

ABSTRACT

Introduction:

We assume that based on the connection between yoga and sensorimotor learning, individuals who regularly practice yoga will have better postural stability than those who do not practice yoga. In this way, yoga would prove to be a suitable exercise for improving postural stability, which is suitable for use in modern physiotherapy as a generally available treatment technique. Based on theoretical and practical knowledge from previous research, we decided to verify the effect of yoga practice and full yoga breath on the posture.

The aim of the work:

The aim of my work is to manifest the effect of yoga exercises as a possible way of therapy and prevention of posture problems, when I want to prove the effect of yoga exercises on stabilizing the center of gravity and also theoretically prove the connection between sensorimotor and yoga practice. Because sensorimotor learning is of great importance in medical rehabilitation and is interwoven across various methodologies, I would like to show that it is also part of a thousand-year-old yoga that is accessible to all. With this work, I want to demonstrate the possible positive effect of these simple and affordable exercises on a random sample of people, some whom do yoga and others do not.

Methodology:

To measure the position of the center of gravity in time, we used the method of posturography performed on the Wii Balance Board. Probandes were divided into 2 groups - yoga practitioners with at least 1 year of experience and a control group of non-practitioners. A total of 48 probands took part in the measurement (24 actively practicing yoga and 24 non-practicing). At the time of the measurement, none of them suffered any injuries or illnesses that could affect the measurement results. The average age was 24 years. There was a total of 33 women and 15 men, medical students, non-smokers. Probandes performed a total of 7 exercises on a balance platform.

Results:

Although the study did not clearly show that yogis performed better in all exercises than non-yogis, it showed differences in several exercise categories: standing on a narrow base, standing on a non-dominant leg, and standing on full yoga breath. The difference was mainly when standing on one leg, standing on a wide base and standing with full yoga breath. Yogis had slightly better results in exercises 1, 5 and 6 compared to the control group. Exercise 7 brought an interesting result, where there were two types of results. The first type occurred in the category of yogis, when the stable stand on a wide base with the involvement of full yoga breath did not change. The second type occurred in both yogis and non-yogis and seemed to stabilize the not entirely stable center of gravity by engaging full yoga breath.

Conclusion:

Full yoga breath has a direct effect on stabilizing the center of gravity in both groups. Yogis have shown better stability when standing on a narrow base, standing on a non-dominant leg and with full yoga breath. Yoga exercises and full yoga breath affect the postural stability of the individual and therefore it can be included in therapy to improve these parameters.

Key words:

Yoga, Posture, Posturography, Stabilization, Yoga therapy, Center of gravity, Balance, Full yoga breath, Stabilization exercises, Sensorimotor