MANUAL REACTION SPEED AND MANUAL DEXTERITY IN ELDERLY PEOPLE: A COMPARATIVE STUDY BETWEEN ELDERLY PRACTITIONERS AND NON-PRACTITIONERS OF PHYSICAL ACTIVITY

Abstract

The human being, as years go by, transforms and loses their normal movement abilities, like too quickly react and objects manipulate. Most of the epidemiological evidence argues that when a subject adopts an active lifestyle through physical activity (PA), this minimizes the effects of the aging process and improves their capabilities. To assess the influence of PA in manual reaction speed (MRS) and manual dexterity (MD) we applied The Nelson Hand Reaction Test and The Minnesota Manual Dexterity Test (the placing and turning tests), respectively. The sample consisted of 40 volunteers (between 67 and 85 years old) residents in two elderly institutions of the Oporto city and they were divided into 2 groups, one by practitioners of PA and the other by non-practitioners (with 20 subjects respectively). This study had these conclusions: 1/Concerning to manual reaction speed (MRS): (i) there are statistically significant differences between practitioners and non-practitioners of PA, as well as between genders, and between males-practitioners and males non-practitioners of PA; (ii) between female practitioners and female non-practitioners of PA there weren't any significant differences; 2/ Concerning to the manual dexterity (MD) it was verified that: (i) either in placing or in turning tests, there are statistically significant differences between practitioners and non-practitioners of PA, and equally there are differences between practitioners and non-practitioners of PA in each gender; (ii) between genders, in the placing test, they observed differences with statistical significance, but in the turning test these differences were only verified in the third and fourth issues, and in the average of four issues.

Key words*: elderly, reaction speed, manual dexterity, proprioceptive sensibility, physical activity*