METHOD

The term method refers to the rules applicable to research or work in a given area and includes the research design, sample, tools, procedures and analyses of data.

Design

Generally, a research design is the overall plan of an investigation. The plan should describe the research question or questions, the methods of observation and measurement, the different conditions of observation and manipulation, procedures of collecting data under different experimental arrangements, and the method of data analysis. In essence, a research design refers to the methods and procedures of an investigation.

Research design not only anticipates and specifies the seemingly countless decisions connected with carrying out data collection, processing and analysis but it presents a logical basis for these decisions also (Manheim, 1997). According to Bulmer “research design is the specification of the problem, conceptual definitions, derivation of hypothesis to test, and definition of population to be studied” (c.f. Zikmund, 1998) has described research design as a master plan specifying the methods and procedures for collecting and analyzing the needed information.

The research objectives depend on whether the research is descriptive,
exploratory, explanatory or experimental. A clear understanding of research design is necessary to do research. Whether the investigator will produce reliable and valid data on the research question will depend mostly on the design used in the study.

Research design in psychology can be divided into two broad types: experimental research design and passive observational design. In the first type of design variables are systematically imposed on or withheld from the subjects, either by experimental or by naturally forming conditions in society. In the passive observational research design, the researcher merely observes subject under many natural conditions and records the subjects’ scores (or status) on a number of variables. Later these scores and status conditions under which the observations were made are interrelated. No attempt is made by the researcher to impose conditions or make systematic changes (Asher, 1994).

The present study is intended to examine the role of cognitive factors in depression. It is also planned to design a suitable intervention package and to test the efficacy of it in managing depression. Pre-post experimental control design is used for this purpose. The study is planned among adolescents at risk of depression.

Sample

Three higher secondary schools from Thrissur, Malappuram and Kozhikode Districts were selected for drawing the sample. Three hundred
higher secondary school students of the age between 15-19 were included in the study. In each school two classes were assigned for conducting the study by the school authority based on their convenience.

From among the 300 students 60 were selected for the intervention purpose. They were selected on the basis of their scores on the Malayalam version of Beck’s Depression Inventory. The participants who volunteered to undergo the training programme were included in the intervention phase of the study. From among them 30 students were randomly assigned to the experimental group and 30 in the control group. Informed consent was obtained from parents/significant others for involving children in the present study.

The following tools were used in the present study

1) The Beck Depression Inventory (Malayalam version)
2) The Shibu-Stress Inventory
3) AECOM Coping Style Scale (Adapted version)
4) Personal Belief Scale
5) Frustration Tolerance Scale
6) Tests of Creative Thinking Abilities

**DESCRIPTION OF THE TESTS USED**

**The Beck Depression Inventory –BDI (1996)**

The Beck Depression Inventory- Second Edition (BDI-II) is a 21 item
self-report instrument for measuring the severity of depression in adults and adolescents aged 13 years and older. This version of the inventory (BDI-II) was developed for the assessment of symptoms-corrresponding to criteria for diagnosing depressive disorders listed in the American Psychiatrist Association’s Diagnostic and Statistical Manual of Mental Disorders and Statistical Manual of Mental Disorders fourth edition-DSM IV-1994.

During the last 35 years the BDI has become one of the most widely accepted instrument for assessing the severity of depression in diagnosed patients and for detecting possible depression in normal populations.

**Reliability and Validity**

The two comprehensive reviews concerning the BDI’s applications and psychometric properties across a broad spectrum of both clinical and non clinical populations have reported its high reliability, regardless of clinical population. The average coefficient alpha of the BDI for psychiatric patients falls in the high 0.80s. Similarly, the concurrent and construct validity of the BDI with respect to a variety of psychological measures has been established. The BDI, moreover differentiated patients with clinical depression from non depressed psychiatric patients (Steer et al, 1986).

**Adaptation of the Scale**

In adapting the Beck Depression Inventory for the present study the English version was translated into simple Malayalam language without
loosing the concept of items by an expert in Malayalam language. This was back translated to English by an independent translator who is equally competent in both languages. There is no difference between the Original English and back translated English version. Hence the Malayalam version was found to be satisfactory for this study.

**Administration and Scoring**

Beck Depression Inventory was administered as follows:

“This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the one statement in each group that best describes the way you have been feeling during the past two weeks, including today. Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number. Be sure that you do not choose more than one statement for any group”.

**Scoring**

It is scored by summing the ratings for the 21 items. Each item is rated on a 4-point scale ranging from 0 to 3. If an examine has made multiple endorsements for an item, the alternative with the highest rating is used. The maximum total score is 63.

The cut score guidelines below are suggested for total scores of patients diagnosed with major depression.
**Repeatability and Validity**

A sample of 50 (male-24, Female 26) of the age group 17-20 was used for this purpose. The odd-even-reliability applying Karl Pearson’s Correlation Coefficient was found to be 0.64. This value shows that adapted version is fairly reliable for the particular study. It had both content and predictive validity.

**The S.S. Inventory (Shibu and Dhramangadhan, 1992)**

Stress is a part of every day life, and human body’s response to stressful stimuli seems to play a key role in mankind’s survival. At moments of comfort and convenience stress may not be a problem. But when confronted with challenge and controversy, the way in which people react (physically, emotionally and spiritually) is an index of their success in dealing with stress. The present inventory measures the level of stress in an individual.

The S.S. Inventory contains thirty items capable of assessing responses with regard to family stress, social stress and environmental stress. Scoring was done based on the manual.

<table>
<thead>
<tr>
<th>Total Scores</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-13</td>
<td>Minimal</td>
</tr>
<tr>
<td>14-19</td>
<td>Mild</td>
</tr>
<tr>
<td>20-28</td>
<td>Moderate</td>
</tr>
<tr>
<td>29-63</td>
<td>Severe</td>
</tr>
</tbody>
</table>
Reliability and Validity

In the present scale the split-half method is used for determining the reliability. The odd-even reliability obtained for the S.S. Inventory is 0.79. And the inventory has satisfactory face validity and content validity.

Frustration Tolerance FRTO (Rai, 1983)

Frustration occurs when a person is unable to reach the desired goal on account of some barrier or other, or due to the absence of desired and appropriate goals. Barriers may be external or internal. Inability to achieve one’s goal may also lead to self-devaluation and inferiority (Rai, 1983).

The term frustration tolerance refers to the amount of stress one can tolerate before his integrated functioning is seriously impaired. Thus frustration tolerance refers to the capacity of the individual to show persistence in efforts despite repeated failures and antagonistic environment. Thus it is necessary to tolerate the frustration resulting from such events as failure in examination, loss of status etc, to maintain the integration of the personality (Rai, 1983).

Scoring

Time and number of attempts are summed and mean time and mean number of attempts are calculated for each subject to know his/her frustration tolerance. Data obtained in this manner may be analysed using any test of significance.
AECOM Coping Style Scale

Coping mechanisms serve as an internal source of emotional strength and moderate a person’s reaction to any perceived stress, whether internal or external. Coping is defined as the ‘cognitive and behavioural efforts used to master, tolerate and reduce demands that exceed a person’s resources (Cohen and Lazarus, 1979). Several studies have demonstrated crucial role of coping styles in buffering the impacts of different stressors on the development of overt psychiatric morbidity (Folkman, et al., 1986). It appear that it is not the stressor alone that leads to serious outcome but the way in which a person perceives and respond to it. It has been reported that depressed individuals have more difficulties in coping with interpersonal problems than do non-depressed or the general population (Lineham et al., 1986).

AECOM Scale (Plutcklik, 1980)

The AECOM (Albert Einstein College of Medicine) coping scale for the measurement of coping styles is a questionnaire based on the psycho-evolutionary theory of emotion developed by Plutclik in 1980, which postulates systematic connection between 8 basic emotions and 8 coping styles. This consists of 87 items each rated by the subject on a 4 point scale ranging from “never” to “often” weighted 0 to 3. It is based on the expressed opinion that the way each individual cope with successful life events in relatively independent on his or her emotional or psychopathological state and characteristic of his or her.
This model assumes that there are 8 basic coping styles that may be used by an individual in his or her attempt to reduce stress or cope with life problems. These coping styles defined by the author are:

Minimization

Minimizing the importance of the problem or situation (I look on the bright side of things). Twelve items belong to this category. Range of scores - 0-36.

Suppression

Avoiding the problem or situation (I avoid thinking about unpleasant things). Thirteen items belong to this category. Range of scores – 0-39.

Seeking Succorance

Asking others for help (when I have a problem to try to let others help me). Eleven items belong to this category. Range of scores 0.33.

Replacement

Dealing with problems by identifying alternate solution (if an illness or accident prevented me from doing my usual work, I would still find useful things to do). Twelve items belong to this category. Range of scores 0-30.

Blame

Blaming others or the ‘system’ for your problem (the arguments I get into are started by other people). Ten items belong to this category.
Range of scores – 0-30.

**Substitution**

Engaging in tension reducing activities such as alcohol or drug use or sports (when I get upset, I look for something to eat). Eleven items belong to this category. Range of scores – 0-33.

**Mapping**

Collecting information about the situation or problem (I get as much information as I can before I make a decision). Eight items belong to this category. Range of scores – 0-24.

**Reversal**

Acting opposite of the way he or she feels (I try to see funny side of upsetting situations). Ten items belong to this category. Range of scores 0-30.

**Reliability and Validity**

The internal reliability is measured by Cronbach’s alpha (\(\alpha\)) was as follows: Minimization 0.71, Suppression 0.82, Help seeking 0.67, Replacement 0.62, Blame 0.73, Substitution 0.64, Mapping 0.80, Reversal 0.46 and 0.78 for the entire scale. The internal validity of the scale was found to have a \(\alpha\) value between 0.58 and 0.79 with a mean \(\alpha\)-value of 0.70. The questionnaire had both predictive validity and discriminative validity.

**Adaptation of the Scale**
In adapting AECOM coping scale for the present study the English version was translated into simple Malayalam language without losing the concept of items by an expert in Malayalam language. This was back translated to English by an independent translator who is equally competent in both languages. There was no difference between the original English and back translated English version. Hence the Malayalam version was found to be satisfactory for this study.

**Administration and Scoring**

AECOM coping style scale was administered in an open interview method. Each item listed in the scale was read out to the subject and the response was entered in a 4 point scale. Scoring was done as per the directions in the manual.

**Reliability and Validity**

A sample of 60 (male, N=34, Females N= 26) of the age group 18 to 60 in Calicut was used for this purpose. The odd-even reliability applying Spearman’s Product Moment Correlation Coefficient was found to be 0.77. This value shows that adapted version is fairly reliable for the particular study. It had both predictive and discriminative validity.

**Personal Belief Scale - PBS (Aniljose and Asha, 2005)**

Individual strength and success to a great extent depends on one’s own belief about his or her personal qualities and life in general. The present
inventory is prepared and standardized in order to assess the strength and direction of person’s belief about himself/herself and the way he/she feels about life in general.

Personal Belief Scale consists of 28 positive and negative statements. The response to each item is to be marked in the categories of A, B, C, D or E as required by the subject. In the columns provided for each of the 28 items. A high score indicates strong positive personal belief and a low score shows negative personal belief.

**Scoring**

The scoring was done as follows:

A score of 5, 4, 3, 2 or 1 was given to the category Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree respectively for positive items. The scoring was done in the reverse order for a negative item.

**Reliability and Validity**

There are different methods for estimating the reliability of a test. The present scale the split-half method is used for determining the reliability. For this purpose a sample of 50 subjects including male and female of the age group 18-20 years have been selected. Odd and even items in the inventory is calculated using Pearson’s correlation (r). The correlation thus obtained for the PBS is 0.64.

To ascertain the validity of the present scale scores obtained by a
sample of 50 subjects belonging to the age group of 18-20 years on the PBS were correlated with those obtained by them on the Self-Esteem Inventory. The correlation coefficient is 0.71.

**Test of Creative Thinking Abilities - TCTA (Asha, 1993)**

Research on creative thinking suggests that it is desirable in our schools to locate children who are endowed with unusual potentialities and who therefore need special handling. Early recognition of talent is expected to help parents, teachers and policy makers to understand, interpret and respond adequately to children’s needs, predict future achievement as well as to institute appropriate measures for their healthy psychological growth and functioning.

In the present study used the adapted version of Wallach and Kogan’s Test of Creative Thinking Abilities (TCTA). It consist of five sub-tests. Three of them are verbal and two are non-verbal in nature. The verbal tests are:

**Instances**: This sub-test is one of the three verbal techniques used to assess creativity. This consist of four items. But in the present study we used only two item. The subjects are asked to generate possible instances of a class concept that is specified in verbal form.

**Alternate Uses**: From this instrument we used two objects. The subjects are to generate possible uses for these verbally specified objects.
**Method**

**Similarities:** From this sub-test we used only two pairs of objects. The subjects are to generate possible similarities between two verbally specified objects.

The non-verbal or visual stimuli tests are:

**Pattern meanings:** This sub test consists of two verbal stimulus, materials, each in a separate card. Each stimulus is a pattern of lines. The subjects are to generate meanings or interpretations relevant to the pattern in question.

**Line meanings:** This sub-test consist of two visual stimulus materials, each in a separate card. Each stimulus is mere lines of some form. The subjects are to generate meanings or interpretations relevant to the form of lines in question.

**Administration and Scoring**

After giving the general information regarding the nature of the tests, blank sheets of paper for writing the responses are to be distributed among the subjects. They should be instructed to write down the personal details required for the study at the top of the response sheet. Then the tests should be given one by one with the specific instructions needed for answering the items in each test. The instructions are to be read to the group by the investigator in a clear and even tone. The examples may be explained to them wherever necessary. Simple clarifications may also be given on request without affecting the quantity and quality of the responses. This is done to make sure that the subjects understand the requirements of each of the sub-
tests before proceeding to the task proper.

The following procedures are to be used in administering the different sub-tests of the TCTA.

**Instances:** “I am going to read the name of an object and it is your job to write as many things as you can that are like what is read out”.

**Alternate Uses:** “Here I am going to name an object you are to write down the different way in which the object can be used”.

**Similarities:**

“ In this part of the task I am going to name two objects. You have to think of all the ways in which these two objects are like. ie., I might name any two objects, your job will be to tell me all the possible ways in which these two objects are alike”.

**Pattern Meanings:**

“In this task you can really feel free to use your imagination. You will be shown a number of drawings. After looking at each one of it, you are to write all the things you think each complete drawing could be”.

**Line Meanings:**

“In this game like task I am going to show you some lines. After looking at each one, your job is to write all the things it makes you think of. You have to write what the whole line makes, you think of not just a part of
In the case of creativity instruments two types of scores viz., number and uniqueness may be obtained. It was done based on the manual. In all the sub scales a high score indicates high creativity and low score indicate poor creativity.

The scores for ideational fluency is obtained by calculating the total of all the responses given for each item and summing up all these totals.

Originality of responses is derived based on the statistical infrequency of the innovative ideas provided in each items and then summing up all these together.

**Reliability and Validity**

Reliability of the instrument was ascertained by finding out item-sum correlations and also by odd-even method. The scores obtained by 100 boys (mean age = 14.68) and 100 girls (mean age = 14.42) were used to find out the reliability coefficients by both methods. The results which respect to boys indicate that of the 88 item-sum correlations 82 are 0.44 or better and 6 are 0.28 or better. In the case of girls of the 88 correlations 8 are below 0.40 but above 0.24 and 82 are above 0.40 or better. The results reveal a fairly high degree of internal consistency of the number and uniqueness measures of the creativity subtests.

To estimate validity coefficients two external criteria namely the test
of creative thinking and high school personality questionnaire on the calculated dimension of creativity were used. The correlation between the scores of the present TCTA and Test of Creative Thinking has turned out to be 0.77 for boys and 0.75 for girls.

**INTERVENTION**

Once an individual has been diagnosed as at risk depression both psychotherapy and counseling could be options. More and more doctors are realizing that chemical imbalances often account for mental illness, but at the same time the importance of psychotherapy cannot be discounted. If an individual’s depression has been caused wholly or in part by psychological factors, counselling may relieve the depression, but the underlying cause will not be cured by counselling alone. Therapy can help the person deal with his part in a healthy manner and also in learning ways to cope with very difficult process of growing up.

Antidepressant medication or counselling is a controversial topic. There are no long term studies that show what kind of impact this treatment procedures will have on individual’s development. Most professionals will recommend therapy as a first line of defense for the people with depression.

A careful examination of outcome studies on depression among adolescent children suggest that rather than a specific therapy a combination of different therapeutic procedures will be more effective in managing the
causative factor and controlling depressive reactions. Hence in the present study a package of intervention procedures is used with children at risk of depression. It is designed based on the understanding that effective approach to deal with problems includes efforts to increase physical/mental preparedness, for eg: through physical exercise, yoga or meditation, creative diversions for cognitive as well as emotional enrichment and strategies of dealing with basic emotional problems. The package includes:

i. Relaxation

ii. Assertiveness training

iii. Brain storming and

iv. General counseling

(i) Relaxation

Applying progressive relaxation procedures to depression emerged from the observation that anxiety symptoms often occur along with depression. Moreover depression can be exacerbated by stress. A few research studies have demonstrated the superior effectiveness of progressive relaxation alone to no treatment in adolescents and adults with mild to moderate depression and in women with post partum depression. More frequently research supports the inclusion of a relaxation component in a comprehensive treatment package for depression. In addition to progressive relaxation training, the coping with depression course is composed of several treatment components including cognitive therapy, social skills training,
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pleasant events scheduling, self-monitoring and training in personal goal achievement in a group setting (Grover and Nagle, 2002).

Relaxation is generally defined as the state or condition which is opposite to the state of tension. Progressive muscle relaxation is a technique of stress management developed by American physician Edmund Jacobson in the early 1920’s. He argues that muscular tension accompanies anxiety, one can reduce anxiety by learning how to relax the muscular tension. Jacobson’s Deep Muscle Relaxation Training was used in the present study. It is also known as the progressive relaxation training because as the training procedure proceeds from hand to head and from head down towards the rest of the body, the individual bound to feel progressively more and more relaxed (Masters, Thomas and Hollon, 1994). The major steps of Jacobson’s Progressive Muscle Relaxation as follows:

1. Right (or dominant) hand and forearm
2. Right (or dominant) biceps
3. Left (or opposite) hand and forearm
4. Left (or opposite) biceps
5. Shoulders and upper back
6. Neck
7. Lower cheeks and jaws
8. Upper cheeks and nose
9. Forehead
10. Chest (breathing)
11. Abdominal region
12. Right (or dominant) thigh.
13. Right (or dominant) calf
14. Right (or dominant) foot
15. Left (or opposite) thigh
16. Left (or opposite) calf
17. Left (or opposite) foot.

(Mc Neil and Lawrence, 2002)

At first the general instructions are given as follows:

“The aim of providing training in relaxation is to increase the discrimination of muscle tension and to train you to relax even in small degree of tension. Relaxation is a skill to be learned. Please do not take this as drudgery. That is never perceives relaxation as something that is imposed. By practice, you can have voluntary control over tension (Swaminathan and Kaliappan, 1997).

The procedure involves training the subjects to successively tense and relax various muscle groups in their body, while the instruction directs their attention to pleasant sensations. The subjects were instructed to alternate tense and relax each muscle groups. The entire procedure takes 20 to 30 minutes.
(ii) Assertiveness Training

Assertiveness training is a form of behaviour therapy designed to help people stand up for themselves to empower themselves, in more contemporary terms. Assertiveness is a response that seeks to maintain an appropriate balance between passivity and aggression. Assertive responses promote fairness and equality in human interactions, based on a positive sense of respect for self and others. Assertiveness training has a decades-long history in mental health and personal growth groups. The approach was introduced to encourage people to stand up for themselves appropriately in their interactions with others, today, assertiveness training is used as part of communication training in settings as diverse as schools, corporate boardrooms, and psychiatric hospitals, for programs as varied as substance abuse treatment, social skills training, vocational programs etc.

The purpose of assertiveness training is to teach persons appropriate strategies for identifying and acting on their desires, needs and opinions while remaining respectful of others. This form of training is tailored to the needs of specific participants and the situations they find particularly challenging. It is a broad approach that can be applied to many different personal, academic, health care and work situations. Specific areas of intervention and change in assertiveness training include conflict resolution, realistic goal-setting depression and stress management. In addition to
emotional and psychological benefits, taking a more active approach to self-determination has been shown to have positive outcomes in many personal choices related to health, including being assertive in risky sexual situations, abstaining from using drugs or alcohol and assuming responsibility for self-care if one has a chronic illness like diabetes or cancer etc.

Assertiveness training typically begins with an information-gathering exercise in which participants are asked to think about and list the areas in their life in which they have difficulty asserting themselves. Very often they will notice specific situations or patterns of behaviour that they want to focus on during the course. The next stage in assertive training is usually role-plays designed to help-participants practice clearer and more direct forms of communicating with others. The role-plays allow for practice and repetition of the new technique helping each person learn assertive responses by acting on them. Feedback is provided to improve the response and the role-play is repeated. Self-observation skills, awareness of personal preferences and assuming personal responsibility are important components of the assertiveness training process.

An enhanced sense of well-being and more positive self-esteem are typical results from assertiveness training. Many participants report that they feel better about themselves and more capable of handling the stresses of daily life. In addition people who have participated in assertiveness training
have a better sense of boundaries, and are able to set appropriate and healthy limits with others.

A healthy sense of self-determination and respect for others is the ultimate outcome of assertiveness training. Such a balance helps each person work better with others and make appropriate decisions for themselves.

(iii) Brainstorming

Brainstorming is a group creativity technique designed to generate a large number of ideas for the solution to a problem. The method was first popularized in the late 1930s, by Alex Faickney Osborn. The traditional brainstorming may not increase the productivity of groups, it has other potential benefits, such as enhancing the enjoyment of group work and develop interpersonal relations.

There are four basic rules in brainstorming these are intended to reduce the social inhibitions that occur in groups and therefore stimulate the generation of new ideas. The expected result is a dynamic synergy that will dramatically increase the creativity of the group.

1) Focus on quantity: It means enhancing divergent production, aiming to facilitate problem solving through the maximum, quantity breed quality.

2) No criticism: It is often emphasized that in group brainstorming, criticism should be put ‘on hold’ so that one can creates a supportive
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atmosphere where participants feel free to generate unusual ideas.

3) Unusual ideas are welcome: To get a group and long list of ideas, unusual ideas are welcomed. They may open new ways of thinking and provide better solutions.

4) Combine and improve ideas: Good ideas can be combined to form a single very good idea, as suggested by the slogan “1+1 = 3”. This approach is assumed to lead to better and more complete ideas than merely generating new ideas along. It is believed to stimulate the building of ideas by a process of association.

Process of Conducting Brainstorming

1) Participants who have an idea but no possibility to present it are encouraged to write down their idea and present it later.

2) The idea collector should number the ideas, so that the chairperson can use the number to encourage quantitative idea generation.

3) The idea collector should repeat the idea in the words he or she has written it, to confirm that it expresses the meaning intended by the originator.

4) When more participants are having ideas, the one with the most associated idea should have priority. This to encourage elaboration on previous ideas.

In short Brainstorming is a popular method of group interaction in
both educational and day to day life situations. Although it does not appear to provide a measurable advantage in creative output, brainstorming is an enjoyable exercise that is typically well received by participants. Newer variations of brainstorming seek to overcome barriers like inhibitions, tensions and may well prove superior to the original technique. How well these newer methods work, and whether or not they should still be classified as brainstorming, are questions that require further research before they can be answered.

(iv) General Counselling

Counseling is a process that involves the use of psychological methods in giving professional guidance and assistance to individuals, families or groups. From a broader perspective, counseling involves the use of interpersonal interactions, including but not limited to those between therapist and client(s), to identify, process and resolve relational, cognitive, emotional, cultural and/or spiritual issues that hinder client development or growth. Counseling allow clients to communicate their thought and feelings spontaneously in a caring and nonthreatening environment. The use of techniques that allow clients to create and express themselves in nonverbal ways are often less threatening and can help clients gain an understanding of their strengths as well as their weaknesses and conflicts.

In terms of the counselor, creative interventions require that counselors devote time and energy to being flexible, spontaneous and sometimes
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provocative. The circumstances sometimes may help the interventions successful. One way of setting up circumstances so therapeutic creativity is possible is to make therapeutic sessions more similar to play than to work. By doing so, clients are attracted to participating in activities the counselor may suggest because therapeutic directives are seen as non-threatening and even fun. This is not to diminish clients' pain or the struggle required in many cases for change, but to simply suggest that successful therapy may involve a combination of play and hard work and that creativity at some level may be a requirement for successful intervention.

There are three phases in intervention

I Phase

As a first step, the investigator met the concerned authority of the selected schools and explained the nature of the study. Then the date for the first phase of the study was fixed.

During the first phase base line data were collected from the subjects.

Procedure

The tests are self-administering. The instruction were given in the test itself but the investigator explained it for their clarity. The subject were asked to read the instructions and to fill the space given for personal details. Then the subjects were asked to read each tests and mark their answers in an appropriate space according to their choice. After they were completed, the
investigator selected 300 subjects with their scores. From among them 60 were selected as high risk of depression based on their scores in BDI. Then they were randomly allotted to the experimental and control group, so as to have 30 subjects in each group.

II Phase

In the second phase, the experimental group were given one month training including Relaxation, Assertiveness training, Brain-storming and General counseling were given to them.

The control group was not given any task but requested to participate in the study after one month. After one month training the above tests were given to the 60 subjects. Other instructions are the same as given before. After the test was completed the investigator thanked for their co-operation and collected the materials back.

III Phase

A follow up was conducted one month after the training. Both experimental and control group were assessed using appropriate tests with procedure employed in the pre-test phase.

OBJECTIVES OF THE STUDY

The present study has two parts. In part I the objective was to examine the role of selected cognitive factors namely, stress, coping styles, frustration
tolerance, personal belief, creative thinking, ideational fluency and originality of ideas. In part II, the objective was to plan and design a package of intervention and test the efficacy of it to manage stress, to improve personal belief and reduce depression among adolescent children.

1. To study the degree and nature of depression in adolescent population.

2. To study the effect of variables like stress, coping style, frustration tolerance, personal belief and creative thinking on depression in adolescents.

3. To study the effect of psychological intervention on depressed adolescent population.

HYPOTHESES

The following hypotheses were examined in the present study

I. Adolescent children with high risk of depression differ from those with low risk of depression on stress.

II. There is difference between adolescent children with high risk of depression and low risk of depression on coping styles.

III. Adolescent children with high risk of depression differ children with low risk of depression on frustration tolerance.

IV. Groups of adolescents with high risk of depression and low risk of depression differ from each other on personal belief.
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V. There is difference between adolescent children with high risk of depression and low risk of depression on creative thinking.

VI. High risk and low risk groups of adolescent children differ from each other on ideational fluency.

VII. Adolescent children with high risk of depression and low risk of depression differ from each other in originality of ideas.

VIII. The intervention package is effective in reducing stress, improving personal belief and reducing depression among adolescent children.

STATISTICAL ANALYSIS

The hypotheses framed were tested using Analysis of Variance (two-way), ‘t’ tests and group profile analysis was also done when required.