Optimizing technical training through monitoring cinematic elements in the 110 meters hurdles race

Florentina Nechita, Liliana Mihăilescu

Faculty of Physical Education and Sport, University of Pitești

Abstract

The paper addresses the issues of kinematic analysis of sport techniques, which may be one of the most effective ways to optimize sports equipment. The method permits the objective evaluation of independent variables of sport techniques that enables them to compare the models in the literature and allows monitoring of the training course, which facilitates the manifestation of performance capacity of athletes in the competition.

The goal of this research is to optimize the sample preparation technique in the 110-meter hurdles, to maximize the performance of sports, by benchmarking the value of kinematic parameters measured by case studies of the model with the existing literature and methodological operationalization of individualized intervention.

The main objective of the research is focused on identifying the kinematic parameters of the steps over the hurdle and determine their value in a case study, comparing the parameters determined by the existing models in literature, monitoring them over a year of preparation in order to optimize the technical preparation of runners in the 110 meters hurdles race.

Keywords: monitoring, optimizing, kinematics, technique, 110 meters hurdles race.