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**EFFECT OF SURYANAMASKARA ON SELECTED PHYSIOLOGICAL COMPONENTS OF HIGH SCHOOL BOYS STUDENTS YAVATMAL DISTRICT OF MAHARASHTRA STATE**



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**ABSTRACT**

The purpose of the present study was to find out the effect of Suryanamaskara on selected physiological components of high school boys students. The present study was consisted of 40 boy's subjects selected by simple random basis from Saraswati Vidyalaya, Mukutban, Yavatmal district of Maharashtra State under the age range of 12 to 14 years. The selected subjects of boys have been divided into two equal groups of 20 (fifteen) subjects in both. One of the boys group was treated as experimental and the second one of the group was control. The experimental group underwent Suryanamaskara practice of six days in a week for the duration of eight weeks. The control group did not participate during the period of eight weeks training programme. The experimental group was administered on the basis of the following training schedules in table-1 and it was conducted in the morning. The data obtained were statistically analyzed by the help of 't' test. Finally, it was concluded that there were significant changes on Resting pulse rate, Respiratory rate, Blood pressure (systolic and diastolic) and Vital capacity in between the mean of pre and post test of experimental and control group. It was also indicate that after eight weeks training programme of Suryanamaskara activity were significant influences on selected physiological Components accept only one of the component of the school boy students.

**Keywords:** Suryanamaskara, Selected Physiological Components & High School Student.

**INTRODUCTION**

Everyone has known that regular exercise along with good nutrition is good for their health. But the most debate issue is that how to build sound exercise habits and a balanced diet into our busy schedule. The tress of modern time emphasis that you should necessarily develop and maintain a fit, trim and fully functioned body. Because active and physically fit are lightens our self-esteem and self-expression. Most of the research polls have indicated that

people are becoming more health centered. As a result people are becoming more interested in making fitness exercise as an integral part of their life style.

Physical exercises are especially important for individual to develop strong intensions towards living a physically active life style. Physical activity is not only important for children to develop into healthy but is also important for all stage of people.

Suryanamaskara means salutation to sun, the Sanskrit name surya here refers to the sun and namaskara means salutation. Suryanamaskara has been handed down from the enlightened sages of the vedic age. The sun symbolizes spiritual consciousness and in ancient times was worshipped on a daily basis. In yoga the sun is represented by pingala or surya nadi the pranic channel which carries the vital life giving force.

Suryanamaskara is very effective and useful for physical, mental and spiritual health development. It helps to keep the both internal and external organs of the body strong and healthy. There are so many exercises which are most important and applied for development of health and physical fitness. Appropriate form of exercise and suryanamaskara on regular basis will be helpful for the development of physical fitness of an individual. Suryanamaskara not only stretch and help in physical fit, but it is extremely beneficial for your joints, ligaments and improves flexibility and posture. It helps in strengthening of the abdominal muscles

#### **OBJECTIVE OF THE STUDY**

The purpose of the present study was to find out the effect of Suryanamaskara on selected physiological components of high school boys students.

#### **HYPOTHESIS**

It was hypothesized that there would be a significant difference of Suryanamaskara on selected physiological components of high school boys students.

#### **METHODOLOGY**

The present study was consisted of 40 boy's subjects selected by simple random basis from Sraswati Vidyalaya, Mukutban of Yavatmal District of Maharashtra State, under the age range of 12 to 14 years. The selected subjects of boys have been divided into two equal groups of 20 (fifteen) subjects in both. One of the boys group was treated as experimental and the second one of the group was control. The experimental group underwent Suryanamaskara practice of six days in a week for the duration of eight weeks. The control group did not participate during the period of eight weeks training programme. The experimental group was administered on the basis of the following training schedules in table-1 and it was conducted in the morning. The data obtained were statistically analyzed by the help of 't' test.

#### **CRITERION MEASURES**

The criterion measures of the selected Physiological components for the purpose of this study are as under:

1. **Resting pulse rate:** To measure the heart beats palpitated on radial artery at wrist.
2. **Respiratory rate:** To counted the visual observing breathing movements of abdomen and chest.
3. **Systolic blood pressure:** To measure the systolic blood pressure.
4. **Diastolic blood pressure:** To measure the diastolic blood pressure
5. **Vital capacity:** To measure the amount of air kept in lungs.

#### ADMINISTRATION OF TEST

The subjects were tested pre and post on the selected Physiological components as per the following standard procedures:

**1. Resting pulse rate:**

To measure the heart beats palpitated on radial artery at wrist and the score was recorded in a number.

**2. Respiratory rate:**

To measure the counted visual observing movements of abdomen & chest and the score was recorded in a minute.

**3. Systolic blood pressure:**

To measure the systolic blood pressure and the score was recorded in mm/hg..

**4. Diastolic blood pressure:**

To measure the diastolic blood pressure and the score was recorded in mm/hg.

**5. Vital capacity:**

To measure the amount of air kept in lungs and score was recorded in kg or cc

**Table No: 1**

**Schedule of Suryanamaskara**

Exercise	Week 1st & 2nd	Week 3rd & 4th	Week 5th & 6th	Week 7th & 8th
Suryanamaskar (12 Count steps)	4 to 6 Repetitions	6 to 8 Repetitions	8 to 9 Repetitions	10 Repetitions

N.B:- After every set 05 sec. Rest

#### STATISTICAL ANALYSIS OF THE DATA

The collected data were statistically analyzed with the help of 't' test to find out the significant differences between the mean scores of physiological components in experimental and control groups of the students.

**Table No: II**  
**Mean differences of Physiological components between the Experimental and Control groups of boys students**

S.No	Components	Groups	Tests	Mean	S.D	M.D	't' Value
1.	Resting Pulse Rate	Experimental	Pre	70.6	2.14	2.9	1.76
		Control	Pre	73.5	1.22		
		Experimental	Post	67.45	3.19	3.25	3.69
		Control	Post	70.70	2.32		
2.	Respiratory Rate	Experimental	Pre	9.6	2.2	0.1	0.12
		Control	Pre	9.5	2.09		
		Experimental	Post	15.60	1.21	3.12	3.92
		Control	Post	18.72	1.99		
3.	Systolic (Blood Pressure)	Experimental	Pre	124.1	4.33	0.4	0.30
		Control	Pre	124.5	3.94		
		Experimental	Post	116.05	3.66	0.60	0.57
		Control	Post	116.65	2.98		
4.	Diastolic (Blood pressure)	Experimental	Pre	82.4	3.38	1.2	1.12
		Control	Pre	83.6	3.45		
		Experimental	Post	80.70	1.72	0.75	1.81
		Control	Post	79.95	0.69		
5.	Vital Capacity	Experimental	Pre	3.2	1.97	0.9	1.83
		Control	Pre	4.1	1.13		
		Experimental	Post	4.46	0.98	0.54	4.16
		Control	Post	3.92	0.74		

\* Significance at .05 level of confidence.

## DISCUSSION

The above table-II indicates that there were significant differences in mean scores of Physiological Components: as Resting pulse rate. Respiratory rate, Blood pressure (systolic and diastolic) and Vital capacity between pre and post test of experimental and control group as the pre test calculated 't' values 1.76, 0.12, 0.30, 1.12, 1.83 and 3.69, 3.92, 0.57, 1.81, 4.16 are respectively greater than that the tabulated 't' value of 38 df at 0.05 level of confidence is 2.04. The data provide significant evidence to ensure that mean scores of maximum components were significantly higher by post test mean than that the pre test mean comparison in between

experimental and control group. So, in comparison between these two groups there was no indicates the higher different in between the control and experimental groups but overall something were changes in this present study.

## CONCLUSION

Finally, it was concluded that there were significant changes on Resting pulse rate. Respiratory rate, Blood pressure (systolic and diastolic) and Vital capacity in between the mean of pre and post test of experimental and control group. It was also indicate that after eight weeks training programme of Suryanamaskara activity were significant influences on selected physiological Components accept only one of the component of the school boy students.

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