

# **APPENDIXES**

## APPENDIX I

### INSTITUTIONAL ETHICS COMMITTEE APPROVAL



स्वामी विवेकानन्द योग अनुसंधान संस्थान  
Swami Vivekananda Yoga Anusandhāna Samsthāna

(Declared as Deemed-to-be University under Section 3 of the UGC Act, 1956)  
Eknath Bhavan, # 19, Gavipuram Circle, Kempegowda Nagar, Bangalore - 560 019  
Ph: 080 - 2661 2669, Telefax: 080 - 2660 8645  
E-mail: svyasa@svyasa.org Website: www.svyasa.org

RES/IEC-SVYASA/127/2018

26 July 2018

To,  
Mrs. Jayashree Ravi Hegde,  
PhD Scholar,  
S-VYASA University,  
Bengaluru.

Reference:

"Efficacy of canons of expression and yoga for the emotion regulation among caregivers of children with Neurodevelopmental disabilities. A comparative study", - Committee Approval of the above mentioned study.

Dear Mrs. Jayashree Ravi Hegde,

We have received from you the following study related documents vide your letter dated 28 June 2018.

1	Project Proposal
2	Informed consent form

Ethics committee meeting was held on **30 June 2018** between 2:00 PM and 5:00 PM at Eknath Bhavan, Bengaluru. Above documents were examined and discussed in the meeting. After due consideration, the committee has decided to approve conducting the aforementioned study.



स्वामी विवेकानन्द योग अनुसंधान संस्थान  
Swami Vivekananda Yoga Anusandhāna Samsthāna

(Declared as Deemed-to-be University under Section 3 of the UGC Act, 1956)  
Eknath Bhavan, # 19, Gavipuram Circle, Kempegowda Nagar, Bangalore - 560 019  
Ph: 080 - 2661 2669, Telefax: 080 - 2660 8645  
E-mail: svyasa@svyasa.org Website: www.svyasa.org

This is to confirm that neither Mrs. Jayashree Ravi nor any staff participating in this study were involved in the voting procedures and decision making.

The Institutional Review Board / Institutional Ethics Committee (IEC) are expected to be informed about the progress of the study / any changes in the protocol and patient information / informed consent. The investigators are also expected to submit a copy of the final report to IEC for records.

This approval is valid up to the completion of the study at the site.

Please submit to the IEC, the status report of the study as per the SOPs.

The IEC is organized & operates according to the requirements of ICH-GCP, Indian Council of Medical Research Guidelines & Schedule Y.

Best Wishes,

Dr. Sanjib Kumar Patra,  
Member Secretary,  
Institutional Ethics Committee,  
S-VYASA, Bengaluru.



## APPENDIX II

### INFORMED CONSENT FORM

Swami Vivekananda Yoga Anusandhana Samsthana  
[S-VYASA University], Declared as deemed-to-be University  
(under Section 3 of the UGC Act, 1956) Bengaluru-560019 India.

Name of Researcher

Jayashree Ravi Hegde (Ph.D. scholar)

Informed Consent form for **The caregivers of children with neurodevelopment disorders.**

The title of the research project: **Efficacy of canons of expression and yoga for the emotion regulation among caregivers of children with neurodevelopment disorders.** A randomized control study (Module on movements and Sentiments of *Nāṭyaśāstra* and Yoga).

Name of Principal Investigator: Dr. M.K. Sridhar (Dean, Yoga, and Spirituality)

Name of Organization: S-VYASA, Jigani.

Name of Sponsor: Self

This Informed Consent Form has two parts:

- **Information Sheet (to share information about the research with you)**
- **Certificate of Consent (for signatures if you agree to take part)**

You will be given a copy of the full Informed Consent Form.

### **Information Sheet-main study**

#### **Part I: Information to the participants:**

The person conducting this research is a renowned artiste of classical dance and masters in yoga therapy, engaged in the research with the renowned and well established deemed University Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA).

We understand that your relative, Sri/Smt/Kumari \_\_\_\_\_ has been diagnosed with neurodevelopment disability such as \_\_\_\_\_ and that you are his/her caretaker. It is known that caregivers of persons with neurodevelopment disability/disorder experience considerable stress and burden. Studies also show that professional help given to caregivers to cope with the stress of caring for the ill person can influence the illness outcome. In this study we are evaluating, two methods of helping caregivers handle their relative with neurodevelopment disorders better:

1. Indian aesthetic dance intervention (based on Canons of expression of *Nāṭyaśāstra*).
2. Yoga intervention

This study, conducted as a part of the PhD Degree program in the Department of Yoga and Humanities examines the effects of Canons of Expression as a psychosocial training program and yoga for caregivers of persons with neurodevelopment disability/disorder.

#### **Purpose of the research**

In this research study we will be comparing the effects of canons of expressions (movements and *abhinaya*) elaborated in the very traditional scripture *Nāṭyaśāstra* as a psychosocial training program and Yoga practices to help emotion regulation among the caregivers of Neurodevelopment disabilities/disorders. We hypothesize that, both Movements and expression of Indian classical dances and yoga techniques are aimed at emotion regulation among caregivers so as to lead better stress-free life and accepting their children better way. If we are right in our hypothesis, we can extend both the techniques of emotion regulation to caregivers of all category.

A caregiver has been defined as a family member, friends or relatives, who has been living with the patient, and has been closely involved in his/her activities of daily living, health care, and social

interaction for more than a year. The effect of stressors on family members caring for an ill person in the family has been referred to as caregiver's burden. Objective (psychological) stress in caregivers of children with neurodevelopment disorders is a common factor. Whenever caregivers are healthy physically, mentally, emotionally, socially and spiritually as defined by World Health Organization regarding positive health, and children can be cared with whole hearted attention. Emotion dysregulation is found to be the major concern with respect to their kids' behaviors, and conditions.

This study is an intense effort to make the caregivers filled with positive energy, thought, new ways of thinking to manage emotion by self and a new dimension looking at children with developmental disorders.

#### **Type of Research Intervention**

Intervention will be of two types 1) **Canons of expression** 2) **Yoga**

There will be another group with no intervention

#### **Participant selection**

Caregivers who are willing to participate after reading the details on the project and based on inclusion and exclusion criteria will be selected for the study.

**Undertaking by the investigator:** Your consent to participate in the above study is sought. You have a right to refuse consent or withdraw the same during any part of the study without giving any reason. In such an event, your relative and you will still receive the best possible alternate treatment, without any prejudice. I undertake to maintain complete confidentiality regarding the information obtained from the patient/caregiver during the course of the study. If you have any doubts about the study, please feel free to clarify the same. Even during the study, you are free to contact the investigator for clarifications if you so desire. The phone number of the investigator is given below:

#### **Procedures and Protocol**

Firstly, demographic questionnaires will be filled to get your personal information such as name, age, economic status etc. Later, few questionnaires will be administered. EPI (electro photonic image) will be taken to measure energy level. Then randomization will be done through closed covers. The participant should agree to join the group as per randomization. Then intervention such as canons of expression or yoga or control group will be given based on randomization. The sessions will be **75 minutes for 8 weeks thrice a week alternatively**. Both interventions will be given by qualified therapists.

#### **A. Unfamiliar Procedures**

There is NO such unfamiliar procedure.

#### **Duration**

**Intervention will be of 8 weeks 75 minutes thrice a week alternatively**

Few psychological questionnaires will be administered and Electro photonic image will be taken through Gas Discharge Visualization (GDV) technique which is a non-invasive technique and completely safe. Ten fingers will be kept on the glass electrode one by one, of the GDV machine. Questionnaires will be given at pre (beginning of the study), mid (4<sup>th</sup> week) and post (8<sup>th</sup> week).

#### **Side Effects**

As the physiological parameter is a non-invasive technique, no question of side effect is involved.

Name of the investigator	Contact number
Jayashree Ravi	9740440658

#### **Risks**

There is no risk which can be anticipated both in the intervention of canons of expression and yoga. Both will be administered by a well-trained person who can give instructions will utmost care to decrease the chance of any possible injury. Even after something happens to the participant during the session, he/she will be taken to the nearby hospital and treated.

#### **Benefits**

With your kind co-operation, current and future parents/caregivers of such neurological problem may be benefitted if this protocol gets established. Your transportation charges will be provided to the cost of the daily bus pass. Those who complete the study will be given a surprise gift!

#### **Confidentiality**

Your identity will remain anonymous and the information you provide will be used for research purposes only. Under no circumstance would your name be mentioned in publications that may arise from this study.

**Sharing the Results**

The knowledge that we get from doing this research will be shared with you meeting thereafter. Later the study we will publish the results in order that other interested people may learn from our research.

**Right to Refuse or Withdraw**

Taking part in this research is fully under your discretion and by doing so your right will be no way affected anywhere.

This proposal has been reviewed and approved by the Internal Review Board (IRB)

S-VYASA, Jigani, which is a committee whose task it is to make sure that research participants are protected from harm. If you wish to find more about the IRB, contact Dr. M.K. Sridhar, Dean, Yoga, and Spirituality. Contact number: 9480467836

You can ask me any more questions about any part of the research study if you wish to. Do you have any questions?

**Part II: Certificate of Consents**

**I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to participate as a participant in this research.**

Name of Participant \_\_\_\_\_ Date \_\_\_\_\_  
Day/month/year

Signature of Participant \_\_\_\_\_

**If illiterate**

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

Name of witness \_\_\_\_\_ AND Thumb print of participant

Signature of witness \_\_\_\_\_

Date \_\_\_\_\_

Day/month/year



Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done:

- 1. Non-invasive parameters will be administered.
- 2. Intervention with respect to canons of expression/yoga will be administered.

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this Informed consent form has been provided to the participant.

Print Name of Researcher/person taking the consent \_\_\_\_\_

Signature of Researcher /person taking the consent \_\_\_\_\_

Date \_\_\_\_\_

Day/month/year

# APPENDIX III

## CLINICAL TRIAL REGISTRY OF INDIA- REGISTRATION FORM



Clinical Trial Details (PDF Generation Date :- Fri, 17 Jul 2020 09:49:53 GMT)

<b>CTRI Number</b>	CTRI/2018/08/015256 [Registered on: 09/08/2018] - Trial Registered Prospectively		
<b>Last Modified On</b>	08/08/2018		
<b>Post Graduate Thesis</b>	Yes		
<b>Type of Trial</b>	Interventional		
<b>Type of Study</b>	Yoga & Naturopathy		
<b>Study Design</b>	Randomized, Parallel Group Trial		
<b>Public Title of Study</b>	Indian dance and yoga for Caregivers		
<b>Scientific Title of Study</b>	Efficacy of Canons of expression and Yoga for the emotion regulation among Caregivers of children with neurodevelopmental disabilities: A comparative study		
<b>Secondary IDs if Any</b>	<b>Secondary ID</b>	<b>Identifier</b>	
	NIL	NIL	
<b>Details of Principal Investigator or overall Trial Coordinator (multi-center study)</b>	<b>Details of Principal Investigator</b>		
	<b>Name</b>	Prof MK sridhar	
	<b>Designation</b>	Dean, yoga & Spirituality	
	<b>Affiliation</b>	S-VYASA	
	<b>Address</b>	S-VYASA, Eknath Bhavan, #19, Gavipuram Circle, Kempegowda Nagar, Bengaluru Bangalore KARNATAKA 560019 India	
	<b>Phone</b>		
	<b>Fax</b>		
	<b>Email</b>	dmksridhar@gmail.com	
<b>Details Contact Person (Scientific Query)</b>	<b>Details Contact Person (Scientific Query)</b>		
	<b>Name</b>	Jayashree Ravi Hegde	
	<b>Designation</b>	Ph.D scholar	
	<b>Affiliation</b>	S-VYASA	
	<b>Address</b>	S-VYASA, Eknath Bhavan, #19, Gavipuram Circle, Kempegowda Nagara, Bengaluru Bangalore KARNATAKA 560019 India	
	<b>Phone</b>	9740440658	
	<b>Fax</b>		
	<b>Email</b>	shreeravi27@gmail.com	
<b>Details Contact Person (Public Query)</b>	<b>Details Contact Person (Public Query)</b>		
	<b>Name</b>	Jayashree Ravi Hegde	
	<b>Designation</b>	Ph.D scholar	
	<b>Affiliation</b>	S-VYASA	
	<b>Address</b>	S-VYASA, Eknath Bhavan, #19, Gavipuram Circle, Kempegowda Nagara, Bengaluru Bangalore KARNATAKA 560019 India	
	<b>Phone</b>	9740440658	



<b>Fax</b>			
<b>Email</b>	shreeravi27@gmail.com		
<b>Source of Monetary or Material Support</b>	Source of Monetary or Material Support		
	> S-VYASA Division of Yoga and Spirituality, Eknath Bhavan # 19, Gavipuram Circle, Kempegowda Nagar, Bengaluru-560019		
<b>Primary Sponsor</b>	<b>Primary Sponsor Details</b>		
	<b>Name</b>	SVYASA	
	<b>Address</b>	Department of Yoga and Spirituality, Eknath Bhavan, #19, Gavipuram Circle, Kempegowda Nagar, Bengaluru	
	<b>Type of Sponsor</b>	Research institution and hospital	
<b>Details of Secondary Sponsor</b>	<b>Name</b>	<b>Address</b>	
	NIL	NIL	
<b>Countries of Recruitment</b>	<b>List of Countries</b>		
	India		
<b>Sites of Study</b>	<b>Name of Principal Investigator</b>	<b>Name of Site</b>	<b>Site Address</b>
	Narasimha Shenoy	Nachiketa Manovikasa Kendra	14th Main end, MC layout, Vijayanagara Bengaluru KARNATAKA
			984537093 nmktrst@gmail.com
<b>Details of Ethics Committee</b>	<b>Name of Committee</b>	<b>Approval Status</b>	<b>Date of Approval</b>
	Institutional ethics committee	Approved	26/07/2018
			<b>Is Independent Ethics Committee?</b>
			No
<b>Regulatory Clearance Status from DCGI</b>	<b>Status</b>	<b>Date</b>	
	Not Applicable	No Date Specified	
<b>Health Condition / Problems Studied</b>	<b>Health Type</b>	<b>Condition</b>	
	Patients	Family history of other mental and behavioral disorders	
<b>Intervention / Comparator Agent</b>	<b>Type</b>	<b>Name</b>	<b>Details</b>
	Intervention	Canons of expression (Indian dance as per Natyasastra)	Canons of expression (dance) intervention group: Then for dance group will be taught movements. Meaning of the lyrics will be explained word by word with the script provided. Therapy interventions will be provided for 75 minutes thrice a week and to make the participants practice at home, audio CDs will be provided. Songs will be taught paragraph by paragraph. Data will be collected at Baseline-mid (30 days) and post (60 days).
	Comparator Agent	Control group:	Control group will be asked to come for parameters during the research. They will be offered.
	Intervention	Yoga group	On the same day of dance intervention, yoga group will be taught yoga practices designed.

CLINICAL TRIALS REGISTRY - INDIA ICMR - National Institute of Medical Statistics		PDF of Trial CTRI Website URL - <a href="http://ctri.nic.in">http://ctri.nic.in</a>											
<b>Inclusion Criteria</b>	Therapy interventions will be provided for 75 minutes thrice a week and to make the participants practice at home, audio CDs will be provided. Data will be collected at Baseline-mid (30 days) and post (60 days).												
<b>Exclusion Criteria</b>	<table border="1"> <tr> <th colspan="2">Inclusion Criteria</th> </tr> <tr> <td>Age From</td> <td>18 (20 Years)</td> </tr> <tr> <td>Age To</td> <td>60 (20 Years)</td> </tr> <tr> <td>Gender</td> <td>Both</td> </tr> <tr> <td>Details</td> <td>1) Primary caregivers of behavioral and developmental disorders, 2) Understanding Kannada, English and/or Hindi, 3)Willing to participate for desired number of sessions.</td> </tr> </table>			Inclusion Criteria		Age From	18 (20 Years)	Age To	60 (20 Years)	Gender	Both	Details	1) Primary caregivers of behavioral and developmental disorders, 2) Understanding Kannada, English and/or Hindi, 3)Willing to participate for desired number of sessions.
Inclusion Criteria													
Age From	18 (20 Years)												
Age To	60 (20 Years)												
Gender	Both												
Details	1) Primary caregivers of behavioral and developmental disorders, 2) Understanding Kannada, English and/or Hindi, 3)Willing to participate for desired number of sessions.												
<b>Method of Generating Random Sequence</b>	Computer generated randomization												
<b>Method of Concealment</b>	Sequentially numbered, sealed, opaque envelopes												
<b>Blinding/Masking</b>	Outcome Assessor Blinded												
<b>Primary Outcome</b>	<b>Outcome</b>	<b>Timepoints</b>											
	1)Anxiety	Day 1, Day-30, Day-60											
	2)Emotion												
<b>Secondary Outcome</b>	<b>Outcome</b>	<b>Timepoints</b>											
	1)Anxiety and depression	Day 1, Day-30, Day-60											
	2)Quality of life												
	3)Caringness appraisal												
<b>Target Sample Size</b>	Total Sample Size=60 Sample Size from Indian-0 Final Enrollment numbers achieved (Total-Applicable only for Completed/Terminated trials) Final Enrollment numbers achieved (Indian-Applicable only for Completed/Terminated trials) NIL												
<b>Phase of Trial</b>	Phase II												
<b>Date of First Enrollment (India)</b>	20/08/2018												
<b>Date of First Enrollment (Global)</b>	No Date Specified												
<b>Estimated Duration of Trial</b>	12-18 Months-6 (Days)												
<b>Recruitment Status of Trial</b>	Not Applicable												
Page 1 / 4													
CLINICAL TRIALS REGISTRY - INDIA ICMR - National Institute of Medical Statistics		PDF of Trial CTRI Website URL - <a href="http://ctri.nic.in">http://ctri.nic.in</a>											
<b>Trial (Global)</b>	Not Yet Recruiting												
<b>Recruitment Status of Trial (India)</b>	NIL												
<b>Publication Details</b>	NIL												
<b>Brief Summary</b>	Based on innumerable research papers, one can find that caregivers of persons with Neurodevelopmental disabilities have several questions to answer in their life with respect to their family members. But those questions does not even after their life span as their mortality (challenged word) will be still in existence. The question is why should caregivers be punished psychologically just for having mentally challenged? For a mundane person, it is difficult to get detached from the worldly concerns. Developing a sense of ease without attachments and accepting their family member unconditionally and joyfully is a great challenge for which they need proper training, counseling, guidance and practice. I strongly believe, these things can be achieved through the canons of expression (based on Natyasastra) and Yoga which elaborately depicts the way of Regulating Caregivers' emotion by observation and practice of expression and yoga enjoyable to achieve emotional stability. Canons of expression helps them to empty the inner emotional burden, and positive notion infused. Yoga through its various limbs help them to achieve positive health.												
	This study can give deep insight into the Indian Traditional Theories to become widely practicable, Ayurvedic medicines, with scientific bio-research, and neurobiological tools.												

**APPENDIX IV**  
**SOCIO-DEMOGRAPHIC DATA SHEET**  
**ABOUT CAREGIVER**

1. Name: Randomized Code:  
 2. Age: 3. Sex:  
 4. Religion: 5. Educational status: (in years):  
 6. Occupation (Current):  
 7. Monthly income of the family (according to MRD file):  
 8. Marital status: single/married/divorced/separated  
 9. Languages known:  
 10. Relationship with disabled dependent:  
 11. Postal address:  
     • Phone no:  
 12. Ailments in the caregiver (Explain):  
     • Medical:  
     • Psychiatric:  
 13. Family constellation of caregiver: (Other than caregiver and disabled dependent)

Relationship (Husband/in-laws/ /father/mother etc.)	Age	Occupation and income	Education	How long living with you?

14. Have you been practicing dance or Yoga (Circle the appropriate option) :  
     Not started Regularly Irregular Discontinued (explain when  
 started and when discontinued):  
 15. Which school of dance or Yoga:  
 16. Diet (Circle appropriate option): Vegetarian Non-vegetarian Mixed  
 17. Any substance use: Smoking / alcohol / drugs etc / None  
 18. What type of structured training have you received to take care of your relative?  
 19. Are you indulging in any other activities to take care of your health?

**ABOUT DISABLED DEPENDENT:**

20. Age: 21. Diagnosis:  
 22. Education in years: 23. Occupation (last three months):  
 24. Duration of disability:  
 25. Treatment Compliance:  
 26. Co-morbid illness in-disabled dependent (explain)?  
     • Psychiatric:  
     • Medical:  
 27. How much has the disabled dependent improved or worsened from treatment  
 compliances: (-100:1:100% rating):  
 28. Other members with psychiatric/medical illness in the family:

# APPENDIX V

## ZARIT BURDEN SCALE

**Name of the Centre where study is conducted:**

**Name of the Caregiver:**

**Randomized Code:**

**PRE / MID / POST**

**INSTRUCTIONS:**

*The following is a list of statements which reflect how people sometimes feel when taking care of another person.*

*After each statement, indicate how often you feel that way: never, rarely, sometimes, quite frequently, or nearly*

*always. There are no right or wrong answers.*

1. Do you feel that your relative asks for more help than he or she needs?  
0 never      1 rarely      2 sometimes      3 quite frequently      4 nearly always
  
2. Do you feel that, because of the time you spend with your relative, you don't have enough time for yourself?  
0 never      1 rarely      2 sometimes      3 quite frequently  
4 nearly always
  
3. Do you feel stressed between caring for your relative and trying to meet other responsibilities for your family or work?  
0 never      1 rarely      2 sometimes      3 quite frequently      4 nearly always
  
4. Do you feel embarrassed about your relative's behavior?  
0 never      1 rarely      2 sometimes      3 quite frequently  
4 nearly always
  
5. Do you feel angry when you are around your relative?  
0 never      1 rarely      2 sometimes      3 quite frequently  
4 nearly always
  
6. Do you feel that your relative currently affects your relationship with other family members?  
0 never      1 rarely      2 sometimes      3 quite frequently  
4 nearly always
  
7. Are you afraid about what the future holds for your relative?  
0 never      1 rarely      2 sometimes      3 quite frequently  
4 nearly always
  
8. Do you feel that your relative is dependent upon you?  
0 never      1 rarely      2 sometimes      3 quite frequently  
4 nearly always
  
9. Do you feel strained when you are around your relative?  
0 never      1 rarely      2 sometimes      3 quite frequently  
4 nearly always
  
10. Do you feel that your health has suffered because of your involvement with your relative?  
0 never      1 rarely      2 sometimes      3 quite frequently  
4 nearly always

11. Do you feel that you don't have as much privacy as you would like, because of your relative?  
 0 never      1 rarely      2 sometimes      3 quite frequently  
 4 nearly always
12. Do you feel that your social life has suffered because you are caring for your relative?  
 0 never      1 rarely      2 sometimes      3 quite frequently      4 nearly always
13. Do you feel uncomfortable having your friends over because of your relative?  
 0 never      1 rarely      2 sometimes      3 quite frequently  
 4 nearly always
14. Do you feel that your relative seems to expect you to take care of him or her, as if you were the only one he or she could depend on?  
 0 never      1 rarely      2 sometimes      3 quite frequently  
 4 nearly always
15. Do you feel that you don't have enough money to care for your relative, in addition to the rest of your expenses?  
 0 never      1 rarely      2 sometimes      3 quite frequently  
 4 nearly always
16. Do you feel that you will be unable to take care of your relative much longer?  
 0 never      1 rarely      2 sometimes      3 quite frequently  
 4 nearly always
17. Do you feel that you have lost control of your life since your relative's death?  
 0 never      1 rarely      2 sometimes      3 quite frequently  
 4 nearly always
18. Do you wish that you could just leave the care of your relative to someone else?  
 0 never      1 rarely      2 sometimes      3 quite frequently  
 4 nearly always
19. Do you feel uncertain about what to do about your relative?  
 0 never      1 rarely      2 sometimes      3 quite frequently  
 4 nearly always
20. Do you feel that you should be doing more for your relative? (more than required)  
 0 never      1 rarely      2 sometimes      3 quite frequently  
 4 nearly always
21. Do you feel that you could do a better job in caring for your relative?  
 0 never      1 rarely      2 sometimes      3 quite frequently  
 4 nearly always
22. Overall, how burdened do you feel in caring for your relative?  
 0 not at all      1 a little      2 moderately      3 quite a bit  
 4 extremely

zarit sh, reever ke, bach-peterson j. relatives of the impaired elderly: correlates of feelings of burden. *gerontologist*. 1980;20(6):649-655.

## APPENDIX VI

### Depression Anxiety Stress Scale-21(DASS-21)

Pre / Mid / Post

Name:

Location of the study:

Statements referring to the past week. The reporting time is less than 10 minutes.

#### I. Stress scale

0-Did not apply to me at all; 1-Sometimes; 2- Often; 3-Most of the times.

- \_\_\_\_\_ 1) I was intolerant of anything that kept me from getting on (accept) with what I was
- \_\_\_\_\_ 2) I felt I was rather touchy (sensitive/irritable)
- \_\_\_\_\_ 3) I found it difficult to relax
- \_\_\_\_\_ 4) I found myself getting agitated (not stable in mind)
- \_\_\_\_\_ 5) I felt that I was using a lot of nervous energy (strength/
- \_\_\_\_\_ 6) I found it hard to wind down (To relax after any strenuous physical or mental activity)
- \_\_\_\_\_ 7) I tended to over-react to situations

#### II Depression scale

0-Did not apply to me at all; 1-Sometimes; 2- Often; 3-Most of the times.

- \_\_\_\_\_ 1) I felt that life was meaningless.
- \_\_\_\_\_ 2) I felt that I had nothing to look forward to.
- \_\_\_\_\_ 3) I couldn't seem to experience any positive feeling at all.
- \_\_\_\_\_ 4) I was unable to become enthusiastic about anything.
- \_\_\_\_\_ 5) I felt that I wasn't worth much as a person.
- \_\_\_\_\_ 6) I felt down-hearted and blue (dejected/depressed/discouraged)
- \_\_\_\_\_ 7) I found it difficult to work up the initiative to do things.

#### III Anxiety scale

0-Did not apply to me at all; 1-Sometimes; 2- Often; 3-Most of the times.

- \_\_\_\_\_ 1) I was aware of the action of my heart in the absence of physical exertion.
- \_\_\_\_\_ 2) I experienced breathing difficulty.
- \_\_\_\_\_ 3) I experienced trembling (e.g., in the hands).
- \_\_\_\_\_ 4) I felt I was close to panic.
- \_\_\_\_\_ 5) I felt scared without any good reason.
- \_\_\_\_\_ 6) I was worried about situations in which I might panic and make a fool of myself.
- \_\_\_\_\_ 7) I was aware of dryness of my mouth.

Signature:

## APPENDIX VII

### CAREGIVING APPRAISAL SCALE

PRE/MID/POST

Name of the Centre where study is conducted:

Name of the Caregiver:

Randomized Code:

### FEELING ABOUT CAREGIVING

I. Now we're going to talk about some feelings you may be having in caring for your Disabled dependent. For each statement, please tell me if **you agree a lot, agree a little, neither agree nor disagree, disagree a little, or disagree a lot.**

Sl. No	Questions	agree a lot 5	agree a little 4	neither agree nor disagree 3	disagree a little 2	disagree a lot? 1
1	In general, I feel able to handle most problems in the care of my disabled dependent					
2	No matter how much I do, somehow I feel guilty about not doing enough for my disabled dependent					
3	I can fit in most of the things I need to do in spite of the time taken by caring for my disabled dependent					
4	Taking care of my disabled dependent gives me a trapped feeling.					
5	I get a sense of satisfaction from helping my disabled dependent					
6	I am pretty good at figuring out what my disabled dependent's needs.					

II. Has helping your disabled dependent ever contributed to your:

Sl. No.	Questions	Yes (0)	No (1)
1	quitting a job?		
2	changing jobs or employers?		
3	decreasing the hours you worked		
4	increasing the hours you worked		
5	taking a job?		
6	missing time from work?		
7	being interrupted frequently at work by phone calls from pertaining to your disabled dependent.		

III. Now we're going to talk about some feelings you may have in caring for your disabled dependent. For each question, please tell how often you feel this way: **"never, rarely, sometimes, quite frequently, or nearly always."**

Sl No.	Questions	Nearly always 5	Quite freq 4	Some-times 3	Rarely 2	Never 1

a.	..that helping your disabled dependent has made you feel closer to (her/him)?					
b.	..that your disabled dependent is too demanding?					
c.	..reassured knowing that as long as you are helping your disabled dependent (she/he) is getting proper care?					
d.	..that nothing you can do seems to please your disabled dependent?					
e.	..uncertain about what to do about your disabled dependent?					
f.	..that you should be doing more for your disabled dependent?					
g.	that you could do a better job in caring for your disabled dependent?					
h.	that you really enjoy being with your disabled dependent?					
i.	that taking responsibility for your disabled dependent gives your self-esteem a boost?					
j.	that your disabled dependent's pleasure over some little thing gives you pleasure?					
k.	that your health has suffered because of the care you must give your disabled dependent?					
l.	that because of the time you spend with your disabled dependent you don't have enough time for yourself?					
m.	that your disabled dependent shows real appreciation of what you do for (her/him)?					

IV. Now we're going to talk about some feelings you may have in caring for your disabled dependent. For each question, please tell how often you feel this way: **"never, rarely, sometimes, quite frequently, or nearly always."**

Sl. NO	Questions	Nearly always 5	Quite freq 4	Some- times 3	Rarely 2	Never 1
n	that your social life has suffered because you are caring for your disabled dependent?					
o	very tired as a result of caring for your disabled dependent?					
p	that caring for your disabled dependent gives more meaning to your life?					
q	that you will be unable to care for your disabled dependent much longer?					
r	isolated and alone as a result of caring for your disabled dependent?					
s	that you have lost control of your life because of caring for your disabled dependent?					
t	that caring for your disabled dependent currently affects your relationships with other family members in a negative way?					
u	that caring for your disabled dependent doesn't allow you as much privacy as you would like?					
v	uncomfortable about having friends over because of your disabled dependent?					
w	that caring for your disabled dependent has interfered with your use of space in your home?					

**Signature of the Caregiver:**

**Date**

## APPENDIX VIII

# WORLD HEALTH ORGANIZATION QUALITY OF LIFE (BREF) SCALE

The following questions ask how you feel about your quality of life, health, or other areas of your life. I will read out each question to you, along with the response options. **Please choose the answer that appears most appropriate.** If you are unsure about which response to give to a question, the first response you think of is often the best one.

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life in the last four weeks.

		Very poor	Poor	Neither poor nor good	Good	Very good
1.	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2.	How satisfied are you with your health?	1	2	3	4	5

The following questions ask about how much you have experienced certain things in the last four weeks.

		Not at all	A little	A moderate amount	Very much	An extreme amount
3.	To what extent do you feel that physical pain prevents you from doing what you need to do?	5	4	3	2	1
4.	How much do you need any medical treatment to function in your daily life?	5	4	3	2	1
5.	How much do you enjoy life?	1	2	3	4	5
6.	To what extent do you feel your life to be meaningful?	1	2	3	4	5

		Not at all	A little	A moderate amount	Very much	Extremely
7.	How well are you able to concentrate?	1	2	3	4	5
8.	How safe do you feel in your daily life?	1	2	3	4	5
9.	How healthy is your physical environment?	1	2	3	4	5

The following questions ask about how completely you experience or were able to do certain things in the last four weeks.

		Not at all	A little	Moderately	Mostly	Completely
10.	Do you have enough energy for everyday life?	1	2	3	4	5
11.	Are you able to accept your bodily appearance?	1	2	3	4	5
12.	Have you enough money to meet your needs?	1	2	3	4	5
13.	How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
14.	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

		Very poor	Poor	Neither poor nor good	Good	Very good
15.	How well are you able to get around?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
16.	How satisfied are you with your sleep?	1	2	3	4	5
17.	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18.	How satisfied are you with your capacity for work?	1	2	3	4	5
19.	How satisfied are you with yourself?	1	2	3	4	5

20.	How satisfied are you with your personal relationships?	1	2	3	4	5
21.	How satisfied are you with your sex life?	1	2	3	4	5
22.	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23.	How satisfied are you with the conditions of your living place?	1	2	3	4	5
24.	How satisfied are you with your access to health services?	1	2	3	4	5
25.	How satisfied are you with your transport?	1	2	3	4	5

The following question refers to how often you have felt or experienced certain things in the last four weeks.

		Never	Seldom	Quite often	Very often	Always
26.	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	5	4	3	2	1

Do you have any comments about the assessment?

---



---

[The following table should be completed after the interview is finished]

	Equations for computing domain scores	Raw score	Transformed scores*	
			4-20	0-100
27. Domain 1	$(6-Q3) + (6-Q4) + Q10 + Q15 + Q16 + Q17 + Q18$ $\square + \square + \square + \square + \square + \square + \square$	a =	b:	c:
28. Domain 2	$Q5 + Q6 + Q7 + Q11 + Q19 + (6-Q26)$ $\square + \square + \square + \square + \square + \square$	a =	b:	c:
29. Domain 3	$Q20 + Q21 + Q22$ $\square + \square + \square$	a =	b:	c:
30. Domain 4	$Q8 + Q9 + Q12 + Q13 + Q14 + Q23 + Q24 + Q25$ $\square + \square + \square + \square + \square + \square + \square$	a =	b:	c:

\* See Procedures Manual, pages 13-15

## APPENDIX IX

### Bio-Well Camera and images



a) Bio-well camera

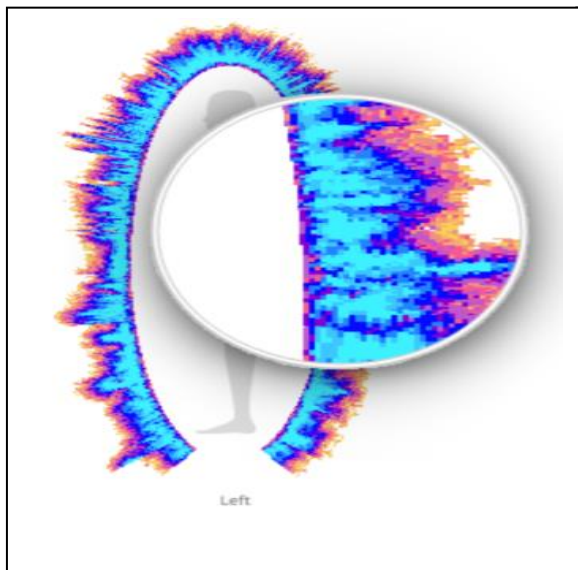


b) Parts of Bio-well camera

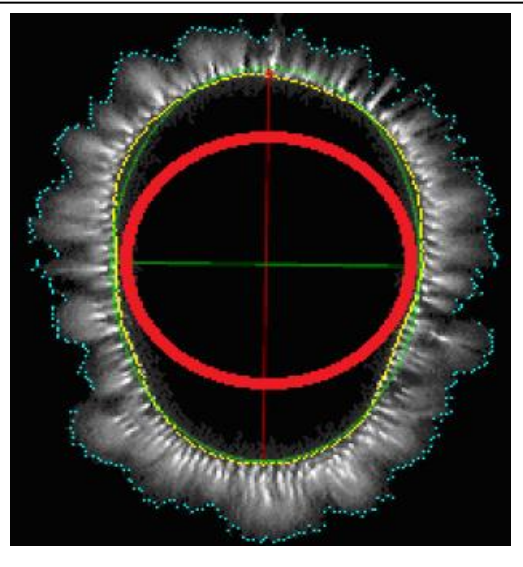


c) On calibration stand

### Images



A) Area



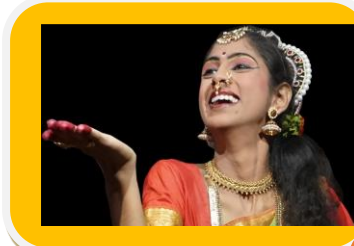
B) Image of loupe

## APPENDIX X

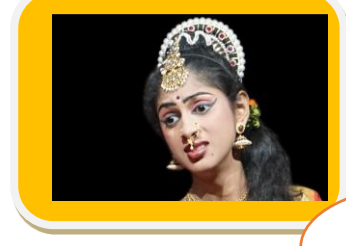
### IMAGES OF SATTVIKA USED FOR CANONS OF EXPRESSION INTERVENTION (*nava rasās*)



*Śṛṅgāra*



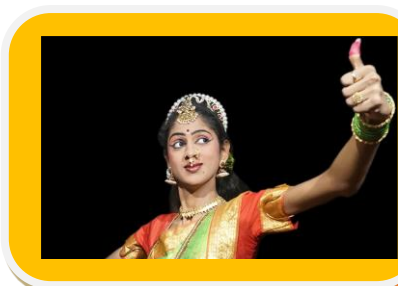
*Hāsyā*



*Karuṇā*



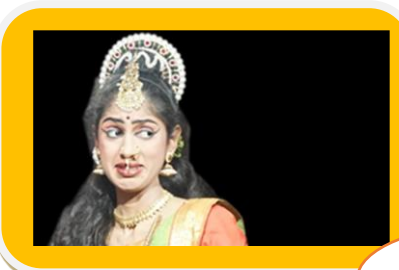
*Roudra*



*Vīra*



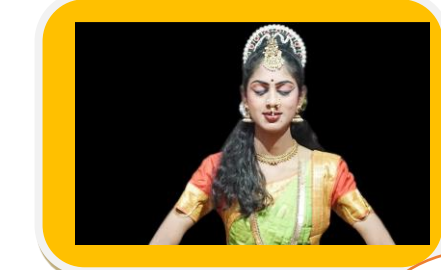
*Bhayānak*



*Bibhatsya*



*Adbhuta*



*Śānta*

## APPENDIX- XI

### IMAGES OF HEAD MOVEMENTS (ANGIKA)



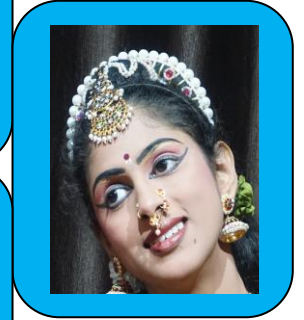
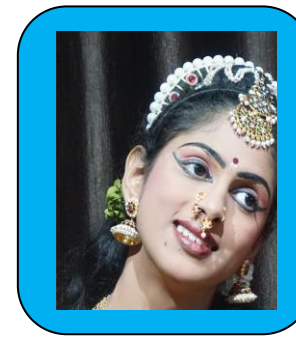
A) SAMA



B) UDVAHITA



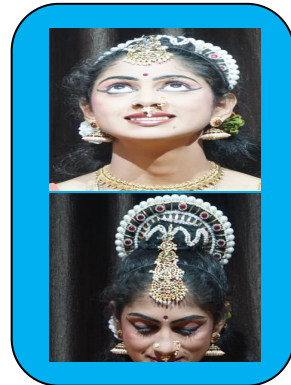
C) ADHOMUKHA



D) ALOLITA



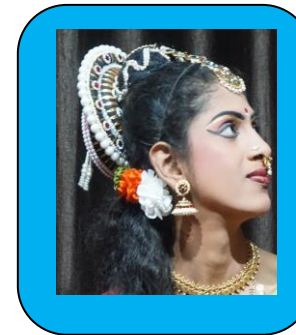
E) DHUTA



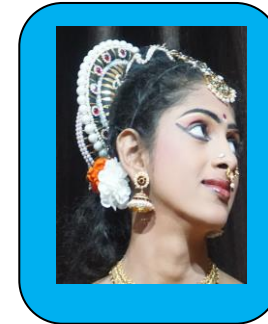
F) KAMPITA



G) PARAVRITTA

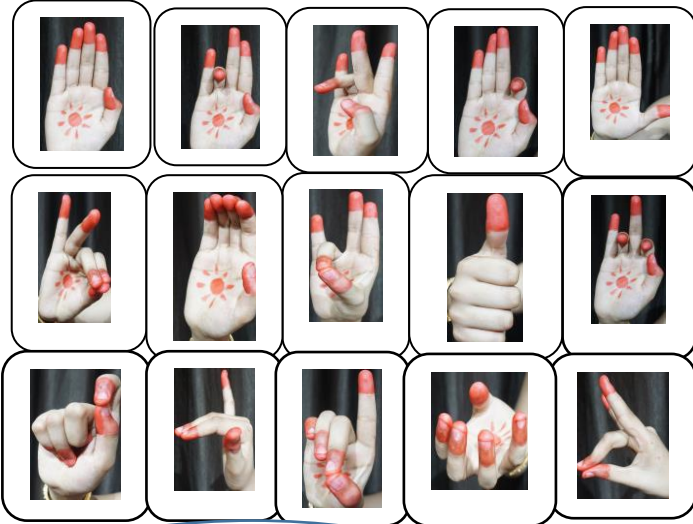


H) UTKIPTA

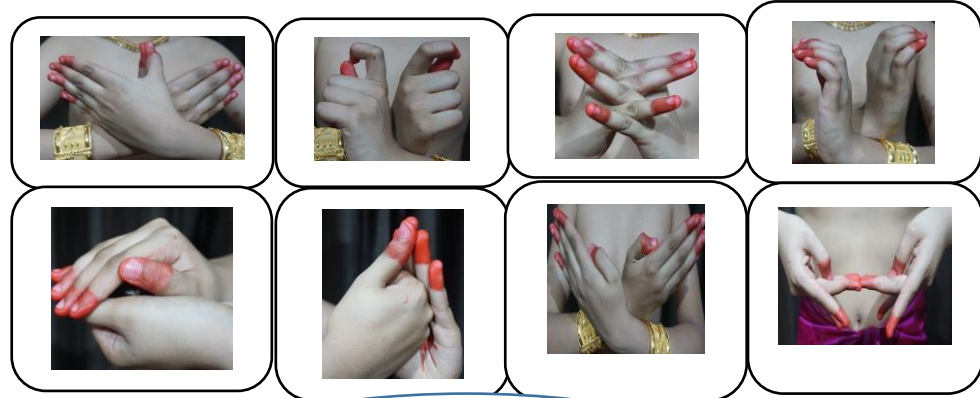


I) PARIVAHITA

**Sub-sample of hand gestures and leg positions used (ANGIKA CONT'D)**



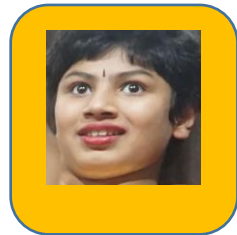
*Asanyuta Hastās*  
(single hand gestures)



*Samyuta Hastās*  
(double hand gestures)



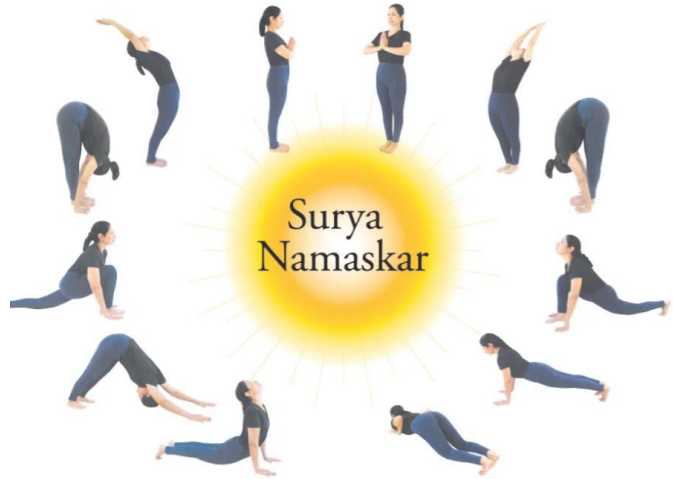
*Pāda Bhedās* (varities  
in feet postures)



**Model: Shreyas Hegde**

## APPENDIX - XVI

### IMAGES OF *āsana* USED FOR YOGA INTERVENTION



*Sūrya namaskāra*



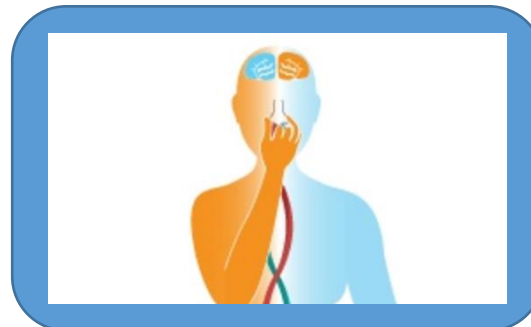
*Pāda hastāsana*



*Ardha Uśtrāsana*



*Prāṇāyāma*



*Omkara Dhyāna*

APPENDIX - XVIII  
PLATES

Plate 1: of dance intervention at Nachiketa Manovikasa Kendra, Vijayanagar-Bengaluru



**Plate 2: Photosnaps of yoga intervention at Nachiketa Manovikasa Kendra, Vijayanagar-Bengaluru**



**Plate 3: Photosnaps of dance intervention at Dharitree Trust, Peenya-Bengaluru**



**Plate 4: Photosnaps of yoga intervention at Dharitree Trust, Peenya-Bengaluru**



**Plate 5: Photosnaps of dance intervention at Aruna Chetana, Malleshwara-Bengaluru**



**Plate 6: Photosnaps of yoga intervention at Aruna Chetana, Malleshwara-Bengaluru**





FEEDBACK form for PILOT STUDY:

THE CAREGIVERS OF CHILDREN WITH NEURO-DEVELOPMENTAL DISABILITIES.

Name of Principal Investigator: Dr. M.K. SRIDHAR (DEAN, YOGA AND SPIRITUALITY)

Researcher: Smt. Jayashree Ravi, Ph.D scholar,

1). What is your experience in this study?

I am feeling good after this study  
It can have control on me and my body  
also I can change myself in better way.

2). What could you understand through this study?

control over my mind & my body  
Before the study I am felt I am helpless  
and hopeless. I think am waste person on the  
earth. But after the study it's like per Rebis/15  
& life. definitely I hardly usefull this study  
for use.

3). Your opinion about the technique researcher used in this study.

wonderfull no words to  
say, she is really a fantastic person I ever  
met. she gave us lot of positivity. It's  
really helps us alot.

FEEDBACK form for MAIN STUDY:

"Efficacy Of Canons Of Expression And Yoga On The Emotion Regulation Of The Caregivers Of Children With Neuro-Developmental Disabilities".

Name of Principal Investigator: Dr. M.K. SRIDHAR (Dean, Yoga And Spirituality)

Researcher: Smt. Jayashree Ravi, Ph.D scholar,

1). ಈ ಅಧ್ಯಯನದಲ್ಲಿ ನಿಮ್ಮ ಅನುಭವ ಏನು? What is your experience in this study?

In this study I met myself and wanted to meet regularly.  
This is really a medicine for all of us means a special  
mother.

2). ಈ ಅಧ್ಯಯನದಿಂದ ನೀವು ಏನನ್ನು ತಿಳಿದುಕೊಂಡಿರಿ? What could you understand through this study?

I understood a lot much more than before means how  
to be, to react, to interact with my special kid and  
also show love and humbleness to needy. Be a model  
to your own child and keep humbleness as a heart not  
as a hateness.

3). ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಸಂಶೋಧಕರು ಉಪಯೋಗಿಸಿದ ತಂತ್ರಗಳ ಬಗ್ಗೆ ನಿಮ್ಮ ಅಭಿಪ್ರಾಯ ಏನು?

Your opinion about the technique researcher used in this study.

This was really unique which made us all to interact  
with our children's, friends and relatives. It was very  
useful for me and myself met my own mother again.

**FEEDBACK form for PILOT STUDY:**

**THE CAREGIVERS OF CHILDREN WITH NEURO-DEVELOPMENTAL DISABILITIES.**

Name of Principal Investigator: Dr. M.K. SRIDHAR (DEAN, YOGA AND SPIRITUALITY)

Researcher: Smt. Jayashree Ravi, Ph.D scholar,

1). What is your experience in this study?

Yoga slowly started helping in controlling my anger & emotions.

2). What could you understand through this study?

I understood practicing yoga daily can help us regulate our emotions and relax our body and mind.

**FEEDBACK form for MAIN STUDY:**

**“Efficacy Of Canons Of Expression And Yoga On The Emotion Regulation Of The Caregivers Of Children With Neuro-Developmental Disabilities”.**

Name of Principal Investigator: Dr. M.K. SRIDHAR (Dean, Yoga And Spirituality)

Researcher: Smt. Jayashree Ravi, Ph.D scholar,

1). ಈ ಅಧ್ಯಯನದಲ್ಲಿ ನಿಮ್ಮ ಅನುಭವ ಏನು? What is your experience in this study?

ಇದರಿಂದ ಮನಸ್ಸಿಗೆ ಶಾಂತಿ ನಿಶ್ಚಿತ ಸಾಧ್ಯವಿಲ್ಲವೆಂದು ತಿಳಿದುಕೊಂಡು ಕ್ರಿಯಾತ್ಮಕವಾಗಿ ದೈವದ ಬಂಧನದಿಂದ ಮುಕ್ತವಾಗಿ ಇನ್ನು ಸುಖವಾಗಿ ಜೀವಿಸುತ್ತಿರುವೆ. ಉಂಟಾಗಿದ್ದ ವೇದನೆಯನ್ನು ಸುಸ್ಥವಾಗಿ ಕಲ್ಪಿಸಿಕೊಳ್ಳುವುದು ಸಾಧ್ಯವಾಗಿದೆ. ಮನಸ್ಸನ್ನು ಸುಸ್ಥವಾಗಿ ಮಾಡುವುದು ಸಾಧ್ಯವಾಗಿದೆ.

2). ಈ ಅಧ್ಯಯನದಿಂದ ನೀವು ಏನನ್ನು ತಿಳಿದುಕೊಂಡಿರಿ? What could you understand through this study?

ಇದರಿಂದ ನಾವು ಸಮಸ್ಯೆಗಳನ್ನು ಎದುರಿಸುವುದರಲ್ಲಿ ಸುಸ್ಥವಾಗಿ ಬರಲು ಸಾಧ್ಯವಾಗಿದೆ. ಕಷ್ಟವನ್ನು ಎದುರಿಸುವುದರಲ್ಲಿ ಸುಸ್ಥವಾಗಿ ಬರಲು ಸಾಧ್ಯವಾಗಿದೆ. ನಮ್ಮ ಕಾರ್ಯವು ನಾವು ಮಾಡುವುದು ಈ ಮಕ್ಕಳು ಭಗವಂತನನ್ನು ಮೆಚ್ಚುವುದು ಇದು ನಮ್ಮ ಜೀವನದ ಮುಖ್ಯ ಲಕ್ಷಣವೆಂದು ಬಾವಿವಿಧಿ ಸಂಕೇತವೆಂದು ಮನಸ್ಸನ್ನು ಸುಸ್ಥವಾಗಿ ಮಾಡುವುದು ಸಾಧ್ಯವಾಗಿದೆ. ನಮ್ಮ ಜೀವನ ಸುಸ್ಥವಾಗಿದೆ.