

An Assessment of a 15 vs. 30 Second Recovery Period on Vertical Jump Performance

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The vertical jump (VJ) test is often used to assess an individual's lower body peak power. The standard recovery time between subsequent jumps is usually 30 seconds (secs) with a completion of 3-6 jumps. Prior studies have reported no significant difference between 30 vs. 60 secs recovery on VJ performance. However, it may be possible that a shorter passive recovery (PR) period may allow for maintenance or improvements in jumping performance versus the standard recovery time and therefore, potentially contribute to a more time efficient testing session. To the best of the researchers' knowledge, the impact of a shorter PR period, such as 15 vs. 30 secs PR, on VJ performance has not been assessed. PURPOSE: To investigate potential differences between a 15 vs. 30 secs PR period on VJ performance in no less than averagely fit college-age males. METHODS: After measuring descriptive data (Ht., Wt., BF%, age), 25 averagely fit college-age males completed an 8 minute (min) dynamic warm-up. Subjects were given a 4 min PR during which their reach height was measured. Following the PR, four familiarization jumps were completed using a VJ measurement device. After another 4 min PR, the subjects completed 2 series of jumps, with 6 trials each, in a counterbalanced order with either 15 (FIF) or 30 (THI) secs of recovery between each jump. The FIF and THI jump series were separated by 6 min of PR. Excluding the first jump, the highest jump for FIF and THI were compared using Paired-Samples t-Tests with significant differences occurring at p < 0.05. **RESULTS**: Significant differences (p=0.01) occurred between FIF (68.88 + 8.42) cm) and THI (69.70 + 8.92 cm). CONCLUSION: The current results suggest that 30 secs of PR between jumps is optimal recovery for performance during the VJ test, while 15 secs of PR may limit peak VJ performance in averagely fit college-age males. Future research may assess the impact of 15 vs. 30 secs PR on VJ performance using highly fit collegiate athletes.