



Loughborough
University

Research Spotlight: Female participation in Wheelchair Rugby

Photo credit: D Echelard / WWR



Wheelchair Rugby (WR), a high-impact Paralympic sport, relies on intensity and teamwork, yet women remain underrepresented. Players are classified by a point system (0.5 to 3.5), reflecting their physical abilities (higher numbers indicate greater functional ability). Teams of four players on court cannot exceed 8.0. A World Wheelchair Rugby competition rule currently allows competing teams an additional 0.5 points for every female player on-court. Successful teams balance the roles of low-point (1.5 and below) and high-point (2.0 and above) players to ensure both defensive and offensive opportunities.

This guidance sheet from Loughborough University provides the research findings on the differences between female and male WR players.

i. Female and male WR players differ in arm muscle strength across all classification levels.

- a. This disparity affects the ability to perform key WR performance activities, like blocking, picking, and hitting.
- b. The differences between females and males are more profound in high-point players.

ii. Female and male WR players show similar sprint performances, only lower sprint momentum.

- a. This affects changes in direction and velocity by making/taking a hit.
- b. If there is contact, female players will experience more change of direction and are more likely to be slowed down or stopped than male players.

The current recommendations based on this research would be:

i. There should be a competition rule compensating female WR players for the sex-based differences in arm muscle strength.

ii. It is recommended to differentiate between low-point and high-point female WR players, allowing a higher overall team points total on the court for each high-point female player compared to that provided for each low-point female player.

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