

## Appendix- 1

### INTERVENTION

Personality Development Camp (PDC) includes yoga training for approximately 8-10 hours a day, which has aimed to improve all aspects of personality (physical, mental, intellectual, and spiritual) development, at *Praśānti Kuṭīram*, a holistic health home. The 10-day PDC only for children with in age range (Mean ± SD; 13.98 ± 0.9) 12-16 years. This program consisted of *Āsana*, *Bhagavad Gīta Chanting*, Creativity Session, *Prāṇayāma*, *Bhajan*, *Yogic Games* and Happy Assembly.

- i. **The Asana Session:** This is predominantly to shatter the laziness and lethargy (Tamas) in general by faster repetitions and quick actions to develop the strength of the muscles and stamina of the organs and harmonious functioning of the systems in the body.

Through these postures, the physical revitalization and deep relaxation and mental calmness are achieved.

- ii. **The Prāṇayāma Session:** The *Prāṇayāma* session remove the imbalances of *Prāṇa* which are the causes for most of the ailments and diseases, initiate the process of positive health development and gained control over inner and thus on the mind.

- iii. **The Gīta Chanting Session:** It helps to release all our emotional suppressions which are the root causes of most of the problems and ailments of the modern time. And it helps the students in training the voice and clarity of speech due to the very characteristic structure of the language.

- iv. **The Creativity Hour:** Creativity helps them to achieve success in areas that matter to them and are favorably viewed by people who are significant to them will be a source 49 of great ego satisfaction. Creativity gives children tremendous personal pleasure and satisfaction-rewards that have a marked influence on their developing personalities.

- v. **The Bhajan Session:** The Bhajan helps to build a congenial atmosphere to evoke, recognize, attenuate and dissipate the emotions and eliminate emotional imbalances and upsurges by such control.
- vi. **The Game Session:** In addition to these specialized practices, the training for children also includes games to improve the attention span and memory (Verbeken, Braet, Goossens & Van Der Oord, 2013) as well as the telling of meaningful stories to foster a sense of values and feelings of responsibility and established group awareness.
- vii. **The Happy Assembly:** The happy assembly sessions build cooperative skills and good social behaviour by preparing with a partner or in a group. The most beneficial point in the happy assembly is the people can be fun and happy without their worries and problems (Nagendra, 2010).

Summary Table of Intervention		
SL NO.	Name of Intervention	Duration
1.	<p><i>Āsana Session</i></p> <ul style="list-style-type: none"> <li>▪ Standing Posture</li> <li>▪ Sitting Postures</li> <li>▪ Prone Posture</li> <li>▪ Inverted Postures</li> <li>▪ Supine Postures</li> </ul>	2 hour
2.	<p><i>Prāṇayāma Session</i></p> <ul style="list-style-type: none"> <li>▪ Sectional breathing</li> <li>▪ Thoracic breathing</li> <li>▪ Diaphragm breathing</li> <li>▪ Bhramari Prāṇayāma</li> <li>▪ Hyperventilation (<i>Blastrika &amp; Kapālabhāti</i>)</li> <li>▪ Balancing of the breath (<i>Nādi Śuddhi, Anuloma Viloma</i>)</li> </ul>	1 hour
3.	<p><i>Cleansing Techniques (Kriyās)</i></p> <ul style="list-style-type: none"> <li>▪ <i>Trāṭakā</i> (Eyes Cleansing Techniques)</li> <li>▪ <i>Sutra Neti &amp; Jala Neti</i> (Nasal Tract Cleansing Techniques)</li> <li>▪ <i>Vāman Dhouti &amp; Laghu Śauka Prakśālana</i> (GI Tract Cleansing Techniques)</li> </ul>	Twice
4.	<p><i>Gita Chanting Session</i></p> <ul style="list-style-type: none"> <li>▪ Chanting (18 Verses from <i>Bhagavad Gīta</i>)</li> <li>▪ Yogic Discourse</li> </ul>	1 hour
5.	<p><i>Creativity Hour</i></p> <ul style="list-style-type: none"> <li>▪ Karma Yoga</li> <li>▪ Designing and Arts</li> </ul>	2 hour

	<ul style="list-style-type: none"> <li>▪ Tree Plantation</li> <li>▪ Debate</li> <li>▪ Stories</li> <li>▪ Singing and Dancing</li> </ul>	
<b>6.</b>	<b><i>Bhajan Session</i></b> <ul style="list-style-type: none"> <li>▪ Devotional songs</li> <li>▪ Patriotic songs</li> </ul>	1 hour
<b>7.</b>	<b><i>Game Session</i></b> <ul style="list-style-type: none"> <li>▪ Yogic Games</li> <li>▪ Group awareness</li> </ul>	1 hour
<b>8.</b>	<b><i>Happy Assembly</i></b> <ul style="list-style-type: none"> <li>▪ Cultural program</li> <li>▪ Team Work</li> </ul>	2 hour

## Appendix- 2

### TECHNIQUE OF CYCLIC MEDITATION

The complete description of the basic version of cyclic meditation (which was investigated in present study) is given below (Nagendra & Nagarathna, 2001). The key features of cyclic meditation are (i) postures interspersed with relaxation, (ii) slowness in movements, (iii) continuity, (iv) inner watchful awareness, (v) feeling of changes in breathing, heartbeat, blood flow and the resonance of sound, and (vi) recognition of linear, surface, three-dimensional and all pervasive awareness. Throughout the practice of cyclic meditation the participants are asked to keep their eyes closed.

**1. Prayer:** The practice of cyclic meditation begins by repeating a verse from the *Muṇḍūkya Upaniṣat*, while participants are laying in the supine posture. As participants chant the verse they are asked to feel the resonance throughout the body.

लये सम्बोधयेत् चित्तं विक्षिप्तं शमयेत् पुनः ।

सकषायं विजानीयात् समप्राप्तं न चालयेत् ॥३.४४ ॥

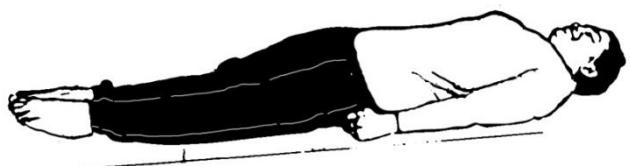
*Laye sambodhayet cittaii vikṣiptaii śamayet punaḥ,*

*Sakaśāyaii vijñānīyāt samaprāptaii na cālayet.*

*'In a state of mental inactivity awaken the mind; when agitated, calm it; between these two states realize the possible abilities of the mind. If the mind has reached the state of perfect equilibrium then do not disturb it again'*

(*Muṇḍūkya Upaniṣat Kārikā*: 3.44; Chinmayananda, 1984).

**2. Instant Relaxation Technique (IRT):** The prayer is followed by isometric contraction of the muscles of the body called Instant Relaxation Technique (IRT). The IRT is done in supine position



with following instructions:

Bring legs together; join heels, toes together, palms byside of the thighs. Keep face smiling till the end. Gently bring your awareness to the tip of the toes. Streach the toes, tighten the ankle joints, and tighten the caff muscles. Pull up the kneecaps. Tighten the thigh muscles. Compress and squeeze the buttocks. Exhale and suck the abdomen inward. Make the fists of the palms and tighten the arms. Inhale and expand the chest. Tighten the shoulders, neck muscles and compress the face. Now tighten the whole body from the toes to the head. Tighten..tighten.

Relax and let go. Legs go apart; arms go apart, palms facing the roof. Asume the most comfortable position; let whole body sink down. Let all the groups of muscles completely relax. Collapse the whole body. Enjoy the relaxation.

**3. *Tādāsana* (Tree posture):** After IRT, the participants are asked to

slowly raise the left hand above the head along the ground. Slowly turn over to left side in left latral position. Place the head on the left biceps; the right leg on the left leg; right palm on the right thigh. Let the whole body relax. Feel entire weight of the body along the left side of the trunk. Fine linear awareness. Then slowly start standing up to *tādāsana*. *Tādāsana* is

the starting posture (sthiti) for all standing postures. In *tādāsana* the participants are asked to stand stright with feet, and legs close together, hands by side of the body along the thighs, fingers pointing dowanwards, shoulders collapsed and relaxed. Smiling face with eyes closed and normal breathing.



**4. Centering in *Tādāsana*:** While standing in *tādāsana* ‘balancing’ the body weight equally on both feet is called centering. While doing centering, participants are asked to

gently lean forward without lifting the heels. Feel the entire body weight on the toes. Feel the pointed awareness. Come to center. Carefully lean backwards without lifting the toes and feel the weight shifting towards the heels. Now come to center. Then slowly lean to the right, where feel the entire weight is on the right edge of the right foot. Fine linear awareness. Then come to center. Similarly lean to left, and come to center. Now feel the body weight is being equally distributed on the soles of the both the feet. Fine surface awareness. The whole body is centered and well-balanced.

**5. *Ardhakāticakrāsana (Half wheel posture):*** From *tādāsana*,

very slowly raise the right arm sideways upward to horizontal position. As the right arm reaches 90 degree position twist the palm at wrist upward, feel the pointed awareness at wrist, and then raise the right arm further up to 135 degree position. As right arm reaches up the vertical position feel the nice stimulation in the right shoulder muscles. The right biceps muscle touching the right ear, feel the nice surface awareness. Feel the blood flowing down the arm with smiling face. Then stretch the right hand from the tip of the fingers of the right palm. Entire right portion of the body gets stretched, but not the face. Slowly start bending down laterally to the left side. Left palm sliding down along the left thigh. Fine movement of surface awareness. Enjoy the fine stretch of the waist muscles on the right side and compression on the left side. Observe all the changes taking place in your body. Slowly start coming back to vertical position. Feel the blood flowing down and spread of nerve impulses throughout the body. Again stretch and pull up the right arm. Feel the entire right portion of the body stretched from toes to the tip of the fingers. Slowly start bringing the right arm down to 135 degree gliding down smoothly. Feel the pointed awareness at the shoulder as arm reaches the horizontal position and at the wrist as you



slowly turn the right palm downward. Further bring down the arm to 45 degree. Feel the tingling sensation at the tips of the fingers. Continuously glide down the hand by the side of the right thigh and leave it freely. Have a glance of the whole body from toes to head and feel entire right side of the body being activated and charged.

Similarly, *ardhakaṭicakrāsana* is performed from left side. Very slowly raise the left arm sideways upward to horizontal position. As the left arm reaches 90 degree position twist the palm at wrist upward, feel the pointed awareness at wrist, and then raise the left arm further up to 135 degree position. As left arm reaches up the vertical position feel the nice stimulation in the left shoulder muscles. The left biceps muscle touching the left ear, feel the nice surface awareness. Feel the blood flowing down the arm. Then stretch the left hand from the tip of the fingers of the left palm. Entire left portion of the body gets stretched, but not the face. Slowly start bending down laterally to the right side. Right palm sliding down along the right thigh. Fine movement of surface awareness. Enjoy the fine stretch of the waist muscles on the left side and compression on the right side. Observe all the changes taking place in your body. Slowly start coming back to vertical position. Feel the blood flowing down and spread of nerve impulses throughout the body. Again stretch and pull up the left arm. Feel the entire left portion of the body stretched from toes to the tip of the fingers. Slowly start bringing the left arm down to 135 degree gliding down smoothly. Feel the pointed awareness at the shoulder as arm reaches the horizontal position and at the wrist as you slowly turn the left palm downward. Further bring down the arm to 45 degree. Feel the tingling sensation at the tips of the fingers. Continuously glide down the hand by the side of the left thigh and leave it freely. Collapse your both shoulders and come back to *tādāsana*. Have a glance of whole body again from toes to head. Entire left portion of the body is now activated. Feel both the sides of the body are now equally energized. Relax and get balanced in *tādāsana*.

**6. *Pādahastāsana* (Forward bending posture):** After resting in *tādāsana*, the forward bending posture called *Pādahastāsana* is performed. Very slowly start bending forward from the waist, keeping both the hands free from shoulders. While bending forward feel the blood gushing towards head and neck region. Bend forward as much as possible. Feel the stretching in the back and the dorsal aspect of the buttocks and the knees. Feel the compression in the abdomen. Maintain the final posture effortlessly with smiling face. Observe all the changes going on, the increased blood flow to head and feel the heaviness in the head region. Inhale and chant M-kara, MMM... Feel the resonance throughout the head with a nice three dimensional awareness. Gently start coming up from the final posture. While observing the changes in blood flow, breathing and heart beat from horizontal plane slowly come back in *tādāsana* and relax. Feel the lightness in the head and entire dorsal portion of the body being activated.



**7. *Ardhacakrāsana* (Backward bending posture):** From *tādāsana* slowly slide the palms up along the thighs, supporting the waist with the palms, fingers together and pointing forwards. Slowly start bending backwards from the waist. Relax the neck muscles; head hanging freely down. Nice stretching of the abdominal and thoracic muscles. In final posture have a smile on the face. Inhale and chant A-kara AAA...and feel the resonance with three dimensional awareness. Slowly return back in straight position, gently sliding the palms back to their original position in *tādāsana*. Feel the entire front portion of the body being activated and energized.



**8. Deep Relaxation Technique (DRT):** From *tādāsana* gently come in sitting position and slowly slide down in supine position with support of elbows. Lay down in *śavāsana* with legs apart, hands part, palms facing the roof and whole body collapsed on the ground.

Bring your awareness to the tip of the toes, gently move your toes and relax.

Sensitize the soles of your feet; loosen the



ankle joints; relax the calf muscles; gently pull up the kneecaps, release and relax; relax your thigh muscles, buttocks; loosen the hip joints, relax the pelvic region and the waist region. Totally relax your lower part of the body. Relax and chant A-kara AAA and feel the vibrations in the lower parts of the body.

Gently bring your awareness to the abdominal region and observe the abdominal movements for a while, relax your abdominal muscles and relax your chest muscles.

Gently bring your awareness to your lower back, relax your lower back, and loosen all the vertebral joints one by one. Relax the muscles and nerves around the backbones. Relax your middle back, shoulder blades and upper back muscles, totally relax. Shift your awareness to tip of fingers, gently move them a little and sensitize. Relax your fingers one by one. Relax your palms, loosen the wrist joints, relax the forearms, loosen the elbow joints, relax the biceps and triceps and relax your shoulders. Shift your awareness to your neck, slowly turn your head to right and left, and again bring back to center. Relax the muscles and nerves of the neck. Relax your middle part of the body, totally relax. Relax and chant U-kara UUU... and feel the vibrations in the middle parts of the body.

Gently bring your awareness to your head region. Relax your chin, lower jaw and upper jaw, lower and upper gums, lower and upper teeth and relax your tongue. Relax your throat and vocal cords. Relax your both the lips, obseve your nostrils. Feel the touch of air in your nostrils. Observe your breathing for few seconds and relax your nostrils. Relax

your cheek muscles, have a beautiful smile on your cheeks. Relax your eye lids, eye ball, eye brows and region between your eye brows. Relax your forehead, temple muscles, ears, sides of the head, back of the head and the crown of the head. Totally relax your entire head region. Relax and chant M-kara MMM... and feel the vibrations in the head and face region.

Observe your whole body from toes to head and relax. Relax and collapse your whole body on the ground. Relax and chant OM-kara AUM... and feel the vibrations and resonance throughout the body.

Slowly come out of the body consciousness. Bring your awareness out of your body and visualize your body laying on the ground completely collapsed. And gently take your awareness towards beautiful sky. Imagine the vast beautiful blue sky. The limitless blue sky. Expand your awareness as vast as the blue sky. Merge yourself into the blue sky. Enjoy the infinite bliss. Enjoy the blissful state of silence and all pervasive awareness.

Gently come back to body consciousness. Feel the lightness, alertness and movement of energy throughout your body. Slowly bring your legs together, hands by side of the body. Slowly turn to right side of the body and come up when you feel for closing prayer.

## 9. Closing Prayer:

सर्वे भवन्तु सुखिनः सर्वे सन्तु निरामयाः ।  
सर्वे भद्राणि पश्यन्तु मा कश्चिद् दुःखं भाग्भवेत् ॥

sarve bhavantu sukhinah̄ sarve santu nirāmayāḥ.

sarve bhadrāṇi paśyantu mā kaścid duḥkha bhāgbhaveta.

*Let every body be happy, let every body be healthy, let every body be able to see the auspicious truth, let no one suffer from any illness or pain.*

## Appendix- 3

# INFORMED CONSENT FORM

**Title of the Project** : “Yoga for Working Memory in Adolescents”

**Investigator** : Natesh Babu, M.Sc., Regd. Ph.D. candidate

**Name of the Guides** : H.R. Nagendra M.E., Ph.D.

**Name of the Participant :** \_\_\_\_\_

**Date and Time** : \_\_\_\_\_ and \_\_\_\_\_

### **About the Project:**

In order to understand the psychomotor function and attention response before and after the practice of cyclic meditation we will be recording cognitive performance task using individual paper pencil test i) Verbal Memory, ii) Non-Verbal Memory, iii) Mindfulness, iv) State Anxiety and v) Computer based Corsi Block-Tapping Task

All these techniques are noninvasive and commonly used in routine clinical practice.

### **Please note:**

1. All information obtained during the study will be kept confidential and individual report of the test will be given.
2. You can withdraw from the study at any point of time unconditionally.
3. In case the study does cause any adverse effects, the institution is not liable.

I hereby have understood the above and consent voluntarily to participate in the study.

Place\_\_\_\_\_

Date\_\_\_\_\_

**Signature of the participant**

## Appendix-4

### **SPIELBERGERS STATE TRAIT ANXIETY INVENTORY (STAI)**

### **SELF-EVALUTION QUESTIONNAIRE**

**Name:**

**Date:**

**DIRECTIONS:** A number of statements which people have used to describe themselves are given below. Read each statement and then tick in the appropriate number to the right of the statement to indicate how you feel at this moment. There is no right or wrong answers. Do not spend too much time on any one statement but give the answer, **which seems to describe your present feelings best.**

Choose the answers from the choice given below:

**1. NOT AT ALL**

**2. SOMEWHAT**

**2. MODERATELY SO**

**4. VERY MUCH SO**

1. I feel calm	1	2	3	4
2. I feel secure	1	2	3	4
3. I am tense	1	2	3	4
4. I am regretful	1	2	3	4
5. I feel at ease	1	2	3	4
6. I feel upset	1	2	3	4
7. I am presently worrying over possible misfortunes.	1	2	3	4
8. I feel rested	1	2	3	4
9. I feel anxious	1	2	3	4
10. I feel comfortable	1	2	3	4
11. I feel self-confident	1	2	3	4
12. I feel nervous	1	2	3	4

13. I am jittery	1	2	3	4
14. I feel "high strung"	1	2	3	4
15. I am relaxed	1	2	3	4
16. I feel content	1	2	3	4
17. I am worried	1	2	3	4
18. I feel over-excited and "rattled"	1	2	3	4
19. I feel joyful	1	2	3	4
20. I feel pleasant	1	2	3	4

## Appendix-5

### STATE ANXIETY INVENTORY SHROT FORM (STAI SF)

**Directions:** A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you feel right now, that is, at this moment. There is no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings at best.

	<b>Not at All</b>	<b>Somewhat</b>	<b>Moderately</b>	<b>Very Much So</b>
	<b>So</b>			
1. I feel calm ....	1	2	3	4
2. I am tense ....	1	2	3	4
3. I feel upset ....	1	2	3	4
4. I am relaxed ....	1	2	3	4
5. I feel content ....	1	2	3	4
6. I am worried ....	1	2	3	4

## Appendix- 6

### STATE MINDFUL ATTENTION AWARENESS SCALE (SMAAS)

**Instructions:** Using the 0-6 scale shown, please indicate to what degree you were having each experience described below when you were paged.

Please answer according to what really reflected your experience rather than what you think your experience should have been.

	<b>Not at all</b>		<b>Some what</b>		<b>Very much</b>		
1. I was finding it difficult to stay focused on what was happening.	0	1	2	3	4	5	6
2. I was doing something without paying attend.	0	1	2	3	4	5	6
3. I was preoccupied with the future or the past.	0	1	2	3	4	5	6
4. I was doing something automatically, without being aware of what I was doing.	0	1	2	3	4	5	6
5. I was rushing through something without being really attentive to it.	0	1	2	3	4	5	6

## Appendix-7

# CHILD AND ADOLESCENT MINDFULNESS MEASURE (CAMM)

(GRECO, DEW, & BAER, 2005)

We want to know more about what you think, how you feel, and what you do. **Read** each sentence. Then, circle the number that tells **how often each sentence is true for you.**

	Never True	Rarely True	Sometimes True	Often True	Always True
1. I get upset with myself for having feelings that don't make sense.	0	1	2	3	4
2. At school, I walk from class to class without noticing what I'm doing.	0	1	2	3	4
3. I keep myself busy so I don't notice my thoughts or feelings.	0	1	2	3	4
4. I tell myself that I shouldn't feel the way I'm feeling.	0	1	2	3	4
5. I push away thoughts that I don't like.	0	1	2	3	4
6. It's hard for me to pay attention to only one thing at a time.	0	1	2	3	4
7. I get upset with myself for having certain thoughts.	0	1	2	3	4
8. I think about things that have happened in the past instead of thinking about things that are happening right now.	0	1	2	3	4
9. I think that some of my feelings are bad and that I shouldn't have them.	0	1	2	3	4
10. I stop myself from having feelings that I don't like.	0	1	2	3	4

**Scoring Instructions:** Compute total score on the CAMM by reverse scoring and summing all items.

## Appendix-8

### VERBAL MEMORY TEST

#### Instructions

- This is an exercise to check your concentration and memory.
- Don't write anything till you are asked to
- You will be shown 10 nonsense words e.g. BYW
- Immediately after this you will be shown an arithmetic sum.
- Solve it mentally-as soon as you can
- Write down the answer alone
- Then try to recall the ten nonsense words in any order

Trial	XEB		PEL	
Trial Sum	$8 + 6 - 2 - 7 + 4 - 3 - 5 + 9$			
ACTUAL TEST	MIP	VIR	BEX	LUH
	BUJ	XOM	SYP	GUB
	ROZ	NUK		
Sum	$- 3 - 5 + 6 + 2 + 7 - 8 + 4 - 5$			

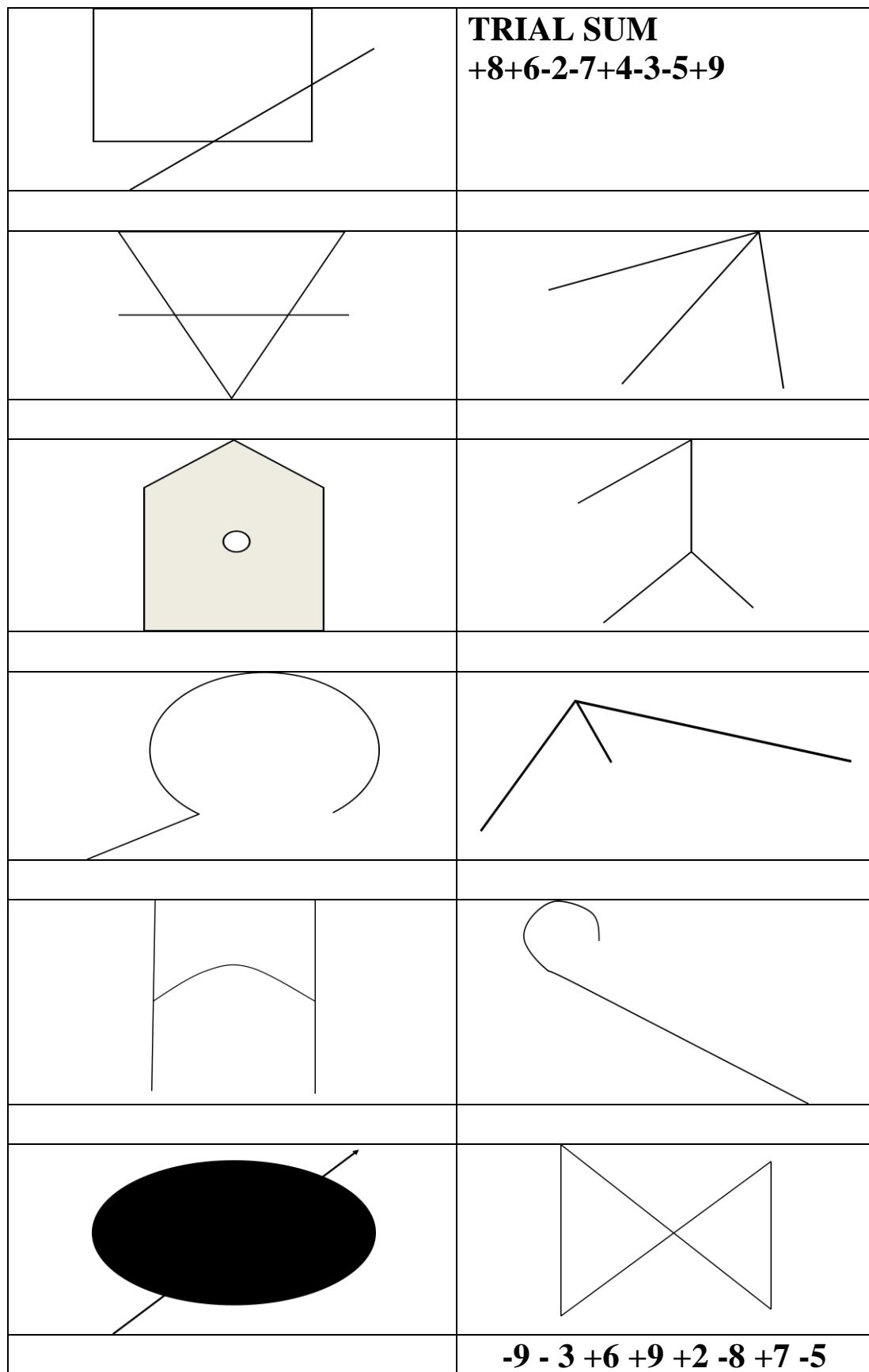
## Appendix-8a

### NON-VERBAL MEMORY TEST

#### Instructions

- This is an exercise to check your concentration and memory.
- Don't write anything till you are asked to
- You will be shown 10 pictures
- Immediately after this you will be shown an arithmetic sum.
- Solve it mentally-as soon as you can
- Write down the answer alone

- Then try to recall and draw the ten pictures in any order



## Appendix-9

# CORSI BLOCK-TAPPING TASK

### SCREEN CALIBRATION REQUIRED

The Corsi Block-Tapping Task requires stimulus sizes and positions to be specified in millimeters.

However, there is no absolute relation between a pixel and any "real", physical measurement unit (mm, cm, inches, etc.). Instead, the relationship between pixels and millimeters is different for every display and depends on certain hardware properties (visible screen area, pixel density, etc.) as well as the current screen resolution.

The script includes a simple calibration routine which will help you figure out the pixel-to-mm correspondence on your particular monitor:

A standardized line will be drawn to the screen. Take a ruler, hold it to the screen, measure the line and enter the result in millimeters.

Make sure you perform the measurement as accurately as possible!

For repeated runs on the same setup, the measurement result can also be entered directly into the script's source code (-> 'values.cal\_mm'). If this value is greater than zero, the calibration routine will be skipped automatically.

Note that you need to reactivate the calibration routine if you change your monitor's resolution or connect a different display.

[Click here to continue](#)

Please measure the length of the line and enter the result in millimeters!

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[Next >>](#)

**Welcome to the Corsi Block-Tapping Task!**

**You are about to take part in a test that measures your ability to remember a sequence of locations on the screen.**

**You will see nine blocks on the screen. On each trial, several blocks will light up one at a time. Your job is to remember their exact sequence.**

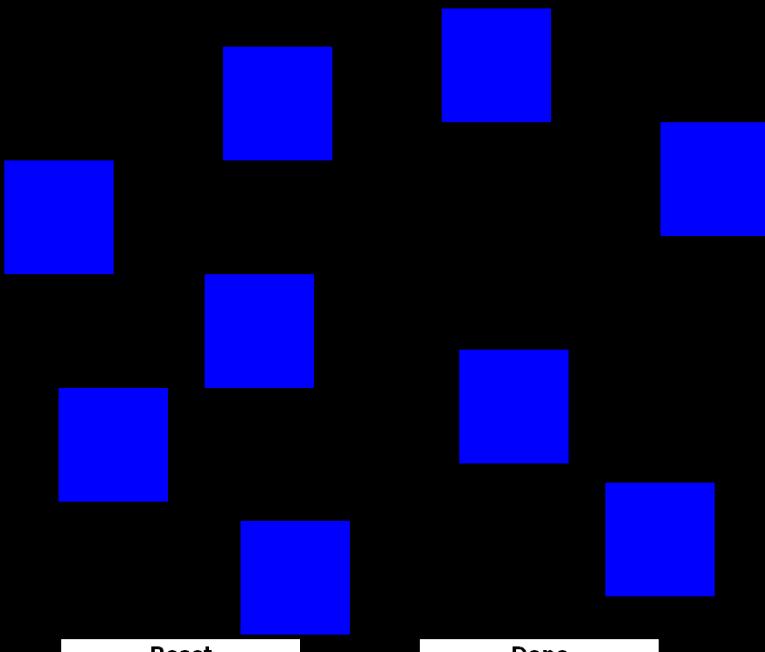
**As soon as the sequence is finished, you must repeat the sequence by clicking on the blocks IN THE SAME ORDER THEY WERE PRESENTED.**

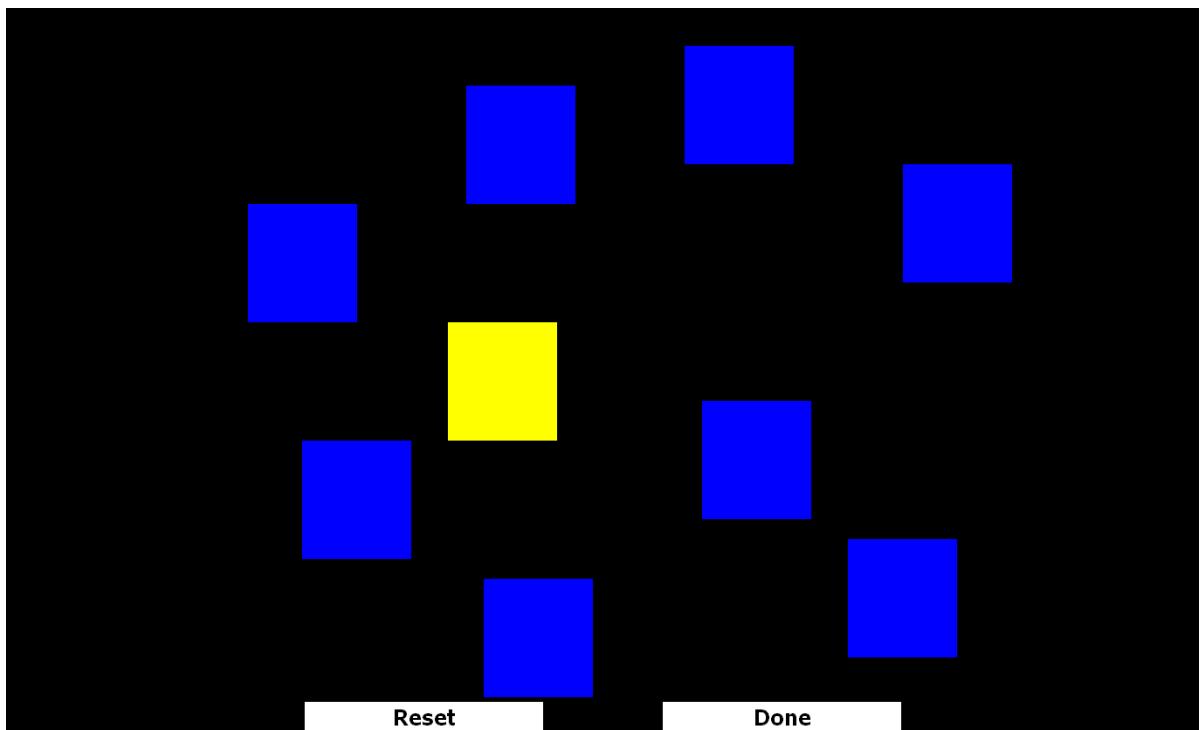
**When you are done, click the button labeled DONE. If you made a mistake, click the button labeled RESET to start over.**

**We will begin with a sequence of two blocks. You will get two tries for each sequence length. The number of blocks will increase by one whenever you get at least one of the two sequences of equal length correct. There will be no practice.**

**Click the "Continue" button when you are ready to begin.**

[Click here to continue](#)





**Results:**  
**Block Span = 2**  
**Total Score = 2**

## Appendix-10

### 10.1 STAI Raw Data

Sl.No.	NAME	AGE	SEX	PRECM	POCM	PRESR	POSR
1	Sandhya V S	16	M	46	40	38	28
2	Dnyaneshwari Shinde	15	F	32	31	31	26.32
3	Mamtha	14	F	44.44	50	43.33	45
4	Gowthami	16	F	29	22	28	25
5	Tulsi R Meda	13	F	27.37	24.21	26.32	26.32
6	Pooja B Rode	15	F	44	38.95	34	35
7	Sharanya P Meda	13	F	37.89	39	38	38
8	Lavanya G	15	F	38	33	33	31
8	Niveditha T	13	F	39	41	44	38
9	Hitha S	15	F	35.79	28	54	28
10	Rashmi T S	13	F	36	35	34	37
10	Jennifer	14	F	35.79	38	29	31
11	Jeevitha	13	F	48	42	42	43
15	Pradnya Deshpande	13	F	50	47	45	45.26
16	Sukruthi R	14	F	30	23	31	26
16	Gidnya Sarode	13	F	41	27.37	33.68	29
17	Uttara P R	15	F	32	27	32	26
17	Harshitha G M	13	F	46	49	42	40
18	Sonniya Bindu Mathi S	14	F	54	38	71	73
19	Abhishek N	15	M	51	47	48	49
20	Yashodhan P Kulkarni	14	M	54	45	47	46
21	Yashas M	14	M	25	26	34	28
22	Sridhar T R	16	M	49	42	50	51.58
23	Santosh R	14	M	38	37	32.63	33.68
24	Prateek S K	14	M	46	51	32	32
25	Anirudh	13	M	37	43	42	46
26	Balaji Mudgul	16	M	27	27	36.84	36
27	Sumeet	16	M	32	32	36	38
28	Prajwal M S	13	M	35	42	27	35.79

31	Sughosh	13	M	63	62	58.95	54
32	Amith C N	14	M	49	46	51	51.58
33	Prajwal Athreya H R	13	M	41	47	57	54
34	Amogh P	13	M	46	44	44.21	45
35	Amith T	13	M	38	37	51	46
36	Prahatheswar	14	M	40	39	43	47
37	T R Vivek	16	M	48	53	38	39
38	Rajasha	15	M	47	49	47	49
39	Anusha	13	F	42	52	45	42
40	Surabhi	13	F	43	40	44	43
40	Deepika V	14	F	36	38	26	27
41	Kailash S	15	M	42.11	47	44	46
42	Vineet Kasture	16	M	46	41	36.67	38.95
42	Nanda V D	17	F	37	20	33	32
43	Vamshish Gupta	14	M	31.11	30	28	30
44	Prajwal Kuchchangi	15	M	28.42	24	25	23
45	Nema Gudi	15	F	29	29	44	30.53
51	Suhas S	15	M	50	51	49	54
55	Nihar	15	M	30	26	40	37
58	Nehal Humpli	13	M	38	37	39	39
71	Shruti Tanksali	16	F	30	32	37	30
72	Shrusti dudhankar	15	F	26	21	30	23
75	Deepti S Rao	13	F	54	52	47	46
77	Rucha Paturkar	14	F	30	28	29	38
94	Parag S Battin	15	M	21	23	22	22
99	Siddharth A	15	M	31	29	28	30
104	Priyanka Kamble	15	F	24	24	33	23
109	Arjun Roy	14	F	42	36	48	42
110	Swapnali Madan Chorghade	18	F	38	37	31	33
126	Vaibhav M	13	M	39	41	36	42
144	prathik jain	16	M	34	34	33	33

## 10.2: IMMEDIATE EFFECT OF CYCLIC MEDITATION ON MEMORY TASK PERFORMANCE

Sl.No.	Name	Age	GENDER	CM_VM _Pre	CM_VM_ Post	CM_PM_ Pre	CM_PM_ Post	SR_VM_ Pre	SR_VM_ Post	SR_PM_ Pre	SR_PM_ Post
1	Navya	13	F	6	8	5	5	8	7	4	5
2	Rucha Paturkar	14	F	8	10	10	9	5	6	7	9
3	Sukruthi R	14	F	5	7	5	10	9	9	7	9
4	Lahari	16	F	6	8	8	8	8	8	4	10
5	Jennifer	14	F	1	2	3	5	4	5	5	5
6	Niveditha T	13	F	6	7	7	8	5	7	5	5
7	M B Deeksha	13	F	6	7	5	8	6	8	3	6
8	Jeevitha	13	F	5	6	4	5	8	9	5	6
9	sneha sankal	13	F	8	9	6	9	7	8	8	7
10	Samruddha S	14	F	5	6	7	9	9	10	6	8
11	Sharanya P Meda	13	F	4	5	8	7	8	10	7	8
12	Priyanka Kamble	15	F	9	10	10	10	8	10	8	9
13	Pooja B Rode	15	F	7	8	6	10	9	10	8	9
14	Swapnali Madan Chorghade	18	F	8	9	9	9	7	8	9	9
15	Nanda V D	17	F	9	10	6	10	8	10	6	10
16	V Mahadher Arpitha	14	F	6	7	6	7	10	10	7	10
17	Sindu Achar	14	F	9	10	6	8	10	10	9	10
18	Brinda Kaushik	13	F	6	6	7	7	5	7	4	5

19	Hitha S	15	F	4	4	6	8	10	10	5	7
20	D.m. vachanashree	13	F	8	8	10	6	4	4	7	7
21	Sheha S H	13	F	6	6	5	6	9	8	5	9
22	Preeti	15	F	9	9	6	7	10	9	7	9
23	Deepti S Rao	13	F	10	10	10	8	6	8	8	9
24	Shrusti dudhankar	15	F	10	10	10	9	8	10	8	10
25	Kusumitha.C.	14	F	9	8	6	9	8	7	5	5
26	Neethu	13	F	10	9	8	7	7	9	5	5
27	Varshini	14	F	10	9	8	7	8	3	6	5
28	Uttara P R	15	F	7	6	7	8	10	8	9	5
29	Apoorva M G Gowda	16	F	9	8	8	9	8	9	5	6
30	Nabeelaa Naushad Hanjsikar	15	F	9	8	7	8	9	7	6	6
31	Arjun Roy	14	F	8	7	4	9	3	3	6	7
32	Pooja H	15	F	7	6	4	6	8	9	6	8
33	Vijeyta Sharma M	15	F	10	9	10	7	6	4	8	8
34	Shreya Dewrkar	15	F	10	9	10	9	8	8	7	9
35	Suman S	13	F	7	6	5	5	8	9	9	9
36	Surabhi Goael	15	F	5	3	2	2	5	5	4	5
37	Pronya V Chidley	14	F	9	7	9	7	8	8	6	5
38	A V Shneha Rathna	14	F	7	5	7	7	10	9	10	7
39	Pooja V Patil	16	F	10	8	8	10	8	6	3	10
40	shreyas M	14	M	5	7	2	6	6	8	2	5

41	Manjunath B L	16	M	4	6	2	6	5	7	4	6
42	Anirudh	13	M	7	9	8	7	5	7	8	6
43	Sridhar T R	16	M	2	4	2	4	1	3	2	7
44	B.N. Shantosh Kumar	14	M	6	8	5	10	2	3	4	7
45	Nikhil k a	13	M	4	6	3	6	5	7	5	7
46	Prashant G	15	M	4	6	5	7	9	7	7	7
47	Suhas S	15	M	6	8	4	7	7	8	7	7
48	Arjun S	14	M	5	7	8	9	10	8	8	7
49	Sampath	17	M	4	6	4	5	6	8	6	8
50	Shree Kar M R	14	M	7	9	5	10	7	7	7	8
51	Nihar	15	M	5	7	6	8	9	8	9	9
52	Soham S Patwardhan	16	M	7	9	8	10	9	9	8	10
53	Aditya Jaju	15	M	8	10	9	9	6	8	9	10
54	Karthik A	13	M	8	10	6	10	7	9	9	10
55	Yashodhan P Kulkarni	14	M	8	10	9	10	8	9	9	10
56	Sathya Bala Raghu deep	15	M	6	7	7	5	8	3	4	5
57	Sreemanth.Y.S	13	M	7	8	6	8	8	5	6	5
58	B Sunil Kumar Reddy	15	M	6	7	5	8	10	9	8	5
59	Gidnya Sarode	13	M	5	6	3	5	7	7	9	5
60	Prajwal Kuchchangi	15	M	7	8	3	5	8	8	6	6
61	Vamshish Gupta	14	M	4	5	5	6	6	8	5	7
62	s shreyas	13	M	7	8	8	6	8	8	6	7

63	Priteesh ss	13	M	5	6	5	5	6	8	5	8
64	Srivathsa	14	M	6	7	4	9	8	8	5	8
65	sundarshan	13	M	7	8	4	9	5	7	6	8
66	Kailash S	15	M	6	7	6	8	8	9	7	8
67	Nitin S	14	M	9	10	9	9	10	10	8	8
68	Shreyas G	14	M	7	8	6	6	9	6	9	8
69	Harish J K	15	M	9	10	7	9	10	10	10	8
70	Balaji Mudgul	16	M	9	10	9	10	7	6	5	9
71	sukruth g	14	M	7	8	6	8	6	8	7	9
72	Sandhya V S	16	M	6	7	5	6	8	9	7	9
73	Tushar.N	13	M	9	9	5	9	6	5	5	5
74	M.S.K. Praneeth	14	M	9	9	9	8	7	6	6	5
75	B.S.Ullas	15	M	10	10	6	6	9	9	6	5
76	Manish K	13	M	5	5	2	5	3	4	1	6
77	G.Prajwal	13	M	8	8	3	6	5	6	2	6
78	Sumeet	16	M	10	10	3	6	9	9	8	6
79	Prajwal M S	13	M	6	6	3	8	8	9	6	7
80	Sankar B N R	13	M	9	9	9	8	6	5	8	7
81	Amruth S Holla	15	M	6	6	4	6	10	7	4	8
82	n p kumar	13	M	8	8	6	8	7	7	6	8
83	Nehal Humpli	13	M	8	8	6	6	9	8	6	8
84	prathik jain	16	M	10	10	10	10	8	9	8	8

85	Parag S Battin	15	M	10	10	10	9	8	10	10	9
86	Rajath V	13	M	9	9	5	5	9	10	9	10
87	Sunil	14	M	6	5	2	7	5	3	2	3
88	Swaroop Gupta	13	M	5	4	5	5	9	6	6	4
89	Rahul Konoi	14	M	7	6	5	7	7	5	7	4
90	Abhishek N	15	M	10	9	9	10	5	7	7	5
91	Sudhir	15	M	8	7	7	4	4	4	10	5
92	yashas G V	14	M	5	4	3	5	7	6	2	6
93	Vishwas	13	M	6	5	3	7	4	5	2	7
94	Prashad C L	14	M	7	6	5	8	5	7	4	7
95	Koushi D	13	M	9	8	9	9	8	9	7	7
96	Arvind M	13	M	6	5	4	5	5	6	3	8
97	M S Ganesh	15	M	8	7	5	8	6	5	4	8
98	manjunath K	14	M	6	5	1	6	6	8	4	8
99	Prateek S K	14	M	10	9	10	9	8	5	5	8
100	Arvind K G	15	M	8	7	6	9	10	8	5	8
101	G.B.Vaibhav	13	M	9	8	7	8	6	8	6	8
102	B Tejas	14	M	6	5	5	8	8	10	7	9
103	Yashas M	14	M	10	9	9	7	10	8	8	9
104	Deepak N D	15	M	10	9	9	9	5	5	10	9
105	Siddharth A	15	M	10	9	10	8	5	7	10	9
106	Suhas	13	M	8	6	4	4	6	3	2	4

107	T K Prajwal	13	M	8	6	7	8	6	8	3	6
108	Sanjit P H	13	M	9	7	8	7	7	5	4	6
109	Dinesh A	14	M	7	5	8	8	8	10	6	7
110	Amogh P	13	M	8	6	5	6	5	4	7	7
111	A v Vasmsi Krishna	14	M	10	8	8	9	9	7	6	8
112	Amarnath K Dixit	13	M	8	6	5	4	10	9	7	8
113	Suman Shankar	15	M	10	8	6	9	8	7	6	10

### 10.3: STATE MINDFULNESS, STATE ANXIETY AND WORKING MEMORY

Code	Gender	Age	Education	State Anxiety	State Mindfulness	Corsi Forward Correct	Corsi Forward Block Span	Corsi Forward Total Score	Corsi Backward Correct	Corsi Backward Block Span	Corsi Backward Total Score
1	1.00	12.00	8.00	8.00	4.00	9.00	7.00	63.00	8.00	5.00	40.00
2	1.00	12.00	7.00	10.00	3.60	8.00	5.00	40.00	7.00	5.00	35.00
3	0.00	12.00	8.00	11.00	3.80	8.00	6.00	48.00	8.00	6.00	48.00
4	0.00	12.00	8.00	12.00	5.00	8.00	5.00	40.00	8.00	6.00	48.00
5	1.00	12.00	7.00	15.00	3.40	6.00	4.00	24.00	4.00	3.00	12.00
6	1.00	13.00	8.00	14.00	1.20	9.00	6.00	54.00	8.00	6.00	48.00
7	1.00	13.00	8.00	20.00	2.80	7.00	5.00	35.00	5.00	4.00	20.00
8	1.00	13.00	8.00	20.00	2.60	7.00	5.00	35.00	9.00	6.00	54.00
9	1.00	13.00	9.00	17.00	5.40	7.00	5.00	35.00	9.00	6.00	54.00
10	0.00	13.00	8.00	12.00	4.80	8.00	5.00	40.00	8.00	6.00	48.00
11	1.00	13.00	8.00	9.00	4.20	9.00	6.00	54.00	8.00	6.00	48.00
12	1.00	13.00	8.00	9.00	3.40	7.00	6.00	42.00	6.00	4.00	24.00
13	1.00	13.00	9.00	12.00	4.20	7.00	5.00	35.00	7.00	6.00	42.00
14	1.00	13.00	6.00	13.00	4.00	8.00	5.00	40.00	9.00	6.00	54.00
15	0.00	13.00	8.00	14.00	5.20	7.00	5.00	35.00	8.00	6.00	48.00
16	0.00	13.00	8.00	10.00	4.40	10.00	6.00	60.00	6.00	4.00	24.00
17	1.00	13.00	8.00	17.00	5.40	13.00	8.00	104.00	9.00	6.00	54.00

18	1.00	13.00	8.00	14.00	5.00	8.00	5.00	40.00	7.00	5.00	35.00
19	1.00	13.00	8.00	17.00	4.00	9.00	6.00	54.00	8.00	6.00	48.00
20	1.00	13.00	8.00	13.00	3.60	8.00	6.00	48.00	3.00	3.00	9.00
21	1.00	13.00	8.00	9.00	4.60	10.00	8.00	80.00	9.00	6.00	54.00
22	1.00	13.00	8.00	18.00	4.40	8.00	5.00	40.00	5.00	6.00	30.00
23	1.00	13.00	8.00	14.00	4.40	7.00	5.00	35.00	8.00	6.00	48.00
24	0.00	13.00	8.00	11.00	5.60	8.00	5.00	40.00	9.00	6.00	54.00
25	1.00	13.00	8.00	13.00	4.40	8.00	6.00	48.00	9.00	6.00	54.00
26	0.00	13.00	9.00	13.00	2.60	6.00	4.00	24.00	8.00	6.00	48.00
27	1.00	13.00	7.00	13.00	4.20	7.00	5.00	35.00	3.00	3.00	9.00
28	0.00	13.00	8.00	12.00	5.60	8.00	6.00	48.00	9.00	6.00	54.00
29	1.00	13.00	9.00	21.00	4.00	9.00	6.00	54.00	7.00	6.00	42.00
30	1.00	13.00	9.00	15.00	2.60	5.00	4.00	20.00	3.00	3.00	9.00
31	1.00	13.00	8.00	14.00	3.00	6.00	4.00	24.00	2.00	3.00	6.00
32	0.00	13.00	9.00	7.00	5.60	6.00	4.00	24.00	7.00	5.00	35.00
33	0.00	13.00	8.00	6.00	5.80	8.00	5.00	40.00	8.00	6.00	48.00
34	1.00	13.00	8.00	15.00	4.40	8.00	5.00	40.00	6.00	5.00	30.00
35	0.00	13.00	8.00	12.00	5.20	10.00	7.00	70.00	9.00	6.00	54.00
36	0.00	13.00	7.00	9.00	4.80	5.00	4.00	20.00	7.00	5.00	35.00
37	1.00	13.00	9.00	20.00	3.00	8.00	5.00	40.00	6.00	5.00	30.00
38	0.00	13.00	7.00	8.00	5.60	9.00	7.00	63.00	9.00	6.00	54.00
39	0.00	13.00	8.00	9.00	4.80	8.00	6.00	48.00	6.00	4.00	24.00

40	1.00	13.00	8.00	10.00	5.40	8.00	6.00	48.00	8.00	5.00	40.00
41	0.00	13.00	10.00	21.00	4.40	8.00	5.00	40.00	7.00	5.00	35.00
42	1.00	13.00	7.00	10.00	4.80	7.00	5.00	35.00	6.00	5.00	30.00
43	1.00	13.00	9.00	6.00	6.00	7.00	5.00	35.00	7.00	6.00	42.00
44	1.00	13.00	8.00	20.00	3.40	4.00	3.00	12.00	2.00	2.00	4.00
45	1.00	13.00	9.00	11.00	5.80	8.00	5.00	40.00	8.00	6.00	48.00
46	0.00	13.00	8.00	8.00	4.00	7.00	5.00	35.00	9.00	6.00	54.00
47	1.00	13.00	8.00	17.00	2.40	7.00	5.00	35.00	7.00	5.00	35.00
48	1.00	13.00	7.00	10.00	5.00	7.00	5.00	35.00	8.00	6.00	48.00
49	1.00	13.00	9.00	8.00	5.80	11.00	7.00	77.00	8.00	6.00	48.00
50	1.00	13.00	9.00	15.00	1.80	5.00	4.00	20.00	4.00	3.00	12.00
51	0.00	13.00	8.00	12.00	4.20	10.00	6.00	60.00	7.00	5.00	35.00
52	1.00	13.00	8.00	15.00	1.60	5.00	4.00	20.00	5.00	4.00	20.00
53	1.00	13.00	7.00	11.00	5.60	7.00	5.00	35.00	5.00	4.00	20.00
54	1.00	13.00	7.00	16.00	2.40	6.00	5.00	30.00	7.00	5.00	35.00
55	1.00	13.00	8.00	9.00	5.80	8.00	6.00	48.00	9.00	6.00	54.00
56	1.00	13.00	8.00	11.00	5.40	8.00	7.00	56.00	4.00	3.00	12.00
57	1.00	13.00	9.00	14.00	2.40	5.00	5.00	25.00	6.00	6.00	36.00
58	1.00	13.00	7.00	13.00	3.60	7.00	5.00	35.00	8.00	6.00	48.00
59	1.00	13.00	8.00	12.00	4.20	7.00	5.00	35.00	5.00	4.00	20.00
60	0.00	13.00	9.00	18.00	3.60	6.00	4.00	24.00	6.00	5.00	30.00
61	0.00	13.00	8.00	8.00	2.40	7.00	5.00	35.00	9.00	6.00	54.00

62	0.00	13.00	9.00	10.00	3.80	7.00	5.00	35.00	7.00	6.00	42.00
63	0.00	13.00	9.00	10.00	5.80	11.00	7.00	77.00	8.00	6.00	48.00
64	1.00	13.00	9.00	7.00	5.40	7.00	5.00	35.00	8.00	6.00	48.00
65	1.00	14.00	10.00	21.00	3.80	5.00	4.00	20.00	5.00	4.00	20.00
66	1.00	14.00	9.00	15.00	4.20	5.00	4.00	20.00	3.00	3.00	9.00
67	1.00	14.00	10.00	18.00	3.00	8.00	5.00	40.00	10.00	6.00	60.00
68	0.00	14.00	9.00	10.00	4.60	8.00	5.00	40.00	7.00	6.00	42.00
69	0.00	14.00	8.00	11.00	5.00	10.00	7.00	70.00	10.00	6.00	60.00
70	0.00	14.00	9.00	6.00	5.60	6.00	5.00	30.00	6.00	4.00	24.00
71	1.00	14.00	9.00	11.00	6.00	7.00	5.00	35.00	11.00	7.00	77.00
72	0.00	14.00	9.00	12.00	5.40	8.00	6.00	48.00	6.00	4.00	24.00
73	0.00	14.00	10.00	11.00	4.60	7.00	5.00	35.00	3.00	4.00	12.00
74	1.00	14.00	9.00	7.00	5.80	8.00	5.00	40.00	8.00	5.00	40.00
75	1.00	14.00	9.00	9.00	5.80	7.00	5.00	35.00	9.00	6.00	54.00
76	0.00	14.00	9.00	16.00	5.40	6.00	5.00	30.00	7.00	5.00	35.00
77	1.00	14.00	9.00	17.00	5.40	5.00	5.00	25.00	8.00	6.00	48.00
78	0.00	14.00	10.00	10.00	5.60	8.00	5.00	40.00	9.00	6.00	54.00
79	0.00	14.00	9.00	13.00	5.20	8.00	5.00	40.00	7.00	6.00	42.00
80	0.00	14.00	9.00	16.00	5.80	8.00	5.00	40.00	7.00	6.00	42.00
81	0.00	14.00	9.00	17.00	5.00	6.00	5.00	30.00	6.00	5.00	30.00
82	1.00	14.00	9.00	11.00	3.40	8.00	6.00	48.00	7.00	6.00	42.00
83	1.00	14.00	10.00	16.00	5.20	9.00	6.00	54.00	10.00	6.00	60.00

84	1.00	14.00	9.00	17.00	4.00	10.00	6.00	60.00	10.00	6.00	60.00
85	1.00	14.00	10.00	10.00	4.80	9.00	6.00	54.00	7.00	6.00	42.00
86	1.00	14.00	9.00	13.00	4.20	5.00	4.00	20.00	4.00	3.00	12.00
87	1.00	14.00	10.00	12.00	4.60	9.00	7.00	63.00	9.00	6.00	54.00
88	0.00	14.00	9.00	12.00	5.60	6.00	4.00	24.00	5.00	4.00	20.00
89	0.00	14.00	10.00	12.00	4.80	8.00	5.00	40.00	8.00	6.00	48.00
90	0.00	14.00	10.00	9.00	2.40	8.00	5.00	40.00	8.00	6.00	48.00
91	1.00	14.00	10.00	7.00	5.60	6.00	5.00	30.00	8.00	6.00	48.00
92	0.00	14.00	10.00	10.00	5.20	8.00	6.00	48.00	7.00	6.00	42.00
93	1.00	14.00	8.00	16.00	3.40	7.00	5.00	35.00	8.00	6.00	48.00
94	1.00	14.00	8.00	9.00	4.60	7.00	5.00	35.00	7.00	5.00	35.00
95	1.00	14.00	8.00	9.00	4.60	8.00	6.00	48.00	8.00	6.00	48.00
96	1.00	14.00	9.00	9.00	5.40	8.00	5.00	40.00	9.00	6.00	54.00
97	1.00	14.00	9.00	13.00	4.20	8.00	5.00	40.00	6.00	5.00	30.00
98	1.00	14.00	10.00	16.00	3.80	8.00	5.00	40.00	8.00	6.00	48.00
99	1.00	14.00	8.00	21.00	2.40	5.00	5.00	25.00	7.00	5.00	35.00
100	0.00	14.00	9.00	13.00	4.60	6.00	5.00	30.00	9.00	6.00	54.00
101	1.00	14.00	8.00	12.00	3.00	6.00	4.00	24.00	9.00	6.00	54.00
102	1.00	14.00	9.00	14.00	5.40	10.00	7.00	70.00	8.00	6.00	48.00
103	1.00	14.00	9.00	14.00	5.20	8.00	5.00	40.00	7.00	5.00	35.00
104	1.00	14.00	9.00	10.00	5.40	10.00	6.00	60.00	7.00	6.00	42.00
105	0.00	14.00	9.00	9.00	6.00	8.00	6.00	48.00	9.00	6.00	54.00

106	0.00	14.00	9.00	16.00	4.20	7.00	5.00	35.00	10.00	7.00	70.00
107	0.00	14.00	8.00	17.00	3.00	2.00	3.00	6.00	4.00	3.00	12.00
108	0.00	14.00	9.00	7.00	5.60	9.00	6.00	54.00	8.00	6.00	48.00
109	1.00	14.00	9.00	13.00	2.40	6.00	5.00	30.00	6.00	4.00	24.00
110	1.00	14.00	9.00	13.00	4.00	6.00	4.00	24.00	7.00	5.00	35.00
111	1.00	14.00	9.00	10.00	6.00	8.00	5.00	40.00	8.00	5.00	40.00
112	0.00	14.00	10.00	8.00	5.20	7.00	5.00	35.00	9.00	6.00	54.00
113	1.00	14.00	9.00	7.00	5.00	8.00	5.00	40.00	7.00	5.00	35.00
114	0.00	14.00	9.00	6.00	6.00	9.00	6.00	54.00	8.00	6.00	48.00
115	0.00	14.00	9.00	12.00	4.80	9.00	6.00	54.00	9.00	6.00	54.00
116	1.00	14.00	9.00	18.00	3.20	8.00	6.00	48.00	10.00	6.00	60.00
117	0.00	15.00	10.00	11.00	5.00	8.00	5.00	40.00	10.00	6.00	60.00
118	0.00	15.00	10.00	20.00	2.20	8.00	6.00	48.00	9.00	6.00	54.00
119	1.00	15.00	10.00	13.00	4.80	5.00	5.00	25.00	8.00	5.00	40.00
120	0.00	15.00	10.00	11.00	5.80	7.00	6.00	42.00	10.00	7.00	70.00
121	0.00	15.00	10.00	11.00	6.00	10.00	7.00	70.00	11.00	8.00	88.00
122	1.00	15.00	10.00	19.00	4.00	7.00	5.00	35.00	8.00	5.00	40.00
123	1.00	15.00	10.00	10.00	5.40	9.00	6.00	54.00	8.00	5.00	40.00
124	1.00	15.00	10.00	14.00	3.80	6.00	4.00	24.00	7.00	5.00	35.00
125	0.00	15.00	10.00	14.00	3.20	4.00	3.00	12.00	6.00	6.00	36.00
126	1.00	15.00	10.00	9.00	5.80	9.00	6.00	54.00	10.00	6.00	60.00
127	0.00	15.00	10.00	15.00	2.40	7.00	5.00	35.00	8.00	5.00	40.00

128	0.00	15.00	10.00	6.00	5.60	6.00	5.00	30.00	7.00	6.00	42.00
129	1.00	15.00	11.00	19.00	3.60	10.00	7.00	70.00	9.00	6.00	54.00
130	1.00	15.00	10.00	11.00	3.00	8.00	5.00	40.00	6.00	4.00	24.00
131	1.00	15.00	10.00	10.00	5.80	8.00	5.00	40.00	8.00	6.00	48.00
132	0.00	15.00	11.00	18.00	4.60	10.00	6.00	60.00	10.00	6.00	60.00
133	1.00	15.00	11.00	17.00	1.20	7.00	5.00	35.00	6.00	5.00	30.00
134	1.00	15.00	11.00	10.00	4.80	12.00	8.00	96.00	10.00	6.00	60.00
135	0.00	15.00	10.00	11.00	4.40	8.00	5.00	40.00	7.00	5.00	35.00
136	1.00	15.00	9.00	14.00	4.60	6.00	5.00	30.00	8.00	5.00	40.00
137	1.00	15.00	10.00	7.00	5.80	7.00	5.00	35.00	8.00	6.00	48.00
138	0.00	15.00	10.00	16.00	3.80	7.00	5.00	35.00	6.00	6.00	36.00
139	0.00	15.00	10.00	10.00	3.80	8.00	5.00	40.00	9.00	6.00	54.00
140	0.00	15.00	10.00	16.00	4.80	6.00	4.00	24.00	8.00	5.00	40.00
141	1.00	15.00	11.00	11.00	4.40	9.00	6.00	54.00	10.00	6.00	60.00
142	1.00	15.00	10.00	11.00	4.20	8.00	5.00	40.00	9.00	6.00	54.00
143	0.00	15.00	10.00	12.00	5.40	8.00	5.00	40.00	5.00	4.00	20.00
144	0.00	15.00	11.00	17.00	4.80	8.00	5.00	40.00	8.00	6.00	48.00
145	0.00	15.00	10.00	9.00	4.40	8.00	5.00	40.00	10.00	6.00	60.00
146	0.00	15.00	10.00	14.00	5.40	11.00	7.00	77.00	6.00	5.00	30.00
147	0.00	15.00	11.00	11.00	3.80	9.00	6.00	54.00	9.00	6.00	54.00
148	1.00	15.00	11.00	8.00	6.00	10.00	6.00	60.00	11.00	7.00	77.00
149	0.00	15.00	11.00	21.00	2.80	8.00	6.00	48.00	8.00	6.00	48.00

150	0.00	15.00	11.00	11.00	4.20	8.00	5.00	40.00	8.00	6.00	48.00
151	0.00	15.00	10.00	9.00	3.80	8.00	5.00	40.00	7.00	6.00	42.00
152	1.00	15.00	10.00	14.00	5.20	8.00	5.00	40.00	6.00	5.00	30.00
153	1.00	16.00	11.00	12.00	4.20	8.00	5.00	40.00	9.00	6.00	54.00
154	1.00	16.00	10.00	11.00	4.00	7.00	5.00	35.00	10.00	6.00	60.00
155	1.00	16.00	10.00	12.00	5.40	9.00	6.00	54.00	11.00	7.00	77.00
156	0.00	16.00	11.00	8.00	4.60	8.00	6.00	48.00	11.00	8.00	88.00
157	0.00	16.00	10.00	14.00	3.20	5.00	4.00	20.00	8.00	5.00	40.00
158	0.00	16.00	10.00	17.00	4.00	6.00	5.00	30.00	8.00	6.00	48.00
159	0.00	16.00	10.00	12.00	4.20	9.00	6.00	54.00	8.00	6.00	48.00
160	0.00	16.00	11.00	13.00	2.20	8.00	6.00	48.00	8.00	6.00	48.00
161	1.00	16.00	12.00	15.00	1.40	9.00	6.00	54.00	9.00	6.00	54.00
162	1.00	16.00	10.00	15.00	2.60	3.00	3.00	9.00	6.00	5.00	30.00
163	1.00	16.00	11.00	17.00	3.80	8.00	5.00	40.00	8.00	6.00	48.00
164	1.00	16.00	12.00	13.00	2.40	3.00	4.00	12.00	6.00	4.00	24.00
165	0.00	16.00	12.00	8.00	5.60	9.00	6.00	54.00	10.00	6.00	60.00
166	1.00	16.00	12.00	12.00	3.40	8.00	5.00	40.00	7.00	6.00	42.00
167	1.00	16.00	12.00	12.00	2.80	7.00	5.00	35.00	9.00	6.00	54.00

## 10.4: PRE-POST DATA OF CORSI BLOCK, CAMM, MAAS, STAISF

Corsi id	Gender	Age	Education	FWN corrpre	FWN corrPost	FW blocks pre	FW blocks Post	FW totalscore pre	FW totalscore Post	BKN corrpre	BKN corrPost	BK blocks pre	BK blocks Post	BK totalscore pre	BK totalscore Post	Camm Pre	Camm Post	Mindfulness Pre	Mindfulness Post	Anxiety pre	Anxiety post
1	1	14	8	0	7	0	5	0	35	9	9	6	6	54	54	27	27	15	17	12	12
2	0	14	8	2	1	3	2	6	2	1	2	2	2	2	4	20	28	15	16	17	13
3	1	16	12	3	8	4	5	12	40	6	7	4	5	24	35	33	31	12	15	13	17
4	1	16	10	3	6	3	4	9	24	6	6	5	4	30	24	21	31	13	13	15	18
5	1	13	8	4	6	3	5	12	30	5	5	4	4	20	20	23	25	29	25	14	20
6	1	13	8	4	2	3	2	12	4	2	0	2	0	4	0	24	25	17	18	20	14
7	1	13	9	5	6	4	4	20	24	4	7	3	6	12	42	23	25	9	7	15	18
8	0	13	7	5	6	4	5	20	30	0	6	0	5	0	30	20	27	5	26	13	9
9	0	13	7	5	5	4	4	20	20	7	8	5	6	35	48	20	28	10	24	18	9
10	1	14	8	5	3	5	3	25	9	0	0	0	0	0	0	24	31	12	21	21	13
11	0	16	10	5	7	4	5	20	35	8	8	5	6	40	48	23	25	16	16	14	13
12	1	12	7	6	8	4	5	24	40	4	5	3	4	12	20	28	23	17	19	15	17
13	1	13	7	6	10	5	7	30	70	7	8	5	5	35	40	23	24	12	26	16	8
14	1	13	8	6	6	4	4	24	24	2	4	3	3	6	12	27	26	15	15	14	11
15	0	13	9	6	7	4	5	24	35	7	7	5	6	35	42	37	35	28	30	7	6
16	0	13	9	6	8	4	6	24	48	6	9	5	6	30	54	28	24	18	23	18	9
17	1	14	9	6	7	5	5	30	35	0	8	0	6	0	48	23	27	12	5	13	13

18	1	14	10	6	7	5	5	30	35	8	3	6	4	48	12	35	38	28	28	7	8
19	0	14	9	6	9	5	6	30	54	9	9	6	6	54	54	32	28	23	16	13	8
20	0	14	9	6	8	4	6	24	48	5	7	4	6	20	42	21	30	28	20	12	9
21	1	14	9	6	8	4	6	24	48	7	7	5	6	35	42	24	26	20	22	13	11
22	1	15	9	6	9	5	6	30	54	8	9	5	6	40	54	23	28	23	25	14	10
23	0	15	10	6	7	4	5	24	35	8	7	5	5	40	35	23	22	24	23	16	10
24	0	15	10	6	7	5	6	30	42	7	8	6	6	42	48	23	29	28	25	6	7
25	0	16	10	6	8	5	6	30	48	8	9	6	6	48	54	23	20	20	14	17	20
26	0	13	8	7	9	5	6	35	54	9	8	6	5	54	40	23	26	12	11	7	8
27	1	13	8	7	8	5	5	35	40	7	6	5	5	35	30	26	28	30	30	14	6
28	1	13	7	7	8	5	5	35	40	8	7	6	5	48	35	28	30	25	23	10	9
29	1	13	8	7	8	5	5	35	40	7	6	5	4	35	24	23	24	12	10	17	17
30	1	13	8	7	5	5	5	35	25	5	4	4	4	20	16	28	29	21	21	12	13
31	1	13	7	7	8	5	6	35	48	0	7	0	5	0	35	32	33	28	30	11	9
32	1	13	7	7	6	5	5	35	30	6	7	5	5	30	35	22	21	24	18	10	14
33	0	13	8	7	8	5	6	35	48	9	8	6	7	54	56	25	23	20	22	8	8
34	0	13	9	7	7	5	5	35	35	7	7	6	5	42	35	30	25	19	17	10	11
35	1	13	9	7	9	5	6	35	54	7	6	6	4	42	24	38	33	15	30	7	6
36	0	14	9	7	11	5	7	35	77	10	8	7	6	70	48	23	27	21	25	16	11
37	1	14	8	7	5	5	5	35	25	7	7	5	5	35	35	24	23	23	14	9	18
38	1	14	8	7	4	5	3	35	12	8	8	6	6	48	48	33	31	7	17	20	16
39	0	14	10	7	9	5	7	35	63	9	9	6	6	54	54	28	23	26	18	8	6

40	1	15	10	7	9	5	7	35	63	8	7	6	6	48	42	23	27	29	29	7	7
41	0	15	10	7	6	5	5	35	30	6	8	6	6	36	48	22	21	19	16	16	19
42	1	16	12	7	10	5	7	35	70	9	9	6	6	54	54	27	24	14	29	12	19
43	0	12	8	8	8	5	5	40	40	8	7	6	6	48	42	25	25	25	28	12	10
44	1	13	8	8	6	5	4	40	24	6	7	5	6	30	42	22	31	22	27	15	9
45	0	13	8	8	8	6	5	48	40	6	9	4	6	24	54	27	28	24	26	9	12
46	1	13	9	8	9	5	6	40	54	8	10	6	7	48	70	28	29	29	27	11	8
47	0	13	8	8	9	5	6	40	54	8	8	6	5	48	40	32	32	29	25	6	8
48	1	13	8	8	10	7	7	56	70	4	8	3	6	12	48	37	36	27	27	11	10
49	0	13	10	8	8	5	5	40	40	7	9	5	6	35	54	30	28	22	29	21	12
50	1	13	8	8	9	6	6	48	54	8	8	5	6	40	48	23	22	27	26	10	9
51	1	14	10	8	8	5	6	40	48	8	6	6	4	48	24	22	30	19	17	16	14
52	0	14	9	8	8	5	5	40	40	7	6	6	6	42	36	27	34	29	30	8	7
53	1	14	9	8	9	5	6	40	54	7	8	5	6	35	48	27	29	25	20	7	10
54	0	14	9	8	8	6	6	48	48	9	8	6	5	54	40	23	23	30	29	9	8
55	1	14	9	8	8	5	5	40	40	7	7	5	6	35	42	26	26	26	29	14	7
56	1	14	8	8	10	6	7	48	70	8	9	6	6	48	54	30	30	23	23	9	7
57	0	14	10	8	9	6	6	48	54	7	9	6	6	42	54	25	24	26	27	10	13
58	0	14	10	8	10	5	7	40	70	8	8	6	5	48	40	21	19	12	15	9	9
59	1	14	9	8	9	6	6	48	54	10	11	6	7	60	77	23	21	16	24	18	12
60	1	14	9	8	8	5	6	40	48	9	6	6	5	54	30	25	23	27	24	9	13
61	0	15	10	8	8	6	5	48	40	9	7	7	6	63	42	21	23	19	18	13	13

62	0	15	11	8	9	6	6	48	54	8	6	6	6	48	36	21	22	14	12	21	20
63	0	15	10	8	6	5	4	40	24	7	9	5	6	35	54	22	23	22	23	11	9
64	0	15	10	8	11	5	7	40	77	9	8	6	6	54	48	27	27	19	21	10	10
65	0	15	11	8	11	5	8	40	88	11	10	8	7	88	70	29	29	13	23	14	10
66	0	15	11	8	8	5	5	40	40	8	9	6	6	48	54	26	25	24	23	17	10
67	1	15	10	8	7	5	5	40	35	6	8	5	6	30	48	26	24	26	28	14	17
68	0	15	11	8	7	5	5	40	35	8	7	6	5	48	35	25	21	21	15	11	13
69	1	15	10	8	8	5	5	40	40	9	9	6	6	54	54	26	33	21	30	11	11
70	1	15	10	8	8	5	6	40	48	6	7	4	6	24	42	30	26	15	22	11	11
71	1	16	11	8	7	5	5	40	35	8	8	6	5	48	40	27	27	19	15	17	15
72	1	16	12	8	8	5	5	40	40	7	9	6	6	42	54	28	27	17	19	12	11
73	1	13	9	9	8	6	5	54	40	7	9	6	6	42	54	23	33	20	27	21	7
74	0	13	7	9	12	7	8	63	96	9	11	6	7	54	77	25	21	28	29	8	7
75	1	14	10	9	8	7	5	63	40	9	10	6	6	54	60	23	25	23	26	12	9
76	0	14	9	9	9	6	6	54	54	8	7	6	6	48	42	32	32	30	30	6	6
77	0	14	9	9	10	6	7	54	70	8	9	6	6	48	54	31	30	28	28	7	9
78	0	14	9	9	2	6	2	54	4	9	5	6	5	54	25	26	23	24	22	12	11
79	1	15	11	9	8	6	6	54	48	9	9	6	6	54	54	33	34	30	30	8	6
80	1	15	11	9	10	6	7	54	70	10	12	6	8	60	96	21	19	11	22	14	11
81	0	16	10	9	7	6	5	54	35	8	8	6	7	48	56	18	20	15	21	12	13
82	1	16	12	9	10	6	7	54	70	9	9	6	6	54	54	28	22	7	15	15	11
83	0	13	9	10	8	6	5	60	40	8	11	5	7	40	77	32	29	30	30	8	6

84	0	13	8	10	10	7	7	70	70	9	7	6	6	54	42	17	25	26	25	12	7
85	1	14	9	10	10	6	6	60	60	7	9	6	6	42	54	31	38	27	30	10	10
86	0	15	11	10	12	6	8	60	96	10	10	6	6	60	60	23	28	23	23	18	15
87	1	15	11	10	8	7	5	70	40	9	5	6	4	54	20	24	25	18	17	19	15
88	0	13	9	11	10	7	7	77	70	8	9	6	6	48	54	33	33	29	28	10	10
89	1	13	9	11	13	7	8	77	104	8	11	6	8	48	88	24	31	29	30	8	10
90	0	15	10	11	10	7	7	77	70	6	6	5	5	30	30	20	24	24	25	14	11
91	1	15	11	12	14	8	9	96	126	10	11	6	7	60	77	24	25	22	30	12	6

## 10.4: NORMATIVE DATA FOR VERBAL AND NON-VERBAL MEMORY SCORES

<b>Sl.No.</b>	<b>Age</b>	<b>Sex</b>	<b>Verbal Memory</b>	<b>Non-Verbal Memory</b>
1	13	F	7	4
2	14	F	5	4
3	14	F	4	5
4	14	F	5	6
5	14	F	4	6
6	15	F	6	9
7	15	F	5	6
8	16	F	5	8
9	13	F	5	4
10	14	F	4	8
11	15	F	8	7
12	15	F	6	4
13	15	F	6	9
14	14	F	6	5
15	14	F	5	7
16	13	F	4	8
17	13	F	4	7
18	13	F	4	7
19	15	F	7	8
20	13	F	5	9
21	13	F	5	7
22	13	F	6	8
23	13	F	4	6
24	13	F	7	5
25	13	F	6	8
26	13	F	6	8
27	13	F	4	7
28	13	F	4	7
29	13	F	6	7
30	13	F	7	10
31	13	F	5	6
32	13	F	4	5
33	13	F	5	5
34	13	F	5	6
35	13	F	5	7
36	13	F	6	6
37	13	F	6	8
38	13	F	7	4
39	13	F	4	6

40	13	F	8	5
41	13	F	9	8
42	13	F	6	4
43	13	F	8	8
44	13	F	6	7
45	13	F	8	7
46	13	F	8	4
47	13	F	7	7
48	13	F	6	7
49	13	F	8	7
50	13	F	7	7
51	13	F	5	9
52	13	F	6	8
53	13	F	5	9
54	13	F	8	8
55	13	F	6	9
56	13	F	4	9
57	14	F	7	7
58	14	F	8	9
59	14	F	6	9
60	14	F	7	7
61	14	F	7	8
62	14	F	8	8
63	14	F	8	9
64	14	F	8	7
65	14	F	7	9
66	14	F	7	7
67	14	F	5	9
68	14	F	7	8
69	14	F	6	9
70	14	F	6	8
71	15	F	4	6
72	15	F	5	7
73	15	F	6	8
74	15	F	7	7
75	15	F	4	8
76	15	F	4	9
77	15	F	8	8
78	15	F	4	7
79	15	F	9	9
80	15	F	5	7
81	15	F	5	7
82	15	F	6	10
83	15	F	8	9
84	15	F	9	10

85	15	F	8	10
86	15	F	8	9
87	15	F	4	7
88	15	F	4	7
89	15	F	4	7
90	15	F	9	7
91	15	F	7	7
92	15	F	6	8
93	15	F	7	9
94	15	F	8	8
95	15	F	6	8
96	15	F	7	9
97	15	F	7	7
98	16	F	9	9
99	16	F	6	5
100	16	F	7	6
101	16	F	4	7
102	16	F	7	8
103	16	F	7	9
104	16	F	8	4
105	16	F	5	6
106	16	F	8	9
107	13	M	4	6
108	14	M	7	5
109	15	M	7	6
110	15	M	7	7
111	15	M	7	6
112	14	M	5	7
113	14	M	6	5
114	13	M	5	5
115	13	M	6	6
116	13	M	5	7
117	14	M	5	5
118	14	M	5	5
119	14	M	7	5
120	15	M	5	7
121	16	M	7	5
122	16	M	6	9
123	16	M	6	8
124	16	M	7	6
125	16	M	7	8
126	16	M	5	7
127	13	M	5	6
128	13	M	6	6
129	13	M	5	6

130	13	M	7	5
131	13	M	5	9
132	13	M	5	8
133	13	M	7	6
134	13	M	8	5
135	13	M	7	6
136	13	M	6	8
137	13	M	7	10
138	13	M	5	6
139	13	M	5	6
140	13	M	6	5
141	13	M	7	6
142	13	M	8	8
143	13	M	5	7
144	13	M	5	6
145	13	M	6	9
146	13	M	5	5
147	13	M	5	7
148	13	M	7	10
149	13	M	6	10
150	13	M	6	4
151	13	M	5	8
152	13	M	5	9
153	14	M	7	7
154	14	M	8	6
155	14	M	6	8
156	14	M	6	8
157	14	M	8	7
158	14	M	7	10
159	14	M	5	8
160	14	M	5	6
161	14	M	5	5
162	14	M	6	6
163	14	M	8	7
164	14	M	7	6
165	14	M	6	9
166	14	M	5	6
167	14	M	6	5
168	14	M	7	7
169	14	M	6	7
170	14	M	8	7
171	14	M	6	5
172	14	M	5	7
173	14	M	5	10
174	14	M	6	5

175	14	M	8	7
176	14	M	5	6
177	14	M	5	6
178	14	M	5	6
179	14	M	5	9
180	15	M	7	6
181	15	M	7	8
182	15	M	6	4
183	15	M	6	9
184	15	M	8	7
185	15	M	6	6
186	15	M	6	6
187	15	M	6	5
188	15	M	8	8
189	15	M	8	10
190	15	M	5	6
191	15	M	7	6
192	15	M	8	6
193	15	M	8	5
194	15	M	7	8
195	15	M	7	6
196	15	M	7	8
197	16	M	8	9
198	16	M	5	6
199	16	M	6	8
200	16	M	9	9
201	16	M	6	6

## LIST OF PLATES

### Plate-1: Adolescents performing computerized Corsi Blok-Tapping Task





## Plate-2: Adolescents practicing Yogāsans





## **PUBLICATIONS FROM THIS DOCTORAL WORK**

Natesh Babu., Balaram, P., Nagendra, H.R. (2014). A Comparative study on two yogic relaxation techniques on anxiety in school children. *International Journal of Yoga - Philosophy, Psychology and Parapsychology*.

Natesh Babu., Balaram, P., Nagendra, H.R. (2014). Immediate effect of yoga based relaxation Techniques on memory task performance in Teenagers. *International Journal of Multidisciplinary Educational Research*.

Natesh Babu., Rajesh S.K., Nagendra, H.R. (2014). Relationship between state mindfulness and working memory in Children. *Indian Journal of Positive Psychology*