

# **The effect of game location on positional profiles of a professional rugby union team during a competitive season– Implications for the coaching process**

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## **Introduction**

Previous studies within rugby union have examined various aspects of performance including performance profiles (Reed and Hughes, 2006) and position-specific performance indicators (James et al., 2005). The investigations have provided an insight into the relative demands and effectiveness of each position, however, the impact of game location has not been considered. It is suggested that home teams play an attack dominated style (Thomas et al., 2008) and therefore the aims of the present study are to examine the impact of the game location on positional profiles of a professional rugby union over a competitive season and also gain an insight into the implications for the coaching process.

## **Methods**

**Match analysis:** Twenty-eight competitive matches (14 Home; 14 Away) from the 2010 English Championship were analysed using the SportsCode elite system (Sportstec). All fifteen playing positions were fully coded utilising 31 performance indicators: Minutes played prior to substitution; Total tackles attempted; Effectively completed tackles; Ineffective completed tackle; Assisted tackle; Missed tackle; Jackal; Kick pressure; Ball-in-hand; Pass; Into contact; Ball out of tackle; Recycle; lost in contact; Tackled into touch; Hammer; Ruck clears; Try; Handling error; kick; Penalty conceded; Penalty won; Turnover conceded; Turnover won; Line-out throw; Line-out jump; Lift; Maul attack; Maul defence; Scrum engage; Set piece error (Inter operator reliability – % error score  $0.85 \pm 0.26$ ).  
**Coach interview:** A semi-structured interview was conducted with the team Head Coach to consider the game location positional profiles and their subsequent use within the coaching process.

## **Results**

**Match Analysis:** Mann Whitney U tests identified no significant ( $p < 0.05$ ) differences between the home and away location scenarios for all the performance indicators coded. Interesting findings included: All forwards (except the No.8) completed more tackle attempts at home (Home 65; Away 61) in contrast to the backs who achieved a greater number of tackle attempts (Home 33; Away 37) when away (except the right winger). Generally, there tended to be a higher number of ball-in-hand occurrences among all players (except the right second row and full-back) when playing away from home (Home 146; Away 169).  
**Coach Interview:** Thematic content analysis of the interview highlighted that the coach did not fully engage with the performance analysis support afforded and despite acknowledging the interesting nature of the information presented admitted that the results would not be used within the planning process.

## **Discussion**

The study has identified that game location has little impact on the positional profiles in rugby union over a competitive season however the elite Premiership rugby coach has emphasised the need for individual player-specific information to assist in player development as opposed to general positional profiles. However, the importance of the positional demand information for use by the multi-disciplinary support staff, as opposed to the coach, has been highlighted.

## **References**

- James, N., Mellalieu, S. & Jones, N. (2005) The development of position-specific performance indicators in professional rugby union, *Journal of Sports Sciences*, 23: 63–72.
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- Thomas, S., Reeves, C. & Bell, A. (2008) Home advantage in the Six Nations Rugby Union Tournament, *Perceptual and Motor Skills*, 106: 113-116.