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Physical Function Among Older Recreational Orienteers: A Comparative Study With the General Population

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Purpose: Orienteering is a popular activity among older adults in Sweden, but little is known about the physical characteristics and health outcomes of this group compared to the general older population. This study aimed to: 1) describe the physical function of older orienteers, and 2) compare their physical function to that of age-matched active men and women from the general population.

Methods: Men and women aged 65 years and older who participate in recreational orienteering at least once a year were invited to participate. Data were collected in the field. Physical function was assessed using four measures: balance (total ascents on the preferable leg during 60 seconds), grip strength, coordination/motor skills (Timed Up and Go [TUG]), and functional leg strength (number of sit-to-stand during 30 seconds). For comparison, individual data from 1,407 community-dwelling physically active older adults were used. Total description of the comparative population was conducted. Linear regression analyses, adjusted for age, were used for comparisons between the two populations.

Results: A total of 287 individuals participated (37% women), aged 65 to 91 years, median age of 75 years. Median balance score was 1 ascent (interquartile range (IQR): 1.0–2.0 women, 1.0–3.0 men). Median grip strength was for left and right: 228/250 N (IQR: 211–254/221–278) in women, and 380/402 N (IQR: 325.5–420.8/356–445.3) in men. Median TUG was 5.47 s (IQR: 5.0–6.1 women, 5.0–6.3 men). Median sit-to-stand transitions were 20 (IQR: 16–24) in women and 19 (IQR: 16–22.25) in men. Compared to active community-dwelling older adults, both male and female orienteers performed significantly better regarding balance ascents (+1.1 ascents less for both men and women), TUG time (–1 seconds in women and –0.9 seconds in men), and sit-to-stand transitions (+4.8 in women and +4.0 in men) (all $p < 0.01$). No significant differences were found for grip strength (p-range = 0.190 to 0.739).

Conclusion: Older male and female recreational orienteers demonstrated significantly better performance in several indicators of physical function compared to active non-orienteer peers. Since orienteering naturally challenges balance, leg strength, and coordination/motor skill, these findings suggest that orienteering may be a beneficial form of physical activity for maintaining functional capacity in later life.

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