The Effect of Music Tempo on Muscular Endurance During the Bench Press

Garrett C. Ressler, Ashley Y. Lesniak, Curt B. Dixon, FACSM. Lock Haven University, Lock Haven, PA

Music is often utilized in athletic and recreational settings. Many athletes believe it is motivating and can improve performance. **PURPOSE:** To determine the effect of music tempo while performing repetitions to failure (RTF) on the bench press. **METHODS:** Five male and four female recreationally trained athletes (Age: 22.8 ± 1.1 yrs; Height: 173.8 ± 8.0 cm; Weight: 77.8 ± 10.0 kg; Body Fat: 21.6 ± 8.6%) participated in the study. One-repetition maximum (1RM) was measured on the bench press using National Strength and Conditioning Association guidelines. Individuals were asked to bench press 70% of their 1RM to volitional fatigue or failure while listening to one of the three music conditions in a counterbalanced design. The music conditions were control (white noise), low tempo (<90 bpm), and high tempo (120+ bpm) played on wireless headphones. Subjects selected music from a playlist the day of their trials to control for genre preference. Heart rate, blood lactate, and Ratings of Perceived Exertion (RPE) were assessed immediately post exercise. Repeated measure ANOVAs were used to explore for differences between music conditions. **RESULTS:** There were no significant differences between conditions (control, low tempo, high tempo) for RTF (16.8 ± 2.7, 16.9 ± 3.5, 17.9 ± 3.4; p = .720), post blood lactate (6.5 ± 2.4, 7.9 ± 3.8, 6.9 ± 2.7 mmol·L⁻¹; p = .211), peak heart rate (128.6 ± 13.2, 136.2 ± 15.4, 131.2 ± 19.9 bpm; p = .379), or RPE (14.7 ± 2.7, 14.1 ± 3.4, 15.2 ± 2.2; p = .84). **CONCLUSION:** Music tempo did not significantly impact RTF during the bench press in a resistance trained population.

Supported by Lock Haven University’s Health Science Department