CHAPTER III
METHODOLOGY

I. PROBLEM.

II. OBJECTIVES.

III. HYPOTHESIS.

IV. RESEARCH DESIGN.
(a) sample
(b) tools
(c) pilot study
(d) final study
(e) classification and treatment of data.
CHAPTER 3

METODOLOGY

THE PROBLEM AND METHODS OF PRESENT INVESTIGATION

1) PROBLEM

A study of the impact of birth control methods on sexual adjustment problems - A cross cultural study.

2) OBJECTIVES

The objectives of the present study are

i) to determine the impact of birth control methods namely condoms, loop, pills, diaphragm, abortion, vasectomy, tubectomy and self control, on sexual adjustment problems of the users.

ii) to determine the influence of attitude to 'Sex' on sexual adjustment problem.

iii) to study the impact of culture on the relation between birth control methods and sexual adjustment problems.

iv) to study the influence of personal variables viz. age, education, occupation, health record, on sexual adjustment problem.

v) to determine the relationship between the method used viz pills, loop, condoms, diaphragm, vasectomy, tubectomy, abortion and self control, and the four stages of human sexual response cycle viz:– excitement, plateau, orgasm & resolution.

vi) to study the inter-relationship among method of birth control used, health problems associated with its use, and the influence exerted by these problems on sexual adjustment.

vii) to study the importance of sexual history on sexual adjustment problems.
viii) to determine the relationship between 'Attitude to sex' & sexual adjustment problems.

III HYPOTHESES

On the basis of earlier findings on the relationship between birth control methods and sexual adjustment problems as experienced by the users, the present study has been undertaken and designed in order to determine the impact of birth control methods on sexual adjustment problems. Since the problems cited by the users of different methods were specific, and pertained to one or the other area in the sexual response cycle, it was felt that a directional hypothesis would be more relevant to the context.

Accordingly, the following hypotheses have been framed:

1) There will be a difference in the kind and intensity of sexual adjustment problems faced by users of different birth control methods.

2) There will be a significant difference in the sexual desire (arousal) experienced by the users of different birth control methods.

3) There will be a significant difference in the maintenance of sexual arousal (plateau) of the users of different birth control methods.

4) There will be a significant difference in the experience of orgasm (orgasm) by the users of different birth control methods.

5) There will be a significant difference in the experience of sexual satisfaction (resolution) of the users of different birth control methods.
6) The extent of the sexual adjustment problems will vary significantly between users of the control methods belonging to the two cultures under study.

7) There will be a positive relationship between the attitude towards sex and the sexual adjustment problems of the users of the birth control methods.

8) The health problems affecting the users of the birth control methods will have a significant impact on the sexual adjustment problems.

9) Sexual adjustment problems are influenced by personal variables like age, sex, education and occupation.

10) The sexual history of the user of the birth control methods will have an impact on the sexual adjustment problems.

RESEARCH DESIGN:

1. The sample of this study consists of a total of 405 men and women using different methods of birth control. Being a cross cultural study, a part of a sample was collected in the United States of America and the rest in India. Of the total sample of 405 a sample of 197 was collected in the U.S.A. and the remaining 208 in India.

The sample from U.S.A. was collected from Washington D.C. and Canton in Ohio. The sample consists of 197 men & women between the ages of 20 - 40 both highly educated & moderately educated. Both working & non working women have been represented. In the total sample of 197, Men & women using condoms, I.U.D. Pills, Vasectomy / Tubectomy, abortion, diaphragm.
and self control as methods of birth control were represented. Some members of the sample have used more than one method.

The Indian sample of 208 was collected in and around Madras city. Both men and women between the ages of 20 - 40, educated & uneducated, employed & unemployed have been represented. Care was taken to ensure that people using different methods of Birth control have been represented. However some members of the sample have used more than one method.

2. TOOLS :- Due to the non-availability of a suitable and reliable technique to assess and evaluate the impact of the birth control methods, it was decided to develop a new scale and test its reliability and validity.

After discussions with eminent doctors in the field 'Sexual medicine' and through confidential contact sessions with both & users & non-users of the various methods and a review of related literature the investigator was able to ascertain the sexual adjustment problems of the users.

On the basis of such an extensive amount of information it was decided to formulate an inventory to study the sexual adjustment problems and 'Attitude to Sex' of the users. The inventory has 6 parts in all, directed at getting all vital information, pertaining to this area. However 4 areas, measure the problems in the 4 stages of sexual response cycle 'viz :- excitement, plateau, orgasm and resolution. There are 12 items each assessing the excitement & plateau stage, 11 items to assess the orgasm stage & 10 to measure the resolution stage, overall a total of 43 items are present in the inventory. Each statement
is to be answered 'Yes' or 'No' by the user in terms of its appropriateness. All items have been so stated that a positive answer indicates a problem & Negative answer indicates adjustment.

The Inventory has 6 parts: - Part A, B, C, D, E & F.

PART A-

Bio-data: Comprising of age, education, sex and Occupation.

Health record: is a record previous illness, accidents, operations & psychiatric visits.

Personal information: has items such as sexual history viz. at which 'sex' knowledge was gained first sexual experience age, age when the person learnt of contraception, & age when he first used it, frequency of sexual contact. The duration of the use of method was also noted here.

These above items were specifically included as the investigator found in the confidential contact sessions, that these factors would exert an influence on impact of methods used on sexual adjustment problems.

PART B-

Has four sub parts each of which has items that represent one of the four stages in sexual response cycle. Part 1 has 12 items related to problems with arousal, Part 2 has 12 items related to problems with intercourse, Part 3 has 11 items related to orgasm and Part 4 has 10 items related to sexual satisfaction. All items are phrased in such a way that a 'positive' answer indicates a 'problem' and a 'negative' answer indicates 'adjustment'. Thus Part 'B' has a total of 45 items, which are to be answered 'Yes' or 'No'.
PART C:-

Consists of 2 open ended questions, aimed at assessing the factors that a person values the most for a happy sexual relationship & those factors that the person feels makes sex life unhappy.

PART D:-

has 21 items that are often associated as the health problems arising out of the use of birth control methods. The user has to indicate by making a tick mark under 'Yes' or 'No' as to whether the stated health problem has been affecting them after the use of a method, and if the problem has affected their sex life.

PART E:-

has 4 open ended questions relating to the subjects assessment of the method used & his/her 'sex life'. Herein an attempt is made to get a feedback from the user of what they think of the methods impact on their sex life.

PART F:-

has 22 items that are based on the common beliefs & attitudes to 'Sex'. These items are to be rated on 5 point rating scale (Likerts method). The items have so selected as to have an equal number of positive & negative items.

In order to overcome the methodological problem of making a schedule appropriate for use in two different cultures, the three steps suggested by Berry (1969) have been followed in the development of the schedule.
1) The first step that Berry states is functional equivalence which he explains as the behaviour in question has developed in response to a problem shared by two or more social cultural groups, though the behaviour in one society may be superficially different from the behaviour in another society. All would accept that sexual adjustment problems following the use of birth control methods are present in both the cultures under study. However, the behaviour of rejection or acceptance of birth control methods as a consequence of the problems in the two cultures agrees with the prediction that the behaviour in question will appear superficially different from culture to the other.

2) The second step is that a comparative descriptive framework valid for both behavioural settings can be generated from an external description of problems in these two settings. The following explanation will justify the successful role of the second step in the present study. In the two cultures considered for the study, acceptance of rejection of a method as a behavioural consequence of the sexual problems associated with the use of a method are descriptively the same. For example, "Condoms reduce satisfaction" is a problem common to both the cultures.

3) The third step says only when both these conditions are met, may an attempt be made to construct and apply instruments to gauge behaviour in two different cultural settings. Since the problem studied in this investigation is such a nature that it satisfies the conditions stated by Berry (1969), the developed schedule to gauge the effects on sexual behaviour in the two cultures is justifiable.
The responses of the subjects for each item in the part 2 of the inventory were scored with the help of a scoring key developed by the investigator.

**PART B:** Sexual adjustment scale has 4 sub-divisions. Part 1 has 12 items measuring the sexual adjustment problems in the arousal stage. Part 2 has 12 items measuring the sexual adjustment problems in the plateau stage. Part 3 has 11 items measuring the sexual problems in the orgasm stage. Part 4 has 10 items measuring the problems in the resolution stage. These items were scored as follows:

Every item answered "yes" was given a score of "1" and every item answered "no" was given a score of "0". Therefore, the total score would range from a maximum possible score of "45" to a minimum of "0" for a person depending on the way he answered the items. If all the 45 items have been answered "yes" then a score of "45" would emerge, and when all the 45 items have been answered no a score of "0" would emerge.

Under part B of the inventory as mentioned above there are 4 sub-parts assessing the four stages of the sexual response cycle. Category 1 of the part B has 12 items. Every answer of "yes" fetches a score of 1, and an answer of "no" fetches a score of 0. The total score of a person in this section could range from 0, if all answers are in the negative to 12 if all answers are in the negative.

Category 2 of part B has 12 items assessing the problems in the plateau stage of the sexual response cycle. Every answer of "yes" fetches a score of 1, and an answer of "no" fetches a score of 0. The total score in this section could vary from 0-12.
of 0 would mean all answers are in the negative, and a score of 12 would mean all answers are positive.

The third part under part B has 11 items related to problems in the orgasm stage. Any answer of yes gets a score of 1, and an answer of no gets a score of 0. Thus the score of a person could range from 0-11, wherein 0 indicates that all answers are negative and 11 would indicate all answers are positive.

The fourth subdivision of part B has 10 items assessing the problems in the resolution stage. Any item answered yes in this section gets a score of 1, and an answer of no gets a score of 0. The total score a person could get would vary between 0 and 11. A score of 0 indicates that all answers are in the negative and a score of 10 indicates all answers are positive.

PART C: The part C of the inventory has 2 open-ended questions relating to items that the person considers conducive to happiness in sex life and those not conducive to happiness in sex life. The method of scoring herein was as follows:

All items considered by the sample as a whole, and separately by the Indian and American sample where rank ordered in terms of their frequencies and discussed.

PART D is a scale that measures the health problems associated with the use of birth control methods. There are 21 items herein. If a person indicates the presence of an item in the list then a score of 1 is given, otherwise a score of 0 is given. The total score a person would get herein would range between 0-21. A score of 0 indicates that all items have been answered in the negative and a score of 21 will indicate that all answers are in the positive direction.
PART E: has 4 open ended questions pertaining to the users self rating of a method in terms of its impact on his sex life. Since question number 1,3 and 4 are qualitative in nature i.e. giving reasons for a method being conducive or not for sex life this information was substituted to explain the reasons for the outcome of this study. The question number 2 has a 5-point rating scale ranging from highly satisfactory to highly dissatisfactory to rate ones sex life after the use of birth control methods. This information was taken as it was and the number of cases who had rated their sex life highly satisfactory, satisfactory, moderate, dissatisfactory and highly dissatisfactory were tabulated for the total sample, the Indian sample and the American sample separately and discussed.

PART F: is an attitude scale with a 5-point rating scale (Likert type), the ratings range from 'strongly agree' to 'strongly disagree'. There are 22 items in the scale, both positive and negative. The items were scored as follows: the positive items when answered 'Strongly Agree' got a score of 1, 'Agree' got 2, 'Neutral' got 3, 'Disagree' got 4 and 'Strongly Disagree' got 5. The negative items when answered 'strongly agree' got a score of 5, 'agree' got a score of 4, 'neutral' got 3, 'disagree' got 4 and 'strongly disagree' got 5. Thus, the maximum score that a person can get under this scale is 110 when one strongly disagreed with all the positive items and strongly agreed with all the negative items and the minimum 22 when one strongly agreed with all the positive items and strongly disagreed with all the negative items.
The following weightage was given for the attitude to sex and self rating of one's sex life after the use of birth control method in using them for determining the criterion validity of the adjustment and attitude scale. In the attitude to sex area, a score of 0 for a positive answer, 1 for a neutral answer and 2 for a negative answer was given. For a self rating of 'satisfactory' sex life after the use of birth control method a weightage of 0 was given and for 'dissatisfactory' sex life a weightage of 1. The personal variables were classified as shown in classification of data discussed below.

Pilot Study: - In order to determine the reliability of the constructed scale a pilot study was done. A sample of 30 people consisting of 7 males & 23 females who have used any 1 of the birth control method for a period of 6 months & more were collected. The sample was collected in and around Madras city.

All the subjects were contacted personally and a highly confidential contact was established, after which Inventory was administered by the Investigator & the data was collected through personal interview alone. During this process care was taken to note down carefully the reactions of the subjects, to the items & the way of presentation, and their attitudes to above.

The investigator is strongly convinced of the fact that data pertaining to In highly sensitive field like 'Sex' & birth control can be most successfully ascertained contact atmosphere. The investigator wishes at this point to bring to fore the value of interview technique.
The interview is perhaps the most unique method of obtaining information from people, especially in areas where people are reluctant to answer otherwise. Interviews have important qualities that objective tests and scales and observations do not possess. When used with a well-conceived inventory, it can obtain a great deal of information & is flexible and adaptable to individual situations. Because of the nature of the problem under study, the interview technique was considered apt to the situation.

The results obtained from the pilot study were subjected to 't-test' to determine the discriminatory value of the items in the inventory.

Test of discrimination:

In order to test the items for discrimination 't-test' was applied (Edwards 1962). The value of 't' is a measure of the extent to which a given statement differentiates between the high and low groups, on adjustment & attitude factors. For this purpose 25% of the subjects belonging to the 2 extreme groups, high and low were selected as 2 criterion groups. Each item was analysed and item discrimination or 't' values were calculated.

The scale initially had 56 items in the adjustment scale & 24 items in the attitude scale. The results of the 't' test revealed that items 10, 11, 12 & 16 of measuring problems in excitement 6, 7 & 14 assessing the problems in the plateau phase, items 10 & 11 of the orgasm scale & 9 & 10 of the satisfaction scale do not discriminate well between the highly adjusted & poorly adjusted groups, & hence were eliminated.
The characteristics of the classified sample have been presented in the next chapter and discussed. Since the number of items in each area of the sexual adjustment scale was not equal, the weighted adjustment score had to be derived, this was done by dividing the total score of each area, by the number of items in the area.

c) Classification & Statistical treatment of Data:
Classification of sample:- The data collected was first classified under various personal variables viz Age, Education, Occupation, Health record, Sexual history (age at which knowledge & experience of 'Sex' was obtained), contraceptive history (age at which knowledge & use of contraceptives) and frequency of sex. The sample from the U.S.A & India were classified separately for each of these personal variables.

The sample was further classified in terms of condom users, loop users, diaphragm users, pill users, sterilized group, vasectomy & tubectomy groups, aborted group, & the self control groups for finding out the respective sexual adjustment problems, health problems & sexual attitudes of each group.

So far as the sexual problems & the health problems are concerned they have been ranked in order of importance of problems for both the U.S.A Group & Indian group, to determine if the nature & intensity of problems overall, & for each method are similar or different in order of intensity of the problems in the 2 groups.
Further, an attempt was made to identify those who constitute the extreme groups in terms of health problems as well as attitude to sex and adjustment problems, in order to examine the methods used by them and their personal characteristics. Similarly, the distribution of those with high and low sexual adjustment problems, health problems and attitude to sex was done to find out what methods are used by these groups.

The classified data was subjected to the following statistical treatment.

1) Frequency distribution of all personal variable viz:- Age, education, etc., methods of Birth control, attitude to sex & the associated sex problems.

2) To see the affect of methods in combination with other independent variables on sex problems cross tabulation will be done.

3) To determine the extent of influence exerted by Birth control methods on sexual adjustment problem analysis of variance was done.

4) To determine the relationship between sexual adjustment problems and personal variables, correlation analysis was done.

The results so obtained are presented in chapter IV.

***************