DOI 10.26386/obrela.v1i0.22

Special Issue on Neuropsychology, from the Founding Conference of the Hellenic Neuropsychological Society, 9-10 April, 2016, Athens, Greece. Guest Editors: Mary H. Kosmidis, Athanasia Liozidou, Lambros Messinis, Alexandra Thanellou, Ioannis Zalonis

## Lecture The effects of combined cognitive and physical training on brain and cognition in older adults.

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## Abstract

Are cognitive and physical training interventions effective against age-related cognitive and brain decline, and disease? In the present talk I will present results from a large-scale study that investigated the effect of a combined cognitive and physical training computerized program on overall cognition and brain function. In this multicenter study, 322 cognitively healthy and impaired older adults were allocated to an intervention group or a passive/active control group. In a pre/ post-test design, participants were assessed in working memory, executive functions and episodic memory, and a subsample of participants also underwent electroencephalographic (EEG) data acquisition during a resting-state condition. I will present both results from cognitive measures and brain connectivity work to support gains in cognition and brain function after cognitive and physical training in older adults.

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