

Effect of Cyclic Meditation on Sleep Quality, Psychological Well-being and Quality of Life among Working Professionals during the Lockdown Period

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Abstract: ***Background:** Rest assumes a crucial function healthy and prosperity for a mind-blowing duration. Getting enough quality rest at the correct occasions can help secure your emotional well-being, actual wellbeing, personal satisfaction, and security. Cyclic meditation is a guided relaxation technique which reduces the sympathetic arousal and there by helps in overall health in the individuals. **Aim:** To evaluate the relationship between Cyclic Meditation and Sleep Quality, Psychological Well-being and Quality of Life. **Methods:** A sample size of 60 working professionals, between the age group of 30-60 years from different sectors were selected. The participants were divided into two groups equally matched through a randomized control study. One group was provided with Cyclic meditation for 30 minutes a day continuously for 21days. The other group was left the usual during the period. And used Sleep Revolution Sleep Quality, DASS21 and Center for Epidemiologic Studies Depression Scale questionnaires. **Intervention:** The study was focused on the Sleep Quality, Psychological Well-being and Quality of Life of working professionals during COVID 19. Cyclic Meditation has been taken as intervention over physical training. Cyclic meditation correlates with Social Intelligence, Sleep Quality, Quality of Life and Stress. **Result:** The Pre and post results showed Cyclic Meditation is positively analyzed with Sleep Quality, Psychological Well-being and Quality of Life. **Conclusion:** Yogic practices were found to be beneficial in an Improvement of Sleep Quality, Psychological Well-being and Quality of Life of the test group as compared to those of the control group who were not given any training in yogic practices*

Keywords: Cyclic Meditation for working professionals, Sleep Quality, COVID19 Pandemic, Lockdown, Psychological Well-being and Quality of Life, The Pittsburgh Sleep Quality Index

1. Introduction

A lockdown is a crisis convention that keeps individuals from leaving a given region. During the COVID-19 pandemic, the term lockdown was utilized for activities identified with mass isolates or stay-at-home requests. To sum up entering public spots was carefully denied and just in certain exemptions permitted. The Coronavirus sickness 2019 (COVID-19) pandemic and the administrative limitations sway our everyday life in many pieces of the world. Despite the fact that limitations are compelling to forestall the uncontrolled spreading of COVID-19, they may contrarily influence emotional well-being. It is regular for people to feel focused on restless and stressed in the midst of pandemics, with fears of becoming sick or passing on, being socially rejected in isolate, or losing their work.

The (COVID-19) pandemic and specialist lockdown estimates present genuine dangers to mental prosperity around the world. One of the most significant elements that is probably going to affect mental prosperity under states of home repression is the capacity to go outside. Under typical conditions, there is an abundance of proof indicating that being outside is related with wide-going positive results as far as psychological wellness and prosperity (for reviews, see Bowler et al., 2010; Collado et al., 2017; Frumkin et al.,

2017; Hartig et al., 2014; Kondo et al., 2018; van den Bosch & Bird, 2018).

The point of this examination is to assess emotional well-being in a working proficient during lockdown considering pertinent affecting variables, for example, rest quality, Psychological prosperity and personal satisfaction.

1.1 Sleep quality, psychological well-being and Quality of life

Rest and stress have been depicted in a bidirectional relationship over the life expectancy (Lo Martire et al, 2019) with stressors affecting on rest quality and the other way around. Specifically, elevated levels of psychological and physiological excitement in light of stressors have been speculated to meddle with rest as indicated by the hyper arousal model of sleep deprivation inside the system of a self-fortifying circle (Harvey, 2002; Morin et al, 2002; Morin and Espie, 2003; Harvey et al, 2005; Bonnet and Arand, 119 2010; Riemann et al, 2010, Harvey et al, 2014; Riemann et al, 2015). In this troublesome period, cautiousness was continually high: sentiments of misfortune, inordinate utilization of web to look for data or to keep up social connections, stresses over being tainted, rash choices and unbending desires were only a portion of the elements that

might have meddled with a decent rest quality among the working experts. Additionally, isolate might have diminished the sunshine presentation, which is basic for synchronizing the circadian body clock, subsequently influencing numerous cycles including rest and temperament (Clunck, 2013; Vadnie and Mc Clunck, 2017). Thus, in this investigation meant to examine the nature of rest in the in the working experts during the lockdown time frame.

1.2 Health problems facing among working professionals

Through evaluation of modern labourer, it has been discovered that a large portion of the laborers were experiencing breathing issues, asthma, expanding in their legs or feet, eye bothering, skin sensitivities, migraine, general shortcoming or exhaustion because of over-burden of work, solid agony, high or low pulse, diabetes and so on (Singh, 2015). According to many of the working professionals are facing health issues such as Anxiety, Depression and insomnia during a COVID 19. And it was also shown in the other international reports that working professionals are undergone through many psychological health issues such as depression, breathing issues, lack of concentration and memory issues during COVID 19 (Bastola,2020). Similar kind of health issues noticed at Jorden in 2019 during a spreading Corona Virus, working professionals were undergone through depression and anxiety among the health workers. Also, it was noticed that psychological wellbeing issues were dominated during this period (Abdallah, 2019).

1.3 Yoga, Breathing exercises and Meditation for energy and tranquillity

Clinical investigations uphold that yoga stances, contemplation, and controlled breathing practices can improves rest quality and in general physiological prosperity. From writing apparently rehearsing cyclic reflection can decrease pressure and uneasiness there by assisting with driving great personal satisfaction.

1.4 Cyclic Meditation

Another method of meditation developed in Vivekananda Kendra is Cyclic Meditation (C.M). A cyclic of alternating stimulation and relaxation is used to go into deep silence. It is inspired by a verse found in the 'Gauda Pada Karika' (commentary) of Mandukya Upanishad.

In day-to-day life we relax deeply, through unconsciously, by stretching and relaxing through yawning. In Cyclic Meditation we stretch consciously and systematically and then relax using standing postures like Pada Hastasana, Ardha Chakrasana and Ardhakati Chakrasana and also using sitting asanas like Shashankasana and Ushtrasana. This provides stimulation at muscular level. The process begins with Tadasana that helps us centre our body. All the postures are performed with a slow speed maintaining internal awareness (observing, as a Sakshi, various changes in the system with eyes closed). Before starting Cyclic Meditation, one has to relax through a technique called I.R.T (Instant Relaxation Technique).After practicing standing postures slowly, with awareness, one has to perform Q.R.T. (Quick

Relaxation Technique). It takes about five minutes. After gently coming up in sitting position from Q.R.T., perform slowly with awareness Shashankasana and Ushtrasana (Ardha Ushtrasana, if Ushtrasana not possible). Lie down for a long Shavasana (also called Deep Relaxation Technique or D.R.T.). Part by part, from toes to top, relax your whole body by moving the consciousness from one part to other. This may take about ten minutes. After that, slowly sit down in deep silence according to your time. Apart from muscular stimulation in C.M., we use sound (chanting of Akara, Ukara, Makara and Omkara) and visual (attuning to vast ocean) stimulations as well to go deeper in silence.

2. Material and Methods

a) Study Protocol

The study included 60 male and female working professionals, between the age group of 19-60 years from different sectors. The participants are divided into two groups equally matched through a randomized control study. For all participants, informed consent was obtained.

b) Inclusion Criteria

Working professionals should be between 19-60 years. They should not have any physical and mental disabilities. They should be punctual in attending the classes(online)with good internet connection. They should be able to understand both English and their regional language (Kannada). They should not have any previous exposure to yoga or they should not have attended any yoga classes in the past three 3 years. Before the commencement of the study, they should willingly provide written consent.

c) Exclusion Criteria

Working professional with physical and mental disabilities. Working professional who are not punctual in attending their classes (online) and have no good internet connection. Also, who are practicing Yoga for last 3 months.

d) Ethical Consideration

From all the participants included in the study written informed consent (scanned copy) was taken. Informed consent in English and Kannada was given to all the workers. The data collected was confidential and not disclosed under any circumstances.

e) Design

Group A (Test group): Yoga group had 30 male and female working professionals.

Group B (Control group): Physical Training group had 30 male and female working professionals.

Cyclic meditation groups were practiced for 21 days. Participants were accessed through the Sleep Revolution Sleep Quality, DASS 21 Ques, and Centre for Epidemiologic Studies Depression Scale method before commencing and after completion of the intervention period

f) Intervention

Yoga- Cyclic Meditation is the primary intervention for the experimental group

g) Cyclic Meditation module design

Three basic design principles are used. They are identified from the goal of improving the Sleeping disorder, mental health and over all psychological well-being among the working professionals

This module includes:

S. No	Cyclic Meditation Steps	Duration in Min
	Opening Prayer	
1	Instant Relaxation Technique	1
2	Centering	2
3	Ardha Katti Chakrasana	3
4	Quick Relaxation Technique	3
5	Vajrasana	2
6	Sasankasana	2
7	Ustrasana	3
8	Deep Relaxation Technique	14
	Closing Prayer	
**Total duration was 30Min		

(Nagendra HR, 2016)

3. Data Extraction and Analysis

a) Data Extraction

In this study, 60 engineering students, between the age group of 18-24 years from different technical institutions were divided into two groups equally matched through a randomized control study, collected a response from students through google form and extracted to excel sheet. Later data has been sorted and divided into two groups in an alternate selection system (1 & 2) and made “1” as an Intervention group and “2” as a Control group. Students were accessed through the PSS, DASS21 and Rosenberg self-esteem Scale method before commencing and after completion of the intervention period.

PSS scores are obtained by reversing responses (e.g., 0 = 4, 1 = 3, 2 = 2, 3 = 1 & 4 = 0) to the four positively stated items (items 4, 5, 7, & 8) and then summing across all scale items, And date were collected in the google form with the response of Never, Almost Never, Sometimes, Fairly Often and Very Often, Which was converted in to numerical as per the guidelines were provided at Perceived Stress Scale, 0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often. (Cohen et al. (1988).

Similarly, DASS21 scale responses were received with an answer of. Did not apply to me at all, Applied to me to some degree, or some of the time, Applied to me to a considerable degree, or a good part of time and Applied to me very much, or most of the time. As per DASS21 guidelines these were converted into numerical 0 =Did not apply to me at all, 1 = Applied to me to some degree, or some of the time, 2 = Applied to me to a considerable degree, or a good part of time And 3 = Applied to me very much, or most of the time.

Same way received a responses from a students for Rosenberg self-esteem scale that, strongly Agree, Agree, Disagree, Strongly Disagree. Wherein, here the Items 2, 5, 6, 8, 9 are reverse scored. Give “Strongly Disagree = 1 point, “Disagree = 2 points, “Agree = 3 points, and “Strongly Agree = 4 points. Sum scores for all ten items. Keep scores on a

continuous scale. Higher scores indicate higher self-esteem (Rosenberg, M.1965).

b) Data Analysis

Data Analysis was done using Microsoft EXCEL. Hypothesis was analyzed using a t-test for paired data. Variables are assessed by Perceived Stress Scale, DASS21 and Rosenberg self-esteem Scale questionnaires

4. Result

This study was conducted from 5th September 2020 to 26th September 2020 in Zoom online meeting platform from across India. After collecting and analysing the data of 60 working professionals with the help of the above mentioned scales before and after the intervention and statistical tools, I have found the below results. From this, I can conclude that regular practice of Cyclic Meditation for about 30 minutes daily increases the sleeping quality and overall quality of life among the working professionals. The tables and graphs show the results.

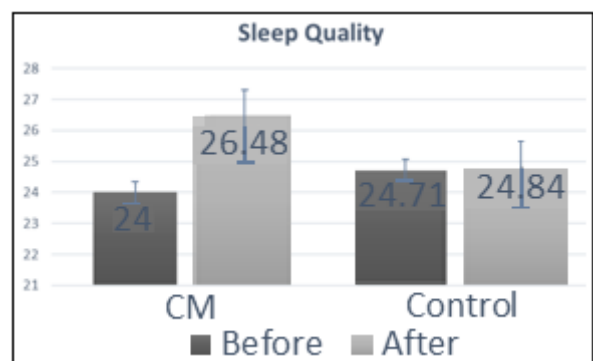
a) Demographic Details

In this study, 60 Working professionals were participated, between the age group of 20-60 years from across India were divided into two groups equally matched through a randomized control study, collected a response from working professionals through Online response form. Later data has been sorted and divided into two groups in an alternate selection system (1 & 2) and made “1” as an Intervention group and “2” as a Control group. As One person from CM group were filled a Pre and post data but was not attended the classes so moved the score to Control Group which was Control group cont was increased to 31 participants, same was Cm group cont was decreased to 29 participants.

b) Sleep Quality

Table: Mean and standard Deviation of the Sleep Quality of Cyclic mediation group.

CM			Control			p value between group
Before	After	p - Value	Before	After	p - Value	
24.000 ± 3.910	26.480 ± 3.345	0	24.710 ± 6.209	24.84 ± 6.614	0.8485	0.621

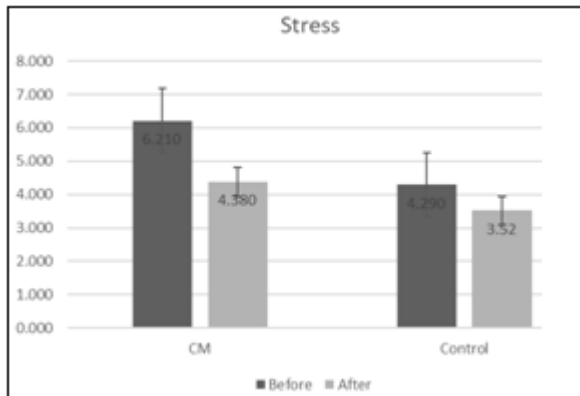


Graph: Change score of Sleep Quality of cyclic meditation and control group

c) Stress

Table: Mean and standard Deviation of the Stress of Cyclic mediation group

CM			Control			p value between group
Before	After	p - Value	Before	After	p - Value	
6.210 ±4.039	4.380 ±2.513	5E-06	4.290± 3.814	3.52 ±2.987	3E-04	0.467

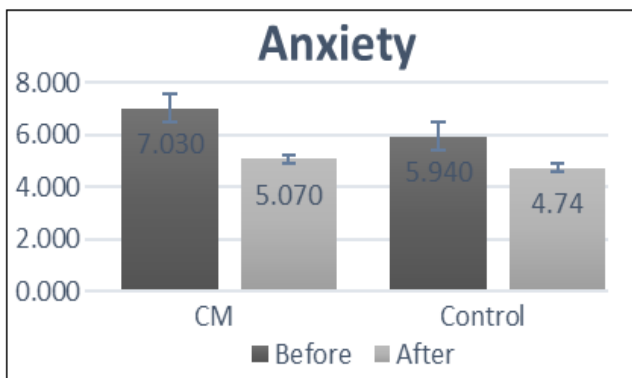


Graph: Change score of Stress of cyclic meditation and control group

d) Anxiety

Table: Mean and standard Deviation of the Anxiety of Cyclic mediation group

CM			Control			p value between group
Before	After	p - Value	Before	After	p - Value	
7.030 ±4.170	5.070 ±2.549	0.0000057	5.940± 4.746	4.74 ±3.255	0.001	0.473

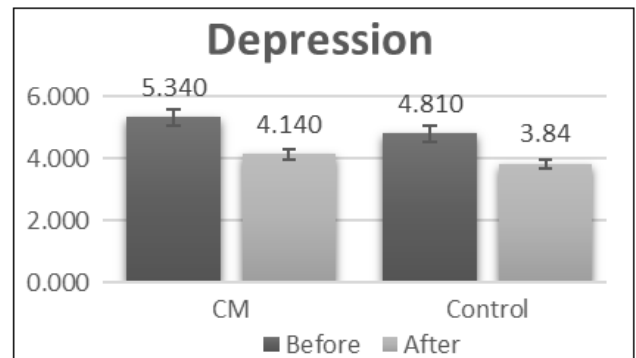


Graph: Change score of Anxiety Scale of cyclic meditation and control group

e) Depression

Table: Mean and standard Deviation of the Depression of Cyclic mediation group

CM			Control			p value between group
Before	After	p - Value	Before	After	p - Value	
5.340 ±	4.140 ±	6E-07	4.810 ±	3.84 ±	0.00032	0.39

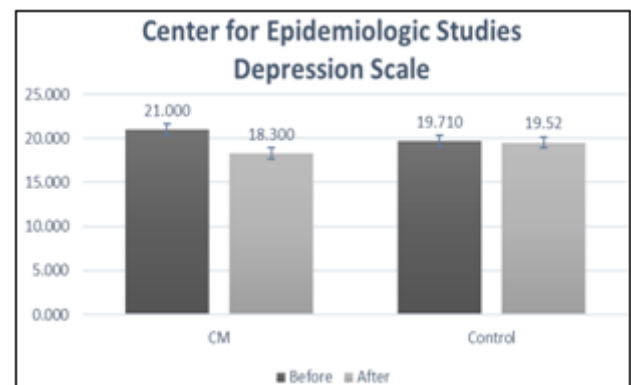


Graph: Change score of Depression of cyclic meditation and control group

f) Center for Epidemiologic Studies Depression Scale (CES - D)

Table: Mean and standard Deviation of the Center for Epidemiologic Studies Depression Scale of Cyclic mediation group

CM			Control			p value between group
Before	After	p - Value	Before	After	p - Value	
21.00 ±11.895	18.30 ± 9.463	0.0000017	19.71± 13.1	19.52 ±9.818	0.86	2.432

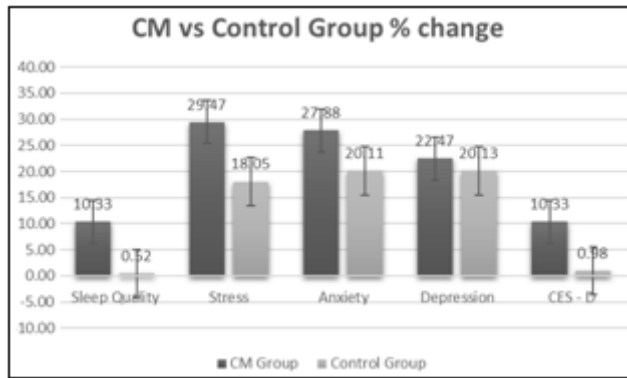


Graph: Change score of Center for Epidemiologic Studies Depression Scale of cyclic meditation and control group

g) Comparison Between CM Group and Control Group % Change

Table: Comparison between CM Group and Control Group % Change

Variables	CM Group			Control Group		
	Pre Mean	Post Mean	% Change	Pre Mean	Post Mean	% Change
Sleep Quality	24	26.48	-10.33333	24.70968	24.83871	-0.52219
Stress	6.21	4.38	29.4686	4.290323	3.516129	18.04511
Anxiety	7.03	5.07	27.88051	5.935484	4.741935	20.1087
Depression	5.34	4.14	22.47191	4.806452	3.83871	20.13423
CES - D	21	18.83	10.33333	19.70968	19.51613	0.981997



5. Discussion

This study was intended to find out the Effect of Cyclic Meditation on Sleep Quality, Psychological Well-being and Quality of Life among Working Professionals during the lockdown period. Cyclic Meditation has been taken as intervention over physical training. Cyclic Meditation correlates with Social Intelligence, Sleep quality, Concentration, Stress and overall psychological well-being. A sample size of 60 working professionals consisting of both males' females, between the age group of 30-45 years from India, were divided into two groups equally matched through randomized control study. One group has been provided with Cyclic meditation for 30 minutes a day for 21 days. The other group has been given usual physical training education during the period. Before the intervention, the result shows that the control group had better sleep quality and psychological well-being than the experimental or the test group. There was an increase in the sleep quality and quality of life of the working professionals in both groups. This is due to the effect of lockdown eradication. We collected the data in the month of Sep'2020 first week and stated giving intervention and the lockdown was eradicated in the third week of August. Hence, people started going out for working, to purchase daily needs and so on. At the same time there was a positive news on corona vaccination worldwide. This significantly made people to think positively, helped to come out from stress. Post Cyclic meditation therapy the better sleep quality and psychological well-being of the test group increased significantly as compared with participants in the control group. The percentage change in the sleep quality is 10.33, stress is 29.4686, anxiety is 27.88051 and depression is 22.4719. The correlation showed Cyclic meditation is positively correlated with sleep quality, psychological well-being and quality of life. There was a significant association between Cyclic meditation and an increase in the sleep quality, psychological well-being and quality of life. Hence, there is a need to include Cyclic meditation as a part of the daily activity. However, there is no much difference in the sleep quality between groups. Hence, there is a need to include a larger sample size for a longer duration of time.

Comparing our study with the study conducted by (Kumari & Ghosh 2015) to know the effect of cyclic meditation on quality of life and perceived stress, their results showed significant improvement in QOL ($p < 0.05$) and significant changes in perceived stress ($p < 0.05$). Similar studies have been conducted by Patra et.al (2009) on sleep quality this

study shown that practicing cyclic meditation appeared to increase slow wave sleep and lower the percentage of time in rapid eye movement sleep. In 2019 Josefien et.al conducted qualitative analysis survey to know the effect of CM on depression, anxiety and stress. The out come of their research is effect sizes for depression, $g = 0.42$ (95% CI: 0.16–0.69), anxiety $g = 0.46$ (95% CI: 0.34–0.59), stress $g = 0.42$ (95% CI: 0.27–0.57) were moderate.

As ours is a unique study conducted during the lockdown period involving 5 variables namely sleep quality, stress, anxiety, depression and overall physical well-being. A significant positive change has been recorded in all the variables with ($p < 0.05$). And as there was a positive result found as many working professionals had a tough time and had a fear of job loss and other sort of issues in professions, As Cyclic meditation were conducted which shown positive movements in working professionals. Hence, strongly believe that CM practice is actively sought to achieve reduced anxiety and stress so that improved sleep may positively impact immunity. As a consequence, there is a need to practice daily CM which apparently prove useful in providing accessible means to achieve mental as well as physical well-being.

6. Conclusion

Yoga and Cyclic Meditation has shown various positive effects on our daily day to day lifestyle. There are numerous benefits and advantages of practicing yoga, pranayama and meditation. Regular practice of Yoga, Pranayama and Meditation has proven to reduce stress, anxiety, obesity and modern life style diseases. The present study showed the need for Cyclic meditation as a physical intervention among the working professionals to have a better sleep quality, psychological well-being and quality of life. Though the study didn't show a significant increase in the sleep quality and psychological well-being between the groups, there is a significant increase in the sleep quality, psychological well-being in the test group post-Cyclic meditation therapy. The present study shows a need for further research in this area. Therefore, further larger studies with a well-controlled clinical setup and an increase in the number of participants are suggested.

a) Strength

The study is an authorized study, where all the data were collected accurately and all participants cooperated well

b) Limitation

This study is based on 60 participants, there is a need for an increase in the sample size for getting a better result. The period of yoga therapy could be increased because yoga being an eternal practice requires, substantial time for producing a tremendous effect on sleep quality, psychological well-being, and quality of life

c) Suggestions for Future scope

This study was helping the researcher to take Cyclic meditation as an intervention for future research. It is necessary to continue the study to obtain better results. The study should use a larger sample size for a longer period of time

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