

## SPRINT PROFILES IN SOCCER

Saunders B, Sale C, Sunderland C

*School of Science and Technology, Nottingham Trent University, Nottingham, NG11 8NS, UK*

There is little information available regarding the variation in sprint demands of competitive soccer with respect to playing position. The aim of this research was to investigate the sprint profiles, in terms of sprint time and distance by playing position in soccer.

University standard soccer players were monitored for sprint activity ( $>21 \text{ km h}^{-1}$ ) during competitive match play using a global positioning satellite system (GPSports, Australia). Information was collected over several games from full-backs ( $n=20$ ), centre backs ( $n=19$ ), centre midfielders ( $n=25$ ), wingers ( $n=13$ ) and attackers ( $n=26$ ). Data were analysed using a 1-way ANOVA with statistical significance accepted as  $p<0.05$ . Data are presented as mean  $\pm$  SD.

Mean sprints performed by wingers ( $30 \pm 6$ ) and attackers ( $29 \pm 7$ ) was significantly higher ( $p<0.01$ ) than full-backs ( $20 \pm 6$ ), centre-backs ( $16 \pm 4$ ) and centre midfielders ( $13 \pm 6$ ). Full-backs also performed significantly more sprints than centre midfielders ( $p<0.01$ ). Wingers and attackers covered significantly more distance sprinting ( $493.0 \pm 150.6$  and  $467.7 \pm 128.2 \text{ m}$ ;  $p<0.01$ ) than other positions, with centre midfielders covering the least distance sprinting ( $182.4 \pm 95.3 \text{ m}$ ). Mean sprint distance was significantly higher ( $p<0.05$ ) for wingers ( $16.5 \pm 2.4 \text{ m}$ ) and attackers ( $16.0 \pm 2.4 \text{ m}$ ) than centre backs ( $13.6 \pm 2.7 \text{ m}$ ) and full-backs ( $13.3 \pm 3.1 \text{ m}$ ), though this just failed to reach significance ( $p=0.66$  &  $p=0.64$ ) compared with centre midfielders ( $14.0 \pm 2.9 \text{ m}$ ). Wingers and attackers also performed more sprints of longer durations (Table 1).

The role of attackers and wingers appear to require them to perform more sprints and cover more distance sprinting during competitive soccer than other positions. Wingers and Attackers also perform more sprints of longer duration. These results can be used to determine appropriate sprint training regimes with respect to playing positions.

Table 1. Mean number of sprints performed per game according to sprint duration (s)

	1	2	3	4	5	6	7
Full Backs	7	6	3	1	1	0	0
Centre Backs	6	4	3	1	1	0	0
Centre Midfielder	5	5	2	1	0	0	0
Wingers	9	8	4	3	1	1	1
Attackers	11	8	6	3	1	1	0