CHAPTER-4
Methodology

It involves the following:

1. **Aims**
2. **Objectives**
3. **Uses**
4. **Sample**
5. **Tools**
6. **Procedure**

1. **Aims**:

   (i) The aim is to find out the various personality factors associated with Hypertension in BSF Jawans.

   (ii) To study the personality factors which are prominent in hypertensive subjects and not so in other persons or less prominent.

   (iii) To study the Hypertensive personality for determining the Psychological factors for better understanding the correlates of Hypertension.

2. **Objectives**:

   (i) To assess the personality factors in hypertensives.

   (ii) To assess the personality factors in non-hypertensives persons for e.g. normal and healthy person and sick person other than hypertensive.

   (iii) Comparative study of the personality factors in the hypertensives and non hypertensives.

   (iv) To assess the prevalence of personality factors in case of hypertensive subjects.

3. **Uses**:

   (i) This can be used for the better selection of recruits in BSF who are having non hypertensive personality factors and will be less
prone to develop hypertension while working in the most strenuous and hazardous environment.

(ii) For the selection of special mission where each one required to work in most dangerous and hazardous task for prolong period.

(iii) For the study of Academic interest. For understanding the personality pattern of 'Bordermen'.

4. **Sample** :

The sample include 150 Jawans of Border Security Force posted at Border areas, Age ranging from 20-40 years: 50 each from Hypertensive, 50 Sick (Other than hypertension) and 50 healthy (having no disease).

The sample distribution is given below:

<table>
<thead>
<tr>
<th>Subject</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Hypertensive</td>
<td>50</td>
</tr>
<tr>
<td>Sick</td>
<td>50</td>
</tr>
<tr>
<td>Healthy</td>
<td>50</td>
</tr>
</tbody>
</table>

5. **Tools** :

Here the test used is the 'Jodhpur Multi Phasic Personality Inventory (JMPl).

**JMPl** : This JMPl is constructed and standardised by Joshi and Malik (1983). It consist of three sub scales. It measures personality dimension. It has three parts.

(a) **Sub Scales** :

(i) Validity Scale

(ii) Clinical Scale and

(iii) Content Scale

(i) **Validity Scale** :

The co-efficient of stability for the three validity and AS
Scales (Awareness Scale) are found to vary from 0.7312 to 0.8015 when the re-testing interval is of two weeks. When the re-testing period is of 12 weeks the range of coefficients is found to vary from 0.6934 to 0.8139. All the Co-efficients of stability are of sufficient high level.

(ii) **Clinical Scale**:

To ascertain intradisease discrimination power a hypothesis is formulated that the average scores on the corresponding scale obtained by the patients of a given disorder will be significantly higher than the average scores obtained by the same patient group on the remaining scale of that area. This hypothesis can be illustrated by taking an example from any part of the JMPI. For instance patients belonging to any one their main area of difficulty when compared to their mean scores on the remaining six types of psychoneurotic problems.

(iii) **Content Scale**:

The internal consistency and discrimination power are calculated for each item of each scale. The internal consistency is computed by product moment correlation coefficients between "Item Score total minus item score" for each item and their significance is ascertained. The biserial, point biserial and tetrachoric Co-efficients are not applicable in the present situation as there is no dichotomy in the response category for similar reasons, Phi Co-efficient is not applicable as far as discrimination power of the items is concerned. 't' test this technique has been used to ascertain discrimination power of the items.

The revised form of JMPI is prepared having 283 items in psychoneuroses, 336 items in psychoses and 250 items in psychosomatic areas. These include 15, 35 and 20 items of L.F. and K respectively in each part. These validity scale items are not subjected to the process of item analysis as it has already been done by Joshi and Singh (1972).

(b) **Part of the JMPI**:

JMPI is a multiphasic psychodiagnostic inventory in Hindi. It assesses the mental stress by administration of its all the three parts.
These parts are as follows:–

(i) Part-I: Psychoneurosis Scale

(ii) Part-II: Psychosis Scale and

(iii) Part-III: Psychosomatic Scale

(i) **Part-I: Psychoneurosis Scale:**

In psychoneurotic problems the person has some insight about his distressing problems. But the persons having these problems are however able to maintain reality orientation and strenuous adjustment. This scale has two hundred and eighty three items and claims to assess:

(A) Anxiety: Show inability to concentrate, difficulty in making decisions, extreme, vague feeling of apprehension, excessive sweating and sustained muscle tension. Anxiety reactions reflect the individual’s acute feelings of inadequacy in the face of inner and outer stresses perceived as threatening.

(B) Phobia: It is a persistent fear of some object or situation which in reality, imposes no actual danger to the person or in which danger is magnified out of all proportions. It is mostly subconscious avoidance reaction.

(C) Obsessive-Compulsive Reaction: Here the person feels compelled to think or act about something that he doesn’t want to think about or to carry out some action against his will. He has masked control over environment and himself and may be deliberate, thoughtful, sober and punctual as well.

(D) Conversion Reaction: Here person has passive aggressive personality feel inadequate to cope independently. They has the tendency to seek sympathy and are highly suggestive. Here the reaction pattern is (a) desire to escape from some unpleasant situation, (b) a fleeting wish to be sick in order to avoid the situation, (c) under additional or continued stress the appearance of the
symptoms of some physical ailment.

(E) Hysteriadissociate: The dissociative type of hysteria is a way of avoiding stress while gratifying needs in a manner permitting the person to deny personal responsibility for his unacceptable behaviour. Thus they defend ego against material that is perceived dangerous.

(F) Neurotic Depression: It reveals presence of guilt which is related to superego. Low stress tolerance, rigid conscience development and proneness to guilty feeling seem to be the dynamic factors. Some times there is a hostility towards the loved one. However this hostility is typically repressed because of its unethical or undesirable implications. It may manifest itself in hostile, guilt arousing fantasies and ultimately precipitate feelings of serious depression while some how managing day to day adjustment.

(G) Neurasthenia: It is characterised by chronic mental and physical fatigue and by various pains and aches having no actual organic reason for them. Mental concentration is difficult and fatigue. He lacks vigour require to carry activities through to completion. Usually the person with such complaints, have prolonged frustration, discouragement, hopelessness, self centered attitude, poorly repressed hostility, emotional conflicts centreing around hostility towards one’s mate and guilt over the abandonment of cherished goals.

(ii) Part-II: Psychoses Scales:

It has three hundred thirty six items and claims to assess:

(A) Schizophrenia (Simple): Here there is insidious depletion of thoughts, effects and behaviour, loss of ego boundaries, insidious loss of desire, interests, ambition and initiative, disturbed interpersonal relationship and generalised inhibition. Here the psychological disorganisation is less severe than
(B) Hebephrenia: It represents a more severe disintegration of the personality, emotional distortion and blunting typically manifested in inappropriate laughter and silliness, peculiar mannerism of bizarre and often obscene behaviour. Speech becomes incoherent and there may be a considerable baby talk, childish giggling and a repetitiously use of similar sounding words. Auditory hallucinations are common. Delusions are usually of a sexual, religious, hypochondriacal or persecutor nature and are changeable and fantastic.

(C) Schizophrenia Paranoid: Here the domination of absurd, illogical and changeable delusions, frequently accompanied by vivid hallucinations with a resulting impairment of critical judgement and unpredictable behaviour. In chronic cases there is usually less disorganisation of behaviour than in other types of schizophrenia and less extreme withdrawal from social interaction.

(D) Paranoia: Here the individual feels that he is being singled out and taken advantage of mistreated, plotted against, stolen from, spied upon, ignored or otherwise mistreated by his enemies. Ideas of persecution predominate and in many paranoias develop delusion of grandeur.

(E) Manic Depression: Here the complaints of unusually warm than friendly, inconsiderate of others and disregards their need and comfort, impulsive alongwith destructibility of impatience and intolerance when wish is not immediately gratified in extreme state of mania. In depressive state they are sober, quite, withdrawn and cheerless. These two phases may occur one after the other or with an intervening phase of apparently normal behaviour or in any other irregular sequence.

(F) Psychotic Depression: They are severely depressed and manifest evidence of gross misinterpretation of reality
including at times delusions and hallucinations. The affective complaints is that of sadness, low spirits, blueness, dullness, failure to enjoy life, loss of interest or zest and a gloomy outlook. Sleep disturbance, early morning awakening, characteristically the patient awaken at 2 to 4 am and cannot return to sleep. In severe cases delusions may occur. The delusions typically involve ideas of sin, guilt, poverty or unworthiness.

(iii) **Part-III : Psychosomatic Scale**:

Here the person has a long exposure to psychologically distressing conditions. The cumulative effects of such an exposure is manifested in the form of organic problems. The persons do have proper adjustment with their surroundings but are under psychological distress beyond tolerance. They posses some degree of insight also. This scale has 250 items.

(A) **Peptic Ulcer** : It is recognised that parasitic dependence desire, worry, repressed anger, conflict between dependence v/s independence, shyness, feeling of deprivation what is due to an individual and want to get what is promised, introversion, anxiety and irritability may stimulate the flow of stomach acids beyond the requirement of digestion which ultimately cause peptic ulcer.

(B) **Ulcerative Colitis** : The Characteristics which may lead to ulcerative colitis are submissiveness, sensitivity, polite by confirming or remaining aloof, limited capacity to establish warm, genuine friendship and obsessive compulsive nature i.e. craving for orderly, neat, punctual, conscientious, stubborn and rigid standards of behaviour. It leads to problems of organic form due to the severe psychological stress sustain by the person.

(C) **Hypertension** : Persons having hypertension usually have problems of dependency, relationship in which they display extreme degree of ambivalence. More often their core
psychological conflicts are observed centre around pregenital libidinal issues and difficulty in neutralising aggression. They feel endangered, threatened with harm and have to be ready for anything to be on ground.

(D) Bronchial Asthma : They have hysterical personality, paranoid features, repressed hostility, desire for self punishment, sexual temptations, competitive feeling, narcissistic desires and feeling of unloved.

(E) Anorexia Nervosa : Persons with such type of problems are rigid in behaviour, compulsive type and hypersensitive. The apathy for food, unless proper care is administered by caretakers, may even culminate in to a state of starvation.

6. Procedure :

This involves the procedure in which JMPI administered individually to each of the subjects and scoring was done of test responses. Procedure for administration and scoring is explained as follows :-

(i) Administration :

(ii) Scoring :

(i) Administration :

It can be administered individually as well as in groups of 15-20 persons of 16 years or older age belonging to either sex at a time. These subjects should be capable of reading and comprehending Hindi language of at least junior high school level. Before starting administration the subjects should be asked to furnish the information regarding their age, sex, educational qualification, marital status, number of family members and monthly income etc. as be considered relevant for the study undertaken in the space provided on the answer sheet.

At the time of administration some people may ask whether they should ask the items as they apply to them now or as they did before in special circumstances. Although general instructions are given on the front page of test booklet are sufficient to guide the subject.
There to respond on a five point scale. The distinction of five points are explained and left to the respondent to assimilate in his own choice of categorization. Advice and clarification can the individual items should be avoided. The subject has to use his own judgement. Answer sheet should be examined before the subject leaves his place to see if an unusually large number of items have been left unanswered, though no such responses are at all expected. Probably not applicable to a person have to be marked under 'never' category as such there is no scope for leaving any items unresponded.

Every effort should be made to convince the testee that the responses are important and will be treated confidential. To encourage them to respond honestly they may be further informed that their responses will be asked. Some code number be assigned to the respondent. It can also be declared at the very beginning and immediately after distributing the answer sheet that the subject may not give his name to facilitate maintenance of complete privacy. This is likely to yield more uncensored responses.

(ii) Scoring :

In order to avoid subjective errors in scoring, keys of stencil type are provided for each scale of the JMPl for answer affirmative response (where 'always' indicate the response of problems) score weightage of 4,3,2,1, and 0 (Zero) is to be given for "Always", "Most of the time", "Generally", "Seldom" and "Never" respectively. The score weightages are in reverse direction for the items where response in the category "Never" indicates the presence of a problem (such items are marked on the scoring keys). For these items "Always", "Most of the time", "Generally", "Seldom" and "Never" shall carry score weightage of 0,1,2,3 and 4 respectively. The total score for a particular scale is the arithmetic sum of the scores on all the items with proper weightage.

After obtaining the raw score from various three groups were statistically analysed for the result and prediction.