

RELATIONSHIP BETWEEN BODY COMPOSITION AND COGNITIVE ABILITY

Kazue Sawami¹, Mitsuo Kimura¹, Tetsuro Kitamura¹ and Chizuko Suishu²

¹Nara Medical University, Japan

²Shubun University, Japan

Introduction: The first objective of this research was to verification to the effectiveness for combining brain training with rhythmic exercises for six-month brain training. In order to further prevent motoric cognitive risk syndrome (MCR), we gave instructions to continue exercise. In order to evaluate motoric ability, we carried out the two-step test. Confirmation of the benefits of this intervention in motoric ability and the extent of the correlation between body composition and cognitive function was the second objective of this research.

Methods: A screening test for mild cognitive impairment: Montreal Cognitive Assessment (MoCA test), measurement of body composition by an inner scan monitor, and motoric ability were performed by measuring two-step test. For statistical evaluation of scores before and after each cognitive test intervention, t tests were used. To test for relationships between the score of cognitive test and measured value of body composition and two-step test, Pearson's correlation coefficient was used.

Results: Significant improvements in cognitive function were detected after intervention, with the strongest correlating variable with the cognitive function and body composition comparisons being blood vessel age. Furthermore, there was a correlation between two-step test and cognitive function, with those subjects with high motoric ability having high cognitive function.

Conclusion: Interventions that combine rhythmic exercises and brain training are effective in preventing dementia. Correlations were detected between cognitive function and body composition, and motoric's ability. Therefore, in order to maintain the cognitive function, it is necessary to improve the dietary life as a means of improving body composition and perform activities to provide maintenance and improvement of motoric's ability.

BIOGRAPHY

Kazue Sawami is a professor at Nara Medical University and completed her PhD at health science. Her research is about the cognitive abilities of elderly people.

sawami@naramed-u.ac.jp



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