



Football Quarterly

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Female Football

Repeated-sprint sequences during female soccer matches using fixed and individual speed thresholds

By F Nakamura et al. in J Strength Cond Res, Sep 2016

What did they do? Eleven players performed a 20-m linear sprinting test, and were assessed in up to 10 official matches to evaluate repeated-sprint sequences (RSS) and its applicability in female football, using standardised and individualised speed thresholds.

Why is it important? Determining the characteristics of repeated sprinting sequences, helping to sculpt training and monitoring regimes for coaches and can be considered a crucial aspect of practice.

Things to consider: To properly contextualise the results, other factors should be included into the analysis (for example current scoreline). Furthermore, all participants played for the same team, meaning that tactical constraints or other factors make it difficult to draw conclusions for an entire population.

Take home message: Although it has been recognised that repeated sprinting is an important determinant of performance in high-level football, the results of the current study show that RSS are performed minimally. This means that match-related physical performance reduction might be caused by other efforts such as accelerations and decelerations or perhaps modulated by other contextual variables such as tactics or scoreline.

Scan or Click



Injuries and Prevention

The use and modification of injury prevention exercises by professional youth soccer teams

By J O'Brien et al. in Scand J Med Sci Sports, Oct 2016

What did they do? Observed and recorded the use of injury prevention exercises (with particular reference to those included in FIFA 11+) among the youth teams of a European professional football club.

Why is it important? Knowing which exercises clubs do and don't use may help inform the design of future injury prevention programs.

Things to consider: The outcomes of this study only relate to one club and may not reflect the use of injury prevention exercises within others. Furthermore, not every injury prevention session was observed.

Take home message: Exercises from the FIFA 11+ program were rarely performed in their original form (12% of sessions), however more frequently in a modified form (28% of sessions). While the FIFA 11+ is efficacious, the results demonstrate that professional clubs require/desire more variations and progressions beyond the included exercises. The key principles underpinning the exercise selection of FIFA 11+ (strength, balance, core stability and plyometrics) appear in line with those valued by professional football club fitness coaches.



Fatigue and Recovery

Muscle damage, inflammatory, immune and performance responses to three football games in 1 week in competitive male players

By M Mohr et al. in Eur J Appl Physiol, Sep 2016

What did they do? Performance and inflammatory responses of 20 male football players in response to three games within one week were compared to a control group (n=20).

Why is it important? In elite football, it is not uncommon for teams to play three games during a specific week. Yet, the majority of studies investigating recovery from football match-play have only followed the response to a single game. Therefore, quantification of player load and recovery response during a heavily congested match week is needed.

Things to consider: Elite players may be familiarised with congested game and training schedules during their competitive season and thus better adapted. This study is likely to be very specific to the sample population, although player rotation was not incorporated.

Take home message: The principal finding was that the physiological stress response appears to limit performance when games are separated by three days, however recovery is enabled when a fourth recovery day is included. Specifically, repeated sprint performance is markedly impaired, coinciding with elevations in markers of muscle damage, inflammation, oxidative stress response and reported muscle soreness.



Match Analysis

Unpacking the black box: Applications and considerations for using GPS devices in sport

By J Malone et al. in Int J Sports Physiol Perform, Oct 2016

What did they do? The functionality of modern Global Positioning Systems and the considerations associated with their use in scientific and practical settings were discussed.

Why is it important? GPS systems are frequently used in (different codes of) elite football. However, data acquired through this technology are often reported without information required to properly interpret the results (such as satellite reception and firmware version). Also, results provided by manufacturers are often reported without questioning the applicability. Highlighting this is a crucial step towards improving applications.

Things to consider: Not every manufacturer makes the underlying specifics or raw data available to its users and desired validation of systems requires expensive equipment.

Take home message: In order to optimise the application of GPS systems within scientific or practical settings, users should look further than the general results provided by the manufacturers. Specifics of the functionality (as mentioned before) and the accuracy of the systems should be determined, taken into consideration and reported.



Mental Fatigue

Impact of mental fatigue on speed and accuracy components of soccer-specific skills

By M Smith et al. in Sci Med Football, Nov 2016

What did they do? Fourteen well trained football players completed the Loughborough Soccer Passing Test (LSPT) in two conditions: mental fatigue (30 minute Stroop task) and control (30 minutes of reading magazines).

Why is it important? The psychological, training and matchplay demands of football may cause mental fatigue and potentially influence skill performance, meaning further research is required to investigate the claim.

Things to consider: The method of inducing mental fatigue (30 minute Stroop task) may not be a true representation of the potential mental fatigue experienced in elite football.

Take home message: The current study identified that a mentally fatiguing task had a detrimental effect on passing accuracy, although effect sizes were merely minimal to moderate. Future studies should also investigate other technical components, along with the physical demands of football. Furthermore, the effects of mental fatigue on short term actions (i.e. isolated match performance) along with long term performance (i.e. effects of fixture congestion) should be assessed.

