

5.0 METHODS

5.1 PARTICIPANTS

5.1.1 Sample size

The Sample size (68) was obtained using a software called “G” power using effect size =0.5768, Alpha = 0.05, Beta = 0.95 from the total score of Adjustment Inventory based on earlier study done on similar setting (Community home) for orphan children population (Nidhi & Apachu, 2009) (Details in Appendix-I).

So, in this study 135 resident young adolescent orphans were screened, out of which only 80 were enrolled based on the inclusion and exclusion criteria and the trail profile is in (Figure-2).

5.1.2 Inclusion criteria

1. Children having single or no parent or abandoned
2. Age ranged 11 to 16 years
3. Both genders
4. Apparently healthy children
5. Children whose guardians have given their consent to participate in the study

5.1.3 Exclusion criteria

Those who can't read, write and understand English.

5.1.4 Source of the participants

The study was conducted in an orphanage at Kallahali, Sarjapura; a sub urban area of Bangalore.

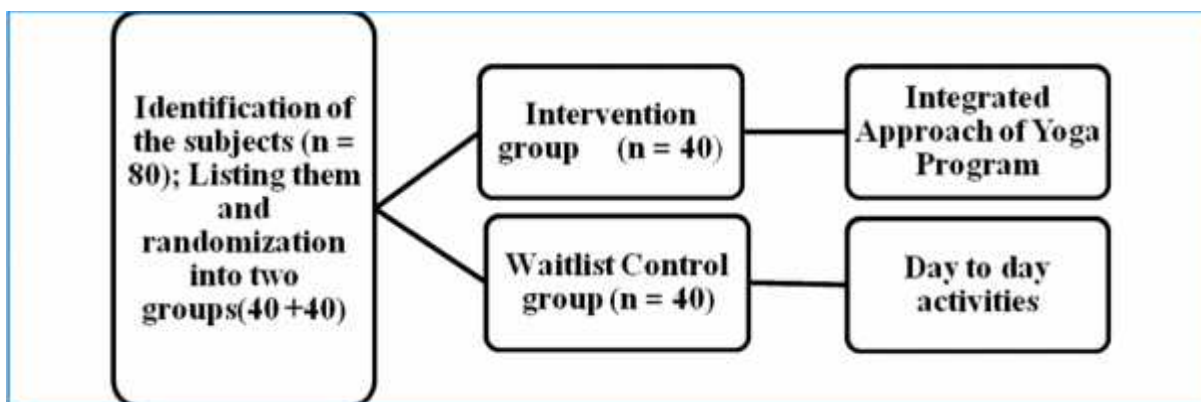
5.1.5 Ethical considerations

The study protocol was approved by the Institutional Ethical Committee of SVYASA Yoga University, and followed the tenets of the declaration of Helsinki research ethics and reviewed by Institutional Review Board. A prior informed consent from the head of the orphanage and a signed informed consent was obtained from the participants after explaining in detail about the nature of the study. They were not provided with any incentives for their participation.

5.2 DESIGN

5.2.1 Randomization

Participants were randomized by a statistician using a computer random number table from www.randomizer.org and assigned into two groups as yoga group and Wait list control (WLC) group. The yoga group underwent the yoga module for three months. Participants in the control group underwent day to day regular activities. Assessments were done before and after the 3 months program in the two groups.



5.2.2 Blinding and masking

The research staff, who administered and scored the tests; the statistician, who did the randomization and subsequently data analysis were blinded to the source of the data and regarding the participants of the intervention groups. Data were analysed only after completion of the study. Double blinding was not possible in this type of yoga studies.

5.3 INTERVENTION

The yoga group received a combined approach of yoga program (IYP) of 90 minutes, four days/week, for three-months under the supervision of two certified yoga teachers from SVYASA. The principle and concept of the yoga program is based on the research work of SVYASA (Nagarathna & Nagendra, 2006). Each session comprises of didactics; warm-ups, loosening and stretching; *S ryanamask ra*, yoga postures (*sanas*), voluntary regulated breathing (*Pr n y ma*), deep relaxation technique (DRT) and concentration techniques (*Tr aka*) or yogic games. The various components of the yoga program are mentioned in the table-3 and appendix-VII.

The WLC group underwent the day to day scheduled activities in the orphanage during the study period and received the same yoga program after the study period.

Table-3: List of practices in the yoga program

Order No.	Intervention components	No. of Rounds	Approx. Time (90 min)	Schedule	Rationale of the practices	Target area
1	Yogic Prayer, Session on basic concepts of Yoga and Instructions for the class		10 min	4 days /week (Wednesday, Thursday, Saturday and Sunday)	Give directions and motivation for practicing yoga	Mental, Intellectual state
2	Preparatory practices: a) Warm up: Jogging, jumping, hopping, forward & backward bending, Side bends, Twisting b) Loosening: for toes, ankle, knee, hips, fingers, wrist, elbow and neck c) Stretching with Breathing exercises: Hands in and out, hands stretch, Ankle stretch, Hip stretch, Backstretch, Tiger stretch (Spinal ups-down), Supine straight leg raising, Cycling, Lumber stretch, Rocking and rolling	One each	10 min	4 days /week (Wednesday, Thursday, Saturday and Sunday)	Preparatory practices for <i>asana</i> and <i>Pranayama</i>	Physical and Vital energy body
3	Sun salutation (<i>Suryanamask ra</i>)	10-12	10 min	4 days /week (Wednesday, Thursday, Saturday and Sunday)	Gives an all-round benefit by balancing physiological systems and removing mental rigidity(<i>Tamas</i>)	All levels

4	<p>Postures (<i>sana</i>):</p> <p>A. Standing postures:</p> <p>a) Half waist rotation posture (<i>Ardhaka i cakra sana</i>)</p> <p>b) Foot palm posture (<i>P dahast sana</i>)</p> <p>c) Half wheel posture (<i>Ardha cakra sana</i>)</p> <p>d) Triangle posture (<i>Triko sana</i>)</p> <p>e) Tree posture (<i>V k sana</i>)</p> <p>f) Eagle posture (<i>Garu sana</i>)</p> <p>B. Sitting postures</p> <p>a) Diamond (<i>Vajr sana</i>)</p> <p>b) Rabbit posture (<i>a a k sana</i>)</p> <p>c) Sleeping diamond posture (<i>Suptavajr sana</i>)</p> <p>d) Camel posture (<i>Us r sana</i>)</p> <p>e) Posterior stretch(<i>Pa cimott n sana</i>)</p> <p>f) Spinal twist posture (<i>Ardhamatsyendr sana</i>)</p> <p>g) Cow face posture (<i>Gomukh sana</i>)</p> <p>C. Prone postures:</p> <p>a) Cobra posture (<i>Bhuja g sana</i>)</p> <p>b) Grasshopper posture (<i>Salabh sana</i>)</p> <p>c) Bow posture (<i>Dhanur sana</i>)</p> <p>d) Shoulder stand (<i>Sarv g sana</i>)</p> <p>e) Plough posture (<i>Hal sana</i>)</p> <p>D. Supine postures</p> <p>a) Fish posture (<i>Matsy sana</i>)</p> <p>b) Boat posture (<i>Nauk sana</i>)</p>	1 each	20 min (around 1 min each posture)	4 days /week (Wednesday, Thursday, Saturday and Sunday)	For culturing the body and mind	Physical & mental levels
5	Deep Relaxation Technique (DRT)	1	10 min	4 days /week (Wednesday, Thursday, Saturday and Sunday)	for total rest to the body and mind.	All levels
6	<p>Pranayama (voluntary regulation of breath):</p> <p>a) Breathing with forceful exhalation with passive inhalation (<i>Kap labh ti</i>)-3 types</p> <p>b) Breathing with rapid inhalation & exhalation (<i>Bhastrik</i>),</p> <p>c) Slow & rhythmic alternate nostril breathing (<i>N i odhana</i>)</p> <p>d) Exhalation, with a honey bee sound (<i>Bhr mar</i>)</p> <p>e) <i>Ujj y</i> (Hissing in thought while exhaling)</p>	1 each	15 min	4 days (Wednesday, Thursday, Saturday and Sunday)	Improve lung capacity, balance vital energy, regulate emotions with reducing anxiety & stress	Physiological, vital and mental levels

7	Concentration Techniques: a) Eye exercises (<i>Netra akti vik saka</i>) b) Practice to improve collective motivation (<i>Dhruti akti vika aka</i>) c) Activity to improve intellect (<i>Dh akti vika aka</i>) d) Tr aka e) Palming	1 each	15 min	2 days /week (Wednesday and Saturday)	An important technique to improve concentration/ attention also along with rest to the ocular muscles	Physical and mental levels
8	Yogic games		15 min	2 days /week (Thursday and Sunday)	Yogic games along with fun; helps reduce stress by keeping the subjects active and also improve, social skills like caring attitude, peer relationship, and reduce loneliness.	All levels with Socio-behavioral

5.4 OUTCOME MEASURES

5.4.1 Socio-demographic data

The demographic data such as age, gender, education, etc. were collected from office record of the orphanage and through a semi-structured interview by the research team of SVYASA.

5.4.2 Anthropometric measures

- a) Height (in cms) was measured in standing position without footwear, to nearest to 0.1 cms.
- b) The participants were weighed with a standard weighing machine, to nearest to 0.1 kgs.
- c) Body Mass Index (BMI) was calculated for each participant from the height (ht) and weight (wt) of the individual by using formula $BMI = wt \text{ in Kg} / ht \text{ in m}^2$.

5.4.3 Physical parameters:

5.4.3.1 Kraus-Weber test (K-W test).

Muscle strength, a fundamental factor of physical fitness, is measured by the Kraus-Weber test (K-W test), a battery of six muscular strength tests (Kraus & Hirschland, 1954). The K-W test is a reliable and easy exercise test (Babalola, Awolola, & Hamzat, 2008) which includes six specific tests to measure strength and flexibility of various different muscle groups. Kraus and Hirschland prepared six tests of minimum muscular fitness for children after two decades of their clinical experience. The battery evaluates strength and flexibility of trunk and leg muscles (Kraus & Hirschland, 1953). Failure of any one of six items is considered as a failure of the total test. Earlier studies have shown the test to be effective especially in paediatrics (Kulkarni & Desai, 2010; Rawat, Rajesh, & Nagarathna, 2014).

The test was performed in a spacious room during the morning hours between 9 a.m. to 11 a.m. at both beginning and end of three months of the intervention. Children were asked to come in

groups of five or six for the tests. The K-W test was recorded individually after an explanation about the six subtests. The procedure details of the K-W tests are as follows:

SubTest-1: It measures the strength in abdominal and psoas (hip flexor) muscles. The participants were instructed to lie in a supine position with the hands behind the neck. The feet were held by the examiner. On command; the participant rolled up into a sitting position.

SubTest-2: The position for this test remained same as test-1 and knees were bent. The feet were held. Participants were asked to do the same like test one. This is a test of abdominal muscles without using the psoas muscle.

SubTest-3: It measures the strength of lower abdominal muscles. Here, the position of the body remained same with legs extended. Participants were instructed to lift the feet above the ground, ten inches and maintained for ten seconds.

SubTest-4: This test measures the strength of upper back muscles. Participants were asked to lie prone with a pillow under the abdomen. The examiner held the feet and asked to lift the head, shoulders, and chest off the floor and maintain for ten seconds.

SubTest-5: During the fifth test, the position remains same. The examiner held the participant's chest down and asked to lift his legs up without bending the knees and maintain this position for ten seconds. The lower back muscles strength was tested with this test.

SubTest-6: In this test, the participants were asked to stand erect with his hands on sides and feet together. With instruction, participants had to lean down slowly to touch the floor with his fingertips. The knees were kept straight and the leaning down position was asked to be

maintained for ten seconds. This test measures the flexibility of back and ability to stretch the hamstring muscle.

5.4.3.2 Euro-fit physical tests battery

Euro-fit physical fitness test (Adam, Klissouras, Ravazzolo, Renson, & Tuxworth, 1988) is a standardized battery, which was developed by the Council of Europe's Committee to help the teachers to assess the physical health-related fitness of the children of school age and it has been used in many European schools since 1988. The tests selected from the battery were a) Flamingo left leg balance test (FLL), b) Flamingo right leg balance test (FLR), c) Left-hand plate tapping test (PTL), d) Right-hand plate tapping test (PTR) e) Sit and reach (SAR), f) Standing broad jump (SBJ), g) Left hand grip strength (LHS), h) Right hand grip strength (RHS), i) Sit-ups (SUP), j) Bent arm hang test (BAH), h) Shuttle run (SHR). Prior to the tests participants were familiarised with the test methods by giving them clear instructions with a demonstration in a group and once again students were taught individually at the time of data taking. Details of Euro-fit physical fitness tests are as follows.

a) Flamingo Balance Test: The subject stood on the beam without any footwear and keep balance by holding the instructor's hand. While balancing on the preferred leg, the free leg was flexed at the knee and the foot of this leg held close to the buttocks. The counting of time started as the instructor lets go and stop with each time the subject loses balance (either by falling off the beam or letting go of the foot being held). The number of falls was counted in 60 seconds of balancing. If there are more than 15 falls in the first 30 seconds, the test was terminated and a score of zero was given. It assesses the successful leg balance.

b) Plate Tapping Test: The table height was adjusted so that the subject could be in a comfortable position in front of the discs. The two yellow discs were placed with their centres 60 cm apart on the table and a rectangle is placed equidistant between both discs. The non-preferred hand was placed on the rectangle. The subject was instructed to move the preferred hand back and forth in the middle of the discs over the hand for 25 full cycles (50 taps) as quickly as possible and time was counted. This test used to assess the speed and coordination of limb movement.

c) Sit and Reach Flexibility Test: This test measures the flexibility of the lower back and hamstring muscles. The subject sat on the floor with bare feet and instructed to put the feet flat against the closed end of the box through the open end of the box with the knees fully extended. The subject then extends his/her arms forward with one hand placed on top of the other with palms down, as far as possible on the measuring scale on the top of the box. The maximum distance reached with the tip of the fingers by forwarding flexion of the trunk was measured. Each subject was given two trials and the maximum reached score was recorded to the nearest centimeters.

d) Standing Broad Jump: The subject stood behind a line marked on the ground with feet slightly apart. The subject used to attempt to jump with the swinging of the arms and bending of the knees to provide forward drive as far as possible, landing on both feet without falling backwards. The distance from the initial line to the back of their heels was measured. Three attempts were given and the best score was recorded to the nearest centimeters. It measures the explosive powers of legs.

e) **Handgrip Strength Test:** The subject held the dynamometer in the hand to be tested, with the arm at right angles and the elbow was touching to the side of the body. The subject was instructed to squeeze the dynamometer with a maximum isometric effort for 5 seconds. No other body movements were allowed. Three attempts were allowed for each hand alternately and the best score for each hand was recorded. This test measures the grip strength of the forearm.

f) **Sits Up Test:** The participant lied on the mat with the knees bent at right angles, with the feet flat on the floor and held down by a partner. The fingers were interlocked behind the head. As per the instruction, participants raised their upper part up to vertical level and then returned to touch the floor. The process was continuing for 30 seconds and the no. of sit ups was counted. This test measures the endurance of the abdominal and hip-flexor muscles.

g) **Bent Arm Hang Test:** The participant was supported into position by the instructor, the body lifted to a height so that the chin was level with the horizontal bar. The bar was grasped using an overhand grip with the hand's shoulder width apart where palms were facing away from the body. The subject was asked to hold this position as long as possible. The timing started when the subject was released. Timing stopped when the person's chin fell below the level of the bar or the head was tilted backwards to enable the chin to stay level with the bar. This test measures upper body relative strength and endurance.

h) **10 x 5m Shuttle Test:** This test measures speed and agility. Marker cones and lines were placed five meters apart. Participants stood at one marker, as per the instruction they run to the opposite marker, turned and returned to the starting line. This was repeated five times without stopping to cover 50 meters in total. At each marker, both feet must fully be crossed the line. The instructor was noted down the time taken to complete the task.

5.4.4 Cognitive functions tests

5.4.4.1 Psychomotor Performance Tests

a) The Six Letter Cancellation Task SLCT:

Purpose: The digit-letter cancellation task measures psychomotor performance.

Description/Contents: This is a worksheet with six specified target letters, which are to be cancelled and have a working section consisting of alphabets arranged randomly in 22 rows and 14 columns (Natu & Agrawal, 1997).

Data extraction: Participants were asked to cancel the target letters as much as possible in 90 sec with any possible strategy.

Scoring: The total number of cancellations attempted, and the number wrongly cancelled were counted. Then the net score is obtained by deducting the latter from the former (Natu and Agarwal, 1997).

b) Digit Letter Substitution Test (DLST):

Purpose: The digit-letter substitution task measures psychomotor performance (Gerrard, Wheeldon, & McDevitt, 1995).

Description/Contents: It has an instruction with a specified row of six different digits matched with six different letters with pairs and a working section consisting of different pairs arranged randomly in 8 rows and 12 columns.

Data extraction: Participants were asked to substitute the correct pairs as much as possible in 90 sec with any possible strategy.

Scoring: The total number of substitutions attempted, and the number of wrong substitutions were counted. Then net score was obtained by deducting the latter from the former (Natu & Agarwal, 1997).

5.4.4.2 Executive Functions test (EFs)

a) Stroop Colours and Word Test (Stroop _CW):

Purpose: The children's version of stroop task measures the executive functions (EFs).

Description/Contents: This test which was involved in both word and colours naming responses. The test was in the form of a booklet containing three pages of word and colour conditions. The test was how fast the participant can: read words on the 1st page; name the colours on the page on the 2nd page; name which colours the words were printed in, ignoring the name of the word on the 3rd page.

Data extraction: The task was administered individually. Test instructions were explained before starting the test. Errors of the participants were indicated and asked to be corrected by the examiner before continuing. The participants were given 45 seconds for each page and the time taken to complete the task was recorded by using a stopwatch.

Scoring: The participants were given 45 seconds for each page and the time taken to complete the task was recorded by using a stopwatch. The no. of score = a total number of items read out in the given time on the 1st page (word), 2nd page (colour) and 3rd third page (word-colour).

b) Trial Making Test (TMT):

Purpose: The test was developed by Reitan (1958). This assess the visual search, scanning, processing speed, mental flexibility, and Efs (Lezak, Howieson, & Loring, 2012).

Description/Contents: It has two parts, part-A and part-B. In TMT-A, participants have to draw lines sequentially connecting 25 encircled numbers distributed on a sheet of paper; and in TMT-B the task is similar except the participant must alternate the sequence between numbers and letters (e.g. 1, A, 2, B, 3, C, etc.)

Data extraction: Before the test, the participants had to go through a practice test for both TMT-A, TMT-B. The score on each part represents the amount of time required to complete the task. Participants were administered parts A and B of the TMT and total time in seconds for both parts A and B was recorded.

Scoring: For the both TMT-A and TMT-B, the score on each part represents the amount of time required to complete the task. Participants were administered parts A and B of the TMT and total time in seconds for both parts A and B was recorded.

c) Digits Forward and Backward Span test (DSF and DSB):

Purpose: This was used in order to assess working memory and mental tracking processes. Both forward and backward spans were calculated (Wechsler, 2012).

Description/Contents: In DSF, there are 8 rows of randomly assigned numeric numbers starting from 2 to 9 digits; trail1 to trail 8 and each row has two trials. In DSB, there are 7 rows of randomly assigned numeric numbers starting from 2 to 8 digits; trail1 to trail 7 and each row has two trials. In both tests, the length of each sequence of numbers increases as the trail increases.

Data extraction: For Digits Forward, the participant was supposed to repeat digits of the strings exactly as read by the examiner. Two trials were administered of each string length. In Digits Backward, the procedures are identical to Digits Forward except that the participant was required to repeat the string of digits in a reverse order.

Scoring: Scoring for each correctly reproduce digit span was scored as “one” and otherwise as “zero”. Total score was added. The total score for DSF was 16 where as for DSB, it was 14.

d) Digit Symbol Substitution Test (DSST):

Purpose: It was used in order to access various cognitive components as scanning, matching, switching, and writing operations which are reflective of several higher cognitive functions such as perception, encoding and retrieval processes, transformation of information stored in active memory and decision making (Salthouse, 1996).

Description/Contents: It has an instruction with a specified row of six different digits matched with six different symbols with pairs and a working section consisting of different pairs arranged randomly in 8 rows and 15 columns. These involve substituting the corresponding symbols or letters in a given period of time – usually 90 seconds.

Data extraction: Participants were asked to substitute the correct pairs as much as possible in 90 sec with any possible strategy.

Scoring: The total number of substituted pairs, wrong targets and net scores (total attempted-wrongly attempted) was calculated for the analysis.

5.4.5 Psycho-social questionnaires (Appendix VI)

The following questionnaires were accessed as an indicator of psychological social well-being.

The descriptions of the tests are as given below.

a) State-Trait Anxiety Inventory for Children (STAI-C)

Rational/ Purpose: The STAI-C was developed by Spielberger to measure the presence and severity of current symptoms of anxiety of the children and adolescents. It has been translated and adapted in 48 languages (Spielberger, 1973).

Description/Content: In this study, we have taken only the trait subscale which has 20 items. Trait Anxiety Scale (STAI-T) evaluates relatively stable aspects of “anxiety proneness”.

Method of administration: The test sheet was distributed among the participants in small groups and instructed to mark their response in the sheet. In the case of any confusion, the investigators were available to clarify.

Scoring- Each item was scored between one and three on the basis of the presence and severity of the anxiety symptom. (Trait) has 20 items and all the items are having 3 points Likert scale. The items are scored on a 3-point scale (1 =hardly ever, 2 =sometimes, 3 = often). Item scores are added to obtain subtest total scores, the higher score indicating greater anxiety.

Reliability & Validity- The Cronbach was 0.88 for the STAI-T (Kirisci & Clark, 1996).

b) Child Depression Inventory-2 (CDI-2)

Purpose: The CDI, developed by Kovacs, used to measure the severity of current depressive symptoms and is applied to individuals aged 7-17 years (Kovacs, 1985).

Description: It includes two domains; emotional problems (mood/physical symptoms, negative self-esteem) and functional problems (ineffectiveness and interpersonal problems). It is composed of 28 questions and each question has three options.

Method of administration: The test sheet was distributed among the participants and instructed to mark their response in the test sheet. In the case of any doubt, the investigators were available to clarify that.

Scoring: The response options for each item are rated on a 3-point scale as follows: 0 (no symptom), 1 (probable or mild symptom), and 2 (definite, marked symptom). The range of scores was 0–56 with higher scores representing increased depressive symptom severity. Each question was scored between 0 and 2 points. Item nos. 2, 6, 7, 9, 10, 12, 14, 15, 17, 20, 23, 24, 26, 27 was scored reversely and all points are added up for a total raw score.

Reliability and Validity: The CDI-2 has a high level of internal consistency (Cronbach's $\alpha = 0.91$), a high test-retest reliability (0.76 - 0.92) (Kovacs, 1985).

c) Aggression scale (AS)

Purpose: Aggression scale was developed by Orpinas & Frankowski (2001), which measure self-reported aggressive behaviours of young adolescents.

Description: The scale consists of 11 items, which ask the participants to number the events they felt aggressive during the last week and focuses on overt behaviours. It is a useful tool for program evaluation and for research on violence prevention in schools.

Method of administration: The test sheet was distributed among the participants and instructed to mark their response in the test sheet. In the case of any confusion, the principal investigator was available to clarify.

Scoring: Responses to each item in the aggression scale can range from 0 times through 6 or more times. Responses are additive; thus, the Aggression Scale ranges between 0 and 66 points.

Reliability and Validity: The scale has the Cronbach's alpha=0.87. The scale was evaluated in two independent samples of young adolescents ($n = 253$ and $n = 8,695$). Reliability scores were high in both samples, and did not vary significantly by gender, ethnicity, or grade level in school. Aggression scores also were stable in a 2-year follow-up study. (Orpinas & Frankowski, 2001).

d) Rosenberg Self Esteem Scale (RSES)

The scale is designed to measure individuals' (aged 8-18years) general levels of self- acceptance, the degree of self-satisfaction or how highly the subject regards him- or herself by measuring both positive and negative feelings about the self (Rosenberg, 1965).

Description: It comprises of ten questions on a four point scale ranging from strongly agree to strongly disagree. Five questions are based on positive and five are on negative attitude. Sample items include: " On the whole, I am satisfied with myself," and "I feel I do not have much to be proud of." Negatively worded items are reverse coded, such that higher scores indicate higher levels of self-esteem.

Method of administration: The test sheet was distributed among the participants and instructed to mark their response in the sheet. In the case of any doubt, the investigators were available to clarify.

Scoring: The scale is a 10-item Likert scale with items answered on a four-point scale from strongly agree (score = 1) to strongly disagree (score = 4) but for items 2, 5, 6, 8 and 9 are reversely scored. It ranges of scores from 10 to 40. The scores below 15 suggest low esteem of the children.

Reliability and Validity: Reliability and validity found that across 53 nations, the component structure of the RSES was generally invariant using principal components analysis. Cronbach coefficient was substantial overall ($\alpha = .81$) across nations supporting the internal coherence of the scale across cultural contexts (Schmitt & Allik, 2005).

e) Children Loneliness Scale (CLS)

Purpose: CLS was developed to assess children's loneliness and social dissatisfaction and can be used in the age 8-18 years (Asher, Hymel, & Renshaw, 1984).

Description: This is a 24 items questionnaire of which 16 items are primary which are focused on children's feeling on loneliness and other 8 items are focus about their hobbies and preferred activities.

Method of administration: The test sheet was distributed among the participants and instructed to mark their reply in the sheet. In case of any confusion the investigators were available to clarify.

Scoring: Response to each item scores from 1 to 5 as it is in the form of 1 to 5 point scale. In the 16 primary items nos.3, 6, 9, 12, 14, 17, 18, 20, 21, 24 are scored reversely. Other 8 items (2, 5, 7, 11, 13, 15, 19 and 23) are hobby items, which are not considered for scoring.

Reliability and Validity: The internal consistency on the main 16 items i.e. Cronbach's alpha =0.90. The internal reliability was 0.83, 0.91 and 0.91 as per split-half correlation between forms, Spearman-brown reliability coefficient, and Guttman split-half reliability coefficient respectively (Steven et al., 1984).

f) Children's Assessment of Mindfulness (CAMM)

Purpose/ Description: The CAMM questionnaire is developed by Greco, Dew & Ball (2005), which assess present moment awareness and non judgmental, non avoidant response to thoughts

and feelings of the children who are above 9 years. This has 10 items; all the items are having 5 point scale.

Method of administration: The test sheet was distributed among the participants and instructed to mark their response in the test sheet. In the case of any confusion, the investigators were available to clarify.

Scoring: All the items are scored by reverse scoring as (4 = Never true, 3 = Rarely true, 2 = sometimes true, 1 = Often true, 0 = Always true). Total score on the CAMM by summing all items.

Reliability and Validity: The CAMM demonstrates good internal consistency with Cronbach's alpha = 0.81 (Greco et al., 2005).

g) Barratt's Impulsivity Scale-Brief (BIS- Brief)

Purpose/ Description: The BIS- (brief) is a modified version of BIS-1, was developed by Steinberg, Sharp, Stanford, & Tharp, (2013). This is a 8-item self-report measure designed to assess general impulsiveness and can be used in the children and adolescents as per the developer.

Method of administration and extraction of data: The test sheet was distributed among the participants and instructed to mark their response in the sheet. In the case of any doubt, the investigators were available to clarify.

Scoring: The items are scored on a 4-point scale (1 =rarely/never, 2 =occasionally, 3 = often, 4 = almost always/always). Item no 1, 4, 5, 6 were reversely scored (which are same as the item nos. 1, 8, 9, 12 of BIS11 respectively).

Reliability and Validity: This demonstrates good internal consistency with Cronbach's alpha =0.83 (Steinberg et al., 2013).