



Mid Atlantic Regional Chapter of the American College of Sports Medicine

Annual Scientific Meeting, November 4th- 5th, 2017
Conference Proceedings

International Journal of Exercise Science, Issue 9, Volume 6



The Effects of Small Group Exercise on Rate of Perceived Exertion and Mood State in College Students

Nicole Martorella, Xiomara Espinosa, Nicholas Lewis, Zachary Altland, Tyler Emerich, Samuel Forlenza, Joohee Sanders. Shippensburg University, Shippensburg, PA

Motivating people to become physically active can be challenging. It is possible that exercising with others can provide a more enjoyable exercise experience. **PURPOSE:** To compare differences in rate of perceived exertion (RPE), mood state and enjoyment in individual and small group exercise. **METHODS:** Eighteen (5 female, 13 male) subjects (age: 22.1±1.4 yrs; mass: 81.4±16.2 kg) came in on two occasions and completed two exercise sessions; one individual and one small group exercise. For the small group exercise, subjects were randomly placed into groups of 3 and interacted with each other throughout the exercise. Each exercise session consisted of a 3 min warm up followed by 4 consecutive, 3 minute intervals at a workload (kp) equal to 2% of their body weight. Subjects pedaled the 1st and 3rd intervals at 50 rpm while the 2nd and 4th intervals at 60 rpm. Subjects' RPE, blood pressure (BP) and heart rate (HR) were measured at rest, during and after exercise. On each test day, subjects completed pre- and post-exercise mood state (positive and negative affect scale (PANAS) and physical activity enjoyment scale (PACES). Two-way analysis of variance with repeated measures was used to compare differences in condition and time. **RESULTS:** Small group exercise showed higher HR (106.1±17.1 vs. 103.1±16.8 bpm) but lower SBP (140.2±17.0 vs. 144.5±18.3 mmHg) when compared to individual exercise. Small group exercise also showed differences in positive and negative affect. Moreover, group exercise revealed higher motivation than individual exercise. However, there were no significant differences in any of the measures.

Group	Positive affect	Negative affect	Motivation	RPE	PACES enjoyment
Individual	36.9 ± 7.2	12.6 ± 3.3	7.6 ± 1.7	11.1 ± 3.1	2.44 ± 1.42
Group	40.0 ± 6.6	11.6 ± 2.1	8.0 ± 1.2	11.4 ± 2.2	2.04 ± 1.41

CONCLUSIONS: Group exercise does not seem to have an effect on increased mood state following exercise or decrease in RPE during exercise.