CHAPTER III

METHODOLOGY
The focal aim of the present research was to study the level of Psychological Distress, Depression and Anxiety in a sample of sixty youth from the age categories of 18 to 35 years; to evaluate the impact of the application of the Counseling Intervention Model designed by Arthur E. Jongsmma, L. Mark Peterson and William P. Mclnnis on the Indian Youth suffering from Psychological distress, Depression and Anxiety and lastly to study the effect of Counseling Intervention Model on the enhancement of Positive Lifestyle.

Keeping the objectives in mind, the blueprint or the research design that elucidates the steps of the study in hand was duly prepared. To realize the focal objectives, the psychologically distressed population was segmented into the experimental and control group respectively. These groups were then subjected to the four psychological tests namely Beck’s Depression Inventory (BDI), Sinha’s Comprehensive Anxiety test (SCIT), Kessler Psychological Distress scale (K10) and Simple Lifestyle indicator Questionnaire (SLIQ).

Beck’s depression inventory was used in the assessment of the level of depression amongst the experimental and control group. Sinha’s Comprehensive Anxiety test (SCIT) was used in the assessment of the level of anxiety amongst the experimental and control group. Kessler Psychological Distress scale (K10) was used in the assessment of the level of psychological distress amongst the experimental and control group. And the last psychological test administered on both the samples was Simple Lifestyle indicator Questionnaire (SLIQ) that was administered to assess the positivity of lifestyle amongst the samples.

3.1 Hypotheses

Observing the goals of the research work; the following hypotheses were framed:-

H₁ There will be a significant difference in the level of Psychological Distress, Anxiety and depression in Pre-test and Post-test scores

H₂ Psychological Distress, Depression and Anxiety in youth will be significantly lower after the counseling intervention
There will be a positive effect of the counseling intervention model on the enhancement of Positive Lifestyle

### 3.2 Sample of the Study

Whenever a small group is designated as demonstrative of the whole, then it is known as a sample method. The process of selecting for study the percentage of universe with an understanding to draw conclusions about the universe is called the sampling. Henceforth, sampling refers to a process used in statistical analysis in which a fixed number of observations will be taken from a larger population.

Rai and Thapa (N.D.) cited Goode and Hatt who defined sample as a “smaller representation of large Whole.” Nan Lin defines it as “a subject of cases from the population chosen to represent it”. Deducing that the whole group from which the sample has been drawn is known as ‘universe’ or ‘population’ and the group selected for study is known as sample.

The sample used in the present study consisted of two significant groups of subjects; mainly the Psychologically distressed experimental group (N=30) and the psychologically distressed control Group (N=30).

For the purpose of the identification of the subjects, the consulting team of Psychiatrists and General Physicians at Apollo Clinics (Faridabad) were acquainted of the present doctoral research and were requested for their cooperation. The consulting doctors thereby referred the diagnosed patients to the researcher for the purpose of psychological testing and further counseling intervention and results.

The subjects were adhered to the **purposive sampling technique** and due consent was taken from the subjects. Purposive sampling is known as judgmental, selective or subjective sampling as well and depends on the judgement of the researcher when it comes to selecting the units of study such as people, cases/organizations, events, pieces of data etc. Usually, the sample size is
quite small, especially in comparison to probability sampling techniques.

It is a form of non-probability sampling in which decisions concerning the individuals to be included in the sample are taken by the researcher solely and is based upon a variety of criteria which may include specialist knowledge of the research issue, or capacity and willingness to participate in the research.

Adolph Jenson defined it as the method of selecting a number of groups of units in such a way that selected group’s together yield as nearly as possible the same average or proportion as the totality with respect of those characteristics which are already a matter of statistical knowledge. Qualitative research designs can involve multiple phases, with each phase building on the previous one. Purposive sampling is useful in these instances because it provides a wide range of non-probability sampling techniques for the researcher to draw on.

The Sample selection Criteria was specific to the need of the study

- **Age**: 18-35 years
- **Sex**: Male & Female
- **Marital status**: Married/ Unmarried
- **Region**: Delhi/NCR (Rural/Urban)
- **Duration of the symptoms**: 15 days to 45 days
- **Medication**: No medication for the last five months for both the Experimental and Control group
- **Psychological symptoms**: Low/sad mood

  Depression

  Anxiety or confused Emotions

  Adjustment concerns- Individual or Marital

  Suffering from loneliness/ Isolation
Feelings of Alienation from society

Loss of interest in any activity
Feelings of Helplessness, Worthlessness, Hopelessness

Lethargy, unrest at mind, constant forgetfulness

Relationship concerns (Marital or Familial)

- **Diagnosis:** Depression (mild to moderate)
  Anxiety (mild to moderate)
  Psychological distress
  (moderate to high)

### 3.3 Measures and Tools

*For the investigation of the present study, the following four psychological tests were used:*

- Kessler Psychological Distress scale
- Beck’s Depression Inventory
- Sinha’s Comprehensive Anxiety test
- Simple Lifestyle indicator Questionnaire

*The brief description of the psychological tests used in the study is as follows:*

#### 3.3.1 The Kessler Psychological Distress Scale (K10)- Kessler and Mroczek (1994)

The rationale for its development was to screen the population on Psychological Distress. This scale comprises of ten questions that are based on the general psychological distress, levels of anxiety and onset of symptoms of depression in the recent 4 weeks duration. In the preparation of the scale, approximately five thousand initial items were taken into account and were further reduced to only forty five items, then it was further reduced to thirty two items and were later
determined as two sets consisting 6 items and 10 items each that signified the continuum of “entire range of high distress” and secondly the “highly discriminating along that continuum”.

Table 3.3.1: Cut-off scores of Kessler Psychological Distress Scale to determine the prevalence of anxiety or depressive disorder

<table>
<thead>
<tr>
<th>K10 Scores</th>
<th>Level of Anxiety or Depressive Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 15</td>
<td>Low or no risk</td>
</tr>
<tr>
<td>16 to 29</td>
<td>Medium risk</td>
</tr>
<tr>
<td>30 to 50</td>
<td>High risk</td>
</tr>
</tbody>
</table>

Andrews and Slade assessed the Validity of the scale and found out that it can be compared to a number of tools like the mental health instrument, the Quality of Life instrument, the GHQ, SF-12 and the mental health instrument CIDI. The Reliability of the scale ranged from 0.42 to 0.74 that indicates that it is a moderately reliable tool for the purpose of study. For the purpose of the research study, clients with medium to high risk were screened and departmentalized into Experimental and control group for Pre-testing.

### 3.3.2 Beck’s Depression Inventory (BDI)

The list of Inventory (BDI, BDI-1A, BDI-II) were documented by Aaron T. Beck. It is a twenty one multiple choice self-report inventory which is widely used as psychometric tools for measuring the severity and the symptomatology of depression and the characteristic attitudes. The BDI has been created in multiple forms such as the card form, several computerized version of forms, the short 13-item form or the recently created BDI-11. It roughly takes 10 minutes to administer and the participants require a 5th or 6th grade reading level of comprehension.

Beck, Steer and Garbin (1988) referred that the internal consistency for BDI ranges from 0.73 to 0.92 with the mean value of 0.86 that indicates high reliability. It is also largely known and tested for content, construct and concurrent validity. High concurrent validity scores are given amongst the Beck’s depression inventory and other tools measuring depression such as the Hamilton Depression Scale. The correlation score was calculated at 0.77 in comparision with
other psychiatric ratings. The scale has also shown high construct validity with other medical symptoms.

3.3.3 Sinha’s Comprehensive Anxiety Test (SCAT)

L.N.K. Sinha and A.K.P. Sinha are the pioneers for the scale that is used in determining the comprehensive Anxiety. The process of development integrates a range of anxiety indices that are proposed by various investigators depending on the conditions of the country and from time to time. The inventory does not require a scoring key or stencil and can be easily scored manually. It takes any response specified as “Yes” with a score of 1 and specified as “No” with a score of 0. The summation of the positive responses i.e. the total number of Yes would then form the total anxiety score.

The reliability coefficient was determined at 0.92 as the values of both the tests i.e. the test-retest and the product moment correlation ensured high reliability. Validity of the scale was assessed as the coefficient of correlation amongst the scores on Comprehensive Anxiety test and in the Taylor’s manifest anxiety scale was computed. This was established at 0.62 that is significant beyond the .001 level of confidence thus the tool proves to be highly valid.

3.3.4 Simple Lifestyle Indicator Questionnaire (SLIQ)

This scale was constructed as a short, self-administered and easy to use tool that is known to evaluate five types of lifestyle risks and also provide an apt score for each of the given factor along with a general lifestyle score. It measures diet, consumption of alcohol, exercise, use of tobacco and psychosocial stress and provides a single summary score.

Two family physicians and a nutritionist developed the SLIQ with the intention of creating a reliable, valid summary measure of lifestyle that would allow researchers and eventually, clinicians to quantify lifestyle. The first iteration of the SLIQ consisted of 25 questions, including nine for the dimension of diet. Feedback from health professionals with experience in lifestyle assessment, including family physicians, nutritionists and nurses, was used in conjunction with factor analysis to reduce the number of items in the SLIQ to 12.
It was found that the questionnaire had moderate content validity and a strong correlation with the value of 0.77 and the measure of test-retest reliability ranged from 0.63 to 0.97 levels for the factors.

This has also been found to correlate fine with the other relevant objective evaluators of lifestyle like the Diet History Questionnaire, the SF-36, Social Readjustment Rating Scale and also physical activity intensities measured with Pedometer with an exception of Stress scale that does not associate well with Social Readjustment Rating Scale. The authors propose that this scale is a short and comparatively modest method of judging the lifestyle amongst participants. It has proved to be a dependable measure of lifestyle conducts.
The summary of the psychological tests used by the researcher is presented in the table below:

Table 3.3.2 Details of the tools used for the study

<table>
<thead>
<tr>
<th>Tools</th>
<th>Year of Publishing</th>
<th>Variables Measured</th>
<th>Classification of Variables</th>
<th>Reliability of the Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Kessler Psychological Distress Scale (K10)</td>
<td>1994</td>
<td>Psychological Distress</td>
<td>Dependent Variable</td>
<td>0.42 to 0.74 (Moderately Reliable)</td>
</tr>
<tr>
<td>Sinha’s Comprehensive Anxiety Test</td>
<td>1955</td>
<td>Anxiety</td>
<td>Dependent Variable</td>
<td>0.92 (High Reliability)</td>
</tr>
<tr>
<td>Beck’s Depression Inventory</td>
<td>1996</td>
<td>Depression</td>
<td>Dependent Variable</td>
<td>0.86 (High Reliable)</td>
</tr>
<tr>
<td>Simple Lifestyle Indicator Questionnaire</td>
<td>2008</td>
<td>Lifestyle</td>
<td>Dependent Variable</td>
<td>0.63 to 0.97 (High Reliable)</td>
</tr>
<tr>
<td>Counseling Intervention Model</td>
<td>1995</td>
<td>Counseling</td>
<td>Independent Variable</td>
<td>Standardized. The Model is published in The Complete Psychotherapy treatment planner and widely used as an intervention strategy</td>
</tr>
</tbody>
</table>
3.4 Research Design of the Study

REVIEW OF LITERATURE

SAMPLE SELECTION

PRE-DIAGNOSED CASES OF DEPRESSION, ANXIETY AND PSYCHOLOGICAL DISTRESS WERE TAKEN

DISTRIBUTION OF SELECTED SAMPLE INTO TWO GROUPS

CONTROL GROUP (N=30)
PSYCHOLOGICALLY DISTRESS POPULATION

EXPERIMENTAL GROUP (N=30)
PSYCHOLOGICALLY DISTRESS POPULATION

PRE-LEVEL ASSESSMENT
- BECK’S DEPRESSION INVENTORY
- SINHA’S COMPREHENSIVE ANXIETY TEST
- KESSLER PSYCHOLOGICAL DISTRESS SCALE
- SIMPLE LIFESTYLE INDICATOR QUESTIONNAIRE
CONTROL GROUP (N=30)  
PSYCHOLOGICALLY DISTRESSED POPULATION

10 TIPS OF COUNSELING

APPLICATION OF COUNSELING INTERVENTION PROGRAM; DESIGNED BY ARTHUR. E. JONGSMA, L. MARK PETERSON AND WILLIAM. P. MCLNNIS; ON THE INDIAN YOUTH

EXPERIMENTAL GROUP (N=30)  
PSYCHOLOGICALLY DISTRESSED POPULATION

POST-LEVEL ASSESSMENT
- BECK’S DEPRESSION INVENTORY
- SINHA’S COMPREHENSIVE ANXIETY TEST
- KESSLER PSYCHOLOGICAL DISTRESS SCALE
- SIMPLE LIFESTYLE INDICATOR QUESTIONNAIRE

DATA PROCESSING AND ANALYSIS
STATISTICAL ANALYSIS:
- MEAN, MEDIAN
- STANDARD DEVIATION
- STANDARD ERROR MEAN
- INDEPENDENT & PAIRED "t" TEST

FOLLOW UP SESSION TO EVALUATE THE LONG LASTING IMPACT OF THE COUNSELING INTERVENTION
3.5 Summary of the Counseling Intervention Model used in the Research

Ivey and Ivey (1999) highlighted that there is a rapid growth in the focus on the mental health concerns and also on the development of the intervention programs that are centric to the problem in hand, personalized and customized to meet the specific client’s needs and goals and also quantifiable in terms of settings landmarks that can be charted to assess the client’s progress.

They also referred to Microskills as the units of the communication skills applied at the interviews to grow the ability to interact more purposely with the client. They said that the Microskills formulated as the underpinning of the intentional interviewing and counseling. They also gave a hierarchy of Microskills that acts like a systematic structure for the subsequent integration of skills into the interview. Ivey and Ivey (1999) also spoke about the skills of Listening as foundation of counseling and purposeful interviewing.

Ivey and Ivey (1999) have adequately described the counseling intervention model designed by Arthur E. Jongsma, L. Mark Peterson & William. P. McInnis that has further supported the narrative model of Intentional interviewing & counseling.

The Narrative model of Intentional Interviewing and Counseling proposes that to facilitate client’s development in a Multicultural Society; it emphasizes on building relationship with the client followed by listening to client’s stories efficiently, followed by listening for strengths and assets, followed by restorying the client’s stories and giving it new directions. The new story formulated by the client often initiate action and change. This technique has been incorporated in the research study, whenever suited and required.

The steps can be summarized below:-

- **STORY**
- **POSITIVE ASSET**
- **RESTORY**
- **ACTION**
Because of the treatment of clients suffering from Psychological distress, Depression and Anxiety; the counseling intervention model designed by Arthur E. Jongsma, L. Mark Peterson and William P. McNiss was applied.

The brief summary of the counseling steps followed by the researcher is as follows:

The intervention process of counseling initiated with rapport building between the client (subject) and the counselor (researcher), followed by the assessment of the counseling clients on the basis of the Behavioral definitions provided by the authors of the counseling intervention model. The formulation of goals (short term and long term) for resolving the client concerns were mutually discussed and narrowed down. The clients were encouraged to adhere to their goals. Finally, all the clients or subjects in the experimental group (N=30) were individually, contextually and respectively consulted for the counseling intervention steps (attached along with the appendices) for reducing or eliminating the psychological distress and for effective treatment.

*The summary of the steps followed in the Counseling Intervention Model are:*-

**Figure 3.5.1 Summary of steps for treatment of Depression followed by the Researcher**
The figure exhibits the treatment pattern followed by the researcher for dealing with depression in the experimental group. As it is seen that firstly the behavioral symptoms of depression are defined and rapport building is adhered with the client, secondly the short term goals and long terms goals are devised mutually by the client and the researcher (counselor) and the implementation of the same is focused upon, and lastly the counseling intervention steps for reducing or eliminating the concerns are applied. Post the treatment, follow up sessions are taken with the clients.

**Figure 3.5.2 Summary of steps for treatment of Anxiety followed by the Researcher**

The figure exhibits the treatment pattern followed by the researcher for dealing with anxiety in the experimental group. As it is seen that firstly the behavioral symptoms of anxiety are defined and rapport building is adhered with the client, secondly the short term goals and long terms goals are devised mutually by the client and the researcher (counselor) and the implementation of the same is focused upon, and lastly the counseling intervention steps for reducing or eliminating the concerns are applied. Post the treatment, follow up sessions are taken with the clients.
The figure exhibits the treatment pattern followed by the researcher for dealing with psychological distress in the experimental group. As it is seen that firstly the behavioral symptoms of psychological distress are defined and rapport building is adhered with the client, secondly the short term goals and long term goals are devised mutually by the client and the researcher (counselor) and the implementation of the same is focused upon, and lastly the counseling intervention steps for reducing or eliminating the concerns are applied. Post the treatment, follow up sessions are taken with the clients.

The Counseling Intervention Model designed by Arthur E. Jongsma, L. Mark Peterson and William P McInnis has been sourced from the book named Adolescent Psychotherapy Treatment Planner, Fifth Edition that provides all the elements necessary to rapidly and simply develop formal treatment plans. The treatment planner consisted of the latest research-supported, evidence-based Interventions and has updated and expanded bibliotherapy references as well as research related references for each chapter topic. It also bears the Suggested Diagnosis section in each chapter that provides a helpful transition from DSM-IV/ICD-9 to the newly listed DSM-5/ICD-10 diagnostic codes and labels.
3.6 Procedure of the Study

The procedure followed in the administration of the questionnaire is explained below in three phases:-

PHASE I
To begin with the researcher reviewed existing literature to study the gap in the field of counseling and psychological distress. Post finalizing the topic, the researcher initiated the process of seeking formal permissions from the Authorities at the Apollo Clinics, Faridabad to volunteer and conduct her Doctoral data collection. After the formal permission was assigned from the Authorities; the researcher was told that she would report to the team of General Physician and the Psychiatrist. The researcher had an orientation meeting with the team and she elucidated the objectives, methodology and discussed the questionnaires used for the study.

After that, the questionnaires and the research design were showcased to the team of Doctors and further they were asked to send the clients that matched the sample selection criterion for the voluntary counseling sessions. The consent form was discussed and the hospital authorities strictly guided the researcher about the matters of confidentiality and record. The hospital authorities also discussed the Simple lifestyle Indicator questionnaire with the researcher for conduction purposes. The hospital authorities and staff welcomed the researcher for the conduction of the study on voluntary basis.

PHASE II
At this stage, the team of Doctors and Interns had conducted the preliminary screening and administered the Simple Lifestyle Indicator Questionnaire to determine the client’s Pre-test score (assessment score) for Lifestyle. Then the Pre-diagnosed counseling cases were sent to the researcher for treatment and the formal consent was taken from each client.

The researcher formed a good rapport with the clients and the sample was randomly grouped into
two groups i.e. experimental and control group of 30 subjects each that were all in the category of psychologically distressed population suffering primarily from either depression, anxiety or experiencing psychological distress.

Then, the counseling sessions began and in the Session 1; the rapport formation was initiated with the client and the information was gathered. They were asked to come once in a week for their sessions and the sample agreed for it. The Psychiatrist, General Physician and their teams were also informed about the same. In the subsequent sessions the questionnaires were administered to collect the Pre testing data on Depression, Anxiety and Psychological Distress.

Post the Pre testing data, the groups were randomly divided into Experimental and control group with 30 people in each group. The Experimental group started coming for counseling sessions and they were introduced to the counseling intervention model designed by Arthur .E. Jongsma, L. Mark Peterson & William. P. McInnis. The control group were given a set of 10 generic tips of counseling (N=30) and were also called simultaneously for one week.

The total of 8-10 sessions were targeted by the researcher for the successful implementation of the counseling intervention model to the Experimental Group. The Pre Testing data consisted of Beck’s Depression Inventory, Sinha’s Comprehensive Anxiety and Kessler Psychological Distress along with the results of Simple Lifestyle Indicator Questionnaire (conducted by the team of Psychiatrist and General Physician at the Apollo Clinics).

**PHASE III**

In this phase, after the researcher was successful in conduction of counseling interventions with the entire experimental group; they along with the control group were again re-tested with the same questionnaires of Depression, Anxiety and Psychological Distress.

The post testing data consisted of Beck’s Depression Inventory, Sinha’s Comprehensive Anxiety and Kessler Psychological Distress Scale along with the results of the Simple Lifestyle Indicator Questionnaire (conducted by the team of Psychiatrist and General Physician at the Apollo Clinics).

The team of doctors and the management were thanked for their immense contribution. The
Positive Lifestyle scores were taken from the hospital and the statistical analysis (Independent and Paired ‘t’ test) were made. After a period of two months, the clients were again called for a Follow Up session under the supervision of the Doctors.

3.7 Collection of Data

All the psychological tests were administered independently in different sessions at the hospital settings as per the accessibility of the clients. Initially seventy samples were considered for counseling yet later only sixty samples gave their consent for the psychological testing and counseling.

Responses from the clients were obtained on the questionnaires either written or orally depending on the circumstance of the client. Attempts were made by the researcher to obtain the maximum assistance from the clients by establishing a proper rapport and also providing clarifications to the queries of the test items, if any.

Similarly, all the psychological tests were administered independently in the case of the control group of subjects in different sessions with the conduction of one test in one session only. Counseling schedules and follow up sessions were conducted as needed to ensure the data collection concluded efficiently.

3.8 Statistical Procedures

The obtained data for both the samples of experimental and control group were examined for the below mentioned statistics

- Mean, Standard Deviation, Standard Error Mean
- Independent and Paired ‘t’ Test
The graphical representation of the same has been made to visually depict the data as much as possible to enhance the understandings of the results. The guidance from the experts was also taken for the analysis of the data.