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Tongtong Guo
East China Normal University

Jian Yang
East China Normal University

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The Influence of Tai Chi Intervention on Inhibitory Function of African College Students

Abstract

Inhibitory function is the core sub-function of executive function, which is mainly aimed at inhibiting the current dominant response in the cognitive process. It is embodied in the control of preventing the activation of irrelevant information, disturbing the irrelevant information, and the dominant reaction in the process. However, little research has examined the impact of Tai Chi on inhibitory function among native African students. The major purpose of this study was to conduct an experimental study on the inhibitory function of African college students through Tai Chi intervention, and to explore the non-Tai Chi local country students' changes in the inhibitory function under the intervention of Tai Chi. Participants were 18 male students from the University of Dar es Salaam in Tanzania, who were randomly selected from the experimental group and the control group. The experimental group was provided for an 8-week Tai Chi intervention, and the control group did not have Tai Chi program. The Inhibitory function was respectively measured by the Flanker task. A 2 x 2 repeated measures MANOVA was employed to examine the effect of exercise intervention (non-Tai Chi, Tai Chi) and time (pre-test, post-test) on the inhibition function among native African students. Before the study, an equal-pair matching design was used. The One-Way ANOVA to matching and screening the subject for exercise habits, BMI values, and age. The homogeneity of different groups' inhibition functions before the study was ensured. From the inhibition function, the time effect in the subject $F=251.43$, $P=0.00$

Conclusions: Tai Chi intervention has a positive impact on the inhibition function of male African college students.

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Tongtong Guo^a, Jian Yang^a

^aEast China Normal University

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Conclusions: Tai Chi intervention has a positive impact on the inhibition function of male African college students.

Keywords: inhibitory function, Tai Chi, exercise intervention