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The Effect of Video Distraction on High-Intensity Exercise Performance

Shannon K. Brady, Kirsten Cofer, Meghan Steager, Remington Paul, Abby Monko, H. Scott Kieffer, FACSM, Douglas K. Miller. Messiah College, Mechanicsburg, PA

PURPOSE This study examined the physiological and psychological effects of external distraction during high-intensity cycling. **METHODS** Ten healthy young adults participated in two ten-minute sessions of cycling. Sessions included a distraction condition (D) during which subjects pedaled while watching an adventure documentary, and a control condition (C) in the lab. Subjects were blinded to any exercise or biofeedback during both sessions. Subjects were instructed to cycle hard and try to cover as much distance as possible in both sessions. Total distance, oxygen consumption, heart rate, rating of perceived exertion, and energy expenditure were assessed during both sessions, and post-test mood state was reported following each session. **RESULTS** There were significant, progressive increases in VO_2 , HR, and RPE throughout both rides, but mean VO_2 (31.43 ± 8.09 vs 30.82 ± 7.92 ml/min/kg), HR (151.37 ± 15.73 vs 152.17 ± 19.20 bpm), and RPE (13.56 ± 1.33 vs 13.24 ± 2.14) were similar between D and C conditions respectively. However, video distraction resulted in greater total cycling distance than the control condition, (2.75 ± 0.43 vs 2.63 ± 0.47 mi, respectively), and a higher 10-minute RER (1.06 ± 0.09 vs 0.99 ± 0.02 , for D and C respectively). There was a non-significant 15% increase in self-reported mood following the distraction session compared to the control session (2.90 ± 0.74 vs 3.40 ± 1.07 , respectively). **CONCLUSION** Mental distraction during high-intensity cycling exercise increases total distance covered during a high-intensity cycling session.