Research Methodology
RESEARCH METHODOLOGY

Sample: It includes 120 hypertensive patients and 120 normotensive subjects age ranging from 30-50 years. Hypertensive subjects as well as normotensive subjects consisted of equal number of male and female and as such each group included 60 male and 60 female.

IDENTIFICATION OF SAMPLE

1. Hypertensive patients: Essential Hypertensive patients are finally included as sample after completing the diagnosis. The hypertensive patients are identified on the following criteria:

(I) Headache: Hypertensive patients generally develop headache, but it is reported to have nonpersistent.

(II) Dizziness: Some hypertensive patients complain about feeling of dizziness.

(III) Blood Pressure: Hypertensive patients develop high blood pressure. Often patients do not even know they suffer from high blood pressure as hypertension does not produce symptoms in the early stages, when symptoms do occur it is rather late.

To establish that a person has hypertension at least three readings of B. P. should be high in normal resting position.

These hypertensive patients age ranging from 30-50 years are included in the sample of hypertensives. As the Investigator himself being a physician is attending on a number of hypertensive patients, only diagnosed as hypertenives are included in the present study.
2. Normotensive: Those persons who do not have any complains and diagnosed as having no hypertension, are included as sample of normotensive subjects age ranging from 30 to 50 years.

These two groups of subjects are matched on age, sex, education and other relevant variables. The sample distribution is presented in the Table no.1.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Hypertensive</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Normotentive</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>120</td>
</tr>
</tbody>
</table>

Total -N= 240

*Table no. 1 showing Sample Distribution*

The purposive sampling method is adopted in the present investigation as because the hypertensive patients belong to special popoulation.

**RESEARCH DESIGN**

The present investigation aims to study the motives among hypertensive patients. The following independent variables are studied:

**Independent Variables:**

- (I) Hypertension
  - Hypertensive patients
  - Normotensive subjects

- (II) Sex
  - Male
  - Female
Thus $2 \times 2$ factorial design is adopted in present study.

**Measures Adopted**

1. **Semi-structured Interview Schedule**: It includes 10 items relating to demographic and some other relating to study.

   Early few items are demographic like name, age, sex, education, other items are related to hypertensive like characteristics of hypertensive, family history and diet habit. These items are finally helped in indentifying the sample.

2. **AAPAS Motive Test by Afzal kureshi**

   AAPAS Motive test is a projective technique design for the study of certain important motives and needs.

   The motives proposed to be studied by the present test are Achievement, Affiliation, Power, Aggression and Security the first letters of which form its title.

   Studies on Achievement, Affiliation & Power motives (Mc Clelland and others, 1949a, 1949b, 1953, 1958a, 1958b, 1961; Atkinson and others 1954, Atkinson 1958, 1964; Heyns and others 1958; Verroff 1958) in fact aroused the scholars in the study of similar other motives such as Aggression and Security. A general line of scoring presented by Mc Clelland (1953) with reference to Achievement motive helped subsequent investigators in preparing scoring schemes for Affiliation and Power motives (Heyns and others, 1958; Veroff, 1958) and the present investigation (Afzal Kureshi) in applying it on Aggression and Security motives which were hitherto untouched.

   Although scoring schemes for Achievement, Affiliation and Power motives were there but a set of pictures for these motives, appropriate for Indian subjects, did not exists. The present test is, therefore meant provide a tool readily available for the study of Achievement. Affiliation, Power, Aggression and Security motives.

   The theory underlying the AAPAS Motive Test is similar to Murray's
That is the test material consisting of certain pictures is presented to the subjects with a view that while writing fictional stories about them the subjects would tend to reveal some of their basic needs, drives & strivings. By identifying themselves with one or more characters in the pictures the subjects would projects or externalize their private fantasies and strictly personal data in the form of written stories. The true purpose of the test is not known to the subjects & hence they take it as tests of imagination, thus unwittingly providing a glimpse in the their personality.

In this AAPAS Test, test material mainly borrowed from Symonds, adapted to Indian situation. A pair of two pictures each meant for all the five motives form the AAPAS motive test.

It was desired there should be pair of two pictures specially more meaningful for one motive than the rest of the motives and so on, while each picture might evoke any of the five motives in lesser magnitude. Thus ten pictures consisting the AAPAS motive test are those selected in the basis of their inherent quality to elicit themes relating to Achievement, Affiliation, Power, Aggression & Security motives. These ten pictures may be seperated in to two sets, each sets consisting of one picture for Achievement, Affiliation, Power, Aggression & Security.

**ADMINISTRATION OF THE TEST**

The AAPAS Motive Test is administered more profitably in small groups ranging, per convenience, from one to three subjects at a time. The subjects are to write down their stories on sheets of papers provided for this purpose. There is time limit for writing a story on a picture. It would require about forty minutes from the subjects for ten pictures. In addition, a few minutes are also needed for giving instructions to the subjects and an interval of five minutes after the completion of fifth story. Before the main test session a picture will be used to creat a warming up effect. Thus entire test session take about an hour’s time.
Each picture is first shown for about twenty seconds then is removed. Immediately after that subjects are to write a story on the theme of the picture just seen. In writing stories the subject are asked to keep in view the following questions:
1. What is happening? Who are the persons?
2. What has led up to the situation? That is, what has happened in the past?
3. What is being thought? What is wanted? By whom?
4. What will happen? What will be done?

It is assumed that answers to these questions with regard to each picture would result in meaningful stories. In order to reminded the subjects of the above questions while they are busy in writing the stories, the question may be put on the board before them.

**SCORING SCHEME FOR ACHIEVEMENT MOTIVE:**

**Achievement Imagery (Ach Im):**

In order to be scored for Achievement Motive, the story in the first instance, should show evidence of Achievement imagery. Reference to any achievement goal has to do with achievement imagery which involves at least any of the following three in respect of the character engaged is achievement activity.

1. Competition with some standard of excellence.
2. Unique accomplishment
3. Long term involvement.

**Need (N):** Some one in the story may appear to have a state a desire to reach a achievement goal. Such expressions as 'He want to finish the essay' are examples of need achievement.

**Instrumental activity : (I)**

Overt or mental activity by one or more characters is the story indicating.
that some thing is being done about attaining a achievement goal is considered instrumental activity and is scored 1 when the outcome of the instrumental activity is successful.

**Block world & Block person (Bw, Bp) :**

The environmental obstacles (Bw) are all those which obstruct the goal directed activity emerging from the achievement situation itself or from world at large.

Personal factors hindering the goal directed activity is called Block person (Bp) eg lack of confidence, inability to make decisions, past failure & so on.

**Nurturant Press (Nup) :-** Any assistance or encouragement given to the character in order to push him to the goal are scored as Nurturant Press.

**Goal Anticipation Positive (Ga +) and Goal Anticipation Negative (Ga -) :** A character being hopeful of attaining an achievement is scoreable for (Ga +) where as his fears of failure, inability to attain an achievement goal is scored for Ga -.

**Goal Positive (G +) and Goal Negative (G -) :** He enjoys painting. He proud of his attainment one examples of goal positive. A character is confused over his failure, “He regrets not to attain” are the examples of goal negative.

**Achivement Thema :** (Ach Th) It is scored when achievement imagery is elaborated in such a manner that is become the central plot of the story.

Thus, the stories are analysed for achievement motive is carefully combed for the above eleven categories. Every category being assigned a score of 1, a story may have a score of 11 as a maximum.

**SCORING SCHEME FOR AFFILIATION MOTIVE**

The only difference between this system and that for other motives is that here only the positive categories are scored while the negative categories like Bp,
Ga –, and G – have been left out from being scored. Maximum score in story scored for affiliation motive is seven (7).

**SCORING SCHEME FOR POWER MOTIVE:**

**Power Imagery :** (Pow Im) Power Imagery involves the feelings, thoughts, actions of some of the characters desiring to control the means of influencing others. Inference of this concern may be drawn on the basis of the following criteria.

1. Some one strongly feels that his point of view should be recognised or his ideas should be accepted.
2. Doing some thing conducive to the maintainance or attainment of the means of influencing others.
3. A superior person having control over means of influencing subordinate person.

**Need (N):**

An explicit statement as to have desire, to controll over the means of influencing other person e.g. he wants to, need to convince the person, are examples of need for power.

**Instrumental activity :**

Actually doing some thing to control the means e.g. influencing another person. e.g. teaching something, putting point, making some one interested in some thing.

**Block world (Bw) and Black person (Bp):**

If a power related story shows that one of the characters is disrupted by the external unfavourable factors and is facing difficulties in attaining or maintaining control over the means of influencing others, the story is scored for Bw.

When these obstacles appear to come from within the character himself in the form of his weakness or deficiency preventing him from establishing the control of the means of influencing others, the story is scored for Bp.
**Positive Goal Anticipation (Ga +)** Negative Goal Anticipation (Ga –): A character hopeful of controlling the means of influencing others and of his success to achieve a goal like winning the election, scored for Ga +, when a character concerned over the anticipated failure in reaching the goal power is scored for Ga-, eg. ‘He is worried about his chance of winning the election.’

**Goad Positive (G +) and Goal Negative (G –):** Positive affective state or G + is evidenced in the character’s expression of happiness with having convinced some one of something, and influenced another person’s behaviour.

Affective states associated with not reaching the goal of controlling the means of influencing others are scored G –.

**Power Thema (Pow Th):** When the story is so told that its central plot is related with some one’s concern for controlling the means of influencing others. That is the story contains a plot predominantly power related.

Highest score for a story will be 10.

**SCORING SCHEME FOR AGGRESSION MOTIVE:**

A Story material comprising the character’s aggression motive directed to the external world or to himself. Also world may appear hostile to the person. The evidence of the existence of aggression motive should be looked into the behaviour of both the person and the world on the ground that the world’s aggression towards the person is also related.

These are following factors included for scoring on the aggression motives:

1. Aggression Imagery (Agg Im)
2. Need (N)
3. Instrumental Activity (I)
4. Block World (Bw)
5. Block Person (Bp)
6. Goal Anticipation Positive (Ga+)

7. Goal Positive (G+)

8. Aggression Thema (Agg Th)

The maximum score for aggression is 8.

**SCORING SCHEME FOR SECURITY MOTIVE:**

A Story to be scored for security motive should show at least of the character's desire to attain an atmosphere in which he would feel contented, satisfied and free from feelings of insecurity, or else, he may already be enjoying such environment.

Security motives may be scored by having an intensive perusal of the story focusing on the following criteria:

1. Expression of the feelings of satisfaction and contentment; being at home in the world.

2. Expression of the feelings of safety, strength, courage & optimism.

3. Expression of the feelings of dissatisfaction, inadequacy to resist the pressure of life.

The maximum score on security motives is 10. These are following factors on which scores are assigned:

1. Security Imagery (secur Im)

2. Need (N)

3. Instrumental activity (I)

4. Block world (Bw)

5. Block person (Bp)

6. Goal Anticipation Positive (Ga+)

7. Goal Anticipation Negative (Ga-)

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8. Goal Positive (G +)
9. Goal Negative (G -)
10. Security Thema (Secur Thema)

**RELIABILITY**

The correlation values obtained by comparing the two halves of the set of pictures for the five motives by means of the pairs of twenty subjects were: Achievement: .85 Affiliation: .81 Power: .98 Aggression: .88 & Security: .92.

The inter scorer reliability co-efficients of correlation between the two scorings were: Achievement: .820, Affiliation: .779 Power: .850, Aggression: .990 & Security: .784.

**VALIDITY**

The Validity of scores for achievement, Affiliation & Power motives has been reported to be high by the authors (Mc Clelland 1953, Heyns and others, 1958. Verroff, 1958) of schemes of scoring for these motives.

The validity of scores for Aggression & Security motives was also found to be high enough. The r value between Ascendenee-submission (Allport, 1939) and Aggression motive scores was .55 and between Security Insecurity (Maslow, 1952) and Security Motive scores was .63 for 119 subjects.

**3. PRESUMPTIVE STRESSFUL LIFE EVENTS SCALE (P. S. L. E SCALE) by Dr. Gurmeet Singh**

In 1936 Hans selye articulated his concept of stress as the ‘general adaptation syndrome’ a set of nonspecific physiological reactions to various noxious environmental agents. This formulation popularised the concept of stress in the scientific vocabulary of Medicine. The researches conducted in wolff’s laboratory incorporating the concepts of Pavlov, Freud, Cannon & Skinner confirmed that
stressful life events play an important causative role in the natural history of many diseases. Subsequent work has confirmed the importance of life events in medical and psychiatric disorders and has led to development of several stressful life event questionnaires which provide a basis for quantification life events eg in terms of life change units (LCU) in the Social Readjustment Rating Scale as a measure of stress (Holmes and Rahe, 1967)

**INTERPRETATION**

(I). *Total number of life events*: There is dissatisfaction with existing life event schedules because of questionable assumptions made in the scoring of events and summation of scores. Rahe states “For clean estimate of environmental stress vice (in place of) subjective stress, it is hard to improve up on a simple counting of recent life changes”. Some workers (Paykel et al, 1969, 1975) have used alternate methods which donot involve the use 8 rated scores (a) comparison of total number of events and mean number of events (b) comparison of frequency of occurrence of each event (c) classification of events in the categories.

Norms as obtained from present study for adult Indian population of experienced stressful life events for life time are 10.34 ± 5.40 and for one year it is 1.90 ± 2.62. This suggests that in our population the average individual experiences an average of ten common stressful events in a life time without suffering any obvious adverse physical or psychological disturbance.

(II). *Frequency of occurrence of various life events*: Some events are more commonly experienced by general population eg. death of close family member, getting engaged or married, pregnancy of wife, etc, as compared to death of spouse, divorce, wife begins or stops works and outstanding personal achievement which are experienced by fewer number of subjects in population. Another observation made in this regard is that stress experienced on commonly occurring
events is not very large, this suggests that although a single event may produce less stress but their frequent recurrence over short period of time may have cumulative effect in producing illness equivalent to that produced by an uncommon quantitatively more stressful event.

(III).Total presumptive stress score: Individuals vary widely in their subjective response to a similar stressful event depending on number of factors including the individual's personality, social support system (Cassel, 1975) and importance of relation with person or institution. To take an extreme example, death of spouse may be absolutely shattering for one person with a close relationship, while for another with serious conflict death of spouse may be actually a relief from stress. However in all human experiences an attempt has to be made to quantify the items in terms of mean stress experience by a majority in that population. Present investigator assigned weights to each individual item varying from 0 to 100 and then ranked them according to the perceived stressfulness of each event. The scale as given is ranked according to decrease in severity of perceived stress, however, practice it is recommended that scale be administered in reverse/order i.e. starting from the lowest stressful event to the most stressful event-death of spouse coming last, as investigator have found this to be have acceptable and easy in administration and is less threatening to the subjects.

The PSLE scale includes 51 items starting from the lowest stressful events to the most stressful event. The weighted scores are assigned to different items at the time of scoring.

DATA COLLECTION

First the informations are collected through interview schedule from each subjects. Then AAPAS cards (10 cards) are presented to each subjects serially from 1 card to 10 card after establishing a rapport with the subjects. They were asked
to write a story on each card. The another test i.e PSLE are handed over to the subjects and they were requested to respond according to instruction written, in case the subjects do not follow, the investigator himself made them clear.

Thus the data are collected from all subjects including hypertensives as well as normotensive individually.

STATISTICAL ANALYSIS

The responses obtained on these two tests viz. AAPAS motive test and the PSLE scale are scored according to the prescribed manual. The obtained data are parametric as well as nonparametric and therfore, statistical analysis are made assuming equal as well as unequal variances. The Mean SD and t-test are worked out among different groups. The discriminant factorial analysis (ANCOVA) and related analysis are also done to make the better inferences. These statistical analysis are made on different groups of hypertensive and normotensive.