. Intellectual-cultural orientation of addict families is lower than that of non-addict families.

5. Active-recreational orientation of addict families is lower in comparison with non-addict families.

6. Addict families show lesser religious emphasis than non-addict families.

7. Organization of addict families is lower than that of non-addict families.

8. Addict families show lesser family sociability when compared to non-addict families.

9. External locus of control is higher in addict families than in non-addict families.

10. Family Idealization is lesser in addict families than in non-addict families.

11. Addict family members show more disengagement than members of non-addict families.
12. Democratic family style is lower in addict families compared to non-addict families.

13. In comparison with non-addict families, addict families show higher laissez-faire family style.

14. Authoritarian family style is higher in addict families than in non-addict families.

15. Enmeshment is higher in addict families than in non-addict families.

16. Social support is lower in addict families compared to non-addict families.

DEFINITION OF THE MAJOR CONCEPTS

A. Family:

a) Conceptual Definition:

The family, in some form, appears to be, universal; at times, it may be diffused and not easily identified as a unit. The Oxford Dictionary offers the following definitions of the family:

i. The body of persons who live in one house or under one head, including parents, children etc. ii. the group consisting of parents and their children, whether living together or not, in a wider sense, all those who are nearly connected by blood and affinity. iii. ‘A person’s children regarded collectively’. iv. ‘Those descended or claiming descent from a common ancestor’.
b) Operational Definition:

Family is one that consists of parents and children. For the sake of this study, family has been divided into two categories:

i) addict family: A family that consists of at least one member who is an addict and undergoing treatment at de-addiction centres.

ii) non-addict family: A family which does not have a member who is addicted to drugs and is not undergoing treatment for de-addiction.

B. Drug

a) Conceptual Definition

Drug is generally defined as 'any substance that, when taken into the living organism may modify one or more of its functions'.

Jacobs and Fehr in their book Drugs and Drug Abuse (1987) gives the definition of Drug as a pharmaceutical preparation or naturally occurring substance used primarily to bring about a change in some existing process or state (physiological, psychological or bio-chemical). In simpler terms, any chemical that alters the physical or mental functioning of an individual is a drug.

b) Operational Definition:

Drug, for this study, is defined as those psycho-active substances that include Central Nervous System (CNS) Depressants (Alcohol is not included), Hallucinogens, Mood modifiers (Major Tranquilizers and Antidepressant), Narcotic Analgesics, Stimulants. E.g. Opium, Cannabis, Heroin, L.S.D, Barbiturates etc.
C. Drug Addict

a) Conceptual Definition

A drug addict is defined as a person who is persistently or habitually accustomed or inclined to the pursuit, practices and taking of drugs. "A person is dependent on a drug when it becomes very difficult or even impossible for him or her to stop taking the drug without help, after having taken it regularly for sometime. Dependence may be physical or psychological, or both".


b) Operational Definition

Persons diagnosed by Psychiatrists, Psychiatric Social Workers, Clinical Psychologists or Counsellors as addicted to drugs (other than alcohol) and those who underwent treatment for de-addiction during the period of May 1992 to November 1992 at the De-addiction Centres in Ernakulam and Idukki District.

D. Family Functioning

a) Conceptual Definition:

Family functioning refers to the basic factors concerning relationship, system maintenance and value, which have to be present in the family if it has to survive as a functioning unit. (Bloom, 1985)
b) Operational Definition:

Family functioning is defined in terms of the variables such as:

Cohesion - togetherness, helping and supporting one another.

Expressiveness - feeling free to say what is in their minds, discussing problems, expressing opinion.

Conflict - fighting, being angry and throwing things, hitting and criticizing.

Intellectual-Cultural Orientation - going to lectures, plays etc., having intellectual discussions and enjoying music, art, literature etc.

Active-Recreational Orientation - going to movies, sports events etc., having hobbies, and involving in recreational activities.

Religious Emphasis - attending places of religious worship, saying prayers, and believing in heaven or hell.

Organization - being on time, keeping rooms neat, being able to find things when you need them.

Family Sociability - being full of life and good spirit, enjoying being with the people and having large number of friends.

External Locus of Control - feeling that decisions are forced upon by things beyond control, feeling that one has very little influence over the things that happen.

Family Idealization - thinking that no one can possibly be happier than one's own family, one's family is well adjusted and one's family has all the qualities desired.
Disengagement - family members do not check with each other when making decisions, and members are extremely independent.

Democratic Family Style - making the rules together, having some say in major decisions, discussing together the method of punishment.

Laissez-faire Family Style - can get away with almost anything, are not punished, being unclear what will happen when rules are broken, no strong leadership.

Authoritarian Family Style - Parents making all the important decisions, having strict punishment for breaking rules.

Enmeshment - finding it hard to get away from each other, being difficult to take time away from family, feeling pressured to spend most free time together.

E. Social Support System

a) Conceptual Definition:

Social support is defined as, "support accessible to an individual, through social ties to other individuals, groups and the larger community" (Lin et al. 1979).

Cobb(1976) defines social support as "information leading the subject to believe that he is cared for and loved, esteemed and a member of a network of mutual obligations".

Kaplan et al. (1977) says, "support is the degree to which an individual's social needs (for affection, security, approval, belonging etc.) are met through social interaction". Thoits (1982) has expanded this model
to include social support (gratification of need) through socio-emotional and instrumental aid (behaviour) provided by the social support system (a subset of the social network).

b) Operational Definition:

Social support system has been treated as a network of significant people, family, friends and relatives who provide emotional support, practical assistance, financial assistance and advice and guidance to members of addict and non-addict families, the varying degree of which is reflected by the high or low scores of the respondents on five-point scale.

PILOT STUDY

After the parameters and the design of the study were finalized, the researcher conducted a pilot study in the field to know whether the study is feasible. It was found that the study was feasible and the various agencies and personnel operating in the field assured their full co-operation to the researcher for the successful conduct of the study. Further the pilot study helped researcher in defining the elements and limits of the universe and the sample to be selected for the study.

UNIVERSE

The universe of the study was delimited as all the drug addicts and their respective families distributed in the revenue districts of Ernakulam and Idukki of the state of Kerala.
SAMPLE

For the purpose of this study 3 samples were used. Sample I - consisting of 150 drug addicts selected from the geographic regions under study. The purpose of this sample was to gather information regarding demographic profile of drug addicts. Sample II - consisting of 100 addict families chosen in such a manner that at least one member of the family was a drug addict. Sample II is the main focus of the present study. Sample III - consisting of 105 families of non-drug addicts, where none of the members was a drug addict. This sample was taken in order to make a comparison of family functioning and social support system, between addict families and non-addict families.

SAMPLING

For the purpose of sampling the researcher resorted to the technique of Stratified Random Sampling. The researcher identified all the major centres of drug addiction and gave representation to each centre while selecting the sample of the study. Making use of the services of the informants in each region, the researcher prepared lists of drug addicts for all the major pockets of drug addiction. From each centre appropriate number of drug addicts and addict families were chosen using Random Sampling Method.

The member of non-addict families selected were from places adjacent to the families of drug addicts. This was done to control the possibilities of cultural and other variations between the two types of families.
SOURCES OF DATA

The data collected for this study were primary in nature, collected directly from the various categories of respondents. The demographic profile as well as the drug abusing patterns of the addicts were gathered from addicts themselves. Data regarding the Family Functioning and Social Support System of the addict and non-addict families were collected from the most significant member in the families. In most cases it was the head of the family. In other cases data was gathered from other responsible member of the family related through blood or marriage.

TOOLS OF DATA COLLECTION

To collect data from the drug addict respondent of the study, an interview schedule was prepared. The schedule contained the information regarding the demographic background of the respondents and items related to the causes and patterns of drug abuse.

To gather data regarding family functioning and social support system of addict and non-addict families, two scales were chosen. The first scale on Family Functioning was taken from the work of Bloom (1985). The second scale on Social Support System was prepared by the researcher himself based on Social Support Appraisals (SS-A) scale prepared by Alan Vaux, Jeffery Phillips, Lori Holly, Brian Thomson, Deirde Williams and Doreen Stewart of Southern Illinois University, U.S.A.

The reliability and validity of the tools used and the scoring technique followed are detailed below.
INTERVIEW SCHEDULE FOR DRUG ADDICTS

The questionnaire administered to drug addicts was conceived by the researcher himself. This questionnaire was constructed in such a way as to provide a background information on drug addicts. These questions help to gather personal information of the addicts.

1. Demographic variables:- Questions regarding age, place of stay, education, occupation, income, order of birth and marital status were put to the addicts in order to study the demography of drug addicts.

2. Stay during education:- Question regarding place of stay during education was asked. This helped understand better whether the habit was influenced by the place of stay during addicts’ studies.

3. Experience:- Under this, questions as to at what age the addict started taking drugs, with whom the addict experienced drug first and as to what made them experience drugs, were asked. This throws light on those who influenced the addict to take drugs and the reason for taking drugs.

4. Types of Drugs:- Question on the type of drug used was asked in order to understand which type of drug was most commonly used.

5. Harmful nature of drugs:- The questionnaire contains of a question regarding the awareness of the addicts of the harmful nature of drugs and as to how they became aware of this fact.
6. Attempt to give up drugs:- The last question in the questionnaire is about whether the addicts have tried to give up drugs and if so, the reasons behind the attempt. These questions provided a general understanding about drug addiction and drug addicts.

II. FAMILY FUNCTIONING SCALE

The family functioning scale used in this study is the Colorado Self-report Measure of Family Functioning (CSMFF). This scale was developed at the department of Psychology centre for Family Studies, University of Colorado- Boulder, Colorado. This scale has been used in a number of studies, often in conjunction with other instruments, as measures of family functioning. There is a growing use of the self-report measure as a research and assessment instrument in its own right.

The Family functioning scale has been used in studies conducted at Tata School of Social Sciences, Bombay and has been found to be applicable for Indian families.

Construction of Scales

In the construction of scales, family functioning were considered from three reference points. Attempt is to provide answers to questions regarding family functioning on the basis of the following three dimensions:

I. Relationship Dimension:

The relationship among family members and with those outside the family is highlighted through this dimension. Under the purview of relationship dimension are:
1. Cohesion- The extent to which family members help and support each others, spend time together and are concerned about and committed to the family.

2. Expressiveness- The extent to which family members are allowed and encouraged to express their opinions and their feelings to each other.

3. Conflict- The extent to which family members get angry, criticize and fight with each other.

4. Family sociability- The extent to which family members seek and get pleasure from social interaction with others.

5. Family idealization- The extent to which the family is prized and valued by its members.

6. Disengagement- The extent to which family members behave without considering others in the family and fail to communicate with each other.

II. System Maintenance Dimension-

This dimension views the running of the family, the control and the type of family style. Under its purview are:

7. Organization- The extent to which the family values orderliness, neatness and promptness.

8. External locus of control- The extent to which family fate is seen as a function of circumstances beyond the control of the family.
9. Democratic family style- The extent to which decision making is based upon full participation of all family members.

10. Laissez-faire family style- The extent to which rules governing family behaviour fail to exist or to be enforced.

11. Authoritarian family style- The extent to which parents are the locus of rule making and of punishment in the event of rule breaking.

12. Enmeshment- The extent to which family members insist on being together without allowing time for individual family members to lead their own lives.

III. Value Dimension-

This dimension deals with the orientation of the family, its activities and the values of the family.

13. Intellectual-cultural orientation- The extent to which the family values and expresses intellectual and culturally oriented behaviours.

14. Religious orientation- The extent to which the family values and expresses religious beliefs and behaviours.

15. Active-recreational orientation- The extent to which the family values and engages in physically active recreationally oriented behaviours.
Reliability and validity of scale

The principal psycho-metric analysis of the CSMFF comes from the administration of the instrument on two occasions to a sample of university of Colorado undergraduates. Students were asked to describe their families of origin as of the time they were in high school, that is, when they were about 15-17 years old. A total of 176 students completed the CSMFF; one month later 148 of these students completed the scale a second time.

Inter-item correlations and Cronbach Alphas were calculated from the original administration of the CSMFF. Test-retest reliabilities were calculated from the data obtained on the two test administrations from 148 students who completed the test twice. The scale scores appeared to be psycho-metrically sound highly reliable and stable over time.
### Psychometric Properties of Scales of the Family Functioning

<table>
<thead>
<tr>
<th>Scale</th>
<th>Avg. Inter item 1</th>
<th>Crobach Alpha</th>
<th>Test-Retest Reliability</th>
</tr>
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<tbody>
<tr>
<td><strong>Relationship Dimension</strong></td>
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<td></td>
</tr>
<tr>
<td>1. Cohesion</td>
<td>0.64</td>
<td>0.90</td>
<td>0.86</td>
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<tr>
<td>2. Expressiveness</td>
<td>0.49</td>
<td>0.83</td>
<td>0.85</td>
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<tr>
<td>3. Conflict</td>
<td>0.50</td>
<td>0.84</td>
<td>0.88</td>
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<tr>
<td>4. Family Sociability</td>
<td>0.45</td>
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<tr>
<td>5. Family Idealization</td>
<td>0.68</td>
<td>0.91</td>
<td>0.91</td>
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<tr>
<td>6. Disengagement</td>
<td>0.37</td>
<td>0.75</td>
<td>0.84</td>
</tr>
<tr>
<td><strong>System Maintenance Dimension</strong></td>
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</tr>
<tr>
<td>7. Organization</td>
<td>0.36</td>
<td>0.73</td>
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<td>8. External Locus of Control</td>
<td>0.26</td>
<td>0.63</td>
<td>0.78</td>
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<td>9. Democratic Family Style</td>
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<td>10. Permissive Family Style</td>
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<td>11. Authoritarian Family Style</td>
<td>0.32</td>
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<td>0.78</td>
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<td>12. Enmeshment</td>
<td>0.32</td>
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<tr>
<td><strong>Value Dimension</strong></td>
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<td>13. Intellectual–Cultural</td>
<td>0.29</td>
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<td>14. Religious Orientation</td>
<td>0.51</td>
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<td>0.93</td>
</tr>
<tr>
<td>15. Active–Recreational</td>
<td>0.38</td>
<td>0.74</td>
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</table>

**Scoring**

The Colorado Self-Report Measure of Family Functioning is divided into 15 scales. Each scale has 5 items. The respondents have to mark 'yes' or 'no' against each item under the 15 scales. Each scale is a variable of family functioning.
The scale items are either positively or negatively keyed depending upon the content of the statement. The negative statement are indicated in the questionnaire using (R) along side of each such statement. The scores obtained for each individual for each scale are totaled on the basis of the above key. The maximum score that can be obtained for each scale is five and the minimum is zero.

According to the score of each variable it can be said whether it is high or low. When a scale score is 4 or 5, then it is said to be high. When the scale score is 0 or 1, it is low and when it is 2 or 3, score is medium. For e.g. if scale score for cohesion is 1, it can be said that cohesion is low in the family. At the same time if the score obtained is 5, then cohesion is high in that particular family and so on.

SOCIAL SUPPORT QUESTIONNAIRE

Social Support Questionnaire was devised by the researcher based on Social Support Appraisals (SS-A) Scale by Alan vaux, Jeffery Phillips, Lori Holly, Brian Thomson, Deirde Williams and Doreen Stewart of Southern Illinois University.

For the purpose of this study, the researcher has defined the social support system as emanating from significant persons, family members, friends and relatives. The support received from the social support system is envisaged as 1. emotional support 2. practical assistance 3. financial assistance and 4. advice or guidance. Therefore based on the above mentioned four areas or types of support from the social support system (significant persons, family, friends and relatives) the questionnaire
contains thirteen items, thus the name Thirteen Item Social Support Questionnaire. As stated earlier, social support is provided by:

1. Significant persons: A person on whom the respondent relies for emotional support. Significant persons may be friends, relatives, family members, superiors or any such person with whom the respondent has a deep relationship.

2. Family: Father, mother and siblings, wife, children.

3. Friends: Persons whom the respondent knows well and is fond of, intimate associates or close acquaintances.

4. Relatives: Persons connected by blood or marriage, uncles, cousins etc.

Each of the above mentioned people can provide:

1. Emotional support: love, concern, affection, care, acceptance, recognition etc. that a person receives during his day to day life.

2. Practical assistance: help received in carrying out various activities like choosing career, academic pursuit, planning future etc.

3. Financial assistance: help received in the form of money.

4. Advice and guidance: opinion or counsel offered as worthy to be followed in a particular situation and direction received pertaining to any matter.

Each item or question has five answers (equal-interval) ranging from highly satisfied to highly dissatisfied. The questions are in the form
of whether the respondent is satisfied with the support received from the above mentioned categories of people in the above mentioned areas. For e.g. Are you satisfied with the emotional support you are receiving from the persons who are significant to you? The respondent has to give an answer from the following: highly satisfied ( ), satisfied ( ), not so satisfied ( ), dissatisfied ( ), highly dissatisfied ( ).

Of the various assistance received by a person (respondent), emotional support is the most important one. That is the reason why this area is divided into four, namely, support given by significant persons, family, friends and relatives. The rest of the variables are divided into three, family, friends and relatives. Emotional support, practical assistance, financial assistance and advice or guidance from family, friends and relatives (and emotional support from significant person) are studied taking each category of the above mentioned people. It serves to understand the variations of help received by the respondent. For e.g. A person may be highly satisfied by the emotional support received from friends and at the same time may be dissatisfied by the emotional support at home (from family). Such variance can be understood more deeply. Since the 13 items are considered as a single variable, it makes the questionnaire more realistic and contributes to the total consistency.

Reliability and Validity of Questionnaire

Reliability was established through Test-Retest method. For this, a group of 40 respondents were contacted and the questionnaire was administered to them. They were collected and incomplete and defective responses were deleted. 30 completed questionnaires were obtained and
these respondents were used again. A gap of two weeks was provided. This time gap provided was long enough to ensure that respondents could not recollect their original responses and short enough to prevent distortions of responses due to occurrence of any external or personal incidents. Karl Pearson’s Product Moment Correlation Coefficient (result obtained $r = 0.879$, df. 29, $p<.005$) indicated a high and significant degree of reliability of the tool. The Questionnaire was administered to 100 addict families and 105 non-addict families as the part of data collection. After data collection the total sample was correlated with the help of computer. It was found that all correlations are positive and significant. Consistency is high. Therefore reliability is established. Also all items of social support questionnaire are significantly correlated with one another. This shows internal consistency which is one of the criteria for reliability.

Score

The scoring pattern attributed to The Thirteen Item Social Support Questionnaire is as follows. Each of the five answers (mentioned earlier) given in the questionnaire under each item, has a score that ranges from 4 to 0 (highly satisfied - 4, satisfied - 3, not so satisfied - 2, dissatisfied - 1 highly dissatisfied - 0). On the basis of answers obtained, scores are given for each item. Then the scores of the 13 items are added up and this gives the total score of the variable, Social Support.

Scores range from 4 to 0. Zero was accepted as a score in order to give the highly negative answer (highly dissatisfied) a zero value, thus signifying the negative nature of the answer. The maximum value is given to the highly positive answer (highly satisfied). Highly satisfied
signifies the positive nature, therefore score of 4 is given. The maximum possible score for social support that can be obtained is 52 and the minimum is zero.

**TRANSLATION**

Before administering the scale and questionnaires to the respondents, the English versions of both these tools were translated into Malayalam for greater accessibility. For this purpose, a research minded Professor with post-graduate degree in Malayalam literature was called upon to translate and the translated version was double checked by three experts in this language.

The translated versions of scale and questionnaire were administered to 30 respondents. English-Malayalam correlation of the translation was calculated for Family Functioning Scale and Social Support Questionnaire.

The obtained results for Family Functioning Scale were:

a) Cohesion \( r = 0.72592 \)

b) Expressiveness \( r = 0.89003 \)

c) Conflict \( r = 0.86351 \)

d) Intellectual-cultural Orientation \( r = 0.62947 \)

e) Active-recreational Orientation \( r = 0.83796 \)

f) Religious emphasis \( r = 0.92841 \)
g) Organization $r = 0.89523$

h) Family Sociability $r = 0.85267$

i) External locus of control $r = 0.79140$

j) Family idealization $r = 0.88436$

k) Disengagement $r = 0.81170$

l) Democratic family style $r = 0.78038$

m) Laissez-faire family style $r = 0.57566$

n) Authoritarian family style $r = 0.69067$

o) Enmeshment $r = 0.87952$

Since all the results obtained have shown considerably higher $r$-values the translation was taken to be reliable and was accepted.

For the Social Support System scale the result obtained from the English-Malayalam translation is $r = 0.794$, and hence its reliability is tested and accepted.

**PRE-TEST**

A pre-test was conducted to test the applicability of the tools of data collection in the population under study. For this purpose a sub-sample of 15 drug addicts and 10 each of addict and non-addict families were identified from the sample of the study. Home visits as well as visits to de-addiction centres were made to carry out the pre-test.
Questionnaires were administered and clarifications were made on the spot. Pre-test established the clarity, adequacy and comprehensiveness of the tool.

COLLECTION OF DATA

Data was collected between May and November 1992. This study involves three groups. Hence data was collected from Addict, Addict families and Non-addict families by the researcher in person.

Data From Addicts

Data from addicts was collected by personally meeting them and explaining to them the purpose of the study. The physical presence of researcher at the time of filling the questionnaires by the respondents provided ample opportunities for clarifications that were sought by them.

Data From Family (addict and non-addict families)

Data was collected from addict and non-addict families by using home visits. Questionnaires were administered to the head of the family. In few case where the head of the family was not alive, the next responsible elder member of the family was approached for the purpose. The questionnaires were filled in the presence of the researcher so that clarifications could be made.

STATISTICAL ANALYSIS

In order to analyze the data collected, the following techniques were applied:

1. Cross tabulation
2. One Way ANOVA

3. Inter-correlations

4. Stepwise Regression Analysis.

I. Cross Tabulation

In order to see the association among two or more variables cross tabulation or break-down tables were used. Such tables make possible the grouping of cases that occur jointly in two or more categories. For e.g. tabulation number of addict families and non-addict families that are high, medium or low in cohesion. In this study, the comparison is made between addict and non-addict families with regards to responses obtained (high, medium, low) for the different variables.

II. One Way ANOVA

One Way ANOVA is the abbreviation of One Way Analysis of Variance. This is an inferential statistical procedure which has the same general purpose as the ‘t’ test: to compare groups in terms of the mean scores. The difference between the two procedures lies in the number of groups that can be compared. Whereas the ‘t’ test is designed for comparing two groups, a one-way ANOVA can be used to compare two or more groups. Both procedures yield identical results in a two-group comparison, but the One Way ANOVA is more versatile because it can also be used to compare three or more groups. The One Way ANOVA is, in effect, an extension of the ‘t’ test to a greater number of groups compared.
III. Inter-Correlation Matrix

Correlation Matrix is a more specialized form of correlation table. The correlation matrix usually presents inter correlations of a list of variables, that is, the matrix presents all the possible combinations of correlation between a certain number of variables.

In a correlation matrix, the numbers across the top of the table correspond to the variables listed at the left of the table. Each figure in the table represents the correlation between the variables corresponding to the row and column in which the figure is located.

Usually, there are no numbers in the lower-left part of a correlation matrix. If they are included, the numbers would be a mirror image of the numbers in the upper-right portion of the table.

IV. Stepwise Regression Analysis

Regression analysis is concerned with investigating the relationship between several variables in the presence of random error. In particular, the dependent variable is expressed as a linear combination of the independent variables. The unknown parameters in the model are estimated using observed values, of the dependent and independent variables. The researcher may wish to obtain a mathematical model to describe the relation between dependent and independent variables. Analysis of variance technique may be used to see how well a particular model fits a set of data and also to assist in determining the best set of independent factors to include in the regression model.
In many practical situations the researcher may have several independent factors some of which may be highly correlated with each other, and others may not be relevant. In such a situation one would like to reduce the number of independent factors, while at the same time explaining the variation in the dependent factor as much as possible, in terms of the remaining independent factors.

Interactions among the factors and constituent elements of variables in the study were probed and understood by using statistical techniques like correlation matrix and regression analysis. The hypotheses were tested and inferences were drawn at $P = 0.05$ throughout the study.