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EL EFECTO DEL TAEKWONDO EN LAS FUNCIONES EJECUTIVAS DE MAYORES DE 35 AÑOS

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RESUMEN

Las funciones ejecutivas (FE), críticas para dirigir el comportamiento de forma intencionada y exitosa, son afectadas por el avance de la edad. Estudios previos sugieren que la actividad física mejora el rendimiento en diversas habilidades cognitivas que forman parte de las FE. No obstante, la especificidad de los efectos de la actividad física no es clara. Al parecer una actividad física que además involucra una demanda cognitiva (p.ej., taekwondo) podría tener mayores beneficios para la conservación de las FE que una actividad física repetitiva y monótona (p.ej., musculación). Por lo tanto, estudiaremos el rendimiento en tareas que miden FE nucleares (control inhibitorio, flexibilidad cognitiva y memoria de trabajo), en sujetos mayores de 39 años. El control inhibitorio será medido con el test de Stroop, la flexibilidad cognitiva se medirá con el Trail Making test, y la memoria de trabajo se medirá a través del Digit Span test. De hallarse diferencias significativas entre ambos grupos en el rendimiento en las tareas mencionadas, nuestros datos indicarían que la práctica de una actividad física cognitivamente demandante, podría prevenir la mengua de las FE, propias del envejecimiento.

Palabras clave

Taekwondo, Musculación, Control Inhibitorio Flexibilidad Cognitiva, Memoria de Trabajo Ejecutivo

ABSTRACT

THE EFFECT OF TAEKWONDO IN EXECUTIVE FUNCTIONS IN SUBJECTS OLDER THAN 35 YEARS OLD

Executive functions (EF), key to guide behaviour in an intentional and successful way, are affected by aging. Previous studies suggest that physical activity improves performance in a variety of cognitive skills which are part of EF. Nonetheless, the specificity of the effects of physical activity are not clear. Apparently, a physical activity that is cognitively demanding (ex., Taekwondo), could have greater benefits for the conservation of EF than a repetitive and monotonous one (ex., muscle resistance training). Therefore, we will study the performance in tasks that measure core EF (inhibitory control, cognitive flexibility and working memory) in subjects older than 39 years old. Inhibitory control will be measured with the Stroop test, cognitive flexibility will be measured with the Trail Making Test, and working memory will be measured with the Digit Span test. If we found significant differences in the performance of the tasks previously mentioned between both groups, our data would indicate that the practice of a cognitively demanding physical activity could prevent the decline of EF, typical of aging

Key words

Taekwondo, Resistance Training, Inhibitory Control Cognitive Flexibility, Working Memory Executive

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