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## 5 Cognitive Rehabilitation Using Teleneuropsychology. A Cohort Study in South America

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**Objective:** The COVID-19 pandemic has affected the continuity of cognitive rehabilitation (CR) worldwide. However, the use of teleneuropsychology (TNP) to provide CR has contributed significantly to the continuity of treatment. The objective of this study was to measure the effects of CR via the TNP on cognition, neuropsychiatric symptoms, and memory strategies in a cohort of patients with Mild Cognitive Impairment (MCI).

**Participants and Methods:** A sample of 60 patients (60% female; age: 72.4±6.96) with MCI according to Petersen criteria was randomly divided into two groups: 30 cases (treatment group) and 30 controls (waiting list group). Subjects were matched for age, sex, and MMSE or MoCA.

The treatment group received ten weekly CR sessions of 45 minutes weekly. Pre-treatment (week 0) and post-treatment (week 10) measures were assessed for both groups. Different Linear Mixed Models were estimated to test treatment effect (CR vs. Controls) on each outcome of interest over Time (Pre/Post), controlling for Diagnosis, Age, Sex, and MMSE/MoCA performance.

**Results:** A significant Group (Control / Treatment) x Time (pre / post) interaction revealed that the treatment group at 10 weeks had better scores in cognitive variables: memory (RAVLT learning trials p=0.030; RAVLT delayed recall p=0.029), phonological fluency(p=0.001),

activities of daily living (FAQ p=0.001), satisfaction with memory performance (MMQ Satisfaction p=0.004) and use of memory strategies (MMQ Strategy p=0.00), and a significant reduction of affective symptomatology: depression (GDS p=0.00), neuropsychiatric symptoms (NPIQ p=0.045), Forgetfulness (EDO-10 p=0.00), Stress (DAS Stress p=0.00).

**Conclusions:** This is the first study to test CR using teleNP in South America. Our results suggest that CR through teleNP is an effective intervention to improve performance on cognitive variables and reduce neuropsychiatric symptomatology compared to patients with MCI. These results have great significance in the context of the COVID-19 pandemic in South America, where teleNP is proving to be a valuable tool.

**Categories:** Teleneuropsychology/ Technology

**Keyword 1:** teleneuropsychology

**Keyword 2:** cognitive rehabilitation

**Keyword 3:** mild cognitive impairment

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## Paper Session 04: Multi-cultural and diversity topics in pediatric populations

11:45am - 1:15pm

Thursday, 2nd February, 2023

Pacific Ballroom E

Moderated by: Rowena Ng

## 1 Psychometric Characteristics of the Grenada Learning and Memory Scale: An Innovative Tool for Preschool Memory Assessment in Resource-Limited Regions

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