CHAPTER III

METHODOLOGY

To verify hypothesis, the next sequential step is methodology. To conduct the study, the systematic and scientific method is to be used to find out the results. To solve the problem, following steps have been taken to conduct the study.

3.1 SAMPLE :-

A random sample is one in which each element in the universe has an equal opportunity of being selected.” Sampling is taking any portion of a population or universe as representative of that population or universe. It is rather taking a portion of population and considering it to be the representative.

Random sampling is the method of drawing a portion (sample) of a population or a universe so that all possible samples of fixed size “n” have the same probability of being selected. (Feller, 1971)

Definitions indicate that a sample taken for the study may be selected from any place of the given area, therefore, for the above mentioned study, random sampling method has been selected.

For present study, 400 married women were selected as subjects. Out of these, 100 women subjects (Ave. age 38.54 yrs.) employed in govt. or private sector and have a daily routine of physical exercise; 100 women subjects (Ave. age 38.37 yrs.) employed in govt. or private sector but are not doing any physical exercise regularly; 100 housewives (Ave. age 40.18 yrs.) with a daily routine of physical exercise and 100 housewives (Ave.
age 37.43 yrs.) with no regular physical exercise, were selected as sample for the present study. The sample was collected from Chhattisgarh state by random sampling method.

3.2 RESEARCH DESIGN

The scientific quality of the research findings depends on research design. It is also known as a blue print of research engineer which tells him what to do and what not to do while chalking out the steps to be taken in sequential manner for collecting, analysing the empirical data for the sake of verification of his research hypothesis.

Comparative research, simply put, is the act of comparing two or more things with a view to discovering something about one or all of the things being compared. This technique often utilizes multiple disciplines in one study. When it comes to method, the majority agreement is that there is no methodology peculiar to comparative research. (Przeworski, A. et al., 1970)

Additionally, to find out the effect of two variables upon one dependent variable, factorial group design was adopted.

3.3 NATURE OF VARIABLES:

(A) Body Image

Body image refers to a person’s feelings of the aesthetics and sexual attractiveness of their own body. According to Cash and Pruzinsky (2004), Body image is a complex construct constituting the following configuration: emotional experience related to body and its functions, as well as mental concept (perception and thoughts) regarding physical appearance. Body image also been defined as the cognitions and affect regarding body, body importance, dieting behavior, and perceptual body
image (Bainfield & McCabe, 2002). This definition indicates that body image is a combination of how an individual pictures or perceives their physical self and how they feel about their body.

In the present study body image has been taken as dependent variable.

(B) Physical Activity:

Physical activity is defined as any bodily movement produced by skeletal muscles that requires energy expenditure. In the present study women who are doing regular physical activities such as cycling, walking, exercise had been considered as physically active women. Also, in the present study routine physical activities of women at home and at their respective workplace was not considered as physical activity. In the present study physical activity has been taken as independent variable.

(C) Personality Dimensions:

(a) Psychoticism:

Psychoticism as personality dimension evolved by Eysenck (1972) represents the fourth dimension of his personality theory and considered to be an independent of the other three dimensions. Eysenck & Eysenck (1968), Cattell & Scheier (1961) and many others have opined that this dimension is not confined to abnormals, it encompasses normal individuals too. According to Eysenck, this dimension seems to be related to odd, cruel, anti-social and suspicious behaviour and lack of feeling even towards the close ones. This dimension too forms a continuum ranging from normal to psychotic ends.
(b) Extraversion :-

The Eysenckian extraversion is a well-established personality dimension which refers to extraversion-introversion, the two extreme poles of the continuum, briefly known as extraversion only. Although the terms extraversion-introversion were originally used by Jung and later on by many other personality psychologists, an attempt has been made to deal with extraversion, as has been viewed by Eysenck. Commenting on the nature of extraversion and introversion as used in his personality theory, Eysenck (1968) says “Terms such as extraversion and introversion are used in our discussion in a sense strictly derived from empirical studies ... we merely wish to point out that our own use of these terms must stand and fall by empirical confirmation and owes more to the work of factor analysis and early experimentalists than to Jung and his followers.”

The beauty of Eysenckian dimension of extraversion is that, he not only attempted to offer a physiological base to his dimension but also specified its behavioural indicators. According to Eysenck (1968) the genotype of extraversion refers to position on the dimensions that are programmed by genes and that variations in extraversion-introversion reflect individual differences in the functioning of particular activation system-a portion in the brain (Eysenck, 1973), and the best prediction of E (extraversion) scores at the moment is possible in adulthood through paper-pencil devices owing to its phenotypic expression. The phenotype specification of extraversion is that the typical extrovert is sociable, likes parties, has many friends, needs to have people to talk to, and does not like reading or studying by himself. He craves for excitement, takes
chances, often sticks his neck out, acts on the spur of the moment and generally an impulsive individual. He is fond of practical jokes, always has a ready answer and generally likes chances. He is carefree, easy going, optimistic and likes to ‘laugh and be marry’. He prefers to keep moving and doing things. He tends to be aggressive and loses his temper quickly; altogether his feelings are not kept under tight control and he is not always a reliable person. On the other hand, ‘the typical introvert’ is a quiet, retiring sort of person, introspective, fond of books rather than people. He is reserved and distant except to intimate friends. He tends to plan ahead, looks before he leaps and distrusts the impulse of moment. He does not like excitement, takes matter of everyday life with proper seriousness and likes a well ordered mode of life. He keeps his feelings under control, seldom behaves in an aggressive manner and does not loose his temper easily. He is reliable, somewhat pessimistic and places great value on ethical standards (London and Exner, 1978). In the light of these phenotypic expressions one should not think that every person is either an extrovert or an introvert. The term E is used in Eysenck’s theory to mean that there is a continuum from one extreme to the other with majority of people (ambiverts) nearer the centre rather than the extreme.

(c) Neuroticism :-

It is another dimension of personality as put forth by Eysenck. Neuroticism is also known as emotionality or stability-instability, and is the close associate of anxiety. While reflecting upon the genotypic level of neuroticism (N), Eysenck (1973) stated that differences between people in emotionality or neuroticism are mediated by inherited differences in the liability and excitedly of the autonomous nervous system. He postulated
that people are constitutionally predisposed to react less stringly, less lastingly and less quickly with their autonomic nervous system to strong, painful or sudden stimuli impinging upon the sense organs. These reactions integrated as they are with on going activities are experienced by organism as emotions and reacted to accordingly (Eysenck, 1965). Eysenck and Ruchman (1965) pointed out that neuroticism is a trait which forms a continuum from normal to neurotic and while reflecting upon those phenotypic expressions in behaviour of this dimension they mentioned that at one end of it there are people whose emotions are liable, strong and easily aroused; they are moody, touchy, anxious, restless and so forth characterizing the unstable or neurotic type; and at the other extreme there are people whose emotions are stable, less easily aroused; who are calm; even tempered and reliable, representing the normal persons typical of stable type. It means that points near the minus end of the continuum represent poorly integrated, emotionally unstable, neurotic personalities; and the points near the plus end of the hypothetical continuum represent well integrated, emotionally stable, non-neurotic personalities (Burjorjee & Helode, 1973).

In the present study, while analysing the data it was felt that for understanding of the research, it is necessary to use personality dimensions as dependent as well as independent variable i.e. while comparing personality of working and non-working working as well as exercises and non-exercisers it has acted as dependent variable while in interaction oriented hypotheses it has acted as independent variable.
(D) Working Women:

A woman who is gainfully employed is termed as working women. In the present study, married women subjects who are employed in various govt., semi government and private institutions / organizations were termed as working women.

(E) Non-Working Women:

Housewife is a term used to describe a married female who is not employed outside of the home. Merriam Webster describes a housewife as a married woman who is in charge of her household. In the present study married women who take the responsibility of their respective homes were termed as non-working women.

(E) Regular Physical Activity:

In the present study physical activities such as cycling, walking, exercise, yoga was considered to be a physical activity and physical activities at work place and household work did not come under the umbrella of physical activity or exercise.

3.4 TOOLS :-

To conduct the study following tools were used :-

(A) Body Image Questionnaire :-

To assess body image of the selected subjects, Modified Version of Self Assessment Questionnaire for Body Image, prepared by Agashe and Karkare (2008) was used. It consist of 25 multiple choice questions which assess the body image of a person. This test is highly valid and reliable. The scoring pattern of this questionnaire is “Higher the score on BIQ, lower is the body image of a person.”
(B) Eysenck’s Psychoticism, Extraversion and Neuroticism (PEN) Inventory :-

For the purpose of tapping extraversion, neuroticism and psychoticism dimensions of Eysenck’s personality theory, the PEN inventory developed by Eysenck (1968, 1969) has been preferred. This inventory measures Psychoticism (P), Extraversion (E) and Neuroticism (N) along with an element of social desirability known as faking through its lie subscale by a questionnaire method. The original inventory is in English and it is basically meant for adult population inclusive of college and university students. However, the sample to be tested in the present study being not well versed with English, it was decided to go for a Hindi version of Eysenck’s PEN inventory prepared by Menon et al (1978). This Hindi PEN Inventory comprises of in all 78 items of which 20 items are for tapping P, 20 items for measuring E, 20 items for tapping N and 18 items are for measuring tendency to tell a lie (L). So as the reliability and validity of this Hindi PEN inventory are concerned it can be said that, the inventory is highly reliable and valid. The test-retest reliability coefficients have been found as 0.630, 0.888, 0.687 and 0.337 for P, E, N and L scales respectively. The authors of this Hindi PEN also attempted to estimate its correlation with the English PEN and found the resulted coefficients fairly high.

(D) Assessment of Participation in Physical Activity :-

In the present study assessment of physical activity was based on regular participation in activities such as cycling, walking, yoga,
light/moderate physical exercise and, jogging etc. While routine physical activities of women at home and at their respective workplace did not constitute as participation in regular physical activity.

3.5 PROCEDURE:
- All the selected subjects were informed of the fact that data collected for this study will be used exclusively for research work.
- First of all, body image questionnaire was administered to each selected subject in a group or as per their availability in a peaceful corner.
- After 15 minutes of rest, Eysenck’s Hindi version of PEN inventory was administered to selected subjects.
- The scoring of responses on body image questionnaire and PEN inventories was carried out according to author’s manual of the respective inventories.
- After scoring, the data was tabulated according to their groups.
- When the data were tabulated according to pre-defined groups, statistical procedures as mentioned in caption "Design" was used to verify the framed hypotheses mentioned in chapter 1.