





FSEM / WFATT 2014



Faculty of Sports and Exercise Medicine 11th Annual Scientific Conference & World Federation of Athletic Training and Therapy World Congress

The sporting hip, groin and hamstring – a complete picture

Thursday, Friday & Saturday 4-6th September 2014

The Helix, Dublin City University, Ireland

SCI 136 Comparison between different dynamic warm-up protocols on anaerobic exercise performance in male athletes.

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Human Performance Laboratory, Anatomy Dept., Watt's Building, Trinity College Dublin, Ireland **Introduction:** Usage of a dynamic warm-up (DWU) has replaced static stretching as the warm-up of choice for many athletes. Recent research has investigated usage of a weighted dynamic warmup (WDWU) as a means of enhancing performance. The aim of this study was to compare a DWU with a WDWU using a weighted vest equivalent to 10% of an individual's body mass and its effect on anaerobic performance. **Methods:** Fifteen (n=15) athletes completed a repeated measures randomised controlled study. Following familiarisation, each participant returned for testing on four separate occasions to investigate a single outcome measure during each visit. The outcome measures investigated were vertical jump (VJ), standing long jump (LJ), 20m sprint time and a modified Illinois speed agility test. Data were analysed using a repeated measures ANOVA with Tukey post-hoc analysis completed as required. Results: Improvements in VJ, LJ and 20m sprint performance were detected (P<0.05) following both warm-up conditions when compared to baseline. No significant differences were identified in the modified Illinois speed agility test data following either warm-up when compared to baseline. No significant differences were detected between DWU and WDWU in any of the outcome measures assessed. Conclusion: A DWU can enhance an athlete's VJ, LJ and 20m sprint times but does not result in improved speed agility performance. The addition of a weighted vest, equivalent to 10% of body mass, does not result in improvements in anaerobic exercise performance when compared to a non-weighted DWU.