# ANTROPOMETRIC AND MOTOR PERFORMANCE CHARACTERISTICS AS RELATED TO AGE IN ACTIVE ELDERLY WOMEN

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Abstract

The purpose of this study was to compare some anthropometric and motor variables is elderly active women according to chronological age. The sample consisted of 95 women from 60 to 69 years of age (x: 64,6 ± 3,0 years) and 61 women from 70 to 80 years (x: 72,9 ± 2,9 years). They were involved in an aerobic program that included low impact aerobics and stretching activities, twice a week, 50 minutes per session. The anthropometric variables measured were: body height (cm) body weight (kg), body mass index – BMI ($mg/m^2$) and mean of three skinfolds SKF (mm). The motor function and mobility tests included: vertical jump (VJ), shuttle run, (SR), sitting to standing position test (CHAIR), the gait speed (GS) and maximum gait speed (MGS). The results groups were compared using "t" student test for independent samples. The values of lower limb strength (VJ) and agility (SR) were correlated to the other motor results in each age group using the Pearson's correlation (r). (*p<.01).

| AGE GROUP | BMI ($kg/m^2$) | SKF (mm) | SR (sec) | VJ (cm) | CHAIR (sec) | GS (sec) | MGS (sec) |
|---|---|---|---|---|---|---|---|
| 9 60-69 x n=95 s | 27.6 6.3 | 22.4 4.9 | 19.48 2.95 | 15.4 4.9 | .90 .26 | 3.27 .43 | 2.74 .41 |
| VJ r | | | | | -.35* | -.20 | -.31* |
| SR r | | | | | .55* | .45* | .42* |
| 70-80 x n=61 s | 27.1 6.7 | 20.8 6.5 | 21.98* 4.13 | 14.1 5.0 | .91 .20 | 3,59* .57 | 2.92* .39 |
| VJ r | | | | | -.06 | .03 | -.06 |
| SR r | | | | | .37* | .33* | .49* |

The older women had significant lower values of body agility and gait speed than the younger ones. There was a significant correlation between body agility and lower limb strength with mobility tests in the 60-69 ys group. In the older group (70-80 ys) this relationship was founded just for agility. These evidences suggested a higher negative impact of aging process on motor functions than on anthropometric characteristics, even in active elderly women. This mobility age differences can not be explained only by the decline in lower limb muscular strength,