

Football Speed, the skill of being fast.

By Sten Schaper (2019)

Introduction

Many football players are good at coordinating the ball, but they lack of coordinating their own body. Looked at the ability to move quickly we see that, especially in team sports, there is a huge potential to improve. Certainly, in the development of football players there is still much to be gained in the field of "Football Speed".

In short, football speed is the ability to use the body in the most efficient way for football actions (e.g. use of arms or foot placement). The available energy and power must be converted as effectively as possible to movements, both in linear sprinting and in agility tasks either with or without a ball. This has 3 major benefits for the player:

1. Speed

A player is faster in position or at the ball, which is a crucial aspect in the game.

2. Endurance

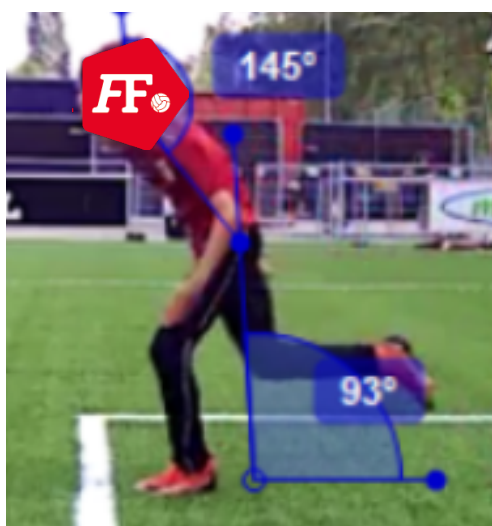
A player with a good running technique will lose less energy during the match and can therefore perform better for a longer duration.

3. Injury prevention

Only when the body is trained sufficiently it will be able to deal with the high loads during match situations. For example, during a sprint the load on the body equals 4 times the bodyweight. When the body is not used in a proper way this leads to enormous strain on muscles and tendons.

The research question:

What are the characteristics of sprinting and change of direction in youth football players and how can we improve their training in different age groups?



Method:

14 elite youth football players participated in this study. Their age ranged from 8 till 11 years old. The T-test was performed as an indicator for agility and a linear sprint was shot by camera for a kinematic analysis. The physical football characteristics during a 20-minutes match were measured with GenGee Insait KS.

Data and test used:

- Kinematic analysis (video)
- Linear sprint
- T-test

GenGee data used:

- Running speed
- Accelerations / Decelerations
- Turns right/left
- Heart Rate

Results:

We found that the players could benefit the most from focused training on mainly:

- Placement of the feet
- Length and width of the strides
- Position and timing of the knee
- Rotation of the trunk
- Change of direction technique

“A player only has the ball for 3 minutes per game. What do you do during the 87 minutes without it? That’s what determines a good player”
- Johan Crujiff

Recommendations:

The results showed that elite football players within the age of 8 till 11 have difficulties with sprinting and change direction the right way. Therefor more attention could be paid on sprinting characteristics during training in youth elite football. Elite trainers could be taught more about the physical aspects in youth football.

Further research:

In which age group football speed training will enhance performance the most?

Theories (e.g.):

- Young et al. (2002)
- Sheppard et al. (2006)
- Van Hooren B & Bosch F (2016)

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For more information contact Forward Football or Sten Schaper