

EFFECT OF SURYANAMASKAR ON SELECTED MOTOR FITNESS COMPONENT OF HIGH SCHOOL STUDENTS

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Abstract:

The main purpose of the study was to find out the effect of Surya namaskar on selected motor fitness component of high school students. To find out effect of surya namaskar on motor fitness components. The present study would be helpful the researcher and the students of high school to know the importance of motor fitness. The present study would be helpful to understand the value of Suryanamaskar to develop motor fitness of the high school students. This present study would be support to fitness aware among teachers, students and parents. It was hypothesized that there might be a significant effect of Suryanamaskar on selected motor fitness components of high school students. The study was delimited to thirty (30) subjects only The study was delimited to the subjects of Sai vidhyalaya, lohara Yavatmal.. The study was delimited to boy's studentonly The age of students varied from 14-16 years. To measure motor fitness through J.C.R test.and to measure variables such as explosive leg power, muscular strength and agility. Within the limitations of the present study, the following conclusions were drawn:

- 1.) On the basis of the results and findings it was concluded that there was significance differences on motor fitness between the experimental and control groups.
- 2). It was also concluded that there was significance differences on muscular strength between the experimental and control groups.
3. It was also found that there were significance differences on muscular power between the experimental and control groups.
- 3) It was also found that there were significance differences on agility between the experimental and control groups.
- 4). Finally it was concluded that six weeks suryanamaskar training significant effect on selected motor fitness components of high school students.

Keyword: Suryanamaskar, Moto Fitness ,Effect.

Today we are in 21st century there is a landmark development in the science and Technology including Space, Defense, Atomic energy, Computer, Internet service etc. Due to this advanced scientific technological invention the body movements of the human being have been restricted and also the sedentary habit has been created. This has resulted in high incidence of obesity, high rate of heart diseases and diabetes. These factors are very harmful to the human beings and their impact is visible not only on the elderly people but also on the younger generation.

The word 'Yoga' has a long history. It is an integral subjective Science. Its divisions into spiritual, mental or physical cannot be separated from each other. The word 'yoga' derived from the Sanskrit root 'Yujir' means 'to Yoke' or 'Union' or 'to join'. In its earliest usage it used to imply union of various things; the sense of bringing together; and Viyoga is the opposite of this implying separation. Yoga or Union is the merging of the individual soul with the cosmic or universal soul. This is an oft repeated, popular and old meaning of yoga. But the other meaning, being non-technical attributed later on implies a way of controlling the mind.

Suryanamaskara is a series of pose that consist of 12 (twelve) yoga postures done in a graceful and smooth sequence. Therefore, each pose serves as a bridge to the next for one complete flow. During the practice of sun salutation there are 10 sacred mantras observed to fully emphasis the benefits of this practice. Each mantra represents the key elements in the performance of Suryanamaskara that has delivered the benefits to the performing sun salutation as yogis known today.

Stages of Suryanamaskara:The following stages of suryanamaskara are as under;i) Namaskaram ii) Uttanasana iii) Dwi-Hastapadasana, iv) Ak-Hastapadasana v) Parvatasana vi) Bhunamanasana vii) Sastanga-Namaskara viii) Sarpasana ix) Parvatasana x) Ak-Hastapadasana xi) Dwi-Hastapadasana xii) Namaskaram.

Benefits of Suryanamaskara: There are so many benefits of Suryanamaskara as; it teaches how to develop latent powers both mental and physical. It develops strong will power and through this control of emotions, resistance to the temptation of passion, power and greed, resistance to all unworthy desires. It also promotes long life happiness and unity. This is the only exercise which affects in most parts of the body.

Study and Material:

Statement of the problem: The himself is the student of physical education and is also a conscious person about physical fitness and motor fitness. He knows very well, that motor ability play a vital role in physical education and sports. Childhood is a very important period of life, the promotion of physical activity has been identified as a major public health priority. Hence the problem as; "Effect of suryanamaskar on selected motor fitness component of high school students."

Purpose: The main purpose of the study was to find out the effect of Suryanamaskar on selected motor fitness component of high school student.

Objectives. To find out effect of suryanamaskar on motor fitness components.

Significance i) The present study would be helpful the researcher and the students of high school to know the importance of motor fitness. ii) The present study would be helpful to understand the value of Suryanamaskar to develop motor fitness of the high school students. v) This present study would be support to fitness aware among teachers, students and parents.

Hypothesis: It was hypothesized that there might be a significant effect of Suryanamaskar on selected motor fitness components of high school students.

Scope & limitation : -i) The study was delimited to thirty (30) subjects only .ii) The study was delimited to the subjects of Sai vidhyalaya, lohara Yavatmal. .iii) The study was delimited to boy's student only iv) The age of students varied from 14-16 years. v) The study was delimited to measure motor fitness through J.C.R test. vi) The study was delimited to measure variables such as explosive leg power, muscular strength and agility.

Methodology:

In this procedure for sources of data, selection of subjects, criterion measures, test administration, experimental design, and data collection were described. **Source:** For the present study was selected thirty (30) subjects from Sai Vidyalaya, Yavatmal. **Selection:** For this study randomly. The age of the subjects ranged between 14 to 16 years. **Criterion measures:** For the present study used to measure the following motor fitness variables through the J.C.R test. A) Muscular Strength B) Power: C) Agility:

Statistical Analysis & Interpretation

The collected data of this study tabulated in different tables for the statistical treatment. The hypothesis was tested and results were interpreted after analyzing the statistical findings. To see any significant differences'' test was used at 0.05 level of confidence.

Discussion of findings:

All the data pertaining to the present study were examined by employing 't' test to find out whether any significance difference between the means of motor fitness component of high school students. The following notations were used for all the subsequent tables for elaborations. E.G. – Experimental group, C.G. – Control group, N – Number of subjects in group, M – Mean score of the group, SD – Standard deviation of , 't' – 't' value, H_0 – Null hypothesis, df – degree of freedom, 't' follows t distribution with $(N_1 + N_2 - 2)$ in .05 level of significance.

Mean differences between the pre and post test of experimental and control groups on muscular strength, muscular power and agility.

Sr.	Group		Test	N	M	SD	MD	't' value
1	muscular strength	E.G	Pre test	15	5.34	1.42	0.07	0.13
2		C.G	Pre test	15	5.27	1.37		
1		E.G	Post test	15	7.63	2.43	2.26	3.09*
2		C.G	Post test	15	5.37	1.47		
1	muscular power	E.G	Pre test	15	6.32	1.64	0.17	0.29
2		C.G	Pre test	15	6.49	1.52		
1		E.G	Post test	15	9.00	1.8	2.7	4.47*
2		C.G	Post test	15	6.33	1.5		
1	agility	E.G	Pre test	15	7.15	0.85	0.3	0.96
		C.G	Pre test	15	7.18	0.89		
2		E.G	Post test	15	6.12	0.91	1.04	3.35*
		C.G	Post test	15	7.16	0.84		

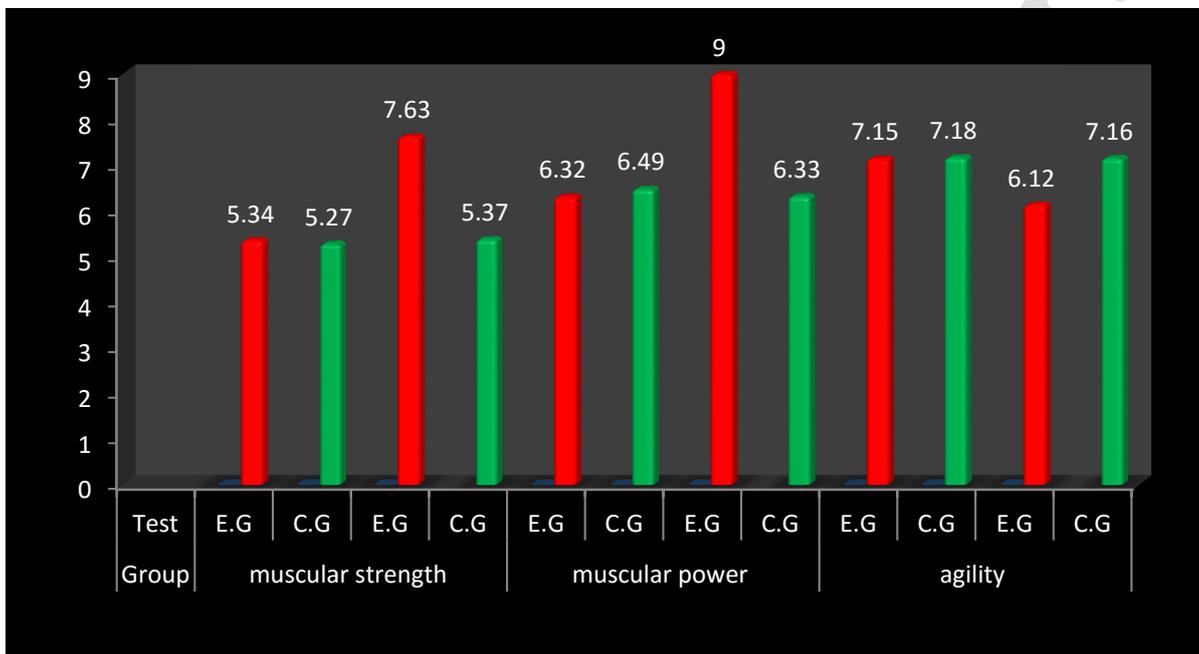
*Significance at .05 level Tabulated 't' value of df (28) =2.04

Table-1 reveals that the pre test mean of experimental and control groups muscular strength are 5.34 and 5.27 and their calculated 't' value is 0.13 which is lesser than that of tabulated value 2.04 at 0.05(28) level of confidence. There is no significance difference found between the experimental and control groups of pre test on muscular strength. Whereas the mean of post test experimental and control groups are 7.63 and 5.37 and their calculated 't' value is 3.09 which is greater than that of tabulated value 2.04 at 0.05(28) level of confidence. It was indicated that there is significance difference between the experimental and control groups of post test on muscular strength. It can be said that six weeks suryanamaskar effect on muscular strength of experimental group. Hence, the null hypothesis is rejected.

shows that the pre test mean of experimental and control groups on muscular power are 6.32 and 6.49 and their calculated 't' value is 0.29 which is lesser than that of tabulated value 2.04 at 0.05(28) level of confidence. There is no significance difference found between the experimental and control groups of pre test on muscular strength. Whereas the mean of post test experimental and control groups are 9.00 and 6.33 and their calculated 't' value is 4.47 which is greater than that of tabulated value 2.04 at 0.05(28) level of confidence. It was indicated that there is significance difference between the experimental and control groups of post test on muscular power. It can be said that six weeks suryanamaskar effect on muscular power of experimental group. Hence, the null hypothesis is rejected.

shows that the pre test mean of experimental and control groups on muscular power are 7.15 and 7.18 and their calculated ‘t’ value is 0.96 which is lesser than that of tabulated value 2.04 at 0.05(28) level of confidence. There is no significance difference found between the experimental and control groups of pre test on agility. Whereas the mean of post test experimental and control groups are 6.12 and 7.16 and their calculated ‘t’ value is 3.35 which is greater than that of tabulated value 2.04 at 0.05(28) level of confidence. It was indicated that there is significance difference between the experimental and control groups of post test on agility. It can be said that six weeks suryanamaskar effect on agility of experimental group. Hence, the null hypothesis is rejected.

The mean comparison of pre and post test of experimental and control groups on muscular strength, muscular power and agility. have been graphically presented in the fig-1.



Discussion of findings:

On the basis of the results and findings it was concluded that there are significance differences in motor fitness variables between the experimental and control groups. It was found that experimental group is highly muscular strength, muscular power, and agility then that of control group. It may be attributed to the fact that six weeks suryanamaskar training may be improve the muscular strength, muscular power and agility of the experimental group.

5.2 Conclusions:

Within the limitations of the present study, the following conclusions were drawn:

1. On the basis of the results and findings it was concluded that there was significance differences on motor fitness between the experimental and control groups.
2. It was also concluded that there was significance differences on muscular strength between the experimental and control groups.
3. It was also found that there were significance differences on muscular power between the experimental and control groups.
3. It was also found that there were significance differences on agility between the experimental and control groups.
4. Finally it was concluded that six weeks suryanamaskar training significant effect on selected motor fitness components of high school students.

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