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SUMMARY

THE EFFECT OF GENERAL DEVELOPMENTAL AND RESISTANCE TRAINING ON FUNCTIONAL FITNESS, PAIN PERCEPTION, AND COGNITIVE FUNCTIONS IN WOMEN OVER 60 YEARS OF AGE

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The ageing process is associated with a progressive decline in functional fitness and cognitive functions, as well as an increased risk of pain-related complaints. Regular physical activity supports the functioning of the cardiovascular and respiratory systems, improves muscle strength, balance, cognitive performance and independence in older adults. Therefore, maintaining physical fitness in seniors is an important element of successful ageing.

The aim of this study was to assess and compare the effects of general fitness training and resistance training on functional fitness, pain perception and cognitive functions in women over 60 years of age. The scope of the study also included examining the relationship between the level of functional fitness and pain perception. The programme was completed by 85 participants, who were randomly assigned to a group performing general fitness training or a group performing resistance training. Before and after the training programme, questionnaire surveys were conducted using the diagnostic survey method, functional fitness was assessed with the Senior Fitness Test, cognitive functions were evaluated using the Stroop Test, and pain threshold and pain tolerance were measured with a pressure algometer.

The results showed that both resistance training and general fitness training affected the analysed variables in women over 60 years of age. The extent of these changes differed depending on the type of intervention used. Resistance training had a greater effect on improving functional fitness and reducing pain-related complaints. In terms of cognitive functions, both resistance training and general fitness training were found to significantly influence selected aspects of cognitive performance. General fitness training had a greater effect on the speed of task performance, whereas resistance training was associated with a shorter task completion time and a reduced number of errors. The results also indicate that a higher level of functional fitness may be associated with a higher pain threshold and greater pain tolerance in women over 60 years of age. Based on the conducted study, it can be concluded that general fitness training and resistance training are effective forms of physical activity that support functional fitness, cognitive functions and pain perception in women over 60 years of age.

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