RSA, CMJ, Leger, 10m sprint responses to Pre-season training in semi-Professional Soccer Players

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**References**

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**Aim:** The aim of this study was to analyze RSA, CMJ, and Leger, 10 m sprint responses to pre-season training in semi-professional soccer players. The study considered numerous studies highlighting the combination of high levels of physical, technical, and tactical skills during a soccer match. The aim was to determine whether physical training poses particular emphasis on training load that generally increases up to two times during the pre-season period compared with the in-season.

**Methods:** Six SPSS (age: 23 ± 7.7 years, BMI: 23.1 ± 1.8) were requested to perform aerobic training over an 8-week period on alternate days with the functional strength training sessions and sprint training drills as prescribed by the coaches and strength and conditioning staff.

Repeated Sprint Ability (RSA, total time (TT) and percentage of fatigue index (%FI)), Leger, 10 m sprint, and Counter Movement Jump (CMJ) tests were performed before and after pre-season soccer training. ANOVA for repeated measures was conducted to assess differences (p < 0.05) with respect to pre-season training. Correlation was calculated between the percentage of variation (Δ) of each test.

**Results:** Compared to the values recorded before the pre-season, improvements of Leger (3%) and %FI (17.5%) and a deterioration of TT (10%), 10 m sprint (0.2%) and CMJ (2.4%) were found. In addition, we found a main effect between before and after pre-season training in TT (ΔTT = 60.2, p = 0.001) and Leger (ΔL = 25, p < 0.005). ΔCMJ showed very large correlation with ΔL (r = 0.93), while ΔFT was largely correlated with ΔFI (r = -0.69).

**Conclusion:** Given the lack of the physical preparation considered as an important element in order to influence the final soccer game result, this study may be beneficial information for the coach in order to maximize the best physical condition of the whole team relative to the beginning of the regular season.

**References**


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