原著論文

二人組で取り組むトレーニングは居住環境による特徴を有するが 身体機能および認知機能を改善させる

Paired training improves physical and cognitive functions in elderly people living in different environments

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Abstract

This study examined the methods of preventing social withdrawal in elderly people, which is referred to as social frailty. The aim was to verify influence of the living environments on effect of paired training improves physical and cognitive function in elderly people.

In this study, 26 elderly people living in a community were given weekly exercise training at a community center and weekly home-based training for 3 months. All pairs, except couples, were women. The subjects were classified as follows: women living alone (n=8), living with family (n=9), and women in married couples (n=9).

For the women living alone, the improvement in physical functions were as follows: weight (p<0.05), bone density (p<0.05), lower limb muscle strength (p<0.05), and functional reach (p<0.05). In terms of cognitive function, memory functions (p<0.05) and thinking functions (p<0.05) also improved. For the women in married couples, improvements in physical functions were as follows: bone density (p<0.05), lower limb muscle strength (p<0.05), functional reach test (p<0.05), and 2-step test (p<0.05). Memory functions (p<0.05) also improved. In the women living with family group, improvements in physical functions were as follows: bone density (p<0.05), lower limb muscle strength (p<0.05), functional reach test (p<0.05), and reaction time (p<0.05). Both memory functions (p<0.05) and thinking functions (p<0.05) also improved.

These results suggest that paired training is an effective method of improving physical performance and cognitive functions.

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