

The Effects of Different Exercises on Balance, Fear and Risk of Falling among Adults Aged 65 and Over

Gonul Babayigit Irez

*Mugla Sýtký Koçman University, School of Physical Education and Sports, Mugla, Turkey
E-mail: gbabayigit@yahoo.com, bigonul@mu.edu.tr*

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ABSTRACT This study compared the effects of Pilates and a walking exercise program on dynamic balance, flexibility, and muscle strength, fear of falling and falling risk among an elderly population. A total of 45 volunteers aged 65 years and older were recruited from a live-in community center in the province of Mugla in southwestern Turkey. Participants were invited to attend a 14-week exercise program of either Pilates or walking for 1 hour 3 times per week. Dynamic balance, flexibility, muscle strength, fear of falling and risk of falling were measured before and after the 14-week exercise program and at the same time in a control group that did not join either exercise program. Significant differences ($p < 0.05$) were found between pre-and post-exercise scores for all parameters in the Pilates group and in the flexibility scores in the walking group. No significant differences were found in the control group. Thus, it may be concluded that in comparison to walking, Pilates offers a more efficient way of improving certain physical fitness parameters among the elderly.