Rating Of Perceived Exertion Rpe | cff144e1ce22c0ac8b86f4520062677c


Biology of Sport publishes reports of methodological and experimental work on science of sport, natural sciences, medicine and pharmacology, technical sciences, biocybernetics and application of statistics and psychology, with priority for interdisciplinary papers. Brief reviews of monographic papers on problems of sport, information on recent developments in research equipment and training aids, are also published. Papers are invited from researchers, coaches and all authors engaged in problems of training effects, selection in sport as well as biological and social effects of athletic activity during various periods of man's ontogenetic development. This book focuses on the interconnectedness of health and being physically alive. This study evaluated the effect of post-exercise time on session rating of perceived exertion (sRPE) following steady-state and interval exercise bouts on a cycle ergometer. Fifteen subjects completed one steady-state ride and four different interval rides. The order of rides was counterbalanced. The steady-state ride was conducted at a workload of 90% to VT. The work-to-rest ratios of the interval rides were 1:1, 2:2, and 3:3. The high-intensity component of each interval was 75% of PPO. Heart rate (HR), blood lactate (BLA), and ratings of perceived exertion (RPE) were measured during each ride. The sRPE was measured at 5, 10, 15, 20, 25, 30, 60 minutes and 24 hours after completion of each ride. No significant differences (p > 0.05) in sRPE were found based on time post-exercise. Significant differences (p<0.05) Dunnar Borg introduced the field of perceived exertion in the 1950s. His ratings of perceived exertion (RPE) scale is used worldwide by professionals in medicine, exercise physiology, psychology, cardiology, ergonomics, and sports. Now, Dr. Borg presents the definitive source for using the latest RPE and CR10 scales correctly. Borg's Perceived Exertion and Pain Scales begins with an overview and history to introduce readers to the field of perceived exertion. The book then covers principles of scaling and applications of both the RPE and the CR10 scaling methods. This user-friendly, informative, and readable text discusses the fundamental bases of perceived exertion, presents information on uses and misuses of the scales, and provides guidance and direction on how and when to measure subjective somatic symptoms. A special appendix in the back of the book includes tear-out cards containing three RPE scales and three CR10 scales. A scale and instructions for how the scale is used are printed on each two-sided card. Borg’s Perceived Exertion and Pain Scales is the complete theoretical and methodological guide to the field of human perception. John Griffin presents an exercise prescription model that focuses on the unique body types and needs of clients. This revised edition includes case studies, reproducible handouts, questionnaires and tables to enhance teaching and learning. Everyone struggles when that scale just stops moving. It is extremely frustrating and can even cause a backslide in all the weight loss progress that has been made: the frustration will stop when you follow the 5 simple secrets in Weight Loss Secrets: Avoiding & Overcoming Plateaus. Sprint kayaking is prominent in Europe with training methods devised and adopted from Eastern bloc training systems. Modern sprint kayaking training incorporates the brickyard kayaking and kayaking between the legs (K2) and kayaking on a single-blade paddle (K1). The Profile of Mood States (POMS): monitoring training duration and intensity and establish a link with the POMS and Rating of Perceived Exertion (RPE): to monitor the general wellness of the kayakers. Seventeen elite sprint kayakers (two male, five female) with the following characteristics: age 26.5 (1.4) years, training experience 8.4 (3.7) years were part of the South African national sprint kayaking squad selected to participate in this study, based on their preparation for the 2008 Beijing Olympic Games (one male athlete did not qualify but continued to train). The females trained for the 500m K1, K2 and K4 events and the male for the 1000m K1. Three training camps (TC1, TC2, TC3) were held from 12 November to 09 December 2007, 25 February to 22 March 2008 and 14 July to 04 August 2008. RPE (Borg Scale) was recorded for each session. The 65-item POMS was completed twice a week, after half a days rest (Wednesday) and after a day and half rest (Sunday). Daily training load was calculated from RPE and session time: and an energy index calculated from the POMS vigour and fatigue scores. The Wisconsin Upper Respiratory Symptom Survey recorded illness and injury. Descriptive and Inferential Statistics, Friedman's rank test for k correlated samples, The Wilcoxon Signed Ranks Test, Spearman rank-order correlations were used to analyse the data. Statistical significance was calculated at p<0.05 and 10% (p<0.1). The results showed higher vigour scores associated with lower RPE and low training load: and high RPE associated with higher anger, confusion, depression, fatigue and total mood disturbance scores. There was a relationship between increasing POMS scores across training camps and the increasing training load. The energy index and vigour scores showed a positive relationship in the first two weeks of training. The findings for the POMS and RPE suggested that a state of overreaching might have occurred during the camps. Monitoring of the kayakers for an extended period after the training camps would have been useful to determine whether any of these individuals become over-trained. In accordance with Kentta et al (2006), regular use of the POMS may help detect under recovery, preventing staleness and unwanted rest for extended periods. Future studies will enable a retrospective view on these results. The purpose of this study was to determine if any difference in Calorie expenditure and rating of perceived exertion (RPE) exists when walking on the Curve or a motorized treadmill. Recruitment of participants was done through recruitment flyers placed on campus. After indicating interest, participants' eligibility was determined by the PAR-Q and being unfamiliar with walking on the Curve. Twelve participants volunteered for the study (five males, seven females). The mean age of participants was 22.58 years ± 2.31 and mean weight was 76.89kg ± 16.19. On testing days, each participant was fitted with a polar heart rate monitor and the K4-25 metabolic gas analyzer (K4). The order of tests was randomly assigned. The warm up consisted of walking at 3 MPH until steady state heart rate was reached which took approximately three minutes. The actual test consisted of walking at 3 MPH for 10 minutes on each treadmill. Oxygen consumption was collected on a breath-by-breath basis by the K4. Calorie expenditure was reported using the formula of one liter of Oxygen consumed equals five calories. Calorie expenditure was then totaled over 10 minutes. RPE was obtained during the last minute of each exercise bout. To determine whether there was a significant difference in Calorie expenditure and RPE while walking under the two conditions, two paired t-tests were performed. Alpha level was set at p<0.05. The purpose of this study was to evaluate the relationship between ratings of perceived exertion (RPE) and MET levels during four graded exercise tests (GXTs) in an early outpatient (Phase II) cardiac rehabilitation. Thirty post-coronary artery bypass and valve replacement surgery patients were tested on the day prior to hospital discharge, a LLGXT (T1); two weeks post-discharge, a FGXT (T2); four weeks post-discharge, a FGXT (T3); and eight weeks post-discharge, a SLM-GXT (T4). Mean peak heart rate (HR), RPE, and MET levels were calculated. A Scheffe post-hoc revealed significant differences (p<0.01) in RPE between T1 and T4, and T2 and T4. Significant differences in MET levels were also noted between T1 and T2 (p<0.05), and between all other GXTs (p<0.01). Mean correlation coefficients (r) and individual regression equations were developed for each subject for each GXT. Mean beta-coefficients and r values relating RPE and MET levels were also computed for each subject for each GXT. The slopes of the regression lines at the points (RPE, MET) along the regression line were also calculated. The slopes (T1), T2, and T4 (p<0.05) were compared. The decline in the slopes of the calculated regression represented progressively greater MET capacities at the same RPE. It was concluded that as a result of postsurgical recovery and exercise training, perception shifts occurred to yield the same RPE at higher MET levels.Autoregulation is a training approach where adjustments are made based on the recovery, performance and readiness of the individual. By providing greater individualisation, autoregulation may optimise muscular adaptations. This thesis investigates the practical implementation of autoregulation in strength training to answer the question: “can autoregulation, through the use of the novel rating of perceived exertion (RPE) scale based on repetitions in reserve (RR), improve the efficacy of powerlifting training?” This is an introduction to powerlifting and the training concepts common to it is undertaken. Then, the history of RPE in powerlifting is detailed, establishing the theoretical frame. In Chapter two book knowledge and methods of monitoring and regulating resistance training is reviewed. Those methods with strong (r ≥ 0.68) relationships to resistance training
performance are highlighted and the need for further investigation into the use of the RIR-based RPE scale in autoregulation is identified. Chapter three is a narrative review of the history of RPE scales in resistance training and the utility of the RIR-based RPE scale. In Chapter four, this scale's utility when conducting one-repetition maximum (1RM) tests in competitive powerlifters is assessed. Specifically, while similar, near-maximal RPE at 1RM among the powerlifters (9.7–9.8 RPE; p > 0.05) was found, average concentric velocity (ACV) among the squat (0.23 ± 0.05 m·s⁻¹), bench press (0.10 ± 0.04 m·s⁻¹) and deadlift (0.24 ± 0.05 m·s⁻¹) differed (p < 0.05). Sprint kayaking is prominent in Europe with training methods devised and adapted from Eastern bloc training systems. There is a lack of published research on sprint kayaking locally and internationally. Consequently, the aims of this research directly addresses establishing a relationship between kayak specific training and the Profile of Mood States (POMS); monitoring training duration and intensity and establish a link with the POMS and Rating of Perceived Exertion (RPE); to monitor the general wellness of the kayakers. Seven elite sprint kayakers (two male, five female) with the following characteristics: age 26.5 (1.4) years, training experience 8.4 (3.7) years were part of the South African national sprint kayak squad selected to participate in this study, based on their preparation for the 2008 Beijing Olympic Games (one male athlete did not qualify but continued to train). The females trained for the 500m K1, K2 and K4 events and the male for the 1000m K1. Three training sessions, November to 09 December 2007, 25 February to 22 March 2008 and 14 July to 04 August 2008. RPE (Borg Scale) was recorded for each session. The 65-item POMS was completed twice a week, after half a days rest (Wednesday) and after a day and half rest (Sunday). Daily training load was calculated from POMS and session time and an energy index calculated from the POMS vigour and fatigue scores. The Wisconsin Upper Respiratory Survey Symptom recorded illness and injury. Descriptive and Inferential Statistics, Friedman's rank test for k correlated samples. The Wilcoxon Signed Ranks Test, Spearman rank-order correlations were used to analyse the data. Statistical significance was calculated at p < 0.05.

The purposes of this study were to examine: 1) the metabolic, cardiovascular, respiratory, neuromuscular, and velocity responses during continuous, constant rate exercise performed at power levels corresponding to the heart rate (HR) GET and GET +15% during 60 min of exercise at 4 different exercise modes for each subject on 4 separate exercise sessions: 2, 3, 23, and 24. Exercise modes included a motor driven treadmill, cycle ergometer, arm ergometer, and rowing machine. HE and RPE were obtained by indirect calorimetry and analyzed. The resting HR and RPE for all subjects were 70 ± 2.1bmp and 6.3 ± 0.5 RPE, respectively.

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on people with various training and conditioning needs, from improving personal health to developing recreational and competitive fitness. By rating their effort based on pictures of other exercisers, your clients will be able to accurately set and regulate their conditioning intensity using a target rating of perceived exertion (RPE) zone. Special features of Perceived Exertion for Practitioners include the following: 1) 11 OMNI picture scales, which apply to all types of exercise and are reproducible for use as handouts, in fitness facilities, and in classrooms - Sample instructions on what to say to clients in various situations - Both clinical and field-based perceptual tests for use in aerobic, anaerobic, and resistance exercise assessments - Case studies that describe the clients’ characteristics, identify the exercise need, and present an action plan to meet that need using RPE as the training zone - Actual programs for aerobic, anaerobic, and resistance training that employ OMNI Scale RPE zones to guide intensity. Perceived Exertion gives you a broader understanding of perceived exertion, and you’ll be able to apply what’s in the text by using the 11 picture scales included. The text is a must-have for anyone looking for a better way to use ratings of perceived exertion to develop training programs.

The primary purpose of this investigation was to determine if a safe and effective physiological conditioning heart rate (HR) could be prescribed by perception of exertion. Ratings of perceived exertion (RPE) were requested from ten normal adult males during treadmill exercise trials at 4.7, 6.5, 9.7, 11.3, and 12.9 mph (T1). Subjects were then requested to subjectively regulate their own treadmill speed during two separate trials (T2 and T3) at the RPE reported for each speed during T1. Speed and HR at equivalent RPE were compared during T1, T2 and T3. Regression analyses revealed that there was no significant difference in speed across all RPE between the three trials, however, HR was seen to progressively higher during T2 and T3 than during T1 as speed and RPE decreased. HR reliability was significant (p<.05) during running but not significant (p>.05) during walking. It is concluded that prescription of exercise by RPE can produce safe, effective and reliable conditioning HR above 150 beats/min (80% HR max) and running speeds above 9 km/hr (5.6 mph). Use of RPE for exercise prescription in healthy individuals can be used in cardiac rehabilitation, and for patients in which strict adherence to target HR is essential. (Author). This study focuses on an evolving, interdisciplinary area of research involving Exercise Science and Clinical Psychology. It investigated the relationship between the perception of present-moment exertion or effort during a exercise and a concept called exertion. Exertion is commonly measured more objectively using physiological measures (e.g., heart rate) or more subjectively using self-rated Ratings of Perceived Exertion (RPE). Mindfulness is characterized as “present-moment, non-judgmental awareness,” or “living in the present.” Despite the acknowledged benefits of physical activity, many people find it burdensome, stressful, and emotionally taxing, especially when first starting an exercise program. Based on previous research, it was hypothesized that mindfulness would affect RPE during exercise, and that people who by nature are “mindful” would perceive exercise intensity as less stressful, measurable by a lower perception of exertion (RPE). The aim of this study was to investigate how mindfulness might affect RPE during exercise, and whether or not the relationship varies with exercise mode. PURPOSE: To compare the BORG-RPE and BORG-CR10 on an individual-level in varying task sessions using concurrent validity, verbal anchor and numerical categorical comparisons. METHODS: Fourteen subjects completed an initial maximal incremental walking exercise to determine maximal physiological values. Subjects then participated in six, varying intensity (two easy, two moderate, two hard), interval exercise sessions. The BORG-RPE and BORG-CR10 were used separately on each exercise intensity. Regression analysis was used to determine consistency and construct validity of the two scales. RESULTS: A strong nonlinear correlation was identified between the two scales (r = .68). Strong, linear correlations were identified between both scales and heart rate [BORG-RPE (r = .85); BORG-CR10 (r = .83)]. Good, linear correlations were identified between both scales and heart rate [BORG-RPE (r = .74); BORG-CR10 (r = .78)]. CONCLUSION: A high degree of validity was found for both the BORG-RPE and BORG-CR10 for perception in walking and running. Whether RPE was correlated with exercise mode or intensity was subject to the limitations of the study. In summary, the results suggest that RPE can be used as a reliable and valid tool in exercise prescription. This study assessed the relationship between subjective exertion during exercise and RPE when expressed in relative terms. Therefore, RPE can be used in exercise prescription to monitor relative exercise intensity. No relationship was found between mindfulness and RPE accuracy. Overall, these results suggest that the relationship between mindfulness and RPE is likely a fruitful area for future research. Cowritten by two of the world’s leading researchers in the field, the book examines these topics: The background and development of perceived exertion including the development of Borg’s RPE (rating of perceived exertion) scale and other measurement models, how physiological and psychological factors affect perceived exertion, the use of RPE in exercise testing and prescription, and the authors’ global model of perceived exertion. This study was designed to evaluate the effect of using the Rating of Perceived Exertion (RPE) on the accuracy of the Rockport 1-mile walk test. Eighty-eight subjects ranging in age and fitness levels performed a Rockport 1-mile walk test and a Balke maximal oxygen consumption (VO2max) test on the treadmill. During both tests the subject’s RPE was recorded each stage of the VO2max test and every 200 meters of the Rockport test. Maximal oxygen consumption was predicted by using linear regression. The accuracy of the equations was determined using multiple regression (R2 between VO2max predicted vs. actual VO2max) in treadmill and walk trials. The Rockport U equation was slightly less accurate compared to the original Rockport, but is simpler as it only used 2 variables. The equation: Predicted VO2max = 31.142 - (1.13 x (Walk Time)) - (0.35 x VO2max). P<.05, RPE predictive power to the equation when compared to only using time to walk 1 mile and was not significantly different than the original Rockport equation. Exercise Science and Clinical Psychology. 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demands of HIRT are not well documented in the Compendium of Physical Activities. The Borg rating of perceived exertion (RPE) 6-20 scale has been used to monitor and prescribe exercise intensity in several modes of exercise, however, the relation between heart rate (HR) and RPE in HIRT exercise is not understood. The purpose of this study was to quantify the metabolic demand in HIRT while examining the relation between RPE and HR. Twenty-six participants (10 male; 16 female) completed kettlebell (KB) swings and The Real RunnerTM (RR) interval style resistance protocols at least 48 hours after completing a maximal aerobic fitness test. The KB protocol consisted of 35 seconds of maximal effort work followed by 25 seconds of rest for 10 rounds (16kg males; 8kg females). The RR protocol followed a Tabata style design for 4 minutes. Oxygen consumption, HR, and RPE were recorded at the end of each work interval. KB exercise oxygen consumption was significantly different between males (31.20 ± 4.37ml/kg/min) and females (23.25 ± 3.8 ml/kg/min; p