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The use of GPS-based movement information in elite women's rugby union is gaining popularity. However, speed thresholds are currently based on data derived from the men's game (for example Cunniffe et al., 2009, Journal of Strength & Conditioning Research, 23, 1195–1203) and evidence suggests the maximum speeds achieved by female players are 2-6 km/h slower (Suarez-Arrones et al., 2014, Journal of Strength & Conditioning Research, 28(2), 452–458). The aim of the study was to examine the effect of reducing the absolute speed thresholds on the volume of high speed running and sprinting in women's rugby. With institutional ethical approval, Catapult Minimax S4 units were used to collect movement data from 58 players in five TP15 rugby matches. Total distance (m) and % time spent in high intensity running (HIR) and sprint (Spr) zones were measured adopting existing Cunniffe et al. (2009) criteria (HIR > 18 km/h; Spr > 21 km/h) (Absolute-1). Two alternative zone adjustments based on the lower maximum speeds reported by Suarez-Arrones et al. (2014) were compared: Absolute-2 (HIR > 16 km/h; Spr > 19 km/h) and Absolute-3 (HIR > 14 km/h; Spr > 17 km/h). Data were analysed using a one-way ANOVA to determine significant differences in total distances and % time between the thresholds. Effect sizes and 95% confidence intervals were calculated to identify the magnitude of observed changes. Only 24 players (41%) achieved speeds greater than the 21 km/h sprint threshold. HIR and Spr distances using the male-derived thresholds were 63 m and 30 m respectively. Significantly greater distances and % time spent at higher intensity speeds were observed when female-adjusted

thresholds were applied: HIR distance: 239 m, P < 0.01, ES

1.45; Spr distance: 137 m, P < 0.01, ES 0.94 (Absolute-3) and HIR distance: 139 m, P = 0.01, ES 0.80; Spr distance: 60 m, P = 0.131, ES 0.41 (Absolute-2). Significant, moderate to

large increases were observed for the % time for HIR and

Spr respectively: 0.12% and 0.03% (Absolute-1); 0.41%

(P = 0.003; ES 0.68) and 0.07% (P = 0.614; ES 0.18)

(Absolute-2) and 0.88% (P < 0.01; ES 1.39) and 0.36%

(P < 0.01; ES 0.81) (Absolute-3). Whilst changes were

expected, existing male-derived thresholds appear to

underestimate the movement patterns of female players.

With adjusted speed thresholds, the volume of high intensity

activity in the women's game aligns more closely to

that observed during men's English Premiership matchplay.

Preliminary findings indicate that female-specific

speed thresholds should be utilised in future where arbitrary thresholds are implemented.