

Effect Of Suryanamaskar On Flexibility Of Middle Elementary School Students

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Abstract

The purpose of the study was to find out the effect of 6-weeks surya namaskar on flexibility of middle elementary school students. The study was based on sample of 30 middle elementary school students. $N_1=15$ for experimental group and $N_2=15$ control group. The age of the subjects was ranging from 11-14 years. The variables selected for the present study were Suryanamaskar training (independent variable) and flexibility (dependent variables). Double Groups pre and post test Design was employed. The flexibility data was collected by administering Sit and Reach test. Pre-test was conducted before starting the training and post-test was conducted after 6-weeks Suryanamaskar training. In order to find out the effect of Suryanamaskar on flexibility analysis of covariance test was employed. The result showed that there was a significant difference between Experimental group and Control group after 6-week Suryanamaskar training on flexibility as the calculated F -value (18.59) was quite more than tabulated F -value (4.21).

Keywords: Suryanamaskar, Flexibility

Introduction

Surya Namaskara or Sun Salutation is a common sequence of Hatha yoga asanas. This sequence of movements and poses can be practised on varying levels of awareness, ranging from that of physical exercise in various styles, to a complete sadhan, which incorporates asana, pranayama, mantra and chakra meditation. The physical base of the practice links together twelve asanas in a dynamically performed series. These asanas are ordered so that they alternately stretch the spine backwards and forwards (Iyengar, 2001). When performed in the

usual way, each asana is moved into with alternate inhalation and exhalation (except for the sixth asana where the breath is held in external suspension). A full round of Surya namaskara is considered to be two sets of the twelve poses with a change in the second set to moving the opposite leg first through the series. Proponents of the use of Surya namaskara as part of the modern yoga tradition prefer to perform it at sunrise, which the orthodox consider to be the most 'spiritually favourable' time of the day. Surya Namaskar provides all of the key health benefits of yoga in a very succinct package. It is a holistic exercise that provides physical health benefits, but also mental or emotional as well as

spiritual benefits. The obvious advantage of Surya Namaskar is the workout it provides for the muscles, but it also benefits joints, ligaments and the skeletal system by improving posture, flexibility and balance. In addition to these physical benefits, Surya Namaskar practice stimulates and conditions virtually every system in the body. It is good for the heart and stimulates the cardiovascular system. It oxygenates the blood and helps strengthen the heart. Surya Namaskar is good for the digestive system and the nervous system.

Suryanamaskar is an ancient Indian method of offering prayers to the rising Sun in the morning along with a series of physical postures with regulated breathing aiming at range of physical, mental and spiritual benefits (parag). Suryanamaskar is a graceful combined sequence of twelve postures along with regulated breathing and relaxation. It helps to relieve stiffness, revitalizes the body, refreshes the mind and purifies subtle energy channels. There are number of study have been conducted on Suryanamaskar and found significant improvement in flexibility.

Flexibility is the capacity of muscle to extend without any damage. The word flexibility is derived from the Latin word flectere or flexibilis which mean to bend and is defined as the "ability to be bent, pliable." (Science of flexibility). Flexibility

is the one of the most important component of physical fitness.

Practice of asana in one of the best way to improve flexibility. There are plenty of study are to be done to see the effect of yogic asanas on flexibility and Suryanamaskar is itself combination of six asanas.

Purpose of the Study

The main purpose of the study was to determine the effect of 6-week Surya Namaskar practice on flexibility of middle elementary school students.

Methodology

For the purpose of this study total thirty male students (N1=15 experimental group and N2 =15 control group) were selected as subjects from Middle Elementary School Students The age of the subjects was ranging from 11-14 years. The experimental group was given 6 weeks Suryanamaskar training on flexibility and control group was not given treatment. Flexibility was measured by sit and reach test and recorded in centimeter The training protocol includes 5 days/week; each session of 40minute.Pace of Surya Namaskar was 2 minutes for each round. It means around 10 seconds was taken each step.

Table 1: Analysis of Co-variance of the Means of the Experimental and Control Groups on Flexibility

Test	Experimental Group	Control Group	Source of Variance	df	Sum of Squares	Mean Squares	F-ratio
Pre-test Mean	9.90	11.50	B	0	50.7	50.5	2.30
			W	2	600.60	20.70	
Post-test Mean	13.50	10.6	B	0	6.50	6.50	0.28
			W	2	630.28	20.55	
Adjusted Post-test Mean	25.12	10.30	B	0	25.12	40.24	16.58
			W	2	10.32	2.20	

* Significant at 0.05 level of confidence

It is evident from the above table that there is significant effect of suryanamaskar on flexibility as markers of antioxidant capacity in women”. J Sports Med Phys Fitness;48:113–9.

the ‘F’-value of adjusted post- test of 18.59 was numerically quite more than that of tabulated F-value of 4.21 at 0.05 level of confidence.

Discussion of Findings

The finding of statistical analysis reveals that there is significant improvement in flexibility of the selected experimental group due to 6-week surya namaskar practice. It may be attributed to the fact that during Surya Namaskar practice, it requires to stretch different parts of the body which make muscle or joint relax and flexible. This study is also supported by Singh Kanwaljeet *et al.* (2010) [4] who conducted an experimental study entitled “the effect of suryanamaskar yogasana on muscular endurance and flexibility among intercollege yoginis” which indicated that muscular endurance and flexibility significantly improved after six week suryanamaskar yogasana. Choudhary R, Krzytof Stec (2010) [1] also conducted an experimental study entitled “The Effects of Dynamic Suryanamaskar on Flexibility of University Students” which also indicated that flexibility significantly improved after six week Dynamic Suryanamaskar. From the various studies and findings it is confirmed that flexibility significantly improved after Surya namaskar training.

Conclusion

Considering the limitations of the study and on the basis of statistical finding it is concluded that there is significant improvement on flexibility after six week suryanamaskar training on middle elementary school students of Kerekoni Adarsh high School from Dhemaji district of Assam.

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