

Project title: EARLY-COGN ³ - Smart digital solutions for EARLY treatment of COGNitive disability: a Neuropsychological, Neurophysiological and Neurobiological perspective in chronic neurological diseases	
Project ID PNRR-MCNT2-2023-12377069	
CUP: C83C24000200007	
Description: The increase in life expectancy has led to a rise in Chronic Neurological Diseases (CNDs) such as Mild Cognitive Impairment (MCI), Subjective Cognitive Complaints (SCCs) and Parkinson's Disease (PD), all linked to higher dementia risk and reduced independence in daily life. Given the limited efficacy of pharmacological treatments, non-pharmacological strategies have gained importance. Cognitive training is promising for dementia prevention and cognitive enhancement, but its most effective protocols often rely on intensive in-person sessions, difficult to scale. Technology-based solutions are emerging to extend rehabilitation at home, particularly telerehabilitation, which delivers care in patients' natural environments, including those in rural or mobility-restricted conditions. This study will test a home-based asynchronous cognitive telerehabilitation program (tele@cognitive) to strengthen continuity of care for MCI, SCCs and PD. The randomized controlled trial will assign participants to two groups: tele@cognitive, with at-home cognitive telerehabilitation treatment, or an active control group with at-home unstructured cognitive stimulation. The objectives are: [1] to assess the short- and long-term efficacy of tele@cognitive; [2] to explore its effects on biomolecular and neurophysiological markers; [3] to identify predictors of treatment response.	
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