

A gerontopsychomotor rehabilitation program can revert losses of motor and cognitive functioning on nursing home residents

Hugo Rosado¹, José Marmeleira^{1,2}, Ana Cruz-Ferreira^{1,2}, Catarina Pereira^{1,2}

1. Departamento de Desporto e Saúde, Escola de Ciências e Tecnologia, Universidade de Évora, Évora, Portugal; hugo_rosado9@hotmail.com; 2. Research Center for Sport, Health, and Human Development, CIDESD, Portugal

INTRODUCTION

European Union older adults number and old-age-dependency has increased (Eurostat, 2015). A frequent answer for their care needs is nursing home admission, although this solution tends to exacerbate older adults losses of cognitive and motor functioning (Frandin et al., 2016).

OBJECTIVE

To analyze the effect of a psychomotor intervention, accomplished by a multimodal exercise program alternating exercises mainly motor with exercises mainly cognitive, on executive and physical function of nursing homes residents.

METHODS

This study included 34 nursing home residents (82.4 ± 6.3 yrs): 17 were allocated to the experimental group (EG: engaged on a 10-weeks multimodal exercise program), and 17 to a control group (maintained usual activities). Planning ability and selective attention were assessed by the Tower of London task and the attention Test d2, respectively. Physical function was assessed by the Senior Fitness Test and the Performance Oriented Mobility Assessment.

RESULTS

Comparison between groups evidenced that the EG improved planning ability variables from

25% to 32%, attention variables from 19% to 67%, and physical function variables (aerobic endurance, lower body strength, agility, balance, gait, and mobility) from 11% to 41% ($p < 0.05$), corresponding to an effect size ranging from 0.29 to 1.11.

CONCLUSIONS

The program induced improvements in the participants' executive functions (planning ability and attention) and physical functions, with a treatment effect from small to high. This shows that the psychomotor intervention was able to revert the usual loss of cognitive and motor functioning in old and very old institutionalized persons.

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