METHOD AND PROCEDURE

The purpose of research is to discover the answer to the questions through application of scientific procedures. The growth of knowledge is closely linked to the methods and approaches used in research investigation. Scientific method alone can bring about the confidence in the validity of conclusion. The Scientific Method is marked according to Karl Pearson, by three features, careful and accurate classification of the facts, observation of their correlation sequence, discovery of scientific laws with the aid of creative imagination and self criticism.

Modern Researches have lead to unparallel intellectual development of human personality. The scientific method adapts itself well to the needs of the psychologists whose unique business is to study the causes of the human behavior, which at a basic level, involves the study of personality.

Field studies are scientific inquiries aimed at discovering the relations and interaction among sociological, psychological and educational variables in real structures. The investigator in a field study first looks at a social or institution situation and then studies the relation among attitudes, values, perception and behaviors of individuals and groups in the situation. (Kerlinger, 1964)

The present study is an humble attempt at identifying, the effect of psychological factors on family planning effectiveness, thus here investigator aims at predicting relations among variables. All efforts have been made to adopt a systematic approach and scientific methods so that results are more objective, reliable and meaningful. The method and procedure employed by the investigator have been presented under the following headings:-
4.1 NATURE OF THE STUDY

The present study has used ex-post factor experimental design. Kerlinger (1979) considers correlation research to be “ex-post-facto” research and formally defines it as follows: “ex-post-facto” research is systematic empirical inquiry in which the scientist does not have direct control of independent variables because they are inherently not manipulable. An inference about relations among variables is made without direct intervention from compliment variation of independent and dependent variables.

Thus an ex-post-facto scientific study systematically discovers relations and interactions among variables in real life situations.

There are two important features of ex-post facto research.

1) A field study is an ex-post-facto study and an ex-post study is one where the investigator tries to trace an effect that has already been produced to its probable causes.

2) In any field study no independent variables are manipulated and thus it differs form a field experiment here the independent variables are manipulated for determining relations among variables. In the field study the investigator depends upon the existing conditions as a field situation as well as upon the selection of the subjects for determining the relationship among the variables.

4.2 THE SAMPLE

The sample chosen for the present study is divided into two groups. The entire sample consists of young and the old couples belonging to four religions of India as sub groups. The present piece of research has used purposive sampling for selection of the subjects.
Purposive sampling is characterized by the use of judgment and a deliberate effort to obtain representative samples by including presumably typical areas of groups.

The total sample consists of 400 equally divided into two groups as follows.

(i) 100 men and 100 women of marital age 0-5 years (younger group)

(ii) 100 married men and 100 married women of marital age 6-10 years (older group)

Sample figure

N = 400

- **Group A**: 200 Couples (0-5) years of
  - 100 Male
    - 50 (H)
    - 20 (M)
    - 20 (S)
    - 10 (C)
  - 100 Female

- **Group B**: 200 Couples (6-10) years of
  - 100 Male
    - 50 (H)
    - 20 (M)
    - 20 (S)
    - 10 (C)
  - 100 Female

H – Hindu

M – Muslim

S – Sikh

C – Christian
These couples were divided into two independent groups of Men/Women and further divided into four sub groups comprising of four major religions of the country i.e. Hindu, Muslims, Sikh and Christians. This was purposely done to get proper sample of these dominant religions of Indian population.

4.3 CONTROLS

In correlation research variables are not directly controlled by the investigator. According to Ferguson (1976), in such studies the investigator excludes certain variables from the group of casual influences affecting the results observed. Although no direct casual argument linking classification variables and the dependent variables can be advanced the influence of certain variables on the result observed can be executed.

An important characteristic of a good research design is to minimize the influence or effect of extraneous variables. The term control is used when we design the study minimizing the effect of extraneous independent variables. The process involves the precise definition, determination, restriction and isolation of the conditions of research situations so that validity of the results of the research is maximized.

In the present study the following controls are exercised.

1. The study was carried out on 400 married men and women residents of Dehradun and adjoining rural areas.
2. The sample has been selected by going door to door personally by the investigator herself in a very informal and relaxed manner.

3. Data collected on four main religious groups of the country i.e. Hindu, Muslim, Sikh and Christians.

4. Age ranges of the married couples were within group (A) 0-5 years of marriage and group (B) 6 to 10 year’s marriage.

5. Instructions and sequences of the tests were kept strictly the same for the entire subject.

6. No time limit was given, but persuasion was done to fill forms as quickly as possible.

4.4 TOOLS

The selection of the tools depends on a number of considerations such as the objectives of the study, the amount of time at the disposal of the researcher, the availability of the tool, it’s scoring, interpretation and the like above all, the tool should posses the characteristics of reliability, validity, objectivity, feasibility and ethical standards to a satisfying degree.(Fox 1969). With due consideration to all the above the following tests were selected:-

1. Sixteen personality factor questionnaire (Form E) by R.B. Cattle (1967-68) Hindi and English adoption by S.D. Kapoor (1978)
2. Structured interview scale by Mrs. Priyanka Trivedi (2002) and Dr. Saraswati Singh, Ex. HOD, Psychology M.K.P (P.G.) college Dehradun.

3. Family planning attitude questionnaire scale Dr. Saraswati Singh and Mrs. Priyanka Trivedi (2002).

1. **THE SIXTEEN PERSONALITY FACTOR (FORM E)**

The sixteen personality factor questionnaire constructed by R.B. Cattle (1967-68), English and Hind adoption by S.D. Kapoor, (1978)

The sixteen-personality factor questionnaire is a multi dimensional set of sixteen questionnaire scales, arranged in omnibus form. It is designed to make available in a practicable testing time, information about on individuals standing on the majority of primary personality factors. The test was designed for the use with individuals aged sixteen and above. The test can be scored by hand or by the machine and various types of answer sheets are available for this season.

Comprehensive converge of personality tests upon, measurement of sixteen functionally independent and psychologically meaningful dimensions isolated and replicated in more then sixty years of the factor analytic research on normal and clinical group. The personality factors measured by the sixteen personality factors are not just unique to the test but instead rest within the context of a general theory of personality. The experience with the sixteen-personality factor in clinical, educational and the industrial psychology shows that the use of the sixteen traits gives actual prediction superior to those form single scales measures of form arbitrary scales not based on the functional unities.
INSTRUCTION FOR THE ADMINISTRATION

Since five forms of Sixteen P.F are now available, evaluation of the personality characteristics can be enhanced by the selection of the most appropriate form(s) for a particular circumstance. In this present study the researcher has used form E.

Form E represents a special adaptation of the test for the use with persons of limited educational and cultural background. The personality factor measured by form E are the same those included in forms A, B, C and D; with fully literate persons those who have achieved successful high school, graduation or more. Form A and form B are the most appropriate choice with the persons of average educational and cultural background. Form C and form D are appropriate only with the person whose reading skill falls below the sixth grade level does form E represent the ideal choice.

Simple and clear instructions are printed for the examinee on the coverage of the test booklet. It is always good to establish good rapport with the examinee. A separate answer sheet is provided to fill the answer of their choice. Name of the subject should be written on the space above and they were asked to read the instructions on the cover of the booklet and work on given example. The test is un timed but it is good to remind the examinee that they should not ponder over a particular question for very long and try to give immediate answer and move along.
2. STRUCTURED INTERVIEW SCHEDULE (2002)

The structured interview schedule questionnaire was constructed by Dr. Saraswati Singh and Priyanka Joshi. This S.I.S schedule is designed to obtain demographic data, adoption, awareness and knowledge of family planning.

Initial part of the interview schedule comprises of general questions like name, age, number of children and family members, year of marriage, education, occupation and socio-economic status of the family to see their effect on family planning effectiveness and adoption. After making good rapport with the subject and building confidence in them they were asked to fill the rest of the questions to obtain information regarding the family health, progeny status, and awareness on the family planning and attitude towards family planning.

5. FAMILY PLANNING ATTITUDE SCALE - 2002

This family planning questionnaire scale was constructed by Dr. Saraswati Singh. It is designed to study the subject’s attitude towards family planning and population control. This scale also investigates the psycho-social aspects of family planning effectiveness.

The FPAS-2002 comprises of 35 statements. The subject was asked to read these statements carefully and rate according to his/her opinion in the questionnaire. The scale is five point rating scale with 0 to 4 ratings. Zero stands for complete disagreement and four stands for complete agreement.
4.5 DATA COLLECTION

The total number of tests to be administered were three and the study the tools were personally administered by the investigator in one fixed serial and in one session. The door to door data collection was widely used. Tests were administered on belonging to two groups of married couples individually. The subjects (husband/wife) filled their questionnaires separately and face to face situation with experimenter. The subjects were also asked to fill the particulars about themselves. Some of the data collection has been done from the Government Hospital Dehradun, with due permission of C.M.S of the hospital. Special care was taken to build up confidence in couples for filling the forms and full assurance was given of the confidentiality. Researcher has tried to make good rapport with the subjects so that they could be more communicative and free while filling the questionnaires.

4.6 SCORING

Scoring of data was undertaken manually with the help of scoring keys Statistical analysis of data, mean, SD, test of significance correlation has been analyzed with the help of computer using the software “statistical package of social science (SPSS).”

4.7 STATISTICAL TOOLS

The statistical tools used for the data analysis in present study are:

**MEAN**

Mean has been used as a measure of central tendency.
STANDARD DEVIATION (S.D.)

Standard deviation has been used as a measure of variability, since it is the appropriate measure of variability to be used with the mean.

't' TEST

't'-test using pooled variance estimates has been used to determine significance when the sample variance do not differ significantly; 't'-test using separate variance estimates has been used when two sample variance differ significantly.

CORRELATION CO-EFFICIENT (r)

The correlation co-efficient has been used as an index of the interdependence, the varying together or the simultaneous increase or decrease of two sets of numerical variables. The Pearson Product Movement Correlation Co-efficient has been employed.