

IAAF

New Studies in Athletics

3./4.2017

The IAAF technical quarterly



APPLIED RESEARCH
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Governance in Sport

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NEW STUDIES IN ATHLETICS

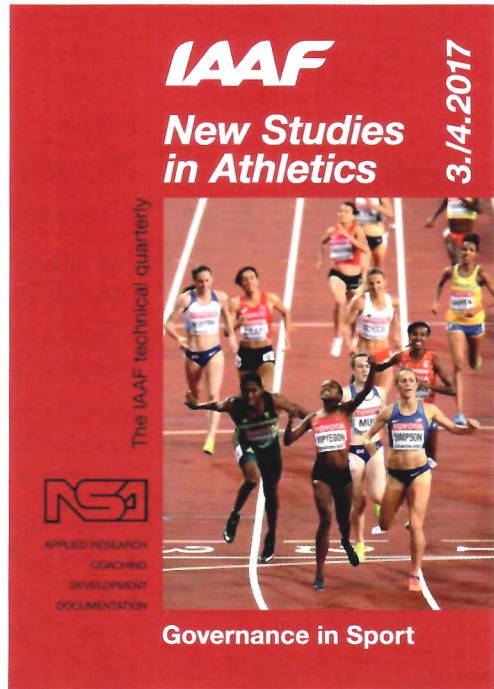
The International Association of Athletics Federations' technical quarterly for:

Applied Research

Coaching

Development

Documentation



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Photos

© Getty Images

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ISSN

0961-933X

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Views expressed in articles published in this magazine are those of the authors and not necessarily those of NSA or the IAAF.

Technique Characteristics of Skilled Junior Race Walkers

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32: 3/4; 79-84, 2017

by Sergey Sovenko

ABSTRACT

Since the introduction of 10km races for U18 men and women at international championships the performance level and competitiveness in this event have increased at a particularly fast rate. The greater demands placed on the athletes necessitate in-depth study to serve as the foundation for further improvement. The author presents an analysis of race walking technique based on video recordings taken during the 2016 and 2017 Ukrainian team and individual championships in Ivano-Frankivsk, where the competition included skilled U18 athletes from Ukraine, Greece, and the Republic of Belarus. Measurements of several biomechanical parameters are given and compared between two groups: athletes with the demonstrated potential to be selected for the national senior team at 20km and athletes with a lower level of accomplishment. The author also compared the results of the first group with those of current senior 20km race walkers obtained in previous studies and found that they are almost identical in all kinematic characteristics for the given average speed of the distance covered. Further performance improvement in this group of athletes should be associated with an increase of stride length at the expense of faster take-off accentuating forward motion, which will positively affect both stride length and frequency.

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