# Effects of Virtual iRest Yoga Nidra Programme on Depression, Anxiety, and Stress of Sedentary Women during the Second Outbreak of Covid-19

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#### **Abstract**

People with healthy mental health are frequently sad, ill, furious, or unhappy, and this is a natural part of living a complete life. Despite this, mental health is frequently viewed as a purely positive state characterised by emotions of enjoyment and a sense of control over one's surroundings. The coronavirus pandemic of 2019 (COVID-19) outbreak affected overall well-being status of people. The focus of this research was to see the effects of short virtual training of iRest yoga programme on depression, anxiety, and stress of sedentary women during the second outbreak of Covid-19. In this study, all sedentary women were assigned to intervention group. Mindfulness training is one holistic method to supporting mental wellness. iRest Yoga Nidra is a mindfulness-based supplementary and integrative health therapy. A descriptive survey design with a pre- and post-intervention period was adopted. Participants took a DASS 21-item questionnaire comprising of three validated instruments: stress, anxiety, and depression, before and after experiencing iRest meditation. For the intervention group, the Virtual iRest Yoga Nidra (ViRYN) Programme was delivered online for 6 weeks. After data analysis, the study's findings revealed that the intervention group improved when compared to base line. The findings suggest that the Virtual iRest Yoga Nidra (ViRYN) Programme may be one of the most effective programmes for improving Depression, Anxiety, and Stress of sedentary women during the Covid-19 Crisis.

**Keywords**— Covid-19, Depression, Anxiety, Stress, iRest Yoga, Mindfulness.

# INTRODUCTION

Mental wellness is an essential component of total happiness. "Health is a condition of complete physical, mental, and social wellbeing, not only the absence of disease or disability," according to the WHO constitution. This definition implies that mental health encompasses more than the absence of mental diseases or disabilities (WHO, 2004). The latest COVID-19 outbreak in numerous countries is similar to the SARS and Middle East

respiratory syndrome (MERS) outbreaks in China and Saudi Arabia, respectively, in 2003 and 2012. (Smith, 2006). Both SARS and COVID-19 are caused by the Coronavirus, which affects the respiratory tract and causes severe disease epidemics around the world (Sonawane, 2019).

Now though COVID cases are on the rise across the country and around the world, there is still hope that science may one day be able to eradicate this terrible virus. That does not,

however, mean that the pandemic's impacts are finished. Mental health issues continue to plague kids at all levels. Anxiety, sadness, and suicide are long-term consequences of the disease's isolation, fear, and loss. The effects of loss are felt far and wide. It includes those who have died as well as those who have long-haul COVID. Months and years of social involvement, interpersonal ties, and confidence in forming new relationships are also lost. These profound feelings and changes can have serious effects for those who are impacted (UPCEA, 2021), and people have experienced a dramatic increase in mental health concerns throughout the pandemic.

According to a recent study by GOOii, 43% of Indians suffer from depression, with the majority turning to harmful lifestyle practises to cope. On a few days a week, 57% of the 10,000+ people asked said they were exhausted or had little energy. Depressed people were also less inclined to work out or exercise, and were more likely to turn to outside food to cope with their depression, according to the study (Panache, 2020). Unfortunately, the pandemic has brought to light something we've known for years: financial insecurity, a lack of social support, discrimination, and poor physical health all lead to greater incidence of mental illness. We could do so much more to prevent mental illness and support those who are affected by it (Kirkham, 2021).

Previous research has demonstrated that meditation-based therapies can reduce stress and improve well-being in a variety of populations. These findings suggest that pandemics affect mental health not just in vulnerable populations like medical workers (Bell, 2020; Rossi, 2020) and people with mental diseases (Rohde, 2020), but also in the general population. Meditation is one of many evidence-based management methods that may be used at home to keep people fit and healthy physically and emotionally. Mindfulness is an important aspect of meditation. It comprises a focus on the present moment and denotes a certain type of nonjudgmental attention (Kabat-Zinn, 2003). A attentive person is completely focused on the current moment, without judging it, and is unaffected by the past or the future. Swami Satyananda Saraswati created Yoga Nidra in 1976 as an easy-to-learn meditation that could be used by people of all backgrounds and cultures, regardless of prior expertise (Saraswati, 2009). Yoga Nidra is a systematic sequence of body awareness and breathing exercises that can engage the parasympathetic and boost nervous system alpha-wave production in the brain (Mandlik. 2002). In the United States, the concept of Yoga Nidra has been further adapted for western practitioners by psychologist Richard Miller (2005) under the name iRest ((Integrative Restoration), and has been utilised primarily for the development of mental well-being.

Yoga Nidra has been shown to have favourable impacts on a variety of physiological and psychological parameters, including insomnia, addictive behaviour, chronic diseases, pain therapy, pregnancies, geriatrics, asthma, and cardiovascular system disorders (Saraswati, 2009). Sustained changes in brain activation were detected using imaging techniques such as positron emission tomography (PET) and electroencephalography (EEG), as well as selfreports (Lou 1999; Mandlik, 2002). Datta et al. (2017) report favourable effects of Yoga Nidra on chronic sleep disorders, while several others report positive effects on PTSD (posttraumatic stress disorder) in veterans (e.g. Stankovic 2011) and women who have experienced sexual assault (e.g. Pence et al. 2014). However, it should be noted that this does not cover virtual training. In the majority of cases, information training took place in a real setting rather than a virtual one. Because the current study intends to produce results for only one and a half months (42 days) of practise, it even refers to a brief form of Yoga Nidra that was administered entirely online. The researchers believe that during the second Covid-19 outbreak after the ViRYN Programme, there will be a significant difference in sedentary women's depression, anxiety, and stress levels. The primary goal of this study was to show that this reduced version of Yoga Nidra is effective. Based on the results of past short meditation-based interventions (e.g., Banks et al. 2015), we expected the

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current meditation intervention to have at least minor favourable benefits.

# Methodology Study Design and Size

This is a quantitative study based on an online training conducted from 27 October to 8 December 2021, among sedentary women from the general population living in Madhya Pradesh state of India.

# **Participants Setting**

The study included 14 housewives (ages 26 to 45) who had never received formal training before. Following explanations of the method and potential risks during the intervention/data collection, they consent and willingly participated in training with no previous meditation experience (without previous structured training experience) consent for this study from Madhya Pradesh state of India. The subjects were then assigned to experimental (ViRYNP) programme.

### **Procedure**

Participants willingly participated in an six week ViRYN programme. One session was held before to the commencement of the ViRYN Programme to familiarise participants with the ViRYN Programme intervention, procedures, and the test protocol. The six week training intervention consisted of 15-minutes of intervention (Table 1) and under the direction and supervision of the trainers. Typically, the meditation takes about 30 min. In the present study, the effects of an 15-min short form of Yoga Nidra were tested for the first time. The main reason for shortening the original form was to address people who have a busy daily schedule and who cannot invest more time for a break. Nevertheless, this was only a suggestion based on the literature of Yoga Nidra (e.g., Satyananda Saraswati 2009)

Table 1. 8 Weeks Vinyasa Programme

S.	Test	Specification	Days/	Dura
N	<b>Batt</b>		Week	tion
0.	ery			(Min

			ts.)				
Ope	Any Prayers	6	1				
ning		D/Wee	Min.				
Pray		k					
er							
Main	Body	6	13				
Part	Screening	D/Wee	Min.				
	(Perception of	k					
	different body						
	parts),						
	Breathing						
	Awareness(ob						
	servation and						
	holding),						
	Thoughts						
	process(Sensa						
	tion and						
	visualisation).						
	Feelings and						
	Emotions.						
Closi	Any Yogic	6D/	1				
ng	Prayers	Week	Min.				
Pray							
er							
	ning Pray er Main Part  Closi ng Pray	Pray er  Main Body Part Screening (Perception of different body parts), Breathing Awareness(ob servation and holding), Thoughts process(Sensation and visualisation). Feelings and Emotions.  Closi Any Yogic ng Prayers Pray	ning D/Wee Pray k er Main Body 6 Part Screening D/Wee (Perception of different body parts), Breathing Awareness(ob servation and holding), Thoughts process(Sensation and visualisation). Feelings and Emotions.  Closi Any Yogic 6D/ ng Prayers Week Pray				

#### **Measurements**

Pre and post data were collected using the DASS-21 Scale. The Depression, Anxiety, and Stress Scale - 21 Items (DASS-21) is a collection of three self-report scales that assess depression, anxiety, and stress. Each of the three DASS-21 scales has seven items that are grouped into subscales that have comparable content. Summing the scores for the relevant elements yields depression, anxiety, and stress scores. Training data was collected at two stages in time: week 0 (before intervention) and week 6 (after intervention).

# **Statistical Analysis**

All statistical analyses were conducted using IBM SPSS (version 22), with a P value of .05 considered statistically significant..

## **Results**

The pairwise t-test revealed a significant difference in change in Depression, Anxiety, and Stress levels of Sedentary Women during the Second Outbreak of Covid-19 after Virtual iRest Yoga Nidra (ViRYN) Programme when compared to baseline in the intervention group (Table 3). Furthermore, looking at the mean values of depression, anxiety, and stress before and after the online ViRYN Programme (Table 2), one can see that the average mean scores have dropped. Because the null hypothesis was rejected in Table 3, it can be concluded that the ViRYN Programme significantly decreased the change in depression, anxiety, and stress levels of sedentary women during Covid-19's Second Outbreak. The mean, standard deviation, and standard error of the mean for data on depression, anxiety, and stress before and after the ViRYN Programme are shown in table 2. Table 3 shows the results. The t-statistic value for Depression is 10.33, and this t-value is significant since the p value is 0.00, which is less than 05. Anxiety has a t-statistic value of 12.38, which is significant because the p value is 0.00, which is less than 05. Stress has a tstatistic value of 13.39, which is significant because the p value is 0.00, which is less than.05. As a result, the null hypothesis of no difference between before and after the ViRYN Programme is rejected, and it is possible to conclude that the change in depression, anxiety, and stress levels of sedentary women during the Covid-19 Second Outbreak is not the same, the ViRYN Programme dramatically decreased the shift in depression, anxiety, and stress levels of sedentary women.

Table 2. Descriptive Statistics for Depression, Anxiety and Stress Level

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Depression_pre	16.00	14	2.80	.74863
	Depression_Post	9.35	14	1.44	.38669
Pair 2	Anxiety_Pre	17.14	14	3.48	.93089
	Anxiety_Post	7.71	14	1.43	.38414
Pair 3	Stress_pre	26.50	14	3.95	1.05742
	Stress_post	13.64	14	3.15	.84260

Table 3. Paired Samples t-Test for Depression, Anxiety and Stress Level in sedentary women.

		Paired Differences				t	df	Sig.	
		Mean	S.D.	Std.	95% C	onfidence	='		(2-
				Error	Interval	of the			tailed)
				Mean	Differen				
					Lower	Upper			
Pair	Depression_pr	6.64	2.40	.642	5.254	8.031	10.33	13	.000
1	e								
	Depression_Po								
	st								
Pair	Anxiety_Pre	9.42	2.84	.761	7.784	11.072	12.38	13	.000
2	Anxiety_Post								
Pair	Stress_pre	12.85	3.59	.959	10.783	14.930	13.39	13	.000
3	Stress_post								

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# **Discussion**

During the second epidemic of covid-19, the purpose of this study was to see how the virtual iRest Yoga Nidra Programme improved depression, anxiety, and stress level in sedentary women. After 6 weeks of virtual iRest Yoga Nidra, our study found that an online ViRYN Programme improves the sedentary women's psychological (depression, anxiety, and stress )well-being.

In current study conducted during the second outbreak of COVID-19 pandemic, sedentary women participants in the ViRYN Programme improved in depression, anxiety, and stress level, according to the current study, and a cross-sectional study (Green, 2021) conducted on the United States population found that mindfulness meditation reduced mental health worsening due to the COVID-19 pandemic. This could be attributable in part to the fact that the subjects in our study had never received instruction before. This ViRYN Programme assists people in improving their mental health. Furthermore, the ViRYN Programme inclusion of a number psychological skills aimed at improving employee psychological well-being account for the improvement in psychological variables (depression, anxiety, and stress).

The outcomes of this study are backed up by mindfulness-based previous research on Meditation training programmes. mindfulness-based therapies improve sleep quality (Hülsheger, 2015). Shorter mindfulness programmes, according to Shapiro et al. (2019), may improve accessibility without sacrificing effectiveness; according to a study (Erogul, 2014), an abridged mindfulness-based stress reduction intervention increases perceived stress and self-compassion in first-year medical students, and could be a useful curricular tool for improving wellness and professional growth.

Yoga Nidra practice has been demonstrated to be effective patients with hormone abnormalities such as dysmenorrhea, oligomenorrhea, menorrhagia, metrorrhagia,

and hypomenorrhea in prior mindfulness-based research (Rani, 2013). Significant decreases in perceived stress and increases in mindfulness were reported after the mindfulness-based stress reduction programme (Carmody, 2008). (Klatt, 2009). Although the ViRYNP Programme's impacts were limited to a small group, they may be deemed significant in terms of public health, which strives to improve the health of large populations using low-cost, low-threshold treatments. For persons who are on a tight schedule, 15 minutes are easier to invest in terms of adherence. Future research should focus on different historical periods, and researchers may use comparable approaches to target different population groups. Sustained changes in brain activation were detected using imaging techniques such as positron emission tomography (PET) and electroencephalography (EEG), as well as self-reports (Lou 1999; Mandlik, 2002). Datta et al. (2017) report favourable effects of Yoga Nidra on chronic sleep disorders.

### Conclusion

As a result, the researcher can conclude that a six-week ViRYNP Programme can help sedentary persons cope with depression, anxiety, and stress during the Covid-19 outbreak. Our findings suggest that, in order to alleviate depression, anxiety, and stress and increase well-being, it is not necessarily necessary to run expensive day programmes with a big structural, personnel, and time commitment. Short-form guided and online-administered Yoga Nidra meditation was found to be just as beneficial as long-form meditation in this experimental investigation.

As a result of this pilot study, researchers are encouraged to do a larger study on similar topics. Furthermore, the ViRYN Programme, a sort of yogic meditation practise employed as a home-based fitness programme, is widely thought to have resulted in significant improvements in sedentary people's psychological (depression, anxiety, and stress) and overall well-being. Furthermore, the fact that it is basic and easy to follow may encourage a wide portion of the population to

participate in and profit from such a programme. Furthermore, the ViRYN Programme is suggested for psychological health and personal well-being during and after the Covie-19 Outbreak.

#### **Conflict of interest**

No conflict of interest from authors side.

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