

ISSN: 2456-4419

Impact Factor: (RJIF): 5.18

Yoga 2019; 4(1): 627-628

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www.theyogicjournal.com

Received: 27-11-2018

Accepted: 30-12-2018

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Influence of asana with Surya Namaskar practices on core strength among intercollegiate cricket players

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Abstract

The purpose of the study was to find out the influence of asana with surya namaskar practices on core strength among intercollegiate cricket players. To achieve the purpose of this study, 20 men intercollegiate cricket players were randomly selected as subjects from The Sadakathullah Appa College, Tirunelveli, Tamilnadu, India. Their age ranged from 18 to 25 years. The selected participants were randomly divided into two groups such as group 'A' asana with surya namaskar (n=10) and group 'B' acted as control group (n=10). Group 'A' underwent asana with surya namaskar for three days per week and each session lasted for an hour for eight weeks. Control group was not exposed to any specific training but they were participated in regular activities. The "plank test" (in seconds) was used to measure core strength were selected as variables. The pre and post tests data were collected on selected criterion variables prior to and immediately after the training program. The pre and post-test scores were statistically examined by the dependent 't' test and Analysis of co-variance (ANCOVA). The level of significance was fixed at .05 level of confidence, which was considered as appropriate. It was concluded that the yogic practices group had shown significantly improved in back strength and core strength. However the control group had not shown any significant improvement on back strength and core strength.

Keywords: Asana with surya namaskar, Core strength

Introduction

Yoga is the science of right living and, as such, is intended to be incorporated in daily life. It works on all aspects of the person: the physical, vital, mental, emotional, psychic and spiritual. On a more practical level, yoga is a means of balancing and harmonizing the body, mind and emotions [1].

Surya Namaskar intends to bow down to the sun in the morning. The sun is the life hotspot for this planet. In everything that you eat, drink and inhale, there is a component of the sun. Just in the event that you figure out how to better "process" the sun, disguise it, and make it a piece of your framework, do you really profit by this procedure. Surya Namaskar is an excellent cardiovascular workout and a good way to lose weight. Some of the Sun Salutation poses help lose extra fat on belly by stimulating sluggish glands like the thyroid gland (which has a big effect on our weight) to increase hormonal secretions. Regularly practicing Surya Namaskar can regulate irregular menstrual cycles among women and also ensure an easy childbirth, reduces the feeling of anxiety and restlessness, and improves flexibility in spine and in limbs [2]. Strength exercises for the abdominal muscles among student participants in experiments have been reported to increase stability of the lumbar spine [3]. Core training excluding the diaphragm for elderly individuals can also improve balance ability [4]. Strength exercises for these four muscles are therefore hypothesized to help improve balance ability during sitting without support.

Purpose of the Study

The purpose of the study was to find influence of asana with surya namaskar practices on core strength among intercollegiate cricket players.

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Methodology

To achieve the purpose of this study, 20 men inter collegiate cricket players were randomly selected as subjects from The Sadakathullah Appa College, Tirunelveli, Tamilnadu, India. Their age ranged from 18 to 25 years. The selected participants were randomly divided into two groups such as group ‘A’ ‘asana with surya namaskar practices’ (n=10) and group ‘B’ acted as control group (n=10). Group ‘A’ underwent asana with surya namaskar practices for three days per week and each session lasted for an hour for eight week. However, control group was not exposed to any specific

training but they participated in their regular schedule. The “plank test” (in seconds) was used to measure core strength were selected as criterion variables. The pre and post tests data were collected on selected criterion variables prior to and immediately after the training program. The pre and post-test selected criterion variable scores were statistically examined by the dependent ‘t’ test and Analysis of Covariance (ANCOVA). The level of significance was fixed at .05 level of confidence, which was considered as appropriate.

Analysis of Data

Table 1: Means and Dependent ‘T’ Test for the Pre and Post Tests on Core Strength of Experimental and Control Groups

Criterion variables	Test	Experimental Group Mean	Control Group Mean
Core strength (in seconds)	Pre test	70.14	71.22
	Post test	83.27	77.89
	‘t’ test	16.12*	2.19

*Significant at .05 level. (Table value required for significance at .05 level for ‘t’-test with df 9 is 2.26)

The table-1 shows that the pre-test mean value of experimental and control groups on core strength are 70.14 and 71.22 respectively and the post test means are 83.27 and 77.89 respectively. The obtained dependent t-ratio values between the pre and post test means of asana with surya namaskar practices and control groups are 16.12 and 2.19 respectively. The table value required for significant

difference with df 9 at 0.05 level is 2.26. From the above table the dependent ‘t’-test value of core strength between pre and post tests means of experimental group was greater than the table value 2.26 with df 9 at .05 level of confidence, it was concluded that the experimental group had significant improvement in the core strength when compared to control group.

Table 2: Computation of Mean and Analysis of Covariance on Core Strength of Experimental and Control Groups

	Experimental Group	Control Group	Source of Variance	Sum of Squares	Df	Mean Square	F
core strength (Adjusted Post Mean)	83.88	77.91	BG	516.56	1	516.56	35.84*
			WG	262.37	17	13.67	

* Significant at 0.05 level. Table value for df 1, 17 was 4.45

Table-2 shows that the adjusted post test means values on core strength of experimental and control groups 83.88 & 77.91 respectively. The obtained f- ratio of 35.84 for adjusted post test mean is greater than the table value 4.45 with df 1 and 17 required for significance at 0.05 level of confidence. The results of the study indicated that there was a significant mean difference exist between the adjusted post test means of asana with surya namaskar practices and control groups on core strength.

The bar diagram figure-1 shows that the mean values of pre, post and adjusted post tests on core strength of asana with surya namaskar practices and control groups.

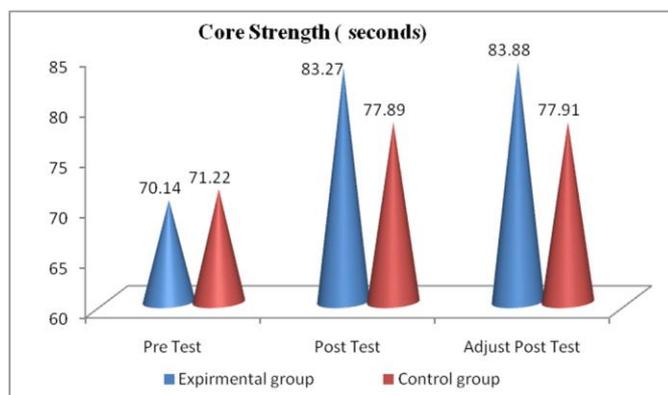


Fig 1: Pre, post and adjusted post tests mean values of experimental and control groups on core strength (in seconds).

Conclusions

1. There was significant improvement on core strength due

to the influence of asana with surya namaskar practices among intercollegiate cricket players.

2. However the control group had not shown any significant improvement on any of the selected variables.

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