

University of Tehran, Faculty of Physical Education and sport sciences

International Congress on Sport Sciences &Interdisciplinary research / semi-virtual





Psychophysiological Reactions to Yoga and Mental Practice Based on Concurrent Biofeedback Tests in Obese Elderly with Anxiety

Oral Presentation

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Abstract

Introduction: The increasing prevalence rate of psychological disorders in aged populations has been a key concern for health authorities. Additionally, there is an epidemic of a sedentary lifestyle, obesity, and psychological disorders in elderly populations worldwide. On another side, obesity as a health risk factor has been significantly increased among older adults with the emergence of the sarcopenia phenomenon (1,2,3,4). Although pharmacological treatments may not be highly recommended for older adults due to the side effects, non-drug strategies such as exercise therapy have been widely recommended by researchers with the aim of improving the quality of life. So, the purpose of the study was to investigate psychophysiological reactions to Yoga and Mental Practice based on Concurrent Neurofeedback Tests in obese elderly with anxiety.

Methods: 49 aged females $(62.3\pm2.6\text{yr})$ with BMI of 35 - 49.99 kg/m2 who volunteered to participate in the current study were assigned to mental practice (n=17), yoga (n=16), and control groups (n=16). The State-Trait Anxiety Inventory was filled before and after exercise intervention. Biofeedback devices were used to monitor galvanic skin resistance and resting heart rate. All phases of the experiment were performed in the Health Clinic of Dr. Irandoust, Qazvin, Iran.

Results: The results suggested that both interventions decreased levels of anxiety ($p \le 0.05$). Additionally, both experimental groups experienced better-alleviated records for skin potential response (SPR) and resting heart rate compared to control groups (respectively, p=0.04 and p=0.001).

Conclusion: It was concluded that the health benefits of yoga and mental practice are well recognized to decrease anxiety in the elderly with obesity.

Keywords

Biofeedback; Mental Practice; anxiety; Elderly

Reference:

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