EFFECT OF PHYSICAL EXERCISE ON VISUOSPATIAL MEMORY IN OLDER PEOPLE WITH PARKINSON’S DISEASE

K. Tanaka¹, R.F. Santos-Galduróz², F. Stella³, L.T.B. Gobbi³, S. Gobbi³

¹Psychobiology, UNIFESP, São Paulo, ²Mathematics, Computing and Cognition Center, UFABC, Santo André, ³Physical Education, UNESP, Rio Claro, Brazil

Introduction: The benefits of physical exercise to slow the decline in memory caused by Parkinson's disease (PD) have rarely been studied.

Aims: To analyze the effects of physical exercise on visuospatial memory in elderly with PD.

Methods: The sample was composed of 56 elderly (mean age of 67.30 ± 7.59 years) - 36 with DP (stages from 1 to 3 assessed by Hoehn & Yahr Scale and no indication dementia), and 20 without neurodegenerative disease (Control Group - CG). The 36 participants with PD were assigned: Control Group Parkinson (CGP - n=20) and Trained Group (TG - n=16). The TG participated of physical exercise during 6-months, three times a week, 60-min sessions. The CG and CGP didn’t participate in any exercise program. The visuospatial memory was evaluated by Corsi's Block Tapping Task (CBTT); depressive symptoms by Hospital Anxiety and Depression Scale; and anxiety by State-Trait Anxiety Inventory, before and after intervention. The data were analyzed by MANOVA (p < .05).

Results: The results showed a significant interaction (p < .05) in CBTT between groups and pre- and post-intervention.

[Cori’s Block Tapping Task]

No significant interactions were found in depressive symptoms and anxiety.

Conclusions: The physical exercise can benefit the visuospatial memory in elderly with PD.