

Rurkchai Yamwong 2008: The Effect of Modified Rum Muay Thai Boran and Traditional Aerobic Dance on Dynamic Balance Flexibility and Fear of Falling in Aging Women. Master of Science (Sports Science), Major Field: Sports Science, Interdisciplinary Graduate Program. Thesis Advisor: Associate Professor Supitr Samahito, Ph.D. 146 pages.

The purposes of this research were to study and contrast the effect of Modified Rum Muay Thai Boran and Traditional Aerobic Dance on dynamic balance, flexibility and fear of falling in aging women. The samples were 30 women of age 60-69 years old from Aging Club Amphor Mueng Sakonnakhon province. Using simple random sampling technique from the population of 60, then the samples were divided into 3 groups by randomly assignment method. All of those 3 groups were the control group who spent their normally lives style, the first experimental group worked with the Modified Rum Muay Thai Boran while the second experimental group practiced the Traditional Aerobic Dance. The study was carried out over a period of 8 weeks, 3 days a week at 5.00-6.30 p.m. During of this study, the samples were tested the dynamic balance, flexibility and fear of falling by using the agility course test item (Samahito, 2005), sit and reach and the fear of falling measure (Samahito, 2007) in the beginning, after the 4th and the 8th week of this study. Data then, were statistically analyzed by using two-way analysis of variance with repeated measure, one-way analysis of variance with repeated measure, one-way multivariate analysis of variance: MANOVA, Pearson Product Moment Correlation Coefficient and multiple comparison technique at .05 level of significance.

The major findings of this study revealed that after the 8th week the means of the flexibility as well as the fear of falling between the control group, the experimental 1 and the experimental 2 were not significant differences at the level of .05. While the dynamic balance mean of the control group was significant differences from the experimental 1 and the experimental 2, the dynamic balance means between the experimental 1 and the experimental 2 were not significant differences at level of .05. Moreover, the data from this study indicated that after the 8th week, the Modified Rum Muay Thai Boran and Traditional Aerobic Dance can increase the ability of the dynamic balance, flexibility as well as the status in fear of falling in aging women.

Student's signature

Thesis Advisor's signature