# Rastreeya Sikshana Samithi RV Institute of Management

# Centre for Research & Consultancy

# Call for Research Proposals for 2023 (February)

#### Introduction

RVIM offers institutional funding to support research projects through Centre for Research & Consultancy. The institution provides funding to the internal faculty members to conduct cutting edge research in various fields of management and social science that have theoretical, conceptual, methodological, social and policy implications. The Research Projects may belong to any of the management and social science disciplines or may be multi-disciplinary in nature.

#### Categories of Research Projects

• The RVIM may award the research projects on the basis of the scope, duration of the study and budget up to Rs. 50,000 for the duration of 6 months to 12 months.

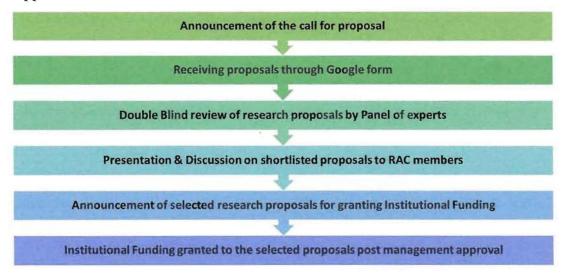
#### Eligibility

- Only internal faculty members of RVIM are eligible to submit the research proposal.
- Each proposal must have a Principal Investigator-PI and a Co-Principal Investigator-Co-PI only from RVIM.

#### How to Apply

After the call for proposal, the applicants will have one month time to prepare a research proposal and submit it through google form. The research proposals will then be sent for double blind review to the experts from RAC. The selected proposals will be called for a discussion and presentation in front of internal RAC members who will give their suggestion. The final announcement of the selected proposals post Management approval will be done by Centre for Research and Consultancy.

#### **Application Process**



# Completion of the study

The Principal Investigator-PI will be liable to complete the research completely. In case a PI leaves/discontinues/unavailable during project before completion tenure, Co-PI will be liable to complete the entire project.

# Login/Scan the QR code to apply

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Last date to receive the application by the Centre is 14th March 2023 (day end).



# INTERVENTIONS OF YOGA AND MEDITATION ON MENTAL HEALTH OF SENIOR CITIZENS DURING PANDEMIC OUTBREAK: A PILOT STUDY

#### Introduction:

As India grapples with pandemic outbreak of nCovid-19 virus in a best possible way to ensure social distancing, localized lockdown and quarantine measures, the number of cases is ticking high with 106,750 confirmed cases, 3,303 deaths, 42,298 cured cases, informed by the Union Ministry for Health and Family Welfare as on 22<sup>nd</sup> May, 2020. A country accommodating 1.3 billion populations cannot safeguard meeting various socio-economic challenges by informing and enforcing strict rules the repercussions of which is evident in the form of instability and insecurity disturbing mental & physical well-being of citizens. Various studies suggest that yoga is a holistic practice that strengthens body defence mechanism naturally. At this hour when enforced rules have failed to show positive results, we propose yoga interventions to fight against this deadly disease. The proposed pilot study is to evaluate the effectiveness of 12 weeks of online yoga course among elderly people on their immune system to fight nCOVID-19. Based on the scientific evidences of yoga being effective in boosting body defence mechanism, yoga and meditation interventions is the focal point in this study as it is also one of the most affordable and sustainable way to balance physical, mental as well as spiritual dimensions that have potential to plank off the traumatizing consequences of pandemic outbreak.

#### Statement of the Problem

Senior citizens are high risk population suffering within the confines of homes without minimum amount of physical exercise. Older people are being challenged by requirements to spend more time at home, lack of physical contact with other family members, friends and colleagues, temporary cessation of employment and other activities; and anxiety and fear of illness and death. They are most susceptible age-group at higher risk due to young members back to work. It is therefore important that we create opportunities to foster healthy lifestyle through yoga interventions.

pharmacological interventions proved to be very beneficial in improving high quality of life in terms of improving high physical functions, moods, flexibility etc.

### Research Gap:

From the review of available literature, it is evident that only handful of studies has been done in India to understand the mental well-being of senior citizens and none of the study has been done to understand the physical and mental health of senior citizens at the time of pandemic outbreak.

#### Aims and Objectives:

❖ The aim of the pilot study is to develop a 12 weeks online yoga and meditation course and implement it into practice among elderly people to assess the effectiveness on their mental and physical health relieving stress and anxiety and depression.

#### The objectives are:

- a) To study the level of stress and anxiety among senior citizens due to isolation and uncertainty.
- b) To identify the factors responsible for stress, anxiety & depression among senior citizens at the time of pandemic outbreak.
- c) To evaluate the effect of isolation and uncertainty on mental health of elderly people in Bangalore.
- d) To determine the effectiveness of yoga interventions and psychologist consultations on mental well-being of senior citizens.
- e) To determine the impact of yoga interventions in reducing the mental health related problems among senior citizens in Bangalore region.
- f) To determine the association between physical exercises, mental health, and overall wellbeing among senior citizens in Bangalore region.
- g) To develop and test an online yoga module/capsule training programme recommended for senior citizens.

#### Methodology:

In order to achieve the objectives and to provide solution to the research problem a systematic methodology will be followed for the proposed study:

**Research Design**: Descriptive research design for the study will be adopted.

Target Population: Elderly individuals (aged 60 years and above)

Location: Bangalore Urban District

#### Literature review:

- The study comparing yoga interventions with aerobic exercises and wait-list control carried out by (Östh et al., 2019) in Stockholm County with 150 senior citizens aged between 65-85 years who were physically inactive suggests the positive effect of yoga practice on sedentary behaviour, mood fluctuations, cognitive functioning, depression and anxiety. The data was analysed using mixed linear modelling.
- (Greendale et al., 2012) carried out Yoga Empowers Seniors Study (YESS) intervention on aged participants to practicing 24 yoga postures designed for older adults for 32 weeks in California to evaluate baseline study, biomechanical measures and physical testing and its side effects. The outcome of the study was the development of YESS asana series recommended for elderly people.
- (Varambally et al., 2013) studied the effect of yoga therapy on caregivers of patients with neurological disease. The study was conducted in a controlled randomised fashion with two groups: control and experimental. 20 caregivers practiced yoga asana for one month and it was found that post yoga exercise for one month was useful in improving quality of life by reducing anxiety and depression.
- (Leong, 2018) conducted a study with 19 old aged participants in Scotland. The study was conducted with two groups; yoga and non-yoga group to know their perception about yoga. Thematic and framework analysis was used by having in-depth interview and group discussions with both the groups. The results of the study suggests the guidelines to be followed by the instructors such as being more audible, creating non-threatening environment, using motivating words and offering alternative exercises to old adults. The study also suggests the strategies to promote yoga such as tester sessions, more detailed information, promoting yoga through healthcare professionals and physiotherapists.
- (Sivakumar et al., 2013) did a study with 120 old adults in Pittsburgh in two groups to evaluate yoga interventions for improving quality of life (QOL) and sleep quality. Participants were given training for first 6 months and then they had to practice yoga for next 6 months. The baseline measure and post-yoga interventions were assessed by World Health Organization (WHOQOL)-BREF to evaluate quality of life and sleep quality. It was found that the subjects who practiced yoga had improved QOL and leep quality compared to control group who did not practice yoga.
- (Florida Atlantic University, 2019) conducted a study in Florida with older adults with advanced dementia to compare chair yoga with chair based exercises and music therapy. The non-

**Sampling Methodology:** Non-Probability convenience sampling methodology will be adopted for the study.

**Sample Size:** 40-45 senior citizens aged 60 years and above will be a sample.

## Sampling procedure:

- Purposive sampling method will be adopted.
- 20 female and 20 male senior citizens will be selected considering factors such as age group, occupation and income group.

**Data Collection:** The study will have both qualitative as well as quantitative data.

## **Primary Data:**

1. **Structured Questionnaire**: Structured Fitness questionnaire will be filled by participant to know the health and mental state 3 times to study the effect of yoga on mental & physical health. The questionnaire will include questions regarding flexibility, immunity & mental health.

## Assessment periodicity:

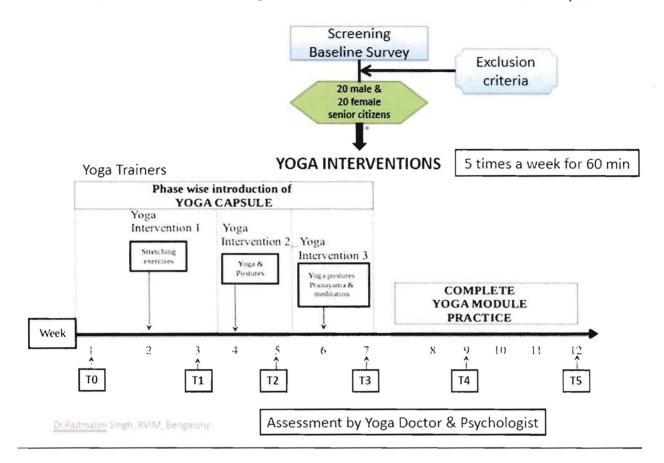
1.	Pre-yoga interventions:	Week 1
2.	After 1st Yoga Intervention:	Week 3
3.	After 2nd Yoga Intervention:	Week 5
4.	After 3rd Yoga Intervention:	Week 7
5.	After practicing complete yoga capsule:	Week 9
6.	Post-yoga interventions:	Week 12

2. **Interview:** Each participant will be interviewed by a psychologist 2 times to know the effect of yoga on mental health of senior citizens.

#### **Secondary Data:**

Secondary data will be collected from reports published by published journals, online Database, reference books, newspapers and websites.

**Data Analysis:** The data analysis will be done as per the identified research objectives and collected responses. Statistical Packages for Social Sciences will be used for data analysis.



#### **WORK PLAN**

Total time duration of yoga intervention: 12 weeks

- a) Yoga practice five times a week (60 minutes)
- b) Psychologist consultation once a week (60 minutes)

Type of practice:

Ashtanga Vinyasa Yoga

**Duration of practice:** 

3 months (12 weeks)

Practice periodicity:

Five times a week

Time duration:

1 hour a day

**ASSESSMENT:** 

Fitness questionnaire to be filled by participant to know the health and mental state

Assessment periodicity:

Pre-yoga interventions: Week 1
 After 1<sup>st</sup> Yoga Intervention: Week 3
 After 2<sup>nd</sup> Yoga Intervention: Week 5
 After 3<sup>rd</sup> Yoga Intervention: Week 7
 After practicing complete yoga capsule: Week 9
 Post-yoga interventions: Week 12

## Assessment parameters:

1. Flexibility (mobility of limbs/motion range/balance)

2. Immunity (general improvement in combating infections)

3. Mental health (stress control, coping with depression/lethargy/lack of energy/dullness)

#### Yoga interventions

SI no	Practice	Type & benefits	Duration
1.	Suryanamaskar A & B	Forward & back bends synchronised with breathing. Strengthening of limbs	15 to 20 min
2.	Standing Postures	Leg stretches, forward bends, lateral stretches, Balancing	10 minutes
3.	Sitting postures	Forward and backward bends, and twists.	15 min
4.	Shavasana	Relaxation	5 minutes
5.	Breathing techniques & meditation	Improvement of vital capacity of lungs, immunity booster, relaxation of mind	

### c) Expected outcome:

We propose the expected outcome of the study as following:

## **\*** Expected Research Outcomes

- <u>Customized online yoga course for elderly population:</u> Customised online yoga course will be helpful in balancing mental, physical and spiritual well-being of senior citizens who are most affected by isolation due to pandemic outbreak.
- <u>Social impacts:</u> The study will help to understand the role of every individual in the society in providing moral support and hope at the pandemic situation especially to senior citizens who require socialization most among any other age group.

- <u>Policy making:</u> The study will provide assistance to the policy makers to build the structure, resources and system to address the need of mental healthcare at the time of uncertainty that is highly ignored.
- **Government:** The outcome of the study will provide the understanding of preparing resources and system for taking care of mental health than physical health that is being fulfilled by increasing the physical capacity of hospitals.

### d) Budget:

Si. No.	Budget Heads	Amount in INR
1.	Manpower	1692000.00
2.	Consumable	90000.00
3.	Contingency	50000.00
4.	Travel (Local)	15000.00
5.	Other Cost	1798.00
6.	Minor equipment	68000.00
7.	Overhead	50000.00
	TOTAL	2016798.00

#### References:

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