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Abstract: Purpose: To compare the sprint mechanical force–velocity (F–V) profile between soccer and futsal players. A secondary aim was, within each sport, to study the differences in sprint mechanical F–V profile between sexes and players of different levels. Methods: A total of 102 soccer players (63 men) and 77 futsal players (49 men) who were competing from the elite to amateur levels in the Spanish league participated in this investigation. The testing procedure consisted of 3 unloaded maximal 40-m sprints. The velocity–time data recorded by a radar device were used to calculate the variables of the sprint acceleration F–V profile (maximal theoretical force [F_{0}], maximal theoretical velocity [V_{0}], maximal power [P_{max}], decrease in the ratio of horizontal to resultant force [DRF], and maximal ratio of horizontal to resultant force [RFpeak]). Results: Futsal players showed a higher F_{0} than soccer players (effect size [ES] range: 0.11–0.74), while V_{0} (ES range: –0.48 to –1.15) and DRF (ES range: –0.75 to –1.45) was higher for soccer players. No significant differences were observed between soccer and futsal players for P_{max} (ES range: –0.43 to 0.19) and RFpeak (ES range: –0.49 to 0.30). Men and high-level players presented an overall enhanced F–V profile compared with women and their lower-level counterparts, respectively. Conclusions: The higher F_{0} and lower V_{0} of futsal players could be caused by the game's specific demands (larger number of accelerations but over shorter distances than in soccer). These results show that the sprint mechanical F–V profile is able to distinguish between soccer and futsal players.

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