METHODOLOGY

Keeping in view the problem of the study, a single group multi-measures design was used. However, a subsidiary two-group design was employed to fulfill some of the objectives. As decided at the conception stage of the study, various components of negative emotions - Fear, Anxiety, Depression and Anger and six dimensions of Temperament were studied among young children. The methodology adopted to conduct this study is described in pertinent sections of this chapter.

SAMPLE

The objectives of the present study necessitated collecting the data from the children. If one is interested to study children, the age of the participants should be below 13 years, according to World Health Organization norms. Therefore, data were collected from children in the age range of 10 – 12 years from various CBSE affiliated schools based in Delhi. A sample of 403 children (197 male and 206 female) was drawn, using the technique of cluster sampling, from VIth and VIIth grade students of five Delhi based public schools. In order to have a homogenous academic setting, only CBSE affiliated schools were chosen. For this purpose a list of all the CBSE affiliated schools of Delhi was generated from the internet. The schools were divided into five zones on the basis of their geographical locations in Delhi region. These five zones are East, West, North, South and Central. It was planned to take two schools from each zone for the collection of data. Since, some of the selected schools did not agree for participation in the study, one school from each zone was retained for further sampling. Each school had 5-7 sections of selected grades. Only two sections of each class were selected at random from each school. Then a list of the students studying in selected sections was compiled as a sample frame. Finally, about forty to forty five
students were drawn randomly from each of the selected classes in a school. This way, a total of 432 participants were recruited for the study. Owing to absentees, lack of interest or incomplete answer-sheets 29 cases were dropped from the final sample. The schools and grade-wise distribution of the participants is as under:

<table>
<thead>
<tr>
<th>Schools</th>
<th>VI&lt;sup&gt;th&lt;/sup&gt; Grade</th>
<th>VII&lt;sup&gt;th&lt;/sup&gt; Grade</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Females</td>
<td>Male</td>
</tr>
<tr>
<td>Alhcon Public School</td>
<td>17</td>
<td>22</td>
<td>21</td>
</tr>
<tr>
<td>Army Public School</td>
<td>20</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>Bal Bharti Public School</td>
<td>19</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>Mata Jai Kaur Public School</td>
<td>22</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Salwan Public School</td>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>97</td>
<td>99</td>
<td>100</td>
</tr>
</tbody>
</table>

**MEASURING INSTRUMENTS**

Following tools were used in the present study:

1. **Fear Survey Schedule for Children- Revised (FSSC-R)**

The Fear Survey Schedule for Children-Revised (Ollendick, 1983) is a widely used self-report measure of children and adolescents’ fears. This instrument is a revised form of Scherer and Nakamura’s (1968) original Fear Survey Schedule for Children. The survey is basically meant for children in the age range of 7-16 years. The scale contains 80 items distributed under five subscales entitled Failure and Criticism, The Unknown, Minor Injury and Small Animals, Danger and Death, and Medical Fears. The items are responded on a Yes/No format.

The reliability of the total fearfulness score and factor subscale scores has
been examined in three principal ways: internal consistency coefficients, test-retest reliabilities and stability of scores over time. Cronbach’s alpha coefficients for the full scale score have consistently been reported to be above .90, whereas the coefficients for factor subscale scores have ranged from .57 to .89. Test-retest reliability for overall fearfulness has been estimated to be .82 for one week, .85 for two weeks and .62 for three months (King & Ollendick, 1992; Ollendick, 1983). Factor subscale test-retest reliabilities have ranged from .70 – .87 over three months (King & Ollendick, 1992). Total scores and subscale scores have been found to be stable over one week and two weeks but decrease in intensity over a three month interval of time (King & Ollendick, 1992).

The validity of FSSC-R has been demonstrated in a number of ways. Girls have been found to report higher levels of fearfulness than boys and younger children were shown to report higher levels of fearfulness than older children and adolescents (Ollendick, 1983; Ollendick et al., 1989). School avoidant children were also found to demonstrate higher levels of fearfulness than normal controls (Ollendick, 1983). Factor subscale scores and specific fear items have been related to specific types of phobia and to specific anxiety disorders (Last et al., 1989; Weems et al., 1999) establishing both convergent and divergent validity of the measure. Fear levels in a normal sample have been found to be positively related to levels of trait anxiety and negatively related to internal locus of control and healthy self-concept (Friedman et al., 1991; King et al., 1992; Ollendick, 1983). Levels of fearfulness have also been found to be related to presence of life stressors, negative attributional styles and avoidant coping strategies (Ollendick, Langley, Jones & Kephart, 2001).
2. State-Trait Anxiety Inventory for Children (STAIC)

State-Trait Anxiety Inventory for Children, (Spielberger, 1973) is especially meant to measure anxiety in nine to twelve year old children. It was initially developed as a research tool for the study of anxiety in elementary school children. STAIC can also be used with younger children below nine years having average or above average reading ability and with older children above twelve years of age who are below average in ability. The STAIC is similar in conception and structure to State-Trait Anxiety Inventory (STAI) which provides measures of anxiety for adolescents and adults (Spielberger, Gorsuch & Lushene, 1970).

The inventory comprises of two separate self-report scales for measuring two distinct anxiety concepts: state anxiety and trait anxiety. A-State scale measures transitory anxiety states, that is, subjective, consciously perceived feelings of apprehension, tension and worry that vary in intensity and fluctuate over time and A-Trait scale measures relatively stable individual differences in anxiety proneness, that is, differences between children in the tendency to experience the anxiety states. The A-State scale consists of twenty statements that ask children how they feel at a particular moment in time. The A-Trait scale also consists of twenty statements but subject responds to these by indicating how they generally feel. Individual STAIC items are similar in content to those included in the STAI, but in order to facilitate its use with young children, the format for responding to STAIC has been simplified. The items are responded on a Yes/No format.

The test-retest correlations for the A-Trait scale were moderate, .65 for males and .71 for females, which probably reflect instability of personality structure in children of this age. For A-State scale the test-
retest reliability coefficients were .31 for males and .47 for females. The test-retest correlations for the A-State scale are quite low, as would be expected for a measure designed to be sensitive to the influence of situational factors. The internal consistency of the scale is reasonably good. The alpha reliability of the A-State scale computed by Kuder-Richardson formula 20 as modified by Cronbach (1951) was .82 for males and .87 for females. For the A-Trait scale, the alpha coefficients were .78 for males and .81 for females.

The construct validity of A-Trait scale against General Anxiety Scale for Children (Sarason, et al., 1960) is .75 and against Children’s Manifest Anxiety Scale is .63. Most of the correlations between the STAIC A-State and A-Trait scales with the California Test of Mental Maturity and the California Achievement Test were negative as might be expected with these measures of aptitude and achievement.

3. Children’s Depression Inventory (CDI)

Children’s Depression Inventory (Kovacs, 2003) is a 27-item self-rated symptom-oriented scale that assesses depression in children aged 7 to 17 years. The CDI provides useful information about severity of depressive symptoms. CDI was developed in 1977 and first published in 1992. Combined with other sources of information CDI can aid in identification and treatment of childhood depression. While the internal consistency and factorial structure vary somewhat in different juvenile cohorts, it has acceptable test-retest reliability and concurrent validity. This self-report form quantifies varieties of depressive symptoms including disturbed mood, difficulties in hedonic capacity and vegetative functions, low self-evaluation, hopelessness and problems in interpersonal behaviours. Contexts that are specifically relevant to
children (e.g., school) are present in several items in order to capture various ways in which depression can manifest itself. The items are responded on a three-point scale. CDI self-report yields scores for five factors in addition to the total score. These factors are labeled as under:

a) **Negative Mood**: This subscale reflects feeling sad, feeling like crying, worrying about 'bad things', being bothered or upset by things and being unable to make up one's mind.

b) **Interpersonal Problems**: This subscale reflects problems and difficulties in interactions with people, including trouble getting along with people, social avoidance and social isolation.

c) **Ineffectiveness**: This subscale reflects negative evaluation of one's ability and school performance.

d) **Anhedonia**: This subscale reflects ‘endogenous depression’, including impaired ability to experience pleasure, loss of energy, problems with sleep and appetite and a sense of isolation.

e) **Negative Self-Esteem**: This subscale reflects low self-esteem, self-dislike, feelings of being unloved and a tendency to have thoughts of suicide.

The 27-item CDI has an internal consistency reliability of .86. However, Cronbach alpha coefficients for the individual factors in the normative sample range from .59 to .68. The total score coefficient alpha has been reported to be .87 with a large sample of public school students (n = 860). CDI has acceptable test-retest reliability. CDI has been utilized in hundreds of clinical and experimental research studies and its validity has been well established using a variety of techniques. The overall weight of evidence indicates that the CDI assesses constructs that have a strong explanatory and predictive utility in the characterization of
depressive symptoms in children and adolescents. CDI factor scores have been found to classify participants as depressed versus not depressed with a high degree of accuracy (Craighead et al., 1995).

4. **State-Trait Anger Expression Inventory-2 Child and Adolescent (STAXI-2 C/A)**

State-Trait Anger Expression Inventory-2 Child and Adolescent (Brunner & Spielberger, 2009) was adapted from STAXI-2 (Spielberger, 1999) to address the need for assessing anger in children and adolescents in the age range of 9 to 18 years. The instrument was guided by state-trait theory of emotions and the concepts of experience, expression and control of anger. The inventory is a 35 item self-rated scale that is unique in its ability to assess state and trait anger along with anger expression and anger control. The items are responded on a three-point scale. It is a multidimensional measure of the components of anger that provides a rapid but thorough assessment of the presentations of anger in children and adolescents. STAXI-2 C/A comprises of five major scales of State Anger, Trait-Anger, two scales to measure anger expression that is Anger Expression-In and Anger Expression-Out and Anger Control.

a) **State Anger** a psychobiological emotional state or condition marked by subjective feelings that vary in intensity from mild irritation and annoyance to intense fury and rage. The concept of state anger is measured by State Anger (S-Ang) scale and by two subscales that assess two more fundamental components of state anger- State Anger-Feelings (S-Ang/F) and State Anger-Expression (S-Ang/VP).

b) **Trait Anger** described in terms of individual differences in anger proneness. Children high in trait anger perceive a wide range of situations as annoying, threatening, or frustrating and they tend to
respond to such situations with elevations in state anger. The concept of trait anger is measured by Trait-Anger (T-Ang) scale and by two subscales that measure two more fundamental components of trait anger i.e., Trait Anger-Temperament (T-Ang/T) and Trait Anger-Reaction (T-Ang/R).

c) *Anger Expression* recognizes the various mechanisms that children and adolescents use to process and express the anger they are experiencing. Expression of anger is measured by two scales- *Anger Expression-Out (AX-O)* and *Anger Expression-In (AX-I)*. The AX-O scale assesses how often anger is expressed towards other persons or objects in the environment. The AX-I assesses the tendency to suppress or hold in angry feelings.

d) *Anger Control* is conceptualized as having two facets- Anger Control-Out and Anger Control-In. However, these were found to be so interwined and strongly related in children that they are assessed as a single concept of anger control. The *Anger Control (AC)* scale measures how often a young person controls angry feelings by either preventing the expression of anger towards other persons or objects or by calming down or cooling off when angered.

The internal consistency alpha coefficients for the 10-item S-Ang and T-Ang scales were .80 or higher for the total normative sample. Alpha Coefficients for the seven 5-item scales and subscales i.e. S-Ang/F, S-Ang/VP, T-Ang/T, T-Ang/R, AX-O, AX-I and AC were consistently moderate to high for the total normative sample, ranging between .57 - .87. The correlations between each of the STAXI-2 C/A scales and subscales for the normative sample were moderate to highly positive and statistically significant, with the exception of AX-I and AC scales. As
the AX-I scale measures the suppression of angry feelings, this scale
correlated negatively and significantly with AX-O (r= -.26, p < .01),
which measures the outward expression of anger. The AC scale which
measures the tendency to manage anger, correlated negatively with all
the scales and subscales except the AX-I scale.

The inventory was validated against Achenbach’s Youth Self-Report
(YSR; Achenbach & Rescorla, 2001). The YSR syndrome scales related to
problematic expressions of anger (e.g., Aggressive behaviour,
Externalizing) showed strongest positive correlations with the AX-O and
the T-Ang scales and subscales. These scales correlated negatively with
the AX-I and AC scales. YSR Rule-Breaking Behaviour scale had small
positive but significant correlations with T-Ang, T-Ang/T and AX-O
scales and correlated negatively with AC scale. The criterion related
validity of STAXI-2 C/A was checked by examining its ability to
distinguish between a clinical group and a matched control group.
Highly significant group differences were found for the T-Ang, S-Ang and
AX-O scales.

5. Formal Characteristics of Behaviour-Temperament Inventory
(FCB-TI)

Formal Characteristics of Behaviour-Temperament Inventory (Strelau &
Zawadzki, 1993) corresponds fully to Regulative Theory of
nearly two decades there was a lack of sufficient instrument to measure
the temperament traits as postulated by RTT. The Strelau Temperament
Inventory (Strelau, 1972, 1983) and its revised version STI-R (Strelau,
Angleitner, Bantelmann & Ruch, 1990) were the only means used for
measuring the constructs postulated by RTT. However, these
inventories were meant for measuring the Pavlovian constructs. To overcome this limitation Strelau & Zawadzki (1993) developed the Formal Characteristics of Behaviour-Temperament Inventory (FCB-TI). They also undertook an international research program to develop FCB-TI in different languages representing different culture. The inventory has been developed in Polish, German and Indian languages.

FCB-TI consists of six scales aimed to measure the six temperamental traits postulated by the RTT: two temporal characteristics and four energetic aspects of behaviour. The inventory has a yes/no answer format and comprises of 120 items, with 20 items in each scale. The six scales, named after the six temperamental traits they tap, are:

a) **Briskness** (BR): tendency to react quickly, to keep a high tempo of performing activities, and to shift easily in response to change in the surrounding from one behaviour to another.

b) **Perseverance** (PE): tendency to continue and to repeat behaviour after cessation of stimuli evoking this behaviour.

c) **Sensory Sensitivity** (SS): ability to react to sensory stimuli of low simulative value.

d) **Emotional Reactivity** (ER): tendency to react intensively to emotion generating stimuli, expressed in high emotional sensitivity and in low emotional endurance.

e) **Endurance** (EN): ability to react adequately in situations demanding long lasting or high stimulative activity and intensive external stimulation.

f) **Activity** (AC): tendency to undertake behaviour of high simulative value or to supply by means of behaviour strong stimulation from the surroundings.
The reliability of the scale was ascertained by using cronbach’s coefficient alpha- the reliability estimates for the six scales ranged between .74 and .83. The highest reliability estimate has been obtained for the scale Endurance (.83), followed by Activity (.82). The reliability estimates of Emotional Reactivity (.79), Perseverance (.78), Briskness (.76) and Sensory Sensitivity (.74) are also satisfactory. Comparison of these reliability estimates with those reported by Strelau and Zawadzki (1993) for Polish version reveals that the estimates are fairly comparable. The original Polish version of FCB-TI has been extensively validated (Strelau, 1996; Strelau & Zawadzki, 1993, 1995). Lending support to the discriminative validity of FCB-TI, Strelau nad Zawadzki observed that each FCB-TI scale appears to contribute something that the others do not. Existence of related Indian studies (Darolia & Kumar, 2003; Darolia & Arora, 2005) also provides support for the validity of FCB-TI.

The present study utilized Indian adaptation of FCB-TI (Darolia & Kumar, 2003), which proved to be a reliable and valid measure of RTT traits among Hindi speaking people (Darolia & Arora, 2005).

**ADMINISTRATION OF TESTS**

Participants of the study were administered Fear Survey Schedule for Children- Revised (FSSC-R), State-Trait Anxiety Inventory for Children (STAIC), Children’s Depression Inventory (CDI), State-Trait Anger Expression Inventory-2 Child and Adolescent (STAXI-2 C/A) and Formal Characteristics of Behaviour-Temperament Inventory (FCB-TI). Keeping in view the age of the participants of the study, all the five measuring tools were made available in Hindi or translated into Hindi with the help of an expert in the language. The translated versions of the tools were judged by two language experts for
establishing equality of Hindi and English versions. Number of items in FSSC-R and FCB-TI were reduced in order to make it suitable for administration on young children. The shortened versions were judged by two subject experts for its content. Thus, bilingual forms of all the scales were used for data collection. A specific answer-sheet was designed for the purpose of data collection. This answer-sheet included the questionnaires of Fear, Anxiety, Depression, Anger and Temperament, in a sequential order. The variable names were not specified in the questionnaire/inventory and the answer-sheet in order to avoid biases and socially desirable responses. The school authorities were approached for the purpose of collection of data and after getting their prior consent the data was collected in respective schools during the time allotted for this purpose to the researcher. The general testing conditions were cordial and the atmosphere was uniform throughout the stage of test administration.

The participants were well informed about the nature and purpose of the study. Initially rapport was established with the participants of the study, in order to enhance their level of comfort with the testing procedure and their willing consent was sought for participation in the study. The participants were assured of the confidentiality of their responses and were encouraged to respond freely and honestly. Informing the participants about the practical applicability of this study, they were instructed not to think too much for giving their responses and to write the very first thought that strikes their mind. Prior to administering the test, the participants were asked to fill in the demographic details required for the study such as age, gender, birth-order, etc.

The tests were administered in accordance with the procedure and instructions described in the test manuals or as described by the respective test authors. The instructions for each scale were read aloud while the
participants were directed to read the instructions silently and clarify their doubts, if any. If a participant did not understand any item, his/her concern was addressed. The data were collected in groups of 20 – 25 participants belonging to one section of each class. The participants of the study comprised of children of small age, therefore in order to reduce fatigue; the tests were administered in two sessions with a gap of 10 minutes duration in between the two sessions. There was no time limit however, for FSSC-R participants took 10-12 minutes, for STAIC 10-12 minutes, for CDI 15-17 minutes, for STAXI-2 C/A 12-15 minutes and for FCB-TI 20-23 minutes time approximately. This way, it took almost 90 minutes in administration of the whole test. After the test the participants were thanked for their contribution and chocolates were distributed to them as an appreciation of their effort and time spent for participation in the study. After completion of the tests by the participants, the answer-sheets were reviewed carefully for any missing information, any items that may have been left blank or items for which more than one response has been marked. After the collection of data, the filled questionnaires were numbered and scored using respective scoring keys.

SCORING

After the completion of data collection, the scoring of the scales was accomplished as per the standard scoring procedure described by the authors of the respective measuring tools. The procedure towards the positive and negative statements within the tools was strictly adhered to while scoring of the tests. The Fear Survey Schedule for Children- Revised (FSSC-R) was scored for Failure and Criticism, The Unknown, Minor Injury and Small Animals, Danger and Death and Medical Fears; State-Trait Anxiety Inventory for Children (STAIC) was scored for State Anxiety and Trait Anxiety; Children’s Depression Inventory (CDI) was scored for Negative Mood, Interpersonal Problems, Ineffectiveness, Anhedonia and Negative Self-Esteem; State-Trait
Anger Expression Inventory-2 Child and Adolescent (STAXI-2 C/A) was scored for State Anger (S-Ang), Trait Anger (T-Ang), Anger Expression-In (AX-I), Anger Expression-Out (AX-O) and Anger Control (AC); and Formal Characteristics of Behaviour-Temperament Inventory (FCB-TI) was scored for Briskness (BR), Perseverance (PE), Sensory Sensitivity (SS), Emotional Reactivity (ER), Endurance (EN) and Activity (AC). Therefore, in overall, scoring provided scores on 23 variables: Fear of Failure and Criticism, Fear of Unknown, Fear of Minor Injury and Small Animals, Fear of Danger and Death, Medical Fears, State Anxiety, Trait Anxiety, Negative Mood, Interpersonal Problems, Ineffectiveness, Anhedonia, Negative Self-Esteem, State Anger, Trait Anger, Anger Expression-In, Anger Expression-Out, Anger Control, Briskness, Perseverance, Sensory Sensitivity, Emotional Reactivity, Endurance and Activity.

The Fear Survey Schedule for Children-Revised was scored on a three-point rating scale ranging from 0 to 2 for response alternatives of ‘none’, ‘some’ and ‘a lot’. The response of ‘none’ was assigned a score of zero, response of ‘some’ a score of one and the response of ‘a lot’ a score of two. The scores obtained on each of the five subscales were summed up to get the score on individual subscales.

The State-Trait Anxiety Inventory for Children was scored for two separate scores, one each on state and trait anxiety component. The responses on this inventory too are obtained on a three-point scale ranging from 1 to 3. There are two scales in this instrument. The response alternatives in the 20 item scale A-State that is, State Anxiety are ‘not at all’, ‘somewhat’ and ‘very much’. Ten items of this subscale contain key terms which are indicative of the presence of anxiety. The other ten items contain key terms which reflect absence of anxiety. The items in which the key term indicates presence of anxiety, the response of ‘not at all’ was assigned a score
of 1, response of ‘somewhat’ was assigned a score of 2 and the response of ‘very much’ was assigned a score of 3. However, the scoring was reversed for the remaining ten items in which the key term indicates absence of anxiety. That is, the response of ‘not at all’ was assigned a score of three, response of ‘somewhat’ was assigned a score on two and the response of ‘very much’ was assigned a score of one. The response alternatives in the scale A-Trait are ‘hardly ever’, ‘sometimes’ and ‘often’. All the twenty items of this subscale are scored in the direct manner. The scoring weights assigned to the response alternatives ‘hardly ever’, ‘sometimes’ and ‘often’ are 1, 2 and 3 respectively.

Finally, two separate scores were worked out for A-Trait and A-State.

Although, Children’s Depression Inventory consists of 27 items, item 9 was not included in scoring, the sample being non-clinical. The omission of this one item is unlikely to affect the pattern of results (Chorpita et al., 1997; Hoffman et al., 2000). There are three choices for each item that correspond to the three levels of symptomatology- absence of symptom, minor probable symptom and definite symptom. About 50% of the items start with the sentence that reflect greater symptom severity, for rest the sequence of response options is reversed. The items having response choices in the descending order of symptom severity are scored as 2, 1 and 0 respectively, whereas items with response choices in ascending order of symptom severity are scored as 0, 1 and 2 respectively. The scores obtained on the items under each of the five subscales were summed up to obtain the scores for individual subscale.

State Trait Anger Expression Inventory-2 Child and Adolescent is comprised of 35 items which are rated on a three-point rating scale that assesses either the intensity of his angry feelings at a particular time or the frequency with which anger is experienced, expressed, suppressed or controlled. This measuring tool has three sections. In all the three sections the
participants have to rate themselves on a three-point rating scale. Part I (items 1-10) which rates the intensity of anger of the participant has the response alternatives ‘not at all’, ‘somewhat’ and ‘very much’ which are scored as 1, 2 and 3 respectively. Part II (items 11-20) which rates the frequency of the indicated emotion, has the response alternatives ‘hardly ever’, ‘sometimes’ and ‘often’ and these are scored as 1, 2 and 3. The Part III (items 21-35) is about how often the participant feels or acts in the indicated way when feeling angry. The same three-point rating scale is used as in Part II that is, ‘hardly ever’ (score- 1) to often (score- 3). In Part I, five items correspond to State Anger-Feelings and five items correspond to State Anger-Expression. As per the distribution of items given in manual, scores on subscale State Anger-Feelings and State Anger-Expression was obtained from Part I. Summation of the scores of these two subscales gives a total score of State Anger (S-Ang). Similarly, in Part II, five items correspond to Trait Anger-Temperament and five items correspond to Trait Anger-Reaction. Following the distribution of items given in manual for this part, scores on subscale Trait Anger-Temperament and Trait Anger-Reaction was obtained from Part II. Summation of the scores of these two subscales gives a total score of Trait Anger (T-Ang). In Part III summation of scores of items given in manual (ten under each scale) gives score on three scales of Anger Expression Out (AX-O), Anger Expression In (AX-I) and Anger Control (AC). Thus scores on five major scales of this instrument are obtained.

**Formal Characteristics of Behaviour-Temperament Inventory** measures the six temperament traits as described by the RTT. The items are dichotomous in nature and the subject gives response in the form of ‘yes’ or ‘no’. The response of ‘yes’ assigned a score of one and the response of ‘no’ is assigned a score of zero. Some of the items were scored in the reverse manner, adhering to the guidelines for scoring the test. Summation of the
scores obtained on the items under each subscale, generates the total score for that particular temperament trait. The scores for all the six temperament traits were obtained in a similar manner. After obtaining scores on all the measuring instruments, the obtained data were subjected to various statistical analyses taking into consideration the objectives of the study.

**STATISTICAL ANALYSES**

The obtained data were processed through SPSS 12.0 for descriptive statistics, correlational analysis, z-test, and Principal Components analysis. Correlation coefficients among variables were computed through Pearson's Product Moment Method. The z-test was carried out for studying gender differences on all the measured variables. Factor analysis (Principal Component) was conducted at two levels. Firstly, it was run to find the factor structure of negative emotions. The second order factors obtained so were further analyzed along with temperamental traits to explore higher order factors among emotions and temperament.