

# SURYANAMASKAR ON FITNESS PARAMETERS OF STAY AT HOME STUDENTS

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# Abstract

The objective of this study was to keep fit or physical & mental 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 student to able performs energetically daily routine activities. The COVID-19 pandemic situations Government of Maharashtra shut the educational institutions include the colleges & fitness industries that's way to college students face to the issues of maintain physical fitness. Researcher takes initiative for keep on touch students physical fitness to conduct online fitness teaching. Survanamaskar 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 & facing the rising Sun. Study was find out the "Suryanamaskar on physical fitness parameter of stay at home students". The present research sample a total number of 20 male stay at home college students were selected the basis of purposively method of sampling technique from M.G.V's. Arts Science & Commerce College, Nandgaon, District Nashik. The subjects were divided into two group i.e, 10 each experimental and control group. Stay at home college students of the experimental group was given the 30 minutes Suryanamaskar program online Google meet through but the control 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. It was concluded that the beneficial effect of Suryanamaskar can be applied to college students to improve the core fitness, physical health and sports activities of the students.

Key words: Suryanamaskar program, Stay at home Students and Physical fitness test.



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#### Introduction:

The wealth of the nation resides on the health & vitality of its people. Every nation primarily enhance the concerned about physical fitness of its students. Physical fitness refer to the ability of your body system to work together efficiently to allow you to be

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healthy & perform activities of daily living. College students maintain the physical fitness to doing different types of workouts. In daily routine students 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 students regularly as per the facility to daily workout for physical fitness. Kraus – Weber tests for muscular fitness are not designed to determine optimum level of muscular fitness but rather to determine whether or not the individual has sufficient strength and flexibility in the part of the body upon which demands are made to normal daily living.

But due to the Coronavirus disease (COVID-19) in the infectious disease caused by a newly discovered Coronavirus most of 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 educational institutions, grounds, parks, gardens, health clubs, gyms, yoga, aerobic dance & zoomba classes, in that condition students missed the physical activities & disturbed the fitness schedule. The students lock down periods have option to own body weights exercises are available to do at home and keep fit. In the situation of COVID-19 pandemic period students must to engage with physical activity for developed the immunity system to fight against the disease and maintain fitness our self or family. Activities like Suryanamaskar easily doing at home without any equipment only exercise with 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 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. (Saraswati 1983)

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

- □ Help maintain the cardiovascular health
- $\Box$  Stimulates the nervous system
- □ Help in stretching, flexing & toning the muscles
- $\Box$  An excellent exercise for weight loss management
- $\Box$  Strengthene the immune system
- $\Box$  Improve overall health, strengthene 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 fitness parameters minimum muscular strength of stay at home college students.

#### **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 samples of 20 male stay at home college students were selected the basis of purposively method of sampling technique from M.G.V's. Arts Science & Commerce College, Nandgaon, District Nashik.

#### **Selection of Variable**

The study was taken to pinpoint the variables was Kraus - Weber's minimum muscular fitness test consist of six items which indicate the level of muscular strength and flexibility of key muscle group.

#### **Procedure of the study**

The researcher using the method of online Google meet application for online assembled the subjects & they were given to them instruction of Kraus - Weber tests and Suryanamaskar program & conduct morning session for selected of 20 male stay at home college students in the age group below 19 years. those selected through purposively sampling technique. The selected subjects were pre-tested by Kraus - Weber minimum muscular fitness tests and after that the subjects were divided into two even groups i.e, experimental and control group. After six weeks Suryanamaskar program which was given six days in a week was implemented only on experimental group & control group

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doing regular activity. 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.

Test	Group	Ν	Mean	SD		
Strength of Abdominal Plus Psoas Muscles Test	Experimental	10	7.33	5.20		
Wuscles Test	Control	10	1.33	5.07		
Strength of Abdominal Minus Psoas Muscles Test	Experimental	10	7.33	5.83		
	Control	10	1.67	5.30		
Strength of Psoas and Lower Abdominal Muscles Test	Experimental	10	7.00	5.35		
	Control	10	1.33	4.34		
Strength of Upper Back Muscles Test	Experimental	10	7.33	4.49		
Strength of Opper Back Muscles Test	Control	10	1.33	5.07		
Strength of Lower Back Muscles test	Experimental	10	7.67	5.04		
	Control	10	0.33	3.19		
Floor Touch Test	Experimental	10	8.33	3.79		
	Control	10	1.00	3.05		

# Table no 1: Descriptive statistics to gain the pre and post-tests of experimental and control group

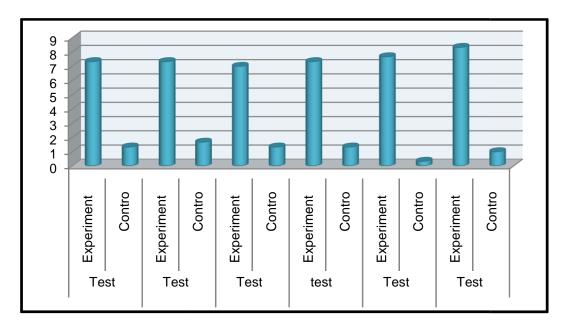
Test	Group	Mean Difference	't' value	Sig. (2-tailed)
Strength of Abdominal Plus Psoas Muscles Test	Experimental	- 6.00	4.52	0.001
	Control			
Strength of Abdominal Minus Psoas Muscles Test	Experimental		3.93	0.001
	Control	- 5.66		
Strength of Psoas and Lower Abdominal Muscles Test	Experimental	5.66	4.50	0.001
	Control			
Strength of Upper Back Muscles Test	Experimental			
	Control	- 6.00	4.84	0.001
Strength of Lower Back Muscles test	Experimental		7.34	0.001
	Control	- 8.00		
Floor Touch Test	Experimental			
	Control	- 7.33	8.25	0.001

# Table no 2: Independent sample t-test to gain the testsof experimental and control group

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 Test 1 Abdominal and Psoas muscles, Test 2 Abdominal muscles without Psoas, Test 3 strength of Psoas and Lower Abdominal muscles, Test 4 strength of the Upper Back muscles, Test 5 strength of the Lower Back muscle and Test 6 strength of Back and Hamstring muscles was 4.52, 3.93, 4.50, 4.84,

7.34 and 8.25 respectively. To determine the effect of Suryanamaskar on fitness parameters minimum muscular fitness of college students, independent sample t-test was used at 0.05

levels of significance in relation to pre and post-test of Kraus - Weber's minimum muscular fitness tests. A significant level at 0.05 (p = 0.001).



# Figure no. 1 Comparisons of group mean to the Minimum Muscular Fitness tests of experimental and control group

### **Discussion of findings**

Discussion on the results of Kraus - Weber minimum muscular fitness test consists of six items which indicate the level of muscular strength and flexibility of key- muscle groups are given as; It was observed from the finding that the effect of Suryanamaskar on fitness parameters minimum muscular fitness of college students from table No. 1, & 2 shows that there was a significant difference between experimental group and control group of subjects regarding to the all test items. This indicates that Suryanamaskar program had positive effect on minimum muscular fitness of experimental group. Therefore the set hypothesis that there was significant effect of Suryanamaskar on fitness parameters minimum muscular fitness of college students was accepted.

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 fitness

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parameters minimum muscular fitness of college students which indicate the level of muscular strength and flexibility of key - muscle groups and also the findings of this study may be helpful to the college students to doing regular practice of Suryanamaskar to improve their health and fitness.

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