The Effect of High-Intensity and Moderate-Intensity Exercise on Enjoyment and General Mood

Catherine G. Majchrowicz¹, Dana L. Ault², Nikki V. Enas², Holly A. Kennel². ¹Indiana University of Pennsylvania, Indiana, PA, ²Grove City College, Grove City, PA

Interval training is defined as exercise involving bouts of high-intensity exercise, usually prescribed at intensities between 80-95% of an individual’s heart rate maximum (HRmax), that are interspersed with rest periods (ACSM 2014). A major reason why high intensity interval training (HIIT) has become so popular is due to the fact that physiological and psychological benefits can be achieved in a much shorter period of time than that of continuous exercise. Although HIIT can achieve similar benefits as continuous exercise, just in a shorter amount of time, a question that must be considered is whether HIIT is enjoyable. One of the most common barriers to compliance with exercise is a lack of pleasure (Bruno, 2013).

PURPOSE: To evaluate the effects of body weight HIIT on enjoyment and general mood in a group of college age males.

METHODS: 15 male participants between the ages of 18-25 completed two 20 minute exercise sessions. Exercise sessions were either a moderate intensity continuous (MIC) exercise session prescribed at 50-65% of their HRmax or a HIIT session. General mood was recorded prior to each exercise session and again five minutes post exercise. During each session ratings of perceived exertion (RPE), affect, and heart rate were recorded. Immediately after exercise and 5 minutes post exercise the Physical Activity Enjoyment Scale (PACES) was administered. RESULTS: A 2 X 2 repeated measures ANOVA revealed no significant main effect for group (MIC and HIIT) (F= 1.234, p= .285) or PACES (F=.648, p= .434), and there was no significant interaction between group and PACES (F=.665, p=.429). A 2 X 2 repeated measures ANOVA revealed a significant main effect for mood (F= 7.146, p=.018). CONCLUSION: This study found general mood significantly improved from pre exercise to post exercise in the MIC session, but not the HIIT session. Therefore, when improving mood is a focus of an exercise program, MIC exercise should be prescribed.