

Abstract

Indoor bouldering consists of low height climbing sequences completed without ropes on artificial walls with landing mats for protection. Although bouldering is increasingly popular and competitive, scientific research remains sparse and information on ideal training regimens is limited. The aim of this study was to investigate the effect of interval bouldering on hanging and climbing time to subjective exhaustion. Twenty-four men, highly advanced boulderers (25.2 ± 4.8 years; 1.77 ± 0.07 m; 69.1 ± 5.3 kg; 6.8 ± 3.1 years climbing; 7b Fontainebleau bouldering ability), were randomly allocated to a 4-week interval bouldering (IB with $n = 12$) and conventional bouldering (CB with $n = 12$) training regimen. Pre- and posttests consisted of intermittent finger hangs (IFH) and climbing time to exhaustion (CTE). Results indicate significant higher IFH times after 4-week regimen for IB ($+27.3 \pm 18.4$ s, $t_{11} = -5.16$, $P < .001$), but not for CB ($+4.9 \pm 11.5$ s, $t_{11} = -1.47$, $P = .168$). Moreover, a significant higher CTE was displayed for IB ($+36.2 \pm 14.1$ s, $t_{11} = -8.85$, $P < .001$), but not for CB (6.1 ± 19.3 s, $t_{11} = -1.09$, $P = .298$). These findings suggest that IB is a highly effective method to increase hanging and climbing time to exhaustion in competitive bouldering.

Keywords: climbing, fingerboard, grip endurance, strength training, intermittent training