28th ECSS Anniversary Congress, Paris/France, 4-7 July 2023

Training load and maturation monitoring in youth soccer: Does understanding the data impact coaching practice?

Thompson, N.G.1,2, Hughes, J.D.3, De Ste Croix, M.B.A.1, Roberts, W.M.4

1University of Gloucestershire 2University of Northampton 3Cardiff Metropolitan University 4University of Waikato

INTRODUCTION:

Training load and maturation monitoring is a practice widely used within professional soccer academies to aid player development and reduce growth-related injuries (1). While data can be used to inform coach decision-making on planning training, and retain and release decisions, the process can be ineffective in a fast-paced academy environment (2). Therefore, it is unclear how coaches interpret and deploy training load and maturation data as part of their coaching practice. Thus, the aim of this study was to explore how youth soccer coaches construct knowledge and resultingly, implement training load and maturation monitoring into their practice.

METHODS:

Eleven experienced professional youth soccer coaches from a range of elite player performance plan (EPPP) (3) category clubs (1-3) were purposively sampled based on their coaching experience (>5 yrs working within an academy environment), coaching qualifications (> FA level 2), and were currently working in the youth development phase (YDP) within their club. Semi-structured interviews were conducted, and coding was carried out using NVivo, until data saturation was achieved (4). An inductive, reflexive, thematic analysis was used to identify themes from the interviews.

RESULTS:

Three higher-order themes were identified (coach learning, club environment, and coach behaviour), which revealed that coaches' knowledge was constructed by learning through informal and formal sources. However, this was only reported within clubs that fostered a multi-disciplinary and social learning environment. Consequently, coaches' knowledge influenced the implementation and deployment of training load and maturation data into coaching practice. Category 2 and 3 status coaches (with the exception of clubs with significant funding) reported a lack of human resources, poor knowledge sharing, and limited communication between coaches/sports scientists as a barrier to using training load and maturation monitoring data. CONCLUSION:

Coaches and clubs of category 1 status fostered a multi-disciplinary, social learning environment that developed coaches' knowledge and use of training load and maturation monitoring as part of their practice. However, category 2 and 3 coaches reported a lack of human resources, knowledge sharing, poor communication of training load and maturation monitoring practices. Future research should aim to develop a coach learning framework for training load and maturation monitoring, that can be used within resource-limited clubs, that are unable to facilitate a multi-disciplinary and social learning environment.

1. Salter et al. (2020) 2. Robertson et al. (2017) 3. Elite Player Performance Plan. (2011). Premier League. English Premier League 4. Buckley (2022)

Topic: Coaching

Presentation Oral

European Database of Sport Science (EDSS)

Supported by SporTools GmbH