



EFFECTS OF SURYA NAMASKAR ON STRESS

Manya.Suresh^{1*} and Preetha S²

¹BDS Saveetha Dental College, 162, Ponamallee high road, Chennai, Tamil Nadu, India

²Department of Physiology, Saveetha Dental College, 162, Ponamallee high road, Chennai, Tamil Nadu, India

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ABSTRACT

Aim: To study the effect of surya namaskar on stress.

Background: The study is done to assess the effect of Surya Namaskar on stress. The solar plexus (located behind the navel, which is the central point of the human body), also known as the second brain, is said to be connected to the sun. This is the main reason why the ancient rishis recommended the practice of Surya Namaskar, because the regular practice of this technique enhances the solar plexus, which increases one's creativity and intuitive abilities. This study is conducted in a yoga centre based on their experience this study finds the effect of yoga on stress management.

Materials and Methods: The participants for the study included 50 persons who were aged between 25-50 years. 25 persons were practicing surya namaskar and 25 people were not practising surya namaskar. A questionnaire assessing the stress experienced by an individual was distributed among them.

Results: It provides the individual with refreshing experiences and ability to manage stress to a great level and to help get rid of psychotic and mood refreshing drugs and tries to find the effect of yoga on management of stress.

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INTRODUCTION

In today's world everyone are prone to get stressed. Stress management refers to the wide spectrum of techniques and psychotherapies aimed at controlling a person's levels of stress, especially chronic stress, usually for the purpose of improving everyday functioning. Stress produces numerous physical and mental symptoms which vary according to each individual's situational factors which include physical health decline as well as depression. The process of stress management is named as one of the keys to a happy and successful life in modern society.^[6] Although life provides numerous demands that can prove difficult to handle, stress management provides a number of ways to manage anxiety and maintain overall well-being, one among stress management is yoga practice. Yoga helps you to access an inner strength that allows you to face the sometimes-overwhelming fears, frustrations, and challenges of everyday life. Surya Namaskar, or Sun Salutation, is a yoga warm up routine based on a sequence of gracefully linked asanas.^{[1][2]} The nomenclature refers to the symbolism of Sun as the soul and the source of all life.^[3] It is relatively a modern practice that developed in the 20th century.^[4] Surya Namaskara may also refer to other styles of "Sun Salutations". A yogi may develop a personalized yoga warm up routine as surya-namaskar to precede his or her asana practice.^[5]

It has been said (by the ancient Rishis of India) that the different parts of the body are governed by different Devas (divine impulses or divine light). The solar plexus (located behind the navel, which is the central point of the human body) is said to be connected with the Sun. This is the main reason why the ancient Rishis recommended the practice of Surya Namaskar, because the regular practice of this technique enhances the solar plexus, which increases one's creativity and intuitive abilities. Surya Namaskar is best done early morning on an empty stomach. Let's begin with these simple yet effective Sun Salutation steps on our way to good health. Each round of Sun Salutation consists of two sets, and each set is composed of 12 yoga poses. You might find several versions on how to practice Sun Salutation. However, it is best to stick to one particular version and practice it regularly for best results.^[7]

- In standing position join the palms together, thumbs at a 90 degree angle from the fingers, pressed against the sternum. Exhale while inhaling stretch the arms up, look up and gently bend backwards
- Exhale bend forward from the hips coming into standing forward bend, try to place the palms on the floor and head toward the knees or shins.:
- Inhale step the left leg back into half cobra position, keeping the foot erect and resting the left knee on the floor. Push the hips down towards the ground and bend the neck back. Push the chest forward, opening the

*Corresponding author: Manya.Suresh

BDS Saveetha Dental College, 162, Ponamallee high road, Chennai, Tamil Nadu, India

chest and pulling the shoulders back.

- Try to bring the calf and thigh of the right leg close together. Hold the breath, bring the right leg back, joining the feet together, keeping the arms, legs and back straight in Plank Pose. Your feet should remain erect.
- While exhaling, first bring the knees to the ground, then the chest and finally the forehead, coming into Ashtanga position, keeping the hips and abdomen off the ground.
- While inhaling come into the Cobra Position, straightening the arms, keeping the toes erect and legs together, knees and hips on the ground. Push the chest forward and pull the shoulders back, gazing up towards the ceiling.
- Exhale raise the hips up into downward dog. Keep the arms and legs straight. Tuck the chin in towards the chest, push the body backwards and try to lower the heels to the floor. Push the forehead down towards the floor.
- Inhale and step the right leg forward between the hands coming back into the half cobra position.
- While exhaling bring the left leg forward into Standing Forward Bend.
- Inhale, straighten the body up and come back to standing with palms joined in front of your chest.

MATERIALS AND METHODS

The study involved 50 people from the age 25-50 to analyse their stress level and to find the effect of SURYA namaskar on stress.

In our study we have taken 25 participants who practiced yoga and 25 participants who did not practice yoga. If they had a score between 0-13 they were considered to have low stress, if it was between 14-26 they were considered to have moderate level of stress and if they had 27-40 they were considered to have high level of stress. Perceived stress scale was given to them and the score was calculated.

| S.no | Do you do yoga? | Stress score | Stress level |
|------|-----------------|--------------|--------------|
| 1 | Yes | 16 | Moderate |
| 2 | Yes | 11 | Low |
| 3 | Yes | 10 | Low |
| 4 | Yes | 22 | Moderate |
| 5 | Yes | 17 | Moderate |
| 6 | Yes | 13 | Low |
| 7 | Yes | 9 | Low |
| 8 | Yes | 9 | Low |
| 9 | Yes | 12 | Low |
| 10 | Yes | 13 | Low |
| 11 | Yes | 18 | Moderate |
| 12 | Yes | 8 | Low |
| 13 | Yes | 18 | Moderate |
| 14 | Yes | 20 | Moderate |
| 15 | Yes | 12 | Low |
| 16 | Yes | 8 | Low |
| 17 | Yes | 18 | Moderate |
| 18 | Yes | 18 | Moderate |
| 19 | Yes | 9 | Low |
| 20 | Yes | 12 | Low |
| 21 | Yes | 11 | Low |
| 22 | Yes | 12 | Low |
| 23 | Yes | 8 | Low |
| 24 | Yes | 18 | Moderate |
| 25 | Yes | 10 | Low |

RESULTS

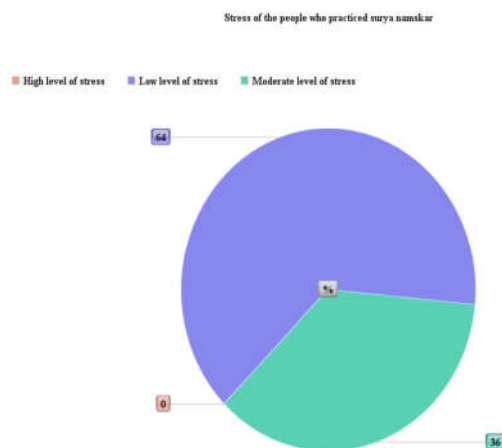
The results of the participants in the stress questionnaire was displayed in the table below:

Stress scores of people who practised suryanamaskar

Stress levels

| S.no | Stress score | Stress level | Percentage of participation |
|------|--------------|--------------|-----------------------------|
| 1 | 0-13 | Low | 64% |
| 2 | 14-26 | Moderate | 36% |
| 3 | 27-40 | High | 0 |

Pie-chart of the stress levels



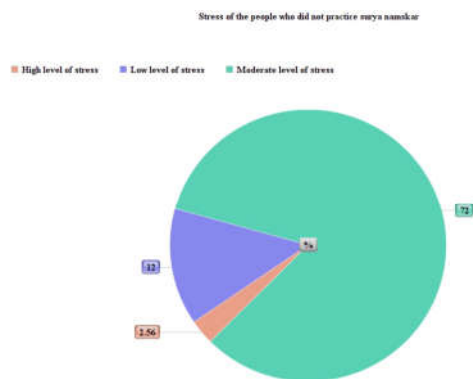
Stress score of people who did not practise suryanamaskar

| S.no | Do you do yoga? | Stress score | Stress level |
|------|-----------------|--------------|--------------|
| 1 | No | 27 | High |
| 2 | No | 15 | Moderate |
| 3 | No | 15 | Moderate |
| 4 | No | 17 | Moderate |
| 5 | No | 11 | Low |
| 6 | No | 19 | Moderate |
| 7 | No | 15 | Moderate |
| 8 | No | 18 | Moderate |
| 9 | No | 30 | High |
| 10 | No | 18 | Moderate |
| 11 | No | 12 | low |
| 12 | No | 9 | Low |
| 13 | No | 22 | Moderate |
| 14 | No | 15 | Moderate |
| 15 | No | 22 | Moderate |
| 16 | No | 27 | High |
| 17 | No | 14 | Moderate |
| 18 | No | 26 | Moderate |
| 19 | No | 15 | Moderate |
| 20 | No | 23 | Moderate |
| 21 | No | 27 | High |
| 22 | No | 22 | Moderate |
| 23 | No | 15 | Moderate |
| 24 | No | 25 | Moderate |
| 25 | No | 24 | Moderate |

Stress levels

| S.no | Stress score | Stress level | Percentage of participation |
|------|--------------|--------------|-----------------------------|
| 1 | 0-13 | Low | 12% |
| 2 | 14-26 | Moderate | 72% |
| 3 | 27-40 | High | 2.56% |

Pie-chart of the stress levels



It was found that 64% of people who practised surya namaskar had low level of stress, 36% had moderate level of stress and no one had high levels of stress but, the people who did not practice surya namaskar 12% of them had low level of stress, 72% had a moderate level and 2.56 had height level of stress.

DISCUSSION

Stress is a naturally occurring phenomenon which can act as a motivator under the right circumstances. However, like so many other things in life, an excess of stress will have negative consequences with repercussions that will transcend personal and professional confines. Left untreated, excessive stress will ruin an individual's health and productivity.^[8]

Various techniques in yoga have been documented to help in stress management. These techniques work at an individual level and also at a collective level to ensure that there is significant respite from the condition of extreme stress. They help in relieving the physical as well as the psychological negative effects of the problem by ensuring a healthy and productive response to the stress stimuli. Yoga can have a positive effect on the Para sympathetic nervous system and aid in lowering heartbeat and blood pressure. This reduces the demand of the body for oxygen. Yoga can also improve digestion, strengthen immunity, help in effective elimination of toxic wastes and also increase lung capacity.

Effective use of this practice can also reduce the chances of stress culminating in anxiety and depression. The practice of yoga involves forming various body postures, slow stretching movements, breathing exercises that can at times lead to progressive relaxation, imagery and meditation. All these specific techniques are meant for a specific purpose and they culminate into a higher awareness of what is happening to oneself during stress-emotionally, physically, mentally and energetically.^[9] A similar research conducted by Sang dol Kim *et al* indicate that yogic exercises would reduce life stress and even lower postprandial blood glucose levels in nursing students.^[11]

CONCLUSION

On comparing the stress score of the people who practiced yoga regularly and those who did not, it was found that people who practiced yoga on a regular basis were able to manage the stress more efficiently. The finest thing about Surya Namaskar is that it can be practiced many times during the day giving you different types of benefits. It can be said that Surya Namaskar is a package of yoga asanas giving you key health benefits. Along with physical health, it helps in getting emotional and mental health benefits also.^[10]

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