

EFFECT OF THREE METHODS OF RECOVERY (WATER IMMERSION) ON PHYSICAL PERFORMANCE OF IRANIAN COLLEGIATE WRESTLER

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Abstract

Background: Recovery is an Important Aspect of every physical activity and is a challenge for wrestlers who are undertaking four or more competitions in one day. Today Water Immersion has Developed among Athletes especially Wrestler for Recovery Speed..

Purpose: The present study was to Investigate the effect of three Kinds of Water Immersion (HWI , CWI , CWT) on some Physical Performance in collegiate wrestlers.

Study Design: quasi experimental study.

Methods: In this quasi experimental study Thirty-three wrestlers (age: 23±2 years , weight : 72±8 kg ,fat :14.2±1.5%)were assigned randomly to four groups: 1. hot-water immersion (HWI) 2. cold- water immersion (CWI) 3. contrasting water temperature (CWT) and 4.control group. (CTRL)

Wrestlers participated in semi-experimental conditions composed of two wrestling competition separated with 15 minutes, post-wrestling competition recovery strategies, including 15 min of Water Immersion at 10-15°C (CWI), 38-45°C (HWI), 10-15°C and then 38-45°C (CWT), or control (CTRL, seated at room temperature), followed by passive resting. The following tests were assessed before exercise (two wrestling competition) and 30 min post water immersion recovery : 30 meter sprint, Rated Perceived Exertion (RPE), grip strength, reaction time, and number Snatch Test in 20 seconds. the data was analyzed with one way ANOVA method at 5% level of significantly.

Results: Grip strength and reaction time were increased only in CWT groups (p=0/00) and the other groups had no significant difference compared to the pre-competition(p>%5). Furthermore ,sprint ability and number Snatch Test were not affected during the recovery and no differences were observed between treatment groups (p>%5). Also, RPE was significantly lower in the CWI and CWT groups (p<%5).

Discussion and Conclusions: cold immersion temperatures likely to be more effective at increasing recovery. In addition, the findings of previous studies indicates contrast water immersion can be an effective recovery modality in a range of sports.

Keywords: collegiate wrestler ; Recovery (Water immersion), physical performance

