ANNALS OF RESEARCH IN SPORT AND PHYSICAL ACTIVITY

Load variability in pre-season soccer matches: the influence of novice players

Autor(es): Vargas, Andrés; Urkiza, Iban; Orozko, Susana María Gil

Publicado por: Imprensa da Universidade de Coimbra

URL persistente: URI:<http://hdl.handle.net/10316.2/34970>

DOI: DOI:http://dx.doi.org/10.14195/2182-7087_5_9

Accessed : 26-Apr-2023 16:01:26

A navegação consulta e descarregamento dos títulos inseridos nas Bibliotecas Digitais UC Digitalis, UC Pombalina e UC Impactum, pressupõem a aceitação plena e sem reservas dos Termos e Condições de Uso destas Bibliotecas Digitais, disponíveis em <https://digitalis.uc.pt/pt-pt/termos>.

Conforme exposto nos referidos Termos e Condições de Uso, o descarregamento de títulos de acesso restrito requer uma licença válida de autorização devendo o utilizador aceder ao(s) documento(s) a partir de um endereço de IP da instituição detentora da supramencionada licença.

Ao utilizador é apenas permitido o descarregamento para uso pessoal, pelo que o emprego do(s) título(s) descarregado(s) para outro fim, designadamente comercial, carece de autorização do respetivo autor ou editor da obra.

Na medida em que todas as obras da UC Digitalis se encontram protegidas pelo Código do Direito de Autor e Direitos Conexos e demais legislação aplicável, toda a cópia, parcial ou total, deste documento, nos casos em que é legalmente admitida, deverá conter ou fazer-se acompanhar por este aviso.

ANNALS OF RESEARCH IN SPORT AND PHYSICAL ACTIVITY

FACULDADE DE
CIÊNCIAS DO
DESPORTO E
EDUCAÇÃO FÍSICA
DA UNIVERSIDADE
DE COIMBRA

IMPRENSA
DA UNIVERSIDADE
DE COIMBRA

1 • TREINO DESPORTIVO / SPORT TRAINING

**LOAD VARIABILITY IN PRE-SEASON
SOCCER MATCHES: THE INFLUENCE OF
NOVICE PLAYERS**

INTRODUCTION

Quantification of the external load in soccer has become a key element in match analysis¹. Thus, the aim of this study was to examine whether physical demand of soccer matches are modified with the incorporation of novice players.

METHODOLOGY

21 male players from the Athletic Club of Bilbao belonging to the 2nd division B participated in this study. Nine players (20.9 ± 0.99 years) had played in the team in two consecutive pre-seasons (veteran players, VT), and 12 players (19.43 ± 1.4 years) were incorporated into the team in the second season (novice players, NP). Written informed consent was received from all players. The Ethics committee of the UPV/EHU approved this study. External and internal load were measured through a GPS system (GPSport) and Pulseimeters (Polar Team2 Pro), respectively. 139 files (14 matches) were evaluated from matches of two pre-seasons, 2012-13 (P1) and 2013-14 (P2): nine matches during P1 and five matches in P2. Data was calculated from one period of a match, as each player played only one of the two periods. The variables analyzed were: total distance covered; minimum, average and maximum heart rate (HR); average and maximum speed; and intensity of the game: 14-21 km/h (moderate-speed running); 21-24 km/h (high-speed running); >24 km/h (sprinting), as well as, the running at high intensity (sum of the last three). Means, standard deviations were calculated. U-Mann Whitney was performed using SPSS (v20). The level of significance was set at $p < 0.05$.

• 49

¹ Department of Physical Education and Sports. Faculty of Physical Activity and Sports. University of the Basque Country (UPV/EHU)

² Athletic Club of Bilbao

RESULT

The average covered distance in P1 was significantly lower than the distance in P2 (4823.66 ± 825.21 vs. 4965.6 ± 517.22 m, $p < 0.05$). Also, the average speed was slower in P1 (6.14 ± 1.00 vs. 6.59 ± 0.66 km/h, $p < 0.001$). HR (minimum and average) was significantly lower in P1 than in P2 (144.90 ± 22.47 vs. 166.45 ± 7.93 beats/min, 78.17 ± 34.54 vs. 112.57 ± 21.47 beats/min). Whilst, the average high intensity covered by VP was significantly shorter than the distance covered by NP in P2 (1038.87 ± 247.59 vs. 1215.44 ± 450.54 m). HR (minimum, average and maximum) recorded in the VP were significantly low than HR recorded by NP (112.57 ± 21.47 vs. 127.10 ± 22.20 , 166.45 ± 7.93 vs. 176.87 ± 6.30 , 188.91 ± 9.99 vs. 194.21 ± 4.87 beats/min).

CONCLUSION

It is possible that VP had to perform more intense actions in order to correct the team tactic. On the other hand, NP covered more distance at high intensity and heart rates than VP which may be due to movements performed caused by the low knowledge of tactical ability to solve games situations presented during matches. Therefore, it would be essential that NP undergo a learning process for specific tactical roles.

ACKNOWLEDGEMENTS

This study was partially supported by a grant from the Basque Government (SPE12UN047). AVF is supported by a predoctoral fellowship from the Basque Government (PIF/UPV/12/101).

BIBLIOGRAPHY

1. Harley et al. Motion analysis (...) J Sports Sci 665–74, 2010.