

FOOTBALL SPECIFIC TESTS AND EXERCISES



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Within football, testing may serve three main purposes:

- 1) determine a player's readiness to return to training or match play following an injury;
- 2) identify possible risk factors which may predispose a player to injury, including the regular monitoring of players to prevent overtraining, and
- 3) assess a player's strengths and weaknesses in line with the demands of sport, as part of either talent identification or for the purposes of devising individualised training programmes for performance enhancement.

A testing programme is only as good as its ability to be implemented into a football environment, and therefore, it is essential that it is easy to implement, can be carried out regularly and receives 'buy in' at all levels including the shared opinions of coaching, science and medical staff. Furthermore, whatever data is collected should be appropriately interpreted and be both reliable and valid. A common theme to both testing and training, should be: "Can this player meet the demands of football, including the ability to play without sustaining injury?". Developing a player performance model based around these demands, allows the highlighting of specific weaknesses which should be corrected through training.

Performance in football (that is performance levels achieved during competitive match play) is based around a myriad of factors including technical, tactical physical, psychological as well as injury resistance. These categories represent the first layer of profiling and having available a series of tests for each factor can highlight main areas in need of development. In terms of this second layer of information, as an example, the physical attributes important for football can be broken down, to include agility, acceleration/speed, lower body power and strength, aerobic and anaerobic fitness, body composition and balance/proprioception.

True optimisation of sport science support on a physical level, would go beyond just assessing physical parameters, but would assess the individual aspects which contribute to the performance of each parameter, i.e. its physiological determinants. For example lower body power is influenced by numerous factors including strength (both slow and high velocity), rate of force development, stretch-shortening cycle capabilities, proprioception and inter-muscular coordination. Going to this depth creates a wealth of information which is likely very informative and allows for a detailed profile of a player. In football, given its complexity, it is unlikely that a comprehensive profile to this extent would be achievable, given its time consuming nature and reliance on expensive equipment as well as skill scientists to acquire it. However, appreciation of the complexity of a football profile as well as the capture of critical more easily acquired information serves well for the training and testing of players. The window of adaptation is a philosophy based upon the principle of diminishing returns, in which an individual's ability to improve a physical performance parameter is influenced by the level of pre-training performance.

Underdeveloped variables can be developed quicker and to a greater relative extent than already developed fitness variables. Therefore, training to develop weak links offers a greater window for development and superior training efficiency.

Our training philosophy largely resolves around the development of football movement, with particular focuses on identification and correction of muscle imbalances, movement re-education and concentrated focus on enhancing neural function in movement, including both intra and inter-muscular coordination. This includes first the resolution of any movement dysfunction (due to altered reciprocal inhibition and/or synergist dominance), development of ground based movement patterns, landing and deceleration capabilities, development of explosive strength and finally football specific movement capabilities. Furthermore, avoidance of fatigue, both acute (development of high levels of aerobic and anaerobic fitness) and chronic (effective recovery and fatigue monitoring) is critical to performance and prevention of injury. Long term injury avoidance allows for long-term holistic player development and thus greater overall performance measures in line with the complexity of the game.