



Effect of Suriyanamsakar and some selected asana on physical fitness of college students

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Abstract

Objectives of the study were to find out the effect of Suryanamaskar and Asana on college going students. For that purpose 60 college going students were selected by using simple random sampling method. 45 days training schedule was given to the students. Results of study shows significant effect on Physical Fitness of Students. Variables tested were Breath Hold Capacity, Agility Flexibility, Strength (Leg and Shoulder). Results of the study shown that effect of yogic Asana and Suryanamaskar was on the both male and female students.

Keywords: Suryanamaskar, asanas, physical fitness

Introduction

In the present time, more and more people, especially the Westerners, are resorting to Yoga to find cure for chronic health problems and attain a peace of mind. They are also curious about knowing what exactly is Yoga and what are included in it. Although many of us are well aware of the health benefits of the physical activity, not everyone knows about the origin and exact definition of Yoga. It is a popular belief that Yoga merely includes stretching and warm up exercises. Of course, yoga involves stretching, but includes many other things beyond that. Originated in ancient India, Yoga typically means 'union' between the mind, body and spirit. It involves the practice of physical postures and poses, which is sometimes referred to as 'asana' in Sanskrit. As the name suggests, the ultimate aim of practicing Yoga is to create a balance between the body and the mind and to attain self-enlightenment. In order to accomplish it, Yoga makes use of different movements, breathing exercises, relaxation technique and meditation. Yoga is associated with a healthy and lively lifestyle with a balanced approach to life. Yoga aims at bringing the different bodily function in to perfect co-ordination so that they work for the good of the whole body. Swami Satyananda Saraswathi (2002) Suriya namaskar integrate and harmonize all aspects of the physical, intellectual, and spiritual body. Positions are related to energize pituitary, pineal and thyroid gland, liver solar pineal, blood flow to organ and glands efficacious for the neck, chest, abdomen and sexual gland. The regular performance of Suriya namaskar is intended to raise one's state of conscious to higher level of realization. Suriya namaskar are mostly more popular in older men than young wrestlers. They strengthen body without strain in bones and organs of the body. Suriya namaskar are not vigorous, but they are practiced to maintain physique

Objectives

Following were the objectives of the study

1. To Find Effect of Suryanamaskar on Physical fitness of college going students
2. To find effect of Asanas on physical fitness of college going students.

Hypothesis

1. It was hypothesized that Syryanamaskar and Asanas have no significant effect on physical fitness of college going students
2. It was hypothesized that male and female students will not differ significantly in response to their training

Design of the Study

Selection of subject

60 college going students were selected from different colleges of Ludhiana. 30male and 30 female students were selected with simple random sampling method.

Methodology

A training schedule was prepared and implemented to subjects for 45 days. A single experimental design was used to see the effect of Syryanamsker and some selected Asana (Padmasana, Pashchimottanasana, Uttanasana, Bhujangasana, Makarasana, Naukasana, Pavanamuktasana, Simhasana, Vajrasana, Ardhakati chakrasana and

Vrksasana) on physical fitness of college going students. Prepared training schedule was given on GHG Khalsa college Gurusar Sadhar Yoga center.

Method and procedure

A training schedule of 1:30 hours was prepared and given to subjects, Training was given from 6:30-8:00AM on GHG Khalsa college yoga center six days a week. Gradual increase in work load was adopted in training from second week of training for training adaption. Morning 6:30 training starts with Vedic prayer “Sarve Bhavantu Sukhinya” followed by slow stretching and warming up for further training. Repetition of Suriyanamskar and Asana (Padmasana, Pashchimottanasana, Uttanasana, Bhujangasana, Makarasana, Naukasana, Pavanamuktasana, Simhasana, Vajrasana, Ardhakati chakrasana and Vrksasana) was increased slowly after second week of training till last week. Sunday was given for recovery and rest.

Variables tested

1. **Breath hold capacity:** Cardio-vascular endurance
2. **Standing broad jump:** Explosive Strength
3. **Bridge-up test:** Flexibility
4. **Pull ups:** Muscular Strength
5. **Sit and reach:** Agility

Collection of data

A pre-test was conducted before starting training schedule for subjects to know their initial level of fitness. After 45 days completion of training a Post Test was conducted to find out effect of training schedule on subjects

Analysis of data

Collected data was analyzed by applying Critical ratio, Mean, Median, SD, SEM.

Table 1: showing the effect of Suriyanamaskar and Some selected Asana on Physical Fitness of Total sample

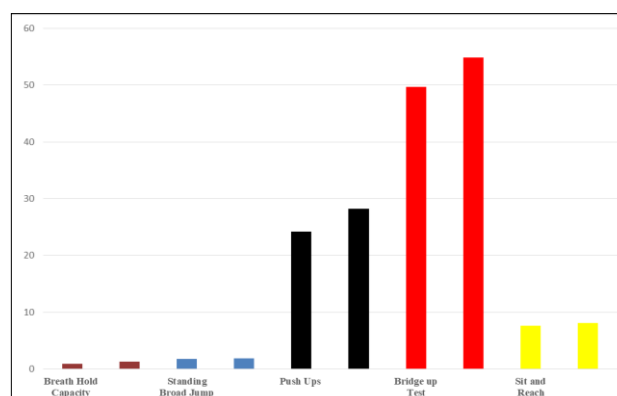
| Variance | Test | M | SD | SEm | “T”cal | “T”tab |
|----------------------|-----------|-------|------|------|--------|--------|
| Breath hold capacity | Pre test | 1.33 | 0.30 | 0.06 | 8.63 | 1.96 |
| | Post test | 2.71 | 0.46 | 0.1 | | |
| Standing broad jump | Pre test | 3.09 | 0.49 | 0.09 | 0.90 | |
| | Post test | 3.26 | 0.5 | 0.03 | | |
| Push ups | Pre test | 40.71 | 1.76 | 0.34 | 10.99 | |
| | Post test | 48.62 | 1.93 | 0.38 | | |
| Bridge up test | Pre test | 88.22 | 2.62 | 0.51 | 7.55 | |
| | Post test | 96.12 | 2.73 | 0.55 | | |
| Sit and reach | Pre test | 20.21 | 1.26 | 0.26 | 3.32 | |
| | Post test | 21.97 | 1.32 | 0.27 | | |

0.05 level of significance at 25

* Significant

@ Insignificant

Above table reveals the effect of Suryanamskar and Some selected Asana was found positive on physical fitness of total sample.it was further revels that significant difference was found in Breath hold Capacity, Push Ups Bridge up test and Sit and Reach Test as calculated t value 8.63,10.99,7.55,3.32 was found greater than the table value of t i.e. 1.96. It was also found that there was no significant effect on Standing Broad Jump of total sample as calculated t value 0.90 was less than the table value of t i.e. 1.96. Hence it was found that Suryaamskar and Asana effect significantly on physical fitness of individual.



Graph 1: Showing difference in mean value of different variables of total sample

Table 2: Effect of suryanamsakar and some selected asana on physical fitness of college going females

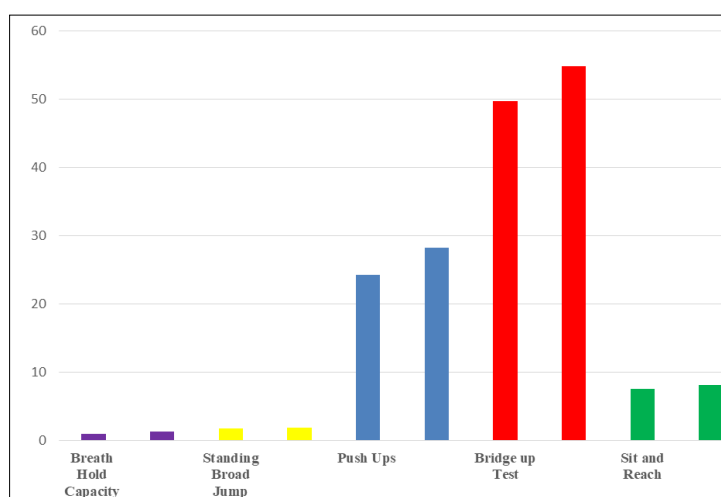
| Variance | Test | M | SD | SEm | “T”cal | “T”tab |
|----------------------|-----------|-------|------|------|--------|--------|
| Breath hold capacity | Pre test | 0.36 | 0.13 | 0.03 | 11.8 | 2.02 |
| | Post test | 1.43 | 0.26 | 0.06 | | |
| Standing broad jump | Pre test | 1.33 | 0.25 | .05 | 0.64 | |
| | Post test | 1.40 | 0.26 | 0.21 | | |
| Push ups | Pre test | 16.48 | 0.88 | 0.19 | 9.87 | |
| | Post test | 20.43 | 0.98 | 0.21 | | |
| Bridge up test | Pre test | 38.5 | 1.35 | 0.20 | 4.47 | |
| | Post test | 41.3 | 1.40 | 0.31 | | |
| Sit and reach | Pre test | 12.56 | 0.77 | 0.17 | 3.74 | |
| | Post test | 13.87 | 0.81 | 0.18 | | |

0.05 level of significance at 25

* Significant

@ Insignificant

It was revealed from the above table that significant effect of Suryanamskar and some selected Asana was found on physical fitness of college going female. As calculated t value of pre and Post Test of Breath hold capacity, Push-ups, Bridge up test and sit and reach test 11.8,9.87,4.67,3.74 respectively was found higher than table value of t i.e. 2.02. Above table further reveals that no significant difference in pre and Post Test was found in Standing Broad Jump of subject as calculated value 0.64 was less than the table value of t 2.02.

**Graph 2:** Showing difference in mean value of different variables of college going female**Table 3:** Effect of suryanamsakar and some selected asana on physical fitness of college going boys

| Variance | Test | M | SD | SEm | “T”cal | “T”tab |
|----------------------|-----------|-------|------|-------|--------|--------|
| Breath hold capacity | Pre test | 0.95 | 0.17 | 0.03 | 4.71 | 2.02 |
| | Post test | 1.28 | 0.20 | 0.04 | | |
| Standing broad jump | Pre test | 1.76 | 0.24 | 0.04 | 6 | |
| | Post test | 1.86 | 0.24 | 0.043 | | |
| Push ups | Pre test | 24.23 | 0.88 | .15 | 12.5 | |
| | Post test | 28.19 | 0.95 | 0.17 | | |
| Bridge up test | Pre test | 49.71 | 1.27 | 0.22 | 11.1 | |
| | Post test | 54.82 | 1.33 | 0.24 | | |
| Sit and reach | Pre test | 7.61 | 0.49 | 0.09 | 2.72 | |
| | Post test | 8.1 | 0.51 | 0.09 | | |

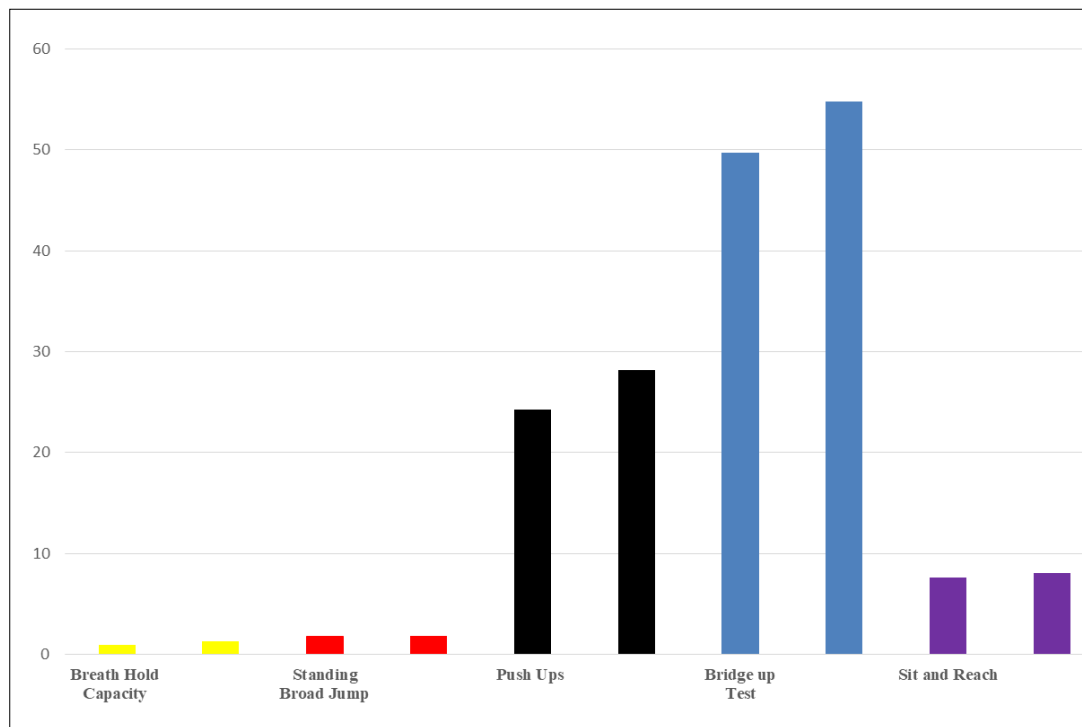
0.05 level of significance at 25

* Significant

@ Insignificant

The above table shows that there is positive effect of Suryanamskar and some selected Asanas on physical fitness of college going male. It can be further revealed that significant difference was found in Pre and Post Test of subjects in Breath hold Capacity, Standing Broad Jump, Push Ups Bridge up test and Sit and Reach Test as calculated t value 4.71, 6, 12.5, 11.1 and 2.72 respectively was greater than the table value of t i.e.2.02.

Results shown that Suryanamskar and Asana effect significantly on Physical fitness of subjects.



Graph 3: Showing difference in mean value of different variables of college going male

Conclusions

1. From the table I it was found that Suryaamskar and Asana effect significantly on physical fitness of individual as calculated value of Breath hold Capacity, Push Ups Bridge up test and Sit and Reach (8.63,10.99,7.55,3.32) was greater than the table value of 't'(1.96). It was also found that there was no significant effect on Standing Broad Jump of total sample.
2. Form table II it was found that Suryanamskar and some selected Asana effect significantly on physical fitness of college going female. Significant difference was found in Pre and Post Test of Breath hold capacity, Push-ups, Bridge up test and sit and reach test (11.8,9.87,4.67,3.74) whereas Pre and Post Test of Standing Broad Jump of subject shown insignificant effect of training program.
3. Table III shows that there is positive effect of Suryanamskar and some selected Asanas on physical fitness of college going male. Because significant difference was found in Pre and Post Test of subjects in Breath hold Capacity, Standing Broad Jump, Push Ups Bridge up test and Sit and Reach Test (4.71, 6, 12.5, 11.1, 2.72) Results shown that Suryanamskar and Asana effect significantly on Physical fitness of subjects.

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