CHAPTER -IV

METHOD OF INVESTIGATION

The methodology followed in the present study is described in this chapter. This chapter deals with operational definitions of variables studied in the present study, ethical considerations, research design, translations and establishment of reliability of tools - pilot study and phases of the present study. Phase I consisted of selection of children’s homes for the survey and procedure used for data collection for the survey. Phase II explains the preparation of life skills training module and selection of sample for training, inclusion criteria used for life skills training, pre-test, implementation of life skills training and post-test. This chapter also describes the statistics used for analysis and description of the psychological tools used in the study.

Operational Definitions of Variables Studied in the Present Study

Variables such as self-esteem, emotional intelligence, coping style, perceived social support and behaviour problems were studied in this study. The operational definitions of these variables are described below.

1. **Self Esteem**- Self Esteem is defined as, “an evaluative attitude towards self in terms of six dimensions namely, Competency self-esteem, Global self-esteem, Moral self-esteem and self-control, Social-esteem, Family self-esteem and Body and physical appearance” (Karunanidhi, 1995).

2. **Emotional Intelligence** - Emotional Intelligence is defined as, “the ability to adaptively perceive, understand, regulate, and harness emotions in the self and others” (Schutte, Malouff, Hall, Haggerty, Cooper, Golden, & Dornheim, 1998).
3. **Coping Style** – Coping Style is defined as, “an individual’s responses to stressors either through Adaptive Coping such as active coping, planning, instrumental support, emotional support, religion, positive reinterpretation and humor or Maladaptive Coping such as acceptance, venting, denial, behavioural disengagement, substance use, self-blame and self-distraction according to the Brief COPE inventory” (Carver, Scheier, & Weintraub, 1989).

4. **Perceived Social Support** - Perceived Social Support is defined as, “an individual’s perceptions of support from people in their social network, which includes Family, Friends and Significant others” (Zimet, Dahlem, Zimet, & Farley, 1988).

5. **Behaviour Problems** - Behaviour problems is defined as, “those behaviours that interfere with adaptive functioning, which includes internalizing problems, externalizing problems, social problems, thought problems and attention problems” (Achenbach & Rescorla, 2001).

**Ethical Considerations for the Study**

To obtain permission to conduct the present study, a proposal was submitted through the Supervisor and Head of the Department to The Directorate of Social Defence, Tamil Nadu, India. Permission was also obtained from the Principal Secretary/ Special Commissioner of Social Defence, Tamil Nadu, India to conduct the study. Individual written consent was obtained from the boys who are in need of care and protection staying in government children’s home to participate in this study after explaining the need and purpose of the study. Those who were not willing to participate in the study were excluded. The above ethical consideration was followed for both phase I survey and phase II training.
Research Design

In Phase I, survey research design was used to understand the extent of behaviour problems reported by boys staying in different Children’s Homes. In Phase II, Quasi-Experimental design was used with pre and post-test assessment to find out the effect of life skills training on self-esteem, emotional intelligence, coping style, perceived social support and behaviour problems of boys in need of care and protection. A follow up assessment was conducted after three months to find out the sustenance of the effect as seen in the post test.

Translations and Establishment of Reliability of Tools - Pilot Study

The psychological tools chosen in the study such as Brief COPE Inventory (Carver, Scheier, & Weintraub, 1989), the Assessing Emotions Scale (Schutte, et al., 1998) and the Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988) were available in English. Since, the population was Tamil speaking and could read and write only Tamil, the researcher decided to translate these tools into the Tamil language. Hence, permission was obtained from the respective authors to translate these tools into Tamil. These three tools were translated into Tamil by the researcher and then given to three experts in Psychology and to a Tamil Professor for technical and language corrections, respectively. The corrected Tamil version was administered to 20 students and their age ranged from 14 to 15 years, in both Tamil and English Medium schools, in order to test the clarity of the items. The students were also asked to give feedback and suggestions if they did not understand the meaning of the words. Then the questionnaires were given to three teachers working in a corporation school to get their feedback and suggestions. Suggestions given by the students and teachers were incorporated in the final translated questionnaire. These questionnaires were given to two Psychologists
and one non-psychologist, who were proficient in both languages, for back-translation. Minor changes were made for 14 items. Only the modified items were given to the same individuals for back-translation. The back-translated items and the original items were found to have the same meaning. The Tamil version of Self-esteem Inventory and Youth Self Report questionnaire were also administered along with the translated tools for establishing reliability.

The researcher obtained permission from a NGO to collect data and to establish the reliability of these tools. The tools were administered to 40 boys over three days in order to avoid boredom and fatigue. After an interval of two weeks, the same questionnaires were administered to the same group of boys over another three days. Reliability was established by using test-retest method. The correlation coefficients of all psychological tools used in the present study are given below:

<table>
<thead>
<tr>
<th>No.</th>
<th>Tool</th>
<th>Author(s)</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Self-esteem Questionnaire</td>
<td>Karunanidhi, (1995)</td>
<td>0.62</td>
</tr>
<tr>
<td>2</td>
<td>The Assessing Emotion Scale</td>
<td>Schutte, Malouff, Hall,</td>
<td>0.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Haggerty, Cooper, Golden</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>and Dornheim, (1998)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Brief COPE</td>
<td>Carver, Scheier, and</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weintraub, (1989)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The Multidimensional Scale of Perceived</td>
<td>Zimet, Dahlem, Zimet,</td>
<td>0.98</td>
</tr>
<tr>
<td></td>
<td>Social Support (MSPSS)</td>
<td>and Farley (1988)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Youth Self – Report (YSR)</td>
<td>Achenbach and Rescorla,</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2001)</td>
<td></td>
</tr>
</tbody>
</table>
Phases of the Present Study

The present study was conducted in two phases. In phase I, a survey was conducted to assess the behaviour problems of boys who were staying in various childrens’ homes in Chennai city. Phase II included preparations of life skills training module, selection of sample for training, pre-test and post-test assessments after implementation of life skills training.

Phase –I

Selection of Children’s Homes for the Survey

At the time of the study, it was found that there were only six Children’s Homes (referred to as ‘Homes’) registered under the Juvenile Justice (care and protection of children) Amended Act, 2006 for boys in the age group of 11 to 18 years in Chennai, Tamil Nadu (Child Line Directory, 2008). (After the study period, there are at present 43 children’s homes in Chennai registered under this Act.) Of these six Homes, five were run by Non Governmental Organizations (NGO) and one by the Government of Tamil Nadu. All the six institutions were approached for permission to conduct the survey. A copy of the questionnaires was given to authorities for their perusal. All queries regarding the questionnaires and the purpose of survey were clarified. After the clarifications, four institutions including one government Home gave permission for the survey. Two NGOs did not give permission, because another research study was in progress. Hence, the survey was conducted in four Homes among the boys who are in the age group of 11 to 18 years.
Procedure Used for Data Collection for the Survey

The following procedure was used to collect data from the boys staying in the four selected Homes.

The researcher visited one Home per day. The caregivers in each of these Homes assembled all boys in the age group of 11 to 18 years in a common study room, introduced the researcher and made them comfortable. The researcher introduced herself and explained the purpose of the survey to the boys. The boys were divided into small groups of 5 or 6 members and the questionnaires were distributed. General instructions were given - that there were no right or wrong answers and to give honest answers according to their personal viewpoint and not according to what others (for example, parents or teachers) thought about them. The general instructions were repeated at the beginning of each session. Then the instructions on the questionnaires were read aloud twice by the researcher. After ascertaining that all had understood the instructions, the first few items on the questionnaire were also read aloud by the researcher. However, the boys felt they could complete the forms independently. Boys were asked to raise their hands if they had any doubts while responding to the questionnaire. For those boys who were distracted while in groups, the questionnaires were administered to individually. The researcher checked all questionnaires at the end of each session to ensure that all items were responded to, and that incomplete statements would be completed. Approximate time taken to complete the questionnaire was 45 minutes. The same procedure was followed in the other four institutions.
A sample of 193 boys was surveyed from three NGOs and one government Home. The number of boys in the four Homes is presented below:

<table>
<thead>
<tr>
<th>Name of Institution</th>
<th>Number of Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Children’s Home</td>
<td>75</td>
</tr>
<tr>
<td>NGOs Children’s Home -I</td>
<td>40</td>
</tr>
<tr>
<td>NGOs Children’s Home -II</td>
<td>45</td>
</tr>
<tr>
<td>NGOs Children’s Home -III</td>
<td>33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>193</strong></td>
</tr>
</tbody>
</table>

**Phase II**

**Preparation of Life Skills Training Module and Selection of Sample for Training**

The data collected during the survey were scored using the Youth Self-Report (YSR) manual (Achenbach, 2001). Based on the type of behavioural problems of these boys, the life skills training module was developed. Of the ten life skills identified by WHO, eight were found to be relevant to the scope of the study. They are Self-awareness, Empathy, Decision-making, Problem solving, Effective communication, Interpersonal Relationship, Coping with emotions and Coping with stress. The Life skills training programme was systematically planned and prepared with activities such as role playing, demonstrations, storytelling and interactive games in order to involve the boys and to promote actively participation.
Inclusion Criteria Used for Life Skills Training

- Age range between 12 to 16 years.
- Boys whose scores were above borderline in Youth Self Report (YSR) test.
- Boys who were attending school and would continue to stay in the same Home for a minimum period of one year.

Pre-test

35 boys who met the above mentioned inclusion criteria were assessed on Self-esteem, emotional intelligence, coping style, and perceived social support. Many of the boys had difficulties in reading, sitting in one place for a long period of time, and tended to distract each other. The questionnaires were administered in small groups of 2 to 3 individuals, or individually. Self-esteem was assessed in the first session, followed by assessment of coping style, emotional intelligence and perceived social support in the next session. The assessment for all the boys was completed in seven days.

Implementation of Life Skills Training

Life skills training was given to all the 35 boys after the pre-assessment. The trainings were conducted in 40 sessions, three times in a week and the duration of each session was one and a half hours. Details of the life skills training programme are described in Chapter V.

Post-test

After the completion of the life skills training, the questionnaires that were used for the pre-tests were re-assessed. The follow-up assessment was done after 3 months from the period of post assessment.
Statistics Used for Analyses

The data collected during the pre, post and follow-up assessments of the present study were analyzed using descriptive statistics, Mean, Median, SD and Percentile, Pearson Product moment correlation and ANOVA (repeated measures), and Trend analysis in order to test the various hypotheses of the study.

Description of the Psychological Tools Used in the Study

Tools such as Youth Self-Report (YSR), Self-esteem Questionnaire, the Assessing Emotions Scale, Brief COPE Inventory and the Multidimensional Scale of Perceived Social Support were used to assess behavioural problems, self-esteem, emotional intelligence, coping style and perceived social support, respectively. The description of each tool is given below:

Youth Self – Report (YSR) for Ages 11-18 (Achenbach and Rescorla, 2001)

The YSR is designed to obtain 11–18 year olds' self ratings of emotional and behavioral problems. The YSR includes 17 items for rating adaptive characteristics and 112 items for behavioral and emotional problems. Items are rated on a three-point scale as 0 = not true, 1 = somewhat or sometimes true, and 2 = very true or often true, based on the preceding 6 months. The following eight syndromes were scored from the YSR; Anxious/Depressed, Withdrawn/Depressed, Somatic Complaints, Social Problems, Thought Problems, Attention Problems, Rule-Breaking Behavior and Aggressive Behavior. The Anxious/Depressed, Withdrawn/Depressed, and Somatic Complaints syndromes are grouped as Internalizing problems. The Rule Breaking Behavior and Aggressive Behavior
syndromes are grouped as Externalizing problems. Total Problems is the sum of scores of all problem items.

**Reliability of the YSR Tamil Version**

The test re-test reliability obtained during the pilot study was .58 for total problem scales.

**Validity**

Discriminant analysis of behaviour problems on the YSR reported a cross – validated accuracy of 73% in correctly classifying the children.

**Administration**

Administration procedures which were given in the YSR forms were followed. Items in the YSR were rated as how true each item is ‘now’ or ‘was’ within the last six months. Boys rate items using the following scale: 0 = not true (as far as you know); 1 = somewhat or sometimes true; 2 = very true or often true. Boys who could read well answered the questions independently. For boys whose reading skills were poor or who may have been unable to complete forms for other reasons, the following procedure was adopted: the researcher hands the boy a copy of the form while retaining a second copy and says “I will read the questions on this form and you will write down your answers.”

**Scoring Procedure**

Scoring was done as per the manual. Responses of 0, 1 or 2 were summed up for each syndrome. The problem scales were not scored if data was missing for more than 8 items not counting the open–ended items 56 and 113 or YSR socially desirable items numbers 6, 15, 49, 59, 60, 73, 80, 88, 92, 98, 106, 107, 108 and 109. A higher score indicates more behaviour problems.
**Self – Esteem Questionnaire (Karunanidhi, 1995)**

The multi-dimensional self-esteem questionnaire consisted of 83 items in the form of statements. It has both positive and negative items. Categories are well mixed to reduce the halo effect and the logical error, and double – barrelled statements are avoided. Six dimensions involved:

1. Competency
2. Global self-esteem
3. Moral and self-control
4. Social-esteem
5. Family

A Lie scale is also included to measure social conformity in responses.

**Dimensions of Self Esteem**

1. **Competency**

   Ability to evaluate and understand one’s personal resources. This feeling reflects esteem based on one’s skills, talents and unique achievements.

2. **Global Self- Esteem**

   It is the general appraisal of self and it is based on the adolescent’s evaluation of all parts of himself. A positive global self-esteem would be reflected in feelings such as I am a good person, or I respect myself.

3. **Moral & Self-Control**

   It is the general reflection of feeling good as being honest; sincere, adhering to social values, etc. Adolescents who value these are supposed feel good about themselves.
4. **Social Esteem**

The social area encompasses the adolescent’s feelings about himself as a friend to others. Do others like him, value his ideas and include him in their activities? Is he satisfied with his interactions and relationship with peers? A child whose social needs are being met will feel comfortable with this aspect of himself.

5. **Family**

The family self-esteem reflects his feelings about himself as a member of his family. A person who feels he is a valued member of his family, who makes his own unique contribution and who is secure in the love and respect they receive from parents and siblings, will have a high positive self-esteem in this area.

6. **Body and Physical Appearance**

Body image has a contribution of physical appearance and capabilities. The adolescent’s self-esteem in this area is based upon his satisfaction with the way his body looks and performs.

**Reliability**

The mean test re-test reliability obtained was .62 for total self-esteem scales.

**Validity**

The questionnaire has been factor analyzed by using orthogonal varimax rotation principle and the factorial validity has been established.

**Administration**

It is a self administered questionnaire. This tool can be administered as a group test or individually. The procedure for individual administration is given below. The boys were seated comfortably in a well lighted room free of external distractions. The questionnaire was given and the following instructions were read
out. “These questions are to help you learn more about how boys and girls of your age feel about different things. There is no right or wrong answers. It is important that you answer the way you really feel and not how somebody thinks you should feel. Please indicate your response by circling the appropriate number. There is no time limit, but please try to answer the question as fast as possible. Do not omit any question”.

4- Always

3- Most of the time

2- Sometimes

1- Never

Scoring Procedure

Each dimension has a set of items and the responses for these items are added together for the dimension score. Higher score indicates high self-esteem in each dimension. Asterisk mark indicates reverse scoring.

Asterisk Items

1- Always

2- Most of the time

3- Sometime

4- Never

Competency

Items 1, 8*, 15, 22, 29*, 36, 43*, 49, 55, 61, 66*, 71, 75, 78, 80, 82; 16 items- total scores = 64
Global self –Esteem

Items 2,9,16*,23*,30,37,44*,50,56,62,67*,72,76*,79*,81*,83;
16 items-Total scores =64

Moral & Self –Control Scale

Items 3,10*,17,24,31*,38,45,51,57*,63*,68*,73*,77;
13 items-Total scores = 52.

Social Esteem Scale

Items: 4,11,18*,25,32*,39*,46,52*,58,64*,69*,74;
12 items -Total score = 48

Family Scale Items

5, 12*, 19, 26, 33*, 40*47*53, 59*65, 70;
11 items- Total score = 44

Body & Physical Appearance Scale

Items 6, 13, 20*, 27*, 34, 41*, 48, 54*, 60*;
9 items - Total score -36.

Lie Scale

7, 14, 21, 28*, 35, 42: 6items- Total score-24

Brief COPE (Carver, 1989)

The Brief COPE scale was developed to assess a broad range of coping responses, several of which had an explicit basis in theory. The inventory includes some responses that are expected to be dysfunctional, as well as some that are expected to be functional. It also includes at least 2 pairs of polar-opposite tendencies. It consists of 28 items. The scale has 14 dimensions and it is grouped further into adaptive and maladaptive coping.
Reliability of the COPE Scale Tamil version

The test re-test reliability obtained during pilot study for adaptive coping was .63 and for maladaptive coping was .86.

Validity

Internal validity was established using an oblique rotation to permit correlation among factors.

Administration

Administration procedures which were given in the COPE scale were followed. “We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feel when you experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress. Then respond to each of the following items by blackening one number on your answer sheet for each, using the response choices listed just below. Make your answers as true for you as you can. Please answer every item. There is no "right" or "wrong" answers. Indicate what you usually do when you experience a stressful event”.

1 = I usually don't do this at all
2 = I usually do this a little bit
3 = I usually do this a medium amount
4 = I usually do this a lot

Scoring Procedure

The Brief Cope scale consisted of fourteen dimensions with two items on each dimension. The responses for these items are added together for dimension
score. These fourteen dimensions were further divided into adaptive and maladaptive coping. The dimensions such as active coping, planning, instrumental support, emotional support, religion, positive reframing and humor are adaptive coping and the dimensions such as acceptance, venting, denial, behavioural disengagement, substance use, self-blame and self-distraction are maladaptive coping. A high score indicates higher coping style in each dimension.

Self-distraction, items 1 and 19
Active coping, items 2 and 7
Denial, items 3 and 8
Substance use, items 4 and 11
Use of emotional support, items 5 and 15
Use of instrumental support, items 10 and 23
Behavioral disengagement, items 6 and 16
Venting, items 9 and 21
Positive reframing, items 12 and 17
Planning, items 14 and 25
Humor, items 18 and 28
Acceptance, items 20 and 24
Religion, items 22 and 27
Self-blame, items 13 and 26

The Assessing Emotion scale (Schutte et al., 1998)

The Assessing Emotions Scale attempts to assess characteristic or trait emotional intelligence. The Assessing Emotions Scale is a 33-item self-report inventory focusing on typical emotional intelligence. This scale is based on Salovey and Mayer’s (1990) original model of emotional intelligence. This model proposed
that emotional intelligence consists of appraisal of emotion in the self and others, expression of emotion, regulation of emotion in the self and others, and utilization of emotion in solving problems. Respondents rate themselves on the items using a five-point scale. Respondents require on an average five minutes to complete the scale.

**Reliability of the Assessing Emotion Scale Tamil version**

In the pilot study, the 5 point scale was changed into a 4 point scale because the adolescents had a tendency to mark their response as neither agree nor disagree. The test re-test reliability obtained was .56.

**Validity**

Brackett and Mayer (2003) found that scores on the Assessing Emotions Scale were correlated with scores on the EQ-i, another self-report measure of emotional intelligence that is based on a broader definition of emotional intelligence. The relationship between Assessing Emotions Scale scores and the EQ-i was substantial, at $r = .43$. Kirk, Schutte and Hine (2007) found that scores on the Assessing Emotions Scale were not associated with scores on the Marlowe-Crowne Social Desirability Scale.

**Administration**

The following instructions were given before administering the questionnaire: “each of the following items asks you about your emotions or reactions associated with emotions. After deciding whether a statement is generally true for you, use the 5-point scale to respond to the statement. Please circle the “1” if you strongly disagree, the “2” if you somewhat disagree, “3” if you somewhat agree, and the “4” if you strongly agree. There are no right or wrong answers. Please give the response that best describes you”
1 = strongly disagree
2 = somewhat disagree
3 = somewhat agree
4 = strongly agree

Scoring Procedure

Total scale scores are calculated by reverse coding items 5, 28 and 33, and then summing all items. Scores can range from 33 to 132, with higher scores indicating more characteristic emotional intelligence.

Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet et al., 1988)

The Multidimensional Scale of Perceived Social Support (MSPSS) of Zimet et al., (1998) is a brief instrument for assessing the hierarchical structure of perceived social support. The MSPSS is a 12-item scale developed to assess perceived social support from three different sources such as, family, friends, and a significant other. The MSPSS is self-explanatory, simple to use and time conserving-features that made it an ideal research instrument when a number of measures are being administered at the same time (Zimet et al., 1988). It has been widely used by many researchers who are looking for a short, clear, and accurate scale to assess perceived social support and was found to be suitable for the purpose of the present study. The MSPSS is rated on a 7-point Likert-type scale (1 = Strongly disagree to 7 = Strongly agree). No items are reverse scored. Sample items include “There is a special person with whom I can share my joys and sorrows,” “My family really tries to help me,” and “I can talk about my problems with my friends.” The MSPSS produces three scores.
Reliability of the MSPSS Tamil version

In the pilot study the 7 point scale was changed into 4 point scale because the boys were not able to differentiate between strongly and very strongly and also had a tendency to mark in neutral response. The test re-test reliability obtained was .98 for total scale.

Validity

Convergent validity was established by the author for this tool. Perceived support from family was significantly inversely related to both depression, and anxiety. Perceived support from friends was related to depression symptoms, but not to anxiety. The Significant Other subscale was minimally but significantly negatively related to depression, as was the scale as a whole.

Administration

Administration procedures which were given in the MSPSS scale were followed.

We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the “1” if you Strongly Disagree

Circle the “2” if you Mildly Disagree

Circle the “3” if you Mildly Agree

Circle the “4” if you Strongly Agree

Scoring Procedure

The MSPSS scale consisted of three dimensions with four items on each dimension. The responses for these items are added together for dimension score. A higher score indicates high perceived support in each dimension.
Significant others – 1, 2, 5 and 10

Family – 3, 4, 8 and 11

Friends – 6, 7, 9 and 12

The next chapter deals with the life skills training in detail.