

عنوان مقاله:

The Effects of Moderate Interval Training (MIT) and Lithium on Spatial Learning and Memory in Male Wistar Rats

محل انتشار:

اولین همایش بین المللی فیزیولوژی ورزشی (سال: 1402)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Mohadeseh chahkandi - Cellular and Molecular Research Center, Research Institute of Cellular and Molecular Sciences in Infectious Diseases, Zahedan University of Medical Sciences, Zahedan, Iran

Elham Shoghi - Cellular and Molecular Research Center, Research Institute of Cellular and Molecular Sciences in Infectious Diseases, Zahedan University of Medical Sciences, Zahedan, Iran

خلاصه مقاله:

The most effective non-drug treatment for brain health promotion is physical exercise (EX). Exercise results in benefits such as modulation of autophagy, increased mitochondrial biogenesis, and upregulation of BDNF. The effects of lithium and MIT (moderate interval training) on spatial learning and memory in male Wistar rats were investigated in this study. Also, we evaluated the role of mitochondrial genes and the BDNF protein in this effect. The study protocol included six groups of animals: Control (Ctr.), animals that did not receive the drug; II: Li<sup>+</sup> (10 mg/kg/day/i.p.); III: Moderate-intensity training (MIT); IV: Li<sup>+</sup> and MIT (Li<sup>+</sup>+MIT); V: Li<sup>+</sup> (40 mg/kg/ip); VI: Li<sup>+</sup> and MIT (Li<sup>+</sup>+ MIT). Our results showed that memory and spatial learning improved as a result of exercise; nevertheless, lithium administration alone cannot exert this effect. Additionally, rats exposed to a combination of exercise and lithium showed improvement in spatial learning and memory.

کلمات کلیدی:

exercise, lithium, cognitive

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1954788>

