CHAPTER-4: METHODOLOGY

4.1 Title of the Research Problem: “Self-Concept, Anxiety and Depression of Vitiligo Cases and People’s Attitude Towards them”

4.2 Objectives:

The proposed research, as entitled, aims to verify the following objectives:

1) To compare the effect of vitiligo group and normal group on Self concept, anxiety and depression.

2) To determine the effect of chronicity of the disease (vitiligo) on self concept, anxiety and depression.

3) To compare the effect of gender, locality and age on self concept, anxiety and depression.

4) To determine the interaction effect of disease status (vitiligo and normal), gender, locality and age on self concept, anxiety and depression.

5) To assess the attitude of people (i.e. normal group) towards people suffering from vitiligo.

6) To examine the effect of Counselling on a selected group of vitiligo patients on the two mental disposition variables state anxiety and depression.
4.3 Design:

The study has two phases-

**Phase 1- Assessment Phase** and

**Phase 2- Intervention (Counselling)**

**Phase-1:** In the present study attempt has been made to compare the vitiligo patients and normal individuals with respect to the variables self concept, state anxiety, trait anxiety and depression. This was the first phase of the study.

**Phase-2:** From the findings of phase-1, intervention programmes related to the two mental disposition variables State anxiety and Depression were launched at two levels- Pre-Counselling phase and Post-Counselling phase. 30 people from the vitiligo group were selected by Random Sampling Technique.

4.4 Variables of the study:

a. **Dependent Variables**- Self Concept, State Anxiety, Trait Anxiety, Depression and Attitude.

b. **Independent Variables**- Vitiligo patients (cases), Normal individuals, Location (Rural and Urban), Gender (Male and Female), Age (18-40 yrs.), Chronicity of the disease (2-5yrs.).

c. **Control Variables**- Marital status (Married and Unmarried), Educational Qualification, Socio-Economic Status, Religion and Language.
4.4 (A) Description of the Dependent Variables: SELF CONCEPT:

Allport (1961) has described self concept as “something” which we are immediately aware of”. We think of it as the warm, central private region of our life. As such it plays a crucial part in our consciousness. Thus it is some kind of core in our being. According to Hurlock (1974) the concept of self has three major components: the perceptual, the conceptual and the attitudinal. The components of self-concept include physical, psychological and social attributes, which can get influenced by the individual’s attitudes, habits, beliefs and ideas. The “perceptual” component is similar to the physical self-component which includes the image of one’s appearance, attractiveness and sex-appropriateness of body and the importance of different parts of body. The conceptual component is similar to psychological self-concept which relates to the origin of the individual, his abilities and disabilities, his social adjustment and traits of personality. The attitudinal component refers to attitudes of person about his present status and future prospects, his feelings about his worthiness, his attitudes of self-esteem, pride and shame. It includes his beliefs, convictions and values also.

Self-concept is largely determined by the relationship an individual has with others and what they believe the reactions of others to them are.

Self Concept can be categorized into:

1) Physical Self-Image – It is related to a person’s physical appearance, attractiveness, importance of different body
parts to behaviour and to the prestige it gives to the person in the eyes of others.

2) **Psychological Self-Image** - It is based on thoughts, feelings and emotions; qualities and abilities that affect adjustment to life and self confidence.

**ANXIETY:**

Freud defined Anxiety as "something felt or an unpleasant effect of state or condition".

Lewis defined Anxiety as "an emotional state with the subjectively experienced quality of fears or closely related emotion".

Anxiety is a psychological and physiological state characterized by somatic, emotional, cognitive and behavioural components. The root meaning of the word anxiety is "to vex or trouble". In the absence or presence of psychological stress, anxiety can create feelings of worry, fear, uneasiness and dread. Anxiety is considered to be a normal reaction to a stressor. It may help a person to deal with a difficult situation by prompting one to cope with it. When anxiety becomes excessive, it may fall under the classification of an Anxiety disorder. The intensity and reasoning behind anxiety determines whether it is considered a normal or abnormal reaction.

Physical effects of anxiety include heart palpitations, muscle weakness, tension, fatigue, nausea and chest pain, shortness of breath, stomach aches and headaches. The body prepares to deal with a threat: blood pressure and heart rate are increased, sweating is increased, blood flow to the major muscle groups is increased and immune and digestive functions are inhibited (the fight or flight response). External signs of anxiety may include pale skin, sweating,
trembling and pupillary dilation. Someone who has anxiety might also experience it as a sense of dread or panic. Although panic attacks are not experienced by every person who has anxiety, they are a common symptom.

Panic attacks usually come without warning and although the fear is generally irrational, the perception of danger is very real. A person experiencing a panic attack will often feel as if he or she is about to die or pass out.

Anxiety does not only consist of physical effects; there are many emotional ones as well. They include "feelings of apprehension or dread, trouble concentrating, feeling tense or jumpy, anticipating the worst, irritability, restlessness, watching and waiting for signs and occurrences of danger, feeling like "your mind has gone blank" as well as nightmares and bad dreams, obsessions about sensations, deja-vu, a trapped in your mind feeling and feeling like everything is scary.

Behaviour can be affected in the form of withdrawal from situations where unpleasant effects of anxiety have been experienced in the past. Other symptoms may be changes in sleeping patterns, nail biting and increased motor tension such as foot tapping.

Empirical evidence of different types of anxiety was derived from the factor analytic concepts; which were studied by Catell and Schirer. These investigations identified 2 distinct Anxiety factors- STATE ANXIETY and TRAIT ANXIETY.

**State Anxiety** : Speilberger (1976) defined it as a reaction consisting of unpleasant consciously perceived feelings of tension
and apprehension, with associated activation or arousal of autonomic nervous system.

**Trait Anxiety**: It refers to relatively stable individual differences in anxiety proneness, i.e. to differentiate among people in disposition or tendency to perceive a wide range of situation as threatening and to respond to these situations with differential elevations in State Anxiety (Speilberger, 1976).

**DEPRESSION**:  
It is an emotional state of despondency characterized by negative emotional attitudes, a change in the motivation sphere, cognitive impression and passive behaviour. A person in a state of depression experiences painful emotions: deep sadness (melancholy), anxiety, despair. So Depression is feelings of sadness, helplessness, hopelessness and worthlessness.

It is a state of low mood and aversion to activity that can affect a person's thoughts, behaviour, feelings and physical well-being. It may include feelings of sadness, anxiety, emptiness, guilt and irritability.

Depressed people may lose interest in activities that once were pleasurable or suffer from cognitive impairments (difficulty in concentrating, remembering details, making decisions, etc.). They may contemplate or attempt suicide. Their weight may change dramatically. Insomnia, excessive sleeping, fatigue, loss of energy, aches, pains or digestive problems that are resistant to treatment may be present.
ATTITUDE:

Attitude can be defined as the way a person thinks and thereby the choices he/she makes accordingly.

**Attitude = Idea and Outlook + Action.**

It is a settled way of thinking or feeling, typically reflected in a person's behavior. It may be further defined as a predisposition or a tendency to respond positively or negatively towards a certain idea, object, person or situation. It influences an individual's choice of action and responses to challenges, incentives and rewards.

Major components of attitude are:

1) Affective (emotions or feelings)
2) Cognitive (belief or opinions held consciously)
3) Conative (inclination for action)
4) Evaluative (positive or negative response to stimuli).

It is an expression of favour / disfavour toward a person, place, thing or event. According to G. Allport- “it is the most distinctive and indispensable concept in contemporary social psychology”.

4.5 Tools Used-

Tools used as original or adopted-

1) **General Information Schedule** prepared for collecting personal and familial information of both the vitiligo and normal subjects.

2) **Self-Concept Scale** constructed and standardized by Rastogi, M.R. Adapted Bengali version by Nath, D.C. and Banerjee, S. for assessing Self-Concept of the subjects.


5) **Attitude Scale**- Developed by Nath, D.C. and Ghosh, R. (2010) for examining the attitude of normal subjects towards the vitiligo cases.

4.5 **(A) Description of the Tools Used**-

1) **General Information Schedule**- It was prepared by the researcher including the following information- Name, Sex, Age, Address, Locality, Qualification, Chronicity and Marital status.

2) **Self Concept Scale** – Adapted Bengali version of the Self Concept Scale (Nath, D.C. , Sengupta, S. and Banerjee, S.) was originally developed by Dr. (Miss) Mukta Rani Rastogi, University of Lucknow, and has been used in the present study. This Scale consists of 51 statements to be rated on a five-point scale. The range of the total score is 51-255. This test has its implications in measuring the Self concept (i.e. the self worth) of the individual on whom the test is being administered and higher score indicates higher level of self concept.

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3) **Self Evaluation State-Trait Anxiety Inventory**: Bengali version of State-Trait (Bhattacharya, N.K. and Dutta, A., 1997) Anxiety Inventory originally developed by Spielberger, Gorsuch and Lushane was used in the present study. This inventory consists of 40 items of which 20 items are meant for measuring the State Anxiety and the remaining 20 for measuring Trait Anxiety. This inventory is useful for the assessment of anxiety-loading of the individual as well as for the distinction of two aspects of anxiety namely State Anxiety and Trait Anxiety. Several items on the State Trait Anxiety Inventory were reversed coded (Items 1, 2, 5, 8, 11, 15, 16, 19, and 20). The range of scores is 20-80, higher score indicating more anxiety.

4) **Krug and Laughlin’s Depression Scale**: Bengali version (Gangopadhyaya, 1994) of the Krug and Laughlin’s Depression Scale (Krug and Laughlin, 1994) was used in the present study. It is a 40 item self-assessment inventory and has no time limit to complete it. This scale can easily be used for assessing the depression level of the individual concerned. The more positive sounding questions are arranged in a fairly even manner throughout the test. The test format is made suitable for easy reading and understanding of individuals and can be easily scored. Depression level can be calculated for each individual by summing up the scores received in all the items of the scale.

5) **Attitude Scale**: by Nath, D.C. and Ghosh, R., (2010) was employed for the present investigation. The scale has 21
items to be rated on a five-point scale and higher the score more is the attitude towards negative. This scale assists in determining the attitude people have towards a particular social issue or subject.

4. 6: Major Research Assumptions (Hypotheses)

1) There would be an effect of Chronicity of Disease (Vitiligo) on a) Self Concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

2) There would be an effect of Vitiligo Group and Normal Individuals (Disease status) on a) Self Concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

3) There would be an effect of Gender (Male vs Female) on a) Self Concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

4) There would be an effect of Locality (Rural vs Urban) on a) Self concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

5) There would be an effect of Age (18-25 yrs, 26-33 yrs and 34-40 yrs) on a) Self Concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

6) There would be an interaction effect of Vitiligo Cases and Normal Individuals (Disease status) and Gender on a) Self Concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

7) There would be an interaction effect of Vitiligo Cases and Normal Individuals (Disease status) and Locality on a) Self
concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

8) There would be an interaction effect of Vitiligo Cases and Normal Individuals (Disease status) and Age on a) Self Concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

9) There would be an interaction effect of Gender and Locality on a) Self Concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

10) There would be an interaction effect of Gender and Age on a) Self Concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

11) There would be an interaction effect of Age and Locality on a) Self Concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

12) There would be an interaction effect of Vitiligo Cases and Normal Individuals (Disease status), Gender and Locality on a) Self Concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

13) There would be an interaction effect of Vitiligo Cases and Normal Individuals (Disease status), Gender and Age on a) Self Concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

14) There would be an interaction effect of Vitiligo Cases and Normal Individuals (Disease status), Locality and Age on a)
Self Concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

15) There would be an interaction effect of Gender, Locality and Age on a) Self Concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

16) There would be an interaction effect of Vitiligo Cases and Normal Individuals (Disease status), Gender, Locality and Age on a) Self Concept, b) State Anxiety, c) Trait Anxiety and d) Depression.

17) There will be significant difference in Attitude of Normal Rural People and Normal Urban People towards the Vitiligo Cases.

18) There is a significant difference of Pre-Counselling and Post-Counselling of Vitiligo cases on the two mental disposition variables-State Anxiety and Depression.

4.7: Selection of the Sample

Experimental group:

For the present study 200 (100 from rural and 100 from urban) vitiligo subjects of both sexes- male and female within the age range of 18-40 years, suffering for 2-5 yrs and residing in rural and urban areas in and around Kolkata were selected from different hospitals in Kolkata by purposive sampling technique.
Control group:

200 (100 from rural and 100 from urban) normal subjects were matched with the vitiligo subjects in terms of location, sex, age, economic status, religion and language.

Sampling Technique:

Selection of both vitiligo and normal subjects were made through purposive sampling technique. Source of data for the vitiligo group was National Medical College and Hospital and R.G.Kar Medical College and Hospital, Kolkata and for the normal group was from the general population in Kolkata and suburbs.

Sample size= 200 (Vitiligo cases) and 200 (Normal individuals).

4.8: Collection of Data, Scoring and Analysis

For Phase 1 Data were collected from the subjects through individual administration of tools at a convenient time, scoring being done according to scoring keys of the respective tools. Data were analysed through appropriate statistical calculations (Descriptive statistics- Mean and SD, Inferential Statistics- t-test, F-ratio and Correlation-Product Moment Coefficient of Correlation) to verify the hypothesis stated.

4.9: Intervention through Counselling

For Phase 2 the following procedure was adopted:

From the findings of Phase-1, intervention programmes related to the two mental disposition variables state anxiety and depression were launched at two levels: Pre-Counselling Phase and Post-Counselling Phase.
30 people from the vitiligo group were selected by random sampling technique. 10 counselling sessions (each for 1 hour duration) (N=30) related to general awareness and having a clear picture of the disease devoid of its myth and wrong beliefs, supportive therapy, motivational enhancement and ways to increase their confidence level was conducted for each of the selected sample within a span of 6 months followed by determination of their state anxiety and depression levels and to assess the change in these variables if any.

Efficacy of counselling if any was determined through suitable statistical analysis (t-test) of pre and post counseling (state anxiety and depression) scores of the selected vitiligo patients.