



Abstract

## The Effect of a Combat Swimming Training Program on Swimming Performance <sup>†</sup>

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**Abstract: Aim:** To explore the effect of a combat swimming training program (CSTP), with and without equipment, on swimming performance. **Material & Method:** 45 male army officer cadets volunteered to participate in the study and were randomly divided into three groups: a control group (CG) and two experimental groups. The experimental groups participated in a 4-week combat swimming training program with equipment (CSTPE) or without equipment (CSTPS). Prior to and after the CSTP, all groups performed a 400-m and a  $4 \times 50$ -m swimming task, and the time to complete the task, peak blood lactate, and peak heart rate were measured. **Results:** The time to complete the 400-m and  $4 \times 50$ -m trials improved significantly only in the CSTPE group (490  $\pm$  66 s pre and  $463 \pm 50$  s post for 400 m; and  $205 \pm 28$  s pre and  $192 \pm 19$  s post for  $4 \times 50$  m; p < 0.05), while the CG and CTSPS groups did not improve their time significantly in either trial. All groups presented similar peak lactate and peak heart rate values. **Conclusions:** The results suggest that only the CSTPE group improved swimming performance in both the 400-m and  $4 \times 50$ -m trials.

Keywords: army officer cadets; combat swimming; performance



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