

## THE EFFECT OF SURYANAMASKAR ON THE FLEXIBILITY DEVELOPMENT OF JUDOKAS

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### Abstract

**Objective** - The objective of the study was to determine the effects of suryanamaskar (sun salutations) on the flexibility development of judokas.

**Method** -Thirty randomly selected male students aged 17-25 years volunteered to participate in the study. They were randomly assigned into two groups: A (experimental) and B (control). The subjects were subjected to a six week suryanamaskar training programme. The difference in the mean of each group for selected variable was tested for the significance of difference by Descriptive Statistics. The level of significance was set at 0.05.

**Results:** The flexibility significantly improved in group a compared with the control one.

**Conclusions:** Surya namaskar may be recommended to improve flexibility.

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### INTRODUCTION

Surya means Sun in Sanskrit word and Namaskar is the Hindi word for Salutation or greeting. It comes from the root 'Nam' meaning to bow. So Namaskar essentially means Salute, Salutation or greeting. Sun salutation can be found in the Indian Vedas, which are the oldest spiritual scriptures known. Surya Namaskar or Sun Salutation is a common sequence of Hatha Yoga Asana. Its origins lie in a worship of Surya the Indian.

Surya Namaskar is the art of solar Vitalization. It is a complete meditative technique in itself as it includes Asanas, Pranayama, Mantras and Mudras. In many cultures, light has been a symbol of consciousness and self illumination. The practice of Surya Namaskar everyday, early in the morning is the real worship to the Sun God. The Sun God is the source of energy to all. Surya-Namaskar as it literally translates from Sanskrit, is a sequence of Yoga exercise performed in worship of Surya, the Sun God. It is a Unique system which is handed over by the Hindu Sages of the past for the development of individuals body, mind and soul.

Surya Namaskar is a series of twelve postures performed a single graceful way. Each movement is Coordinated with the breath. It is an all round exercise for the young and all men and women mantras – There are 12 mantras with four parts to each mantra, The first part is the chanting of Aum. The chanting of Aum mantra activates stomach, heart, brain and the overall body / mind, thus creating vibrations in the associated chakras.

Surya namaskar is most useful and popular mode of yogic exercises and briefly bestows the benefits of asanas.it energizes the entire neuro – glandular and neuro muscular system of the body and its perfect harmony to all the system of the body, thus invigorating the entire psychosomatic system of human constitution. Flexibility is one and important input in process of skill development and yoga is an ancient health – art developed and perfected over the centuries by the sages and wise men of ancient India.

It can be amazing improvement in our flexibility. Yoga has many benefits in comparison to many other exercises. It is an exercise that can be done age group and even by the most unfit people. Yoga is also the most comprehensive of all exercises as it benefits each part of body.



**Objective of the Study -**

- To find out the status of judokas in relation to flexibility.
- To find out the effect of suryanamaskar on flexibility of judokas

**Selection Of The Subject** – For the purpose of this study thirty (30) male judo player were selected randomly. Their age ranged from 17- 25 years of age.

## Collection of Data

The data were collected at S.G.G.S KHALSA COLLEGE, MAHILPUR; Necessary instructions were given to the subjects before administration of the test. Data were collected on the basis of **AAHPER**, health related physical fitness test and we use one test item Sit and reach test for this study.

**Training Schedule** -Subjects were randomly divided into the two groups of 30 each (experimental and control) and trained to perform SN by a qualified instructor. SN consists of a sequence of 12 postures performed in a rhythmic manner starting in an upright standing position and then moving into alternate forward and backward bending movements interspaced with movements involving all four limbs before ending the practice in an erect standing position.

## Statistical Analysis

To find out the effect of suryanamaskar on flexibility of judo players ANCOVA (analysis of co- variance) was used and the level of significance was set at 0.05.

## Findings

**Table – 1**  
**Descriptive Statistics of Flexibility of Experimental and Control Group in Pre-Test and Post-Test**

		<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>	<b>Minimum</b>	<b>Maximum</b>
Pre Test	Suryanamaskar Group	14.2667	5.57045	1.01702	2.00	25.00
	Control Group	14.1633	5.28149	.96426	4.00	23.90
Post Test	Suryanamaskar Group	16.8000	4.91563	.89747	6.00	27.00
	Control Group	13.9710	5.34830	.97646	3.70	23.50

**Table – 2**  
**Analysis of Variance of Comparison of Means of Experimental and Control Group in Relation to Flexibility**

		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Pre Test	Between Groups	.160	1	.160	.005	.941
	Within Groups	1708.796	58	29.462		
Post Test	Between Groups	120.049	1	120.049	4.550	.037
	Within Groups	1530.266	58	26.384		

\*Significant at .05 level

F value required to be significant at 1, 56 df = 3.11

In relation to pre test, table – 2 revealed that the obtained ‘F’ value of .005 was found to be insignificant at 0.05 level, since this value was found less than the tabulated value 4.02 at 1.56 df.

In relation to post test, significant difference was found between experimental group and control group pertaining to flexibility, since F value of 4.550 was found significant at .05 level.

**Table – 3**  
**Analysis of Covariance of Comparison of Adjusted Post Test Means of Experimental and Control Group in Relation to Flexibility**

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Contrast	112.010	1	112.010	132.479	.000
Error	48.193	57	.845		

\*Significant at .05 level

F value required to be significant at 1, 57 df = 4.02

Table-3 revealed that the obtained ‘F’ value of adjusted post – test was found to be significant at 0.05 level, since this value was found greater than the tabulated value **4.02** at 1, 57 df.

## Discussion

The findings of the study as revealed by the statistical analysis have comprehensively brought forward the facts about efficacy of suryanamaskar as traditional regular exercise. Findings have clearly showed that, the 20 minutes of practice for five days in a week have proportionally effected flexibility of judo players.

This finding can be well attributed to the facts that a well planned exercise programme does improve every systems of human functioning, organic structure their by inducing rise in working ability evident through fitness development.

The very success of the experimentation also shows- training programme (suryanamaskar) primarily well planned, administered and highly feasible even in the Indian context and environment.

Above finding are in consonance with finding of Mr. Sell EH, conditions. The study was conducted for three months physical training which showed improvement in the physiological parameters .i.e. blood pressure resting heart rate and also on physical parameter i.e. flexibility and endurance were found to be.

As per table 2 shows that significance difference was found between experimental group and control group pertaining to flexibility.As per table 3 shows there was significance difference was found in relation to flexibility.

This study indicate that effect of surya namaskar on flexibility attributes reveals the beneficial changes which improve the flexibility of judokas of S.G.G.S KHALSA COLLEGE MAHILPUR

## Conclusion

Scientific research has shown that yogic techniques produce consistent and beneficial physiological changes. A few weeks of disciplined yoga practice can lead to improvement in many physiological and psychological functions. It is claimed that suryanamaskar practice improves general health and fitness. It improves flexibility, cardiovascular function. Suryanamaskar is the combination of asana and Pranayama and it is simple to practice, consumes only less time so that judokas can practice it every day Yoga develops many wonderful qualities, and makes the judokas healthy for their future life. It also sharpens the ability to focus, self-confidence, and helps to develop self-discipline. We therefore conclude that suryanamaskar should be practised by judokas every day to get these beneficial effects in relation to flexibility.

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