

Psychological Impact of Strongman Training

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ABSTRACT

High intensity exercise has been shown to decrease stress and tension, increase energy and generally show greater improvements in mood when compared to lower intensity exercise. However, these findings have primarily been shown to occur as a result of longer duration aerobic exercise, while the impact of resistance training has had more mixed results. **Purpose:** The purpose of this study is to investigate the after the effect of a Strongman-type exercise (Farmers walk) on measures of anxiety, perceived exertion, and affect. **Methods:** Fourteen subjects (mean age \pm SE = 21.6 yrs. \pm 0.45; height = 172.53 cm \pm 2.34; weight = 81.80 kg \pm 4.01; body fat percentage = 28.80% \pm 2.10; 1RM deadlift = 121.24 kg \pm 9.42) participated in two counter-balanced exercise sessions consisting of a 20-meter Farmer's walk carrying 70% of their 1-RM deadlift (Farmer's walk condition; FWC) or a normal (unweighted) walk condition (NWC) for 5-sets of 2-repetitions. Participants responded to the Activation-Deactivation Adjective Check List (AD-ACL), State Anxiety Inventory (SAI), prior to and immediately after completing the exercise protocol and also reported their Rating of Perceived Exertion (RPE) after each exercise repetition. **Results:** RPE scores demonstrated a significant time by condition interaction ($F_{9, 108} = 28.42$, $p < .001$), with participants reporting greater exertion in the FWC. While there were no differences between conditions for anxiety scores, AD-ACL scores revealed significant interaction effects for tiredness ($F_{1, 14} = 5.71$, $p = 0.03$) and tension ($F_{1, 14} = 14.28$, $p = 0.02$). Additionally, a main effect for condition was seen for the AD-ACL energy subscale ($F_{1, 14} = 5.13$, $p = 0.04$), with the FWC eliciting greater affective measures of energy. **Conclusion:** The FWC resulted in increased RPE values, along with energy and tension compared with the NWC. Measures of tiredness decreased in both conditions, but the amount of decrease was larger in the FWC condition. Further, measures of tension increased in the FWC, but decreased in the NWC. This suggests that a Strongman type exercise, such as the Farmer's walk, can have beneficial psychological effects for an exerciser.