

## A single yoga video helps you de-stress and be confident

The practice of yoga has become very popular, being thought to improve people's mental and physical health. There is a lot of scientific evidence pointing to the benefits of such mind-body practice - especially in the treatment of diseases caused by exacerbated stress responses. Among all the benefits of yoga, those related to cardiovascular health have attracted the most attention. It has been shown, for example, that yoga is as effective as walking or cycling to reduce cardiovascular risk factors. Despite research linking yoga practice to such health benefits, the mechanisms through which yoga affects people's health remain unclear.

It is known that acute emotional stress can be harmful to someone's health. For example, greater reactivity to acute stressors is linked to the development of hypertension and atherosclerosis. A practical example were the terrorist attacks of 9/11 (September 11, 2001) in the USA, that increased cases of cardiovascular disease more than 3 years following the attacks. Since the practice of yoga has been shown to benefit cardiovascular health and, also, the fact that most people seek yoga as a relaxation practice to de-stress, we focused, in our study, on the effect of a single yoga session on cardiovascular, cortisol and psychological responses to a psychological stress task.

Twenty-four healthy and young individuals (13 male) participated in our study and completed both a yoga (following a hatha yoga video) and a control (watching TV) session in the afternoon on 2 days, separated by a minimum of 48 hours - the order of the conditions was randomly determined by draw. On each day of testing, participants first rested for 15 minutes and then underwent the assigned condition (yoga *versus* control). Right after, they were submitted to a math test to induce a stress response and, then, rested for 15 minutes to recover from the stress. Blood pressure (BP), heart rate (HR) and salivary cortisol responses were measured throughout. Anxiety and self-confidence were also assessed during the interventions.

Our study demonstrated, for the first time, that a single session of hatha yoga before exposure to a psychological stressor was able to accelerate BP recovery from stress and reduce cortisol reactivity to stress. Besides, a single yoga session increased self-confidence in preparation for the math task and after completion. Levels of Sself-confidence reported after the stress task were considered unhelful for test performance in the control condition, but remained athelpful levels in the yoga condition. These results add new evidence to the literature considering that the hatha yoga intervention was delivered using a video clip, suggesting that the benefits of yoga practice on physiological and psychological stress responses extend beyond a traditional instructor-based class.

In summary, our study provides evidence to the development of recommendations for the use of Yoga as a "stress prophylactic" – perhaps even advises that a quick yoga class may be an easy way to help you prepare for your next exam or presentation.

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## **Publication**

A single session of hatha yoga improves stress reactivity and recovery after an acute psychological stress task-A counterbalanced, randomized-crossover trial in healthy individuals.

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