



Corrigendum: Fatigue-Related Changes in Spatiotemporal Parameters, Joint Kinematics and Leg Stiffness in Expert Runners During a Middle-Distance Run

Felix Möhler*, Cagla Fadillioglu and Thorsten Stein

BioMotion Center, Institute of Sports and Sports Science (IfSS), Karlsruhe Institute of Technology, Karlsruhe, Germany

Keywords: locomotion, endurance, treadmill, middle-distance, SPM, range of motion, 3D movement analysis

A Corrigendum on

Fatigue-Related Changes in Spatiotemporal Parameters, Joint Kinematics and Leg Stiffness in Expert Runners During a Middle-Distance Run

by Möhler, F., Fadillioglu, C., and Stein, T. (2021). Front. Sports Act. Living 3:634258. doi: 10.3389/fspor.2021.634258

OPEN ACCESS

Edited and reviewed by:

Jean Slawinski, Institut National du Sport, de l'Expertise et de la Performance (INSEP), France

*Correspondence:

Felix Möhler felix.moehler@kit.edu

Specialty section:

This article was submitted to Elite Sports and Performance Enhancement, a section of the journal Frontiers in Sports and Active Living

> Received: 09 February 2022 Accepted: 18 February 2022 Published: 25 March 2022

Citation:

Möhler F, Fadillioglu C and Stein T (2022) Corrigendum: Fatigue-Related Changes in Spatiotemporal Parameters, Joint Kinematics and Leg Stiffness in Expert Runners During a Middle-Distance Run. Front. Sports Act. Living 4:872316. doi: 10.3389/fspor.2022.872316 In the original article, **Figure 1** included the joint angles for the left leg instead of the joint angles for the right leg. Since the data were segmented from right heel strike to right heel strike, the gait events and the trajectories did not match. The corrected **Figure 1** appears below.

In the original article, there was an error in some formulations in the **Results** section, subsection **Time Series Analyses of Joint and CoM Movements** and **Discussion** section, subsection **Time Series Analyses of Joint and CoM Movements**, paragraph 1. The corrections in **Results** section and **Discussion** section appear below.

Results, Time Series Analyses of Joint and CoM Movements, paragraph two

Instead of "The SPM analysis (**Figure 1**) revealed a significantly higher plantarflexion of the ankle around right foot strike in the POST, as well as an increase in dorsiflexion and pronation prior to right foot strike. In the flight phase, the ankle was less plantarflexed and less supinated in the POST" the text has been corrected to "The SPM analysis (**Figure 1**) revealed an increase in dorsiflexion and external rotation prior to right toe off."

Results, Time Series Analyses of Joint and CoM Movements, paragraph three

Instead of "The knee joint showed more flexion particularly during swing and around right toeoff, whereas it was less flexed before the right foot strike in the POST. In the remaining planes, there were no significant differences except for a change with a short duration in the transverse plane" the text has been corrected to "The knee joint showed more flexion particularly during late swing and during stance, whereas it was more extended during early swing in the POST. In the remaining planes, there were no significant differences."

Results, Time Series Analyses of Joint and CoM Movements, paragraph four

Instead of "The hip joint was less flexed around right foot strike, and more flexed after right toe-off, in the POST. There were several significant differences between the PRE and the POST in the frontal plane of the hip joint. The hip joint was more abducted in the middle of the right stance phase and in the beginning of the right flight phase. Contrarily, it was more adducted in the middle of the left stance phase as well as in the middle of the left flight phase" the text has been corrected

1

to "The hip joint was less flexed during early and mid-swing, and more flexed during stance and late swing, in the POST. There were several significant differences between the PRE and the POST in the frontal plane of the hip joint. The hip joint was more adducted in the middle of the right stance phase and more abducted in the beginning of the right flight phase. Contrarily, it was more abducted in during mid swing."

Discussion, Time Series Analyses of Joint and CoM Movements, paragraph one

Instead of "The SPM showed that the ankle was less plantarflexed and supinated during flight." the text has been corrected to "The SPM showed that the ankle was less plantarflexed during the second half of stance."

The authors apologize for these errors and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Copyright © 2022 Möhler, Fadillioglu and Stein. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.



