Positional differences in the performance of volleyball players for anthropometric and psychological readiness in a congested fixture tournament

ABSTRACT

In a congested volleyball fixture tournament, the demands of physical and psychological responses are heightened due to the high paced nature of the tournament. Thus, some performance factors such as anthropometric characteristics coupled with psychological readiness may differentiate players in their respective roles. This study investigates the performance differences between Spiker, Libero, and Setter based on anthropometric and psychological readiness during a congested fixture tournament. Anthropometric indexes comprising of height, weight and age were assessed while test for performance strategies instrument was used to evaluate the competitional and practice psychological readiness of the players before the tournament. The players' performances were analysed in real-time during a congested fixture volleyball tournament. A discriminant analysis model demonstrated that 70.60% of the variance within the dataset could be explained in one dimension with height, competitional readiness and skill performance as the most contributing factors in separating the players. Moreover, analysis of variance revealed that spikers are significantly taller than liberos and executed higher performance compared to setters p < 0.05. However, no significant differences were observed between the players in psychological strategies, age, as well as weight p > 0.05. Volleyball players possess unique profiles that are essential for each position to ensure success. The findings herein could assist coaches and other relevant stakeholders in making an informed decision when preparing teams for a fixture congested tournament in men indoor volleyball.