

Suryanamaskar on core fitness on girl's collegiate students of Goa

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Abstract

The Purpose of this study was examining the Suryanamaskar on core fitness of collegiate girls' students. Population of this study were tested and selected a total number of 20 as samples aged 18-21 years were selected on the basis of purposively method of sampling technique from cuncolim educational society colleges of arts and commerce cuncolim, Goa state. Who had failed into three to six test items with the help of randomly method of sampling from Nashik District. Samples were divided into two group i.e., 10 experimental & 10 control groups. The experimental group were given the 60 minutes Suryanamaskar program, but the controlled group did not part in Suryanamaskar program. The duration of Suryanamaskar program was twelve weeks. Kraus & Weber minimum muscular fitness test pre and post test conducted on both groups and data was analyzed by independent sample t-test. The results showed the descriptive statistics gain of pre and post-tests of subjects on Kraus-Weber's minimum muscular fitness tests. A significant level at 0.05, effect of Suryanamaskar was found to improve the core fitness.

Keywords: Suryanamaskar program, Kraus-Weber's minimum muscular fitness

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Introduction

The main need today is to develop system through effective health care be made both accessible and acceptable to the players. 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. Lot of awareness is seen among the people of our country regarding the level of physical fitness. 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.

Materials and Methods

The effect of the Suryanamaskar program in improving core fitness of collegiate students such as muscular strength and flexibility. 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. In research whole population a total number of 20 players were selected who had failed into

three to six test items on the basis of purposively method of sampling technique from cuncolim educational society colleges of arts and commerce cuncolim, Goa state. The study was taken to pinpoint the variables was core fitness & tools for data collection Kraus-Weber's minimum muscular fitness test consists of six items which indicate the level of muscular strength and flexibility of key muscle group. 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 with the help of purposively method of sampling and weeks Suryanamaskar program which was given six days in a week was manipulated only on experimental group. After Suryanamaskar program only the groups i.e., experimental and control groups, were post tested for data collection. 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.

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 statistical analysis

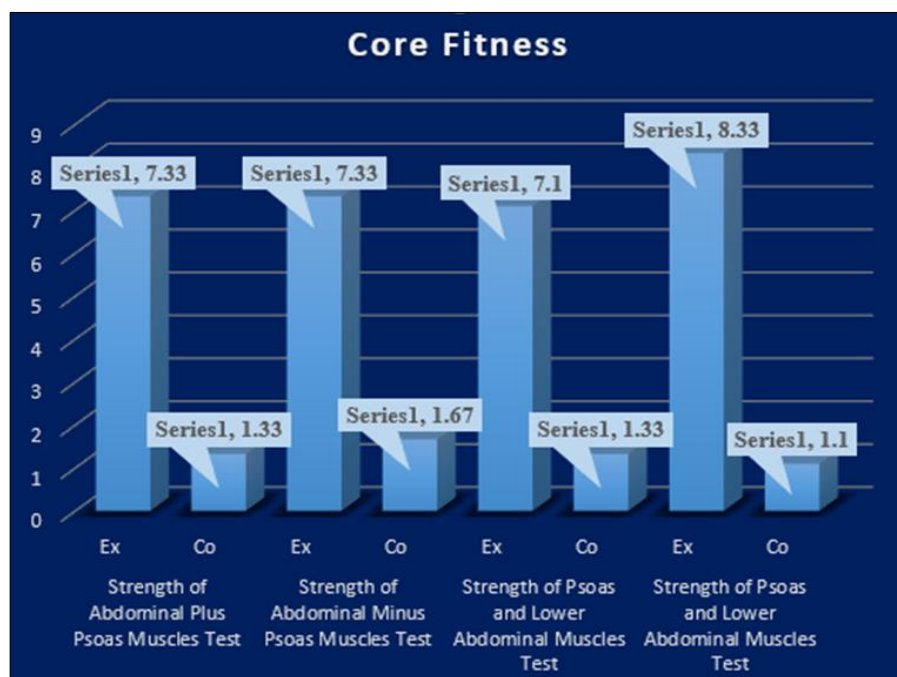
Test	Group	N	Mean	SD
Strength of abdominal plus psoas muscles test	Experimental	10	7.33	5.20
	Control	10	1.33	5.07
Strength of abdominal minus psoas muscles test	Experimental	10	7.33	5.83
	Control	10	1.67	5.30
Strength of PSOAS and lower abdominal muscles test	Experimental	10	7.00	5.35
	Control	10	1.33	4.34
Floor touch test	Experimental	10	8.33	3.79
	Control	10	1.00	3.05

Table 2: Independent sample t-test analysis

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	5.66	3.93	0.001
	Control			
Strength of PSOAS and lower abdominal muscles test	Experimental	5.66	4.50	0.001
	Control			
Floor touch test	Experimental	7.33	8.25	0.001
	Control			

The mean of gain in experimental and control group was compared with independent t-test. The calculated 't' value of subjects in tests Abdominal and Psoas muscles, Abdominal muscles without Psoas, Test strength of Psoas and Lower Abdominal muscles, 4.52, 3.93, 4.50, and 8.25 respectively. To

determine the effect of Suryanamaskar program on core fitness of collegiate student's independent sample t-test was used at 0.05 levels of significance in relation to pre & post-test of Kraus-Weber's minimum muscular fitness tests. A significant level at 0.05 ($P=0.001$).

**Fig 1:** Significant improvement in core muscular fitness after Suryanamaskar ($P=0.001$)

The Figure 1 shows that there was significant improvement in minimum muscular fitness tests of experimental group due to treatment.

Discussion of findings

Discussion on the results of Kraus-Weber minimum muscular fitness test consists of four 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 program on core fitness of collegiate students

from Table 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 core fitness of experimental group.

This finding was supported by Singh K, *et al.* (2010) [2] 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

The result obtained in the study the researcher made the conclusion that twelve weeks Suryanamaskar program was significantly effective to improve the core fitness of collegiate girls' students which indicate the level of muscular strength and flexibility of key muscle group.

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