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# Effect of Suryanamaskar on Selected Physical Fitness Variables of Stay at Home Peoples of Nashik City

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## ABSTRACT

The purpose of this study was to keep fit or physical fitness a need of the days in human society. Physical fitness refer to the ability of your body system to work together efficiently to allow you to be healthy & perform activities of daily living. A fit person to able performs enthusiastically daily routine work. Suryanamaskar consist of twelve different postures and is done along with chanting of mantras in every posture. Suryanamaskar is traditionally performed on empty stomach at sunrise which is considered the most spirituality favorable time and facing the rising Sun. The aim of this study was find out the "effect of Suryanamaskar on selected physical fitness variables of stay at home peoples of Nashik city". The present research whole population a total number of 20 male stay at home peoples were selected the basis of purposively method of sampling technique from Vinayak Society Sanjay nagar Nashik city. And the subjects were divided into two group by randomly method i.e, 10 each experimental and control group. Stay at home peoples of the experimental group was given the 30 minutes Suryanamaskar program but the controlled group did not part in Suryanamaskar program. The duration of Suryanamaskar program was six weeks which was given six days in a week. Pre and post test conducted on the both the groups & data was analyzed by independent sample t-test. The results showed that the significant improvement of pre and post tests of subjects on 1 min Push-ups test, 1 min Sit-ups test, Plank hold test and there was no significant improvement of 1 min Squat test of significant level at 0.05. The effect of Suryanamaskar was found to improve the physical fitness of stay at home peoples.

**Keywords :** Suryanamaskar program, Stay at home peoples and Physical fitness test.

## INTRODUCTION

The wealth of the nation resides on the health & vitality of its people. Every nation primarily enhances the concern about physical fitness of its men, women and children. Physical fitness refers to the ability of your body system to work together efficiently to allow you to be healthy & perform activities of daily living. A fit person is able to enthusiastically do daily routine work. So many people maintain physical fitness by doing different types of workouts. In daily routine peoples engage the activity like walking outside of home & near to the healthy premises, grounds for walking, running & suryanamaskar activity, gardens or park for doing yoga

activity, health club for weight training & zomba, aerobic dance classes for fitness there are the option to people regularly as per the facility to daily workout for physical fitness.

But due to the Coronavirus disease (COVID-19) in the infectious disease caused by a newly discovered Coronavirus most people who fall sick with COVID-19 would experience mild to moderate symptoms & recover without special treatment. The virus that causes COVID-19 mainly transmitted through droplets generated when an infected person coughs, sneezes, or exhales. These droplets are too heavy to hang in the air, & quickly fall on floors or surfaces, people can be infected by berthing in the virus if you are within close proximity of someone who has COVID-19 or by touching a contaminated surface and then your eyes, nose or mouth. (COVID-19 MyGov.in)

That is reason the Government implemented lock down in India last couple of months in lock down period peoples not allowed to going to outside at home & government shut the grounds, parks, gardens, health clubs, gyms, yoga, aerobic dance, zumba classes, in that condition peoples missed the physical activities & disturbed the fitness schedule. The peoples lock down periods have the option to own body weights exercises are available to do at home and keep fit. In the situation of COVID-19 disease people must engage with physical activity to develop the immunity system to fight against the disease and keep fit our self or family. Activities like Suryanamaskar easily done at home without any equipment only exercise with your own body weight.

Suryanamaskar is a form of sun worship and can trace its origin back to the Vedas. But the literal meaning of Suryanamaskar is 'Salutation to the Sun'. Suryanamaskar consists of twelve different postures and is done along with chanting of mantras in every posture. Suryanamaskar is traditionally performed on an empty stomach at sunrise which is considered the most spirituality favorable time and facing the rising Sun. (Saraswati 1983)

#### **Benefits of Suryanamaskar :**

- Help maintain the cardiovascular health
- Stimulates the nervous system
- Help in stretching, flexing & toning the muscles
- An excellent exercise for weight loss management
- Strengthen the immune system
- Enhance cognitive function
- Improve overall health, strengthen the body & relaxes the mind.

#### **MATERIAL AND METHOD**

##### **Method of the study**

The present study was an experimental research which was conducted with a purpose to see the effect of Suryanamaskar on selected physical fitness variables of stay at home peoples of Nashik city.

## Research Design

True experimental design was used for this study to check the hypothesis; this research was based on pre-test and post-test equivalent group design.

## Method of Sampling

The present research whole population a total number of 20 male stay at home peoples were selected the basis of purposively method of sampling technique from Vinayak Society Sanjay nagar Nashik city.

## Selection of Variable

The study was taken to pinpoint the selected variables of physical fitness which indicate the level of upper and lower body muscular strength & endurance.

## Procedure of the study

The researcher using the method of online zoom application for online assembled all the subjects from his population and was given to them instruction of Suryanamaskar program & physical fitness tests and selected a total number of 20 male stay at home peoples in the age group below 35 years of purposively sampling technique. Subjects were divided into two even groups i.e, experimental and control group. The selected subjects were pre-tested by 1 min push-ups test, 1 min sit- ups test, plank hold test and 1 min Squat test after that the and six weeks Suryanamaskar program which was given six days in a week was implemented only on experimental group & control group doing regular training. After both the group's i.e, experimental and control groups, were post test conducted for data collection.

## STATISTICAL TOOLS

After data collection, data of pre-test and post-test of both the groups i.e, experimental and control group, compared by independent sample t-test and interpretation were drawn.

The level of significance was kept at 0.05 to test the hypothesis.

## RESULTS OF THE STUDY

The obtained results are present in the following table which represents the results of descriptive analysis and independent sample t-test to compare the mean of group's i.e, experimental and control group.

**Table 1 :** Descriptive statistics to gain the pre and post-tests of experimental and control group

Test	Group	N	Mean	SD
1 Min Push-Ups Test	Experimental	10	30	4.2
	Control	10	26	3.3
1 Min Sit-Ups Test	Experimental	10	20	2.9
	Control	10	17	1.5
Plank Hold Test	Experimental	10	36.3	5.6
	Control	10	31.5	4.6
1 Min Squat Test	Experimental	10	27	3.1
	Control	10	25	2.7

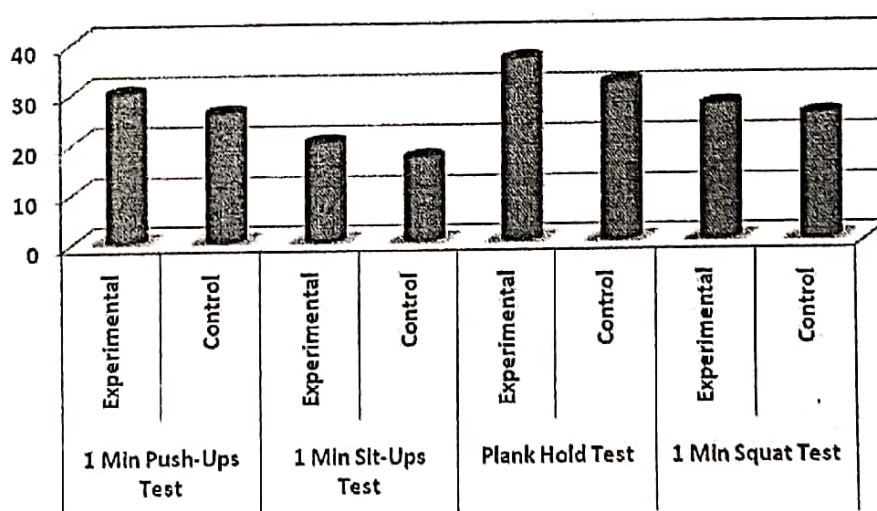
Table no. 1 shows that there were 10 subjects each in experimental and control group. The mean gain in 1 min Push-ups test, 1 min Sit-ups test, Plank hold test and 1 min Squat test as experimental group was  $(30 \pm 4.2, 20 \pm 2.9, 36.6 \pm 5.6, \text{ and } 27 \pm 3.1)$  respectively and the descriptive statistics mean gain of control group was  $(26 \pm 3.3, 17 \pm 1.5, 31.5 \pm 4.6, \text{ and } 25 \pm 2.7)$  respectively.

**Table 2 :** Independent sample t-test to gain the tests of experimental and control group

Test	Group	Mean Difference	't' value	Sig. (2-tailed)
1 Min Push-Ups Test	Experimental	4.0	2.35	0.03
	Control			
1 Min Sit-Ups Test	Experimental	3.3	3.00	0.00
	Control			
Plank Hold Test	Experimental	4.8	2.00	0.04
	Control			
1 Min Squat Test	Experimental	2.6	1.95	0.06
	Control			

Table no. 2 shows the mean of gain in experimental and control group were compared with independent t-test. The calculated 't' value of subjects in 1 min Push-ups test, 1 min Sit-ups test, Plank hold test and 1 min Squat test was 2.35, 3.00, 2.00, and 1.95 respectively. To determine the effect of Suryanamaskar on selected physical fitness variables of stay at home peoples of Nashik city, independent sample t-test was used at 0.05 levels of significance in relation to pre and post-test of 1 min Push-ups test, 1 min Sit-ups test, Plank hold test and 1 min Squat test. A significant level at 0.05 respectively ( $p = 0.03$ ), ( $p = 0.00$ ), ( $p = 0.04$ ) & ( $p = 0.06$ ).

**Fig. 1:** Comparisons of group mean to the Physical Fitness tests of experimental and control group



The figure no. 1 shows that there was significant improvement in physical fitness tests of experimental group due to treatment.

## DISCUSSION OF FINDINGS

Discussion on the results of Physical fitness variable consists of 1 min Push-ups, 1min Sit-ups, Plank hold & 1 min Squat test. It was observed from the finding that the effect of Suryanamaskar on selected physical fitness variable of stay at home peoples. From table No. 1, & 2 shows that there was a significant improvement of 1 min Push-ups, 1min Sit-ups & Plank hold tests and there was no significant improvement of 1 min Squat test of experimental group compare to control group of subjects. This indicates that Suryanamaskar program had positive effect on selected physical fitness variables of experimental group. Therefore the set hypothesis that there in case of 1 min Push-ups, 1min Sit-ups & Plank hold tests research hypothesis was accepted and null hypothesis was rejected and 1 min Squat test null hypothesis was accepted and research hypothesis was rejected.

This finding was supported by Singh, K., et al (2010) studied the effect of Suryanamaskar on muscular endurance and flexibility among inter college student the results shows that muscular endurance and flexibility was significantly improved in group A compared with the control one, and it was also concluded that Suryanamaskar may be recommended to improve muscular endurance and flexibility.

## CONCLUSION

On the basis of the result obtained in the study the researcher made the concluded that six weeks Suryanamaskar program was significantly effective to increase the physical fitness of stay at home peoples which indicate the level of muscular strength and endurance of key – muscle groups and also the findings of this study may be helpful to the stay at home peoples to doing regular practice of Suryanamaskar to improve their health and physical fitness.

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