

Athletic Walking, Executive Functions and Falls among Community-Living Elderly People

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Recent studies have shown a relationship between cognitive function and falls among the elderly population. The lower their cognitive performance, the greater the number of falls they experience. A deficiency in one or more components of executive functioning was associated with the inability of the individual to walk safely and effectively, thus resulting in an increased risk of falling. Physical activity is well known to be both physically and mentally beneficial. Therefore, the purpose of the present study was to examine the difference between cognitive function, executive function and the number of reported falls, between elderly who perform athletic walking at least 90 minutes a week, and elderly who do not perform athletic walking. **Method:** The research included 64 elderly participants over the age of 65, who lived independently in the community. **Instruments:** Mini Mental State Examination (MMSE),

Clock Completion Test (CCT) and Trail Making Test A/B (TMT A/B) .**Results:** A significant difference was found between the groups in their performance time on the TMT A/B, such that the athletic walkers completed the TMT A/B significantly faster than the non-walking group. No significant difference was found between the groups in the MMSE, the CCT scores, the number of mistakes made in the TMT A/B and the average number of falls experienced in the past year. **Conclusions:** Athletic walking of at least 90 minutes a week was related to the participants' speed of information processing. However, in this study, performing athletic walking for 90 minutes a week was not found to factor in fall prevention among the elderly. Occupational therapists in the community can encourage elderly to pursue athletic walking as a leisure activity as part of an activity program to prevent cognitive decline.