

Ready for Combat, Psychophysiological Modifications in a Close-Quarter Combat Intervention after an Experimental Operative High-Intensity Interval Training

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Keywords

autonomic modulation, HRV, soldier, HIIT, anxiety, cortical arousal

Abstract

Tornero-Aguilera, JF, Fernandez-Elias, VE, and Clemente-Suárez, VJ. Ready for combat, psychophysiological modifications in a close-quarter combat intervention after an experimental operative HIIT. *J Strength Cond Res* 36(3): 732–737, 2022—This study aimed to analyze the effect of an experimental operative high-intensity interval training (HIIT) program on the psychophysiological response of soldiers in a close-quarter combat (CQC) intervention. The psychophysiological response of 22 professional soldiers in a CQC before and after an experimental 2-week operative HIIT was analyzed. Training intervention produced a significant increase in blood lactate, isometric hand-grip strength, perceived stress, rates of perceived exertion, anxiety response, heart rate, and autonomic sympathetic modulation and a significant decrease in cortical arousal requirements. An experimental operative high-intensity interval training produced an increase on the psychophysiological operativity for CQC scenarios, increasing the sympathetic and physiological response and decreasing the cortical arousal requirement of soldiers.