

DIFFERENTIAL ANALYSIS OF THE CENTER FORWARD ROLE IN THE TEAM TACTICS IN WATER POLO (MALE)

Abstract

Collective tactics is based on the division of roles in all phases of the game. There are several roles or positions in water polo: center forward, guard, wing, external attacker and goal keeper, all of which are instruments in the realization of collective tactics. The aim of this study was to describe the play on the position of center forward (C.F.) and compare it with other roles. The subject of this investigation was the description of all the activities in the game without contact with the ball (all swimming, duels, man up/down situations). Data collection was performed by registering players' activity on official games of the International Adriatic Water Polo League in the season 2009/10. The main units of measurement, i.e. entities were: position-player-quarter. The results were registered using 21 indicators and basic statistics was performed. Differential analysis for the position of C.F. regarding other players (positions) was carried out on the basis of testing the model of binary logistic regression equation. Markedly light frequency of total actions was noted on the position of C.F. compared to other players' roles. We noted differences in the range from (1:0.66) in crawl swimming in light and sub maximal intensity, up to even (1:4) in back stroke swimming in sub maximal and maximal intensity. C.F. is equal with other players in the meters swum in crawl technique in sub maximal and light intensity, as well as in total meters swum in sub maximal intensity. Compared to other players, C.F. spent generally less time in the game and, proportionally, less time playing in man up/down situations. A remarkable characteristic in the play of C.F. are duels, in accordance with frequencies and the time spent in the game. By applying binary logistic regression, we defined the differential characteristics of the C.F. in contrast to other roles in the game, which resulted in the equation of play structure on the position of C.F.: Solitary contributions in the prediction of the role of C.F. are represented in the linear equation for the position C.F. The results of this investigation will contribute to the elaboration of water polo game model in the domain of situational play without the ball (realization of the collective tactics regardless of the choice of the type of tactics in either attack or defense). The results bring statistical descriptions of the role of C.F. In addition to this, such unusual analysis brings out specific properties of the role C.F. in comparison to others.

Key words: water polo, game, center forward, statistics, model, logistic regression
