

IMPACT FACTOR (SJIF) 2021= 7.380

ISSN 2319-4766

An International Peer Reviewed & Refereed Journal
**SCHOLARLY RESEARCH JOURNAL
FOR INTERDISCIPLINARY STUDIES**

APRIL-JUNE, 2021, VOL- 10, ISSUE-54

**Special Issue of Department of Physical Education,
Lokmanya Mahavidyalaya Warora,
Dist. Chandrapur**

On

**EFFECT OF CORONA PANDEMIC ON
VARIOUS SPORTS SECTORS**

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EFFECT OF SEVEN WEEKS SUDARSHAN KRIYA ON MENTAL HEALTH AND SELECTED RESPIRATORY PARAMETERS OF FEMALE STUDENTS OF LOKMANYA MAHAVIDALAYA OF WARORA

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Abstract

These paper is related to of Effect of Seven Weeks Sudarshan Kriya on Mental Health and Selected Respiratory Parameters of Female Students of Lokmanya Mahavidalaya of Warora. The objective was to compare mean scores of Pre-test and Post-test of Mental Health and Respiratory Parameters of Female Students of Lokmanya Mahavidalaya of Warora. The Null Hypothesis was that there is no significant e difference of mean scores of Pre-test and Post-test of of Pre-test and Post-test of Mental Health and Respiratory Parameters of Female Students of Lokmanya Mahavidalaya of Warora, when Mental Health assessed by Mental Health Battery by Singh and Gupta, Respiratory Rate assessed by Stethoscope developed by Rene Theophile Hyacinthe Laennec in 1816 and Vital Capacity assed by Wet Spirometer developed by John Hutchinson in 1846. The selection of sample on the basis of Simple Random Sampling Methods and size of sample was 35 Female Students of Lokmanya Mahavidalaya of Warora. Correlated Sample t-Test was used for analyzing the data. Mental Health, Respiratory Rate and Vital Capacity mean scores were found to be significantly.

Introduction

Sudarshan Kriya (SKY) came into being in 1982 in Shimoga, India, when global humanitarian, spiritual figure, and Art of Living founder Sri Sri Ravi Shankar went into a ten-day silence. There are said to be 450 million SKY practitioners across 150 plus countries around the world, who vouch for its life-transforming potential in wellness and mental health.

Su' means proper, and 'darshan' means vision. 'Kriya' in yogic science means to purify the body. As a whole, Sudarshan Kriya means 'proper vision by purifying action.' Sudarshan Kriya Yoga is a unique breathing practice that involves cyclical breathing patterns that range from slow and calming to rapid and stimulating. In this Kriya, you take control of your breath, which positively affects your immune system, nerves, and psychological problems. According to a 2009 published study of Harvard Medical School, Sudarshan Kriya yoga can effectively address anxiety and depression. The method is inexpensive and risk-free and has favourable effects on your mind-body connection. With environmental pollution, bad eating habits, and a sedentary lifestyle bogging you down, Sudarshan Kriya is a way out for you to lead a better life.

Breathing is the first act of life. Within the breath is the unexplored secret of life. Sudarshan Kriya is a powerful yet simple rhythmic breathing technique that incorporates specific natural rhythms of the breath, harmonizing the body, mind and emotions. The technique eliminates stress, fatigue and negative emotions such as anger, frustration and depression, leaving the mind calm, focused and the body energized, completely relaxed. Sudarshan Kriya brings a profound depth to life, unravelling its mysteries. It's a spiritual breakthrough giving the experience of a

glimpse of infinity. *Sudarshan Kriya is the unrevealed secret to health, happiness, peace and an insight of life beyond!*

Breath is the main source of *prana* - the vital life-force energy. *Prana* is the very basis of health and well-being for both, the body and mind. When the *prana* is high, one feels healthy, alert and energetic. Sudarshan Kriya elevates the *prana* by flushing out more than 90% toxins and accumulated stress, *everyday*. Sudarshan Kriya practitioners have reported better immunity, increased stamina and sustained high-energy levels. *Daily dose of Sudarshan Kriya can considerably reduce visit to the doctor, keeping you on a healthy, happy note, lifelong!* Breathing helps mental well-being by activating the vagus nerve which influences the human mind and body, including: The brain, Depression and anxiety, Digestive juice secretion in the gut, Heart rate variability, Blood glucose balance, Bile production, Kidney function, Fertility in women, Taste and saliva, A sense of connectedness, Mental and physical well-being, Altruistic behavior etc.

Objectives

- i. To compare the mean scores of Pre-test and Post-test of Mental Health of Female students of Lokmanya Mahavidalaya Warora.
- ii. To compare the mean scores of Pre-test and Post-test of Respiratory Rate of Female students of Lokmanya Mahavidalaya Warora.
- iii. To compare the mean scores of Pre-test and Post-test of Vital Capacity of Female students of Lokmanya Mahavidalaya Warora.

Hypotheses

- i. There is no significant difference of mean scores of Pre-test and Post-test of Mental Health of Female students of Lokmanya Mahavidalaya Warora, when Mental Health assessed by Mental Health Battery by Singh and Gupta.
- ii. There is no significant difference of mean scores of Pre-test and Post-test of Respiratory Rate of Female students of Lokmanya Mahavidalaya Warora, when Respiratory Rate assessed by Stethoscope developed by Rene Theophile Hyacinthe Laennec in 1816.

There is no significant difference of mean scores of Pre-test and Post-test of Vital Capacity of Female students of Lokmanya Mahavidalaya Warora, when Vital Capacity assessed by Wet Spirometer developed by John Hutchinson in 1846.

Methodology

Thirty-five Female students studying in B.A and B.Com. of were selected as subjects from Lokmanya Mahavidalaya, Warora through Simple Random Sampling Method. The age of the subjects was ranged from seventeen to Twenty-second years. Single Group Pre-post Test Experimental Design was chosen. Pre-test was conducted to measure their initial performance of Mental Health and after Seven Weeks Sudarshan Kriya Practices at early morning then the post test was conducted to measure the final results.

Selection of Test and Criterion Measures**Mental Test Battery**

Following six popular indices of mental health were used in the present battery:

- i. Emotional Stability
- ii. Over-all Adjustment
- iii. Autonomy
- iv. Security-Insecurity
- v. Self-concept
- vi. Intelligence

Selected Respiratory Parameters

- i. Respiratory Rate (Stethoscope)
- ii. Vital Capacity (Wet Spirometer)

Collection of Data

The necessary data pertaining to the study were collected using the Mental Test Battery, Stethoscope and Vital Capacity mentioned above from Thirty-five Female students studying in B.A and B.Com of Lokmanya Mahavidalaya Warora.

Analysis of Data

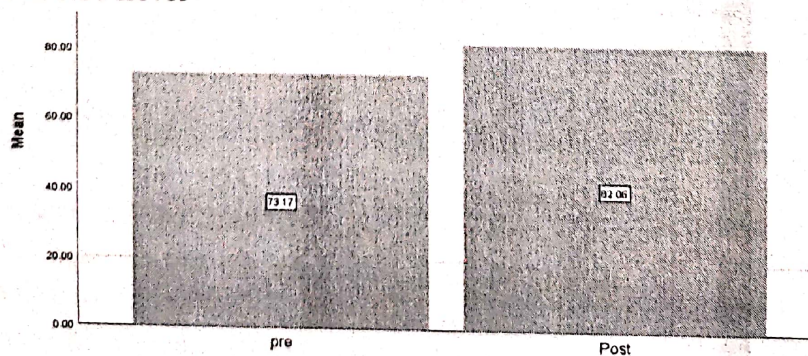
The data pertaining of the Mental Health Battery were examined statistically by Dependent Sample t-Test in order to determine the significant effect if any. The level of significance to test the hypothesis was set at 0.01.

Table-1

Description of Mean, Standard Deviation and Correlated 't'-Values for the data on Mental Health of Female students studying in B.A. and B.Com. of Lokmanya Mahavidalaya Warora.

Components	Mean		Standard Deviation		r	N	Mean Difference	Standard Error of Mean		t-ratio
	Pre	Post	Pre	Post				Pre	Post	
Mental Health Battery	73.17	82.05	6.51	6.99	0.75	35	8.88	1.10	1.18	11.13**

**= Significant at 0.01 Level



From Table 1 it can be seen that the Correlated t-value is 11.13 which is highly significant at 0.01 Level with $df=34$. It indicates that the pre-test Mean scores of Mental Health of Female students of Lokmanya Mahavidalaya Warora and after given the treatment the posttest mean scores of Mental Health of Female students of Lokmanya Mahavidalaya Warora differ Significant. Thus, the Operational Hypothesis in Null Form There is no significant effect mean scores of Pre-test and Post-test of Mental Health of Female students of Lokmanya Mahavidalaya Warora, when Mental Health assessed by Mental Health Battery by Singh and Gupta is Rejected. Further the mean scores of Pre-test of Mental Health is 73.17 which is significantly lower than that Post-test of Mental Health whose mean scores is 82.06. It may, therefore, be said that the Seven Weeks Sudarshan Kriya was found to be effective in improving of Mental Health of students.

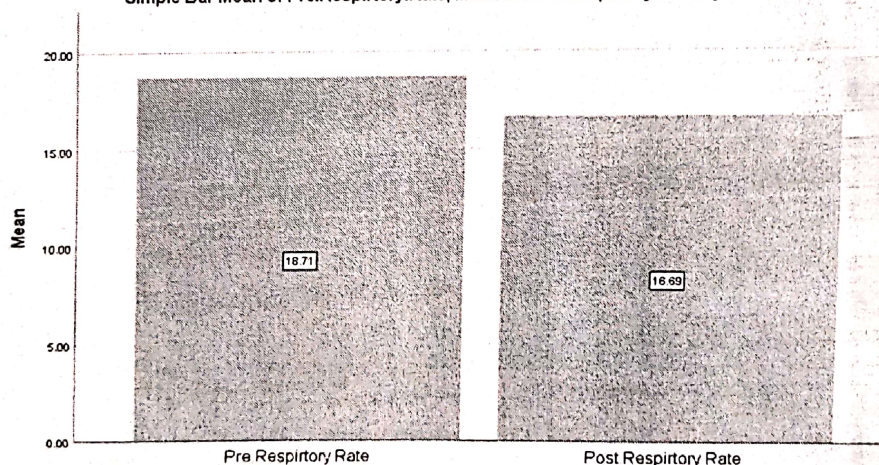
Table-2

Description of Mean, Standard Deviation and Correlated 't'-Values for the data on Respiratory Rate of Female students studying in B.A. and B.Com. of Lokmanya Mahavidalaya Warora.

Components	Mean		Standard Deviation		r	N	Mean Difference	Standard Error of Mean		t-ratio
	Pre	Post	Pre	Post				Pre	Post	
Mental Health Battery	18.71	16.68	2.32	1.87	0.88	35	2.02	0.39	0.31	10.93**

**= Significant at 0.01 Level

Simple Bar Mean of Pre.Respiratory.Rate, Mean of Post.Respiratory.Rate by INDEX



From Table 2 it can be seen that the Correlated t-value is 10.93 which is highly significant at 0.01 Level with $df=34$. It indicates that the pre-test Mean scores of Respiratory Rate of Female students of Lokmanya Mahavidalaya Warora and after given the treatment the posttest mean scores of Mental Health of Female students of Lokmanya Mahavidalaya Warora differ Significant. Thus, the Operational Hypothesis in Null Form that there is no significant e difference of mean scores of Pre-test and Post-test of Respiratory Rate of Female students of

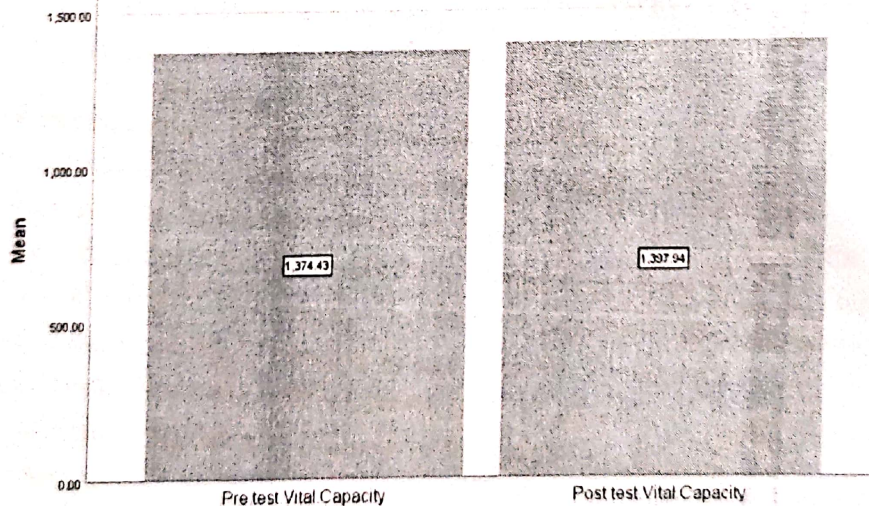
Lokmanya Mahavidalaya Warora, when Respiratory Rate assessed by Stethoscope developed by Rene Theophile Hyacinthe Laennec in 1816 is Rejected. Further the mean scores of Pre-test of Respiratory Rate is 18.71 which is significantly higher than that Post-test of Respiratory Rate whose mean scores is 16.68. It may, therefore, be said that the Seven Weeks Sudarshan Kriya was found to be effective in normalized the Respiratory Rate, hence it indicate that normalize the Respiratory Rate helps to improve better functioning of Respiratory System, Circulatory System and Nervous System of Female students of Lokmanya Mahavidalaya Warora.

Table-3

Description of Mean, Standard Deviation and Correlated 't'-Values for the data on Vital Capacity of Female students studying in B.A. and B.Com. of Lokmanya Mahavidalaya Warora.

Component s	Mean		Standard Deviation		r	N	Mean Difference	Standard Error of Mean		t-ratio
	Pre	Post	Pre	Post				Pre	Post	
Mental Health Battery	1374.42	1397.94	94.70	93.38	0.95	35	23.51	16.00	15.78	4.92*

Simple Bar Mean of Pre.test.Vital.Capacity, Mean of Post.test.Vital.Capacity by INDEX



From Table 3 it can be seen that the Correlated t-value is 4.92 which is highly significant at 0.01 Level with $df=34$. It indicates that the pre-test Mean scores of Vital Capacity of Female students of Lokmanya Mahavidalaya Warora and after given the treatment the posttest mean scores of Mental Health of Female students of Lokmanya Mahavidalaya Warora differ Significant. Thus, the Operational Hypothesis in Null Form There is no significant e difference of mean scores of Pre-test and Post-test of Vital Capacity of Female students of Lokmanya Mahavidalaya Warora, when Vital Capacity assed by Wet Spirometer developed by John Hutchinson in 1846 is

Rejected. Further the mean scores of Pre-test of Vital Capacity is 1374.43 which is significantly lower than that Post-test of Vital Capacity whose mean scores is 1397.94. It may, therefore, be said that the Seven Weeks Sudarshan Kriya was found to be effective in improved the Vital Capacity of Female students of Lokmanya Mahavidalaya Warora .

Testing Hypotheses

In the beginning of this study hypothesis were formulated and on the basis of statistical findings the formulated hypothesis not rejected or rejected are given in the following table-

Hypothesis	Statement	On the basis of statistical results
H1	There is no significant effect mean scores of Pre-test and Post-test of Mental Health of Female students of Lokmanya Mahavidalaya Warora, when Mental Health assessed by Mental Health Battery by Singh and Gupta.	H0 is Rejected
H2	There is no significant e difference of mean scores of Pre-test and Post-test of Respiratory Rate of Female students of Lokmanya Mahavidalaya Warora, when Respiratory Rate assessed by Stethoscope developed by Rene Theophile Hyacinthe Laennec in 1816.	H0 is Rejected
H3	There is no significant e difference of mean scores of Pre-test and Post-test of Vital Capacity of Female students of Lokmanya Mahavidalaya Warora, when Vital Capacity assed by Wet Spirometer developed by John Hutchinson in 1846.	H0 is Rejected

Findings

- i. Seven Weks Sudarshan Kriya was found to be effective in improving of Mental Health of Female students of Lokmanya Mahavidalaya Warora.
- ii. Seven Weeks Sudarshan Kriya was found to be effective in normalized the Respiratory Rate, hence it indicate that normalize the Respiratory Rate helps to improve better functioning of Respiratory System, Circulatory System and Nervous System of Female students of Lokmanya Mahavidalaya Warora.
- iii. the Seven Weeks Sudarshan Kriya was found to be effective in improved the Vital Capacity of Female students of Lokmanya Mahavidalaya Warora .

Discussion of Findings

Based on the statistical findings the result was justified scientifically and logically. Findings Table-1, Table 2 and Table 3 that there was significant mean effect between the pre-test and post-test of Female students of Lokmanya Mahavidalaya Warora in the variables of Mental Health, Respiratory Rate and Vital Capacity. Further it was revealed that regular practice of Sudarshan Kriya helps reduce the brain, Depression and anxiety and also increase lungs capacity and immunity as well as helps to improve better functioning of Respiratory System, Circulatory System and Nervous System

Conclusions

Recognizing the limitations of this study and on the basis of statistical findings the following conclusion may be drawn:

1. Significant effect was found in between the pre-test and post-test in relation to Mental Health of Female students of Lokmanya Mahavidalaya Warora.
2. Significant effect was found in between the pre-test and post-test in relation to Respiratory Rate of Female students of Lokmanya Mahavidalaya Warora.
3. Significant effect was found in between the pre-test and post-test in relation to Vital Capacity of Female students of Lokmanya Mahavidalaya Warora.

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