Journal of Sports Sciences ›
Volume 34, 2016 - Issue 23

Talent Identification and Coaching

The relationship between game-based performance indicators and developmental level in junior Australian football: Implications for coaching

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Pages 2165-2169 | Accepted 01 Jul 2016, Published online: 20 Jul 2016

Cite this article https://doi.org/10.1080/02640414.2016.1210816

ABSTRACT

Identifying performance differences between juniors at different stages of a talent pathway may assist with the development of prospective talent. This study investigated the relationship between game-based performance indicators and developmental level in junior Australian football (AF). Players were categorised into 2 groups according to developmental level; U16 and U18. Physical and technical skill performance indicators were collated for all U16 (n = 200) and U18 (n = 244) participants of their respective 2014 national championships. Data were acquired from all 28 games (12 U16, 16 U18); resulting in 1360 player observations (568 U16, 792 U18). Microtechnology and a commercial provider facilitated the quantification of 15 performance indicators. Generalised estimating equations (GEEs) modelled the extent to which these

performance indicators were associated with developmental level. The GEE model revealed that “contested marks” and “contested possessions” had the strongest association with the U16 level, while “total marks” and “clearances” had the strongest association with the U18 level. The remaining performance indicators were not developmentally discriminant. These results indicate that there are distinctive features of gameplay more associated with the U16 and U18 levels in AF. Coaches may wish to consider these results when constructing training drills designed to minimise developmental gaps.

KEYWORDS:

Performance analysis | notational analytics | generalised estimating equations | youth

Acknowledgements

The authors would like to thank the Australian Football League Talent Pathway for assistance during data collection. No financial support was required or provided for this study.

Disclosure statement

No potential conflict of interest was reported by the authors.

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