2015

Fun versus Practical: Physiological Responses and Preference of Exercise Equipment

David Ryland
Cleveland State University

Alanna Shamrock
Cleveland State University

Shana Strunk
Cleveland State University

Fun versus Practical: Physiological Responses and Preference of Exercise Equipment

College of Education and Human Services

Student Researchers: David Ryland, Alanna Shamrock, and Shana Strunk

Faculty Advisors: Kenneth Sparks and Eddie T.C. Lam

Abstract

Until the invention of the rowing machine, rowing was only attainable on water. The Champiot Ultra Rowing Bike allows athletes to row on land and remains mobile.

PURPOSE: The purpose of this study is to determine whether the Rowing Bike is more efficient and enjoyable than a traditional rowing machine.

METHODS: Energy expenditure, heart rate, and rate perceived exertion (Borg Scale) were evaluated on 20 males (aged 23.75 ± 2.613) and 20 females' (23.05 ± 3.605) while riding the rowing bike and the traditional rowing machine for 20 minutes at 75 percent of their age-predicted maximal heart rates. Post-testing, subjects completed a preference survey. A mixed-design ANOVA in SPSS version 18.00 analyzed and compared all physiological responses and gender differences.

RESULTS: Significant differences ($p<0.01$) were found for energy expenditure, VE and RPE ($p<0.05$) on the different machines. Significant differences were also found when comparing the physiological responses of genders. The questionnaire showed significantly that people prefer the Rowing Bike.

CONCLUSION: The data collected indicated that the subjects prefer the row bike; however the rowing machine provides a more quality workout.