

The Acute Effect of Three Different Warm-up Programs on the Performance of Young Soccer Players

Abed Khoshhal*,

Warm-up programs are important for effective exercise skills, prevention of tendon-muscular injury, and proper treatment. In this study, the acute effects of three types of warming workout (Extention, Plyometric and TRX) were studied. The subjects of this study were 20 members of Pars Drak Club in Rasht city with average age of 17.5 ± 1.00 , height of 174.85 ± 4.78 cm and weight of 61.00 ± 4.42 kg. On the first day, the participants in the pre-test. The pre-test of balance (Stork stand static test), speed (45 m), agility (Illinois test), flexibility (Sit and reach test) and explosive power (Sargent jump) were measured. After pre-test, subjects performed general warm-up movements for 10 minutes, then stretching was performed for 15 minutes. Post-test was performed similar to pre-test. The program was repeated in second and third days for plyometric and TRX trainings, respectively. Extention warm-up included twin muscle stretching in open arches, butterfly stretching, and hamstring muscle stretching in open arches, quadriceps stretching in knees, and quadriceps stretching in knees. Plyometric warm-up protocols included: Pair jump and single leg with hurdle, 180 degree rotation hurdle, Zigzag pair and single foot forward, Pair jump and single leg jump, Zig-Zag side jump with single leg. TRX warm-up program included: front thigh with sleeping belt, upside-down rowing, pressing leg with open arch with belt, swimming with hands moving side to side, Scott, front arm with belt and back arm with belt. Statistical analysis was performed using SPSS software (version 22). Paired sample t-test was used to investigate the effect of each exercise on research variables. One-way analysis of variance (ANOVA) was used to examine differences between groups. Results of this study showed that extention and TRX trainings significantly increased balance ($P<0.05$). Plyometric training significantly reduced the speed and agility test results (P

Keywords : Warming, stretching, plyometric, TRX, soccer

