

How does it affect the setter intervention to the block participation in high level male volleyball?

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Introduction

The match analysis has had a very important role in the performance improvement in different sports (O' Donoghue & Holmes, 2015). Research on match analysis, despite of its amount (Valladares, García-Tormo & Joao, 2016), requires to follow deep in over different technical and tactical variables that affect performance (João, Leite, Mesquita & Sampaio, 2010). An important game action in volleyball is the set. This action is realized by a specialized player, the setter. This player is responsible of the offensive organization of the team, deciding, among other aspects, the area's set, and the tempo of the set (Palao & Manzanares, 2013). One of the main purposes of the setter is to leave the attacker in the best conditions to attack, taking into account to the opponent team. That is, to live the attacker in front of the minor number of blockers (Moreno, Moreno, Iglesias, Ureña & Del Villar, 2008). Thus, the aim of the study was to determine how different variables of the set affect to the block participation in high level male volleyball.

Methods

Sample

The study sample was comprised of 2742 game actions, corresponding to the observation of the 23 matches of the third phase in the Men's World Championship 2010.

Variables

The dependent variable was the block participation: (zero or one blockers, two blockers, three blockers). The independents variables were: area's set (zone one, zone two, zone three, zone four, zone six), and the tempo of set (first tempo, second tempo, third tempo). The statistical analysis was a multinomial logistic regression.

Results

The results showed that, both the area's set, and the tempo of set, were predictors of the block participation. Specifically, when the set was done to zone six (OR=.346, p<.001), instead of to zone four, decreased the frequency of two blockers in the block, instead of blocks formed by one or without blockers. When the set was done to zone one (OR=.351, p=.006) or zone two (OR=.193, p<.001), instead of to zone four, decreased the frequency of the blocks formed by three blockers, instead of blocks formed by one

or without blockers. In the case of the tempo of set, sets done in first tempo (OR=.129, $p<.001$ y OR=.13, $p<.001$, respectively) and second tempo (OR=.362, $p<.001$ y OR=.027, $p<.001$, respectively), instead of 3rd tempo, decreased the frequency blocks formed by two or three blockers, instead of blocks formed by one or without blockers.

Conclusion

Therefore, certain set variables (area's set and tempo of set) may affect to the block participation, and this could be considered in the training process in volleyball.

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