

# STAGES OF SPEED TRAINABILITY

IN YOUTH SOCCER



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# WEBMINAR SUMMARY ↴

## STAGES OF **SPEED TRAINABILITY** IN YOUTH SOCCER

Can we train speed in young soccer players based upon the three stages of trainability?

Here we introduce the **Beyond Pulse Physical Qualities Development Model (PQDM)**, focusing on the physical characteristics of each group with examples of how coaches could train these in their practices.

To set the scene, it is important to understand how we develop speed in a structured manner from childhood to adulthood as speed is an essential component of soccer.

However in order to do this, we have a core set of principles around the model that are fundamental to every aspect of training. These are first to ensure **player welfare**, the delivery of activities that are relative to players' **stages of maturation**, to be prepared to coach to **individualization** and understand ways to achieve this, and **ALWAYS** making everything we do **fun and engaging!**

### Speed Training

Evidence suggests there is no such thing as a single speed gene. Further research also states that we can in fact train speed qualities from as young as five years old as long as the child comprehends. Therefore, Speed Training can be applied appropriately across the "Windows of Trainability" for youth.

On the following page we present our **Beyond Pulse Physical Qualities Development Model**, which is broken down in to three windows:

SAMPLING WINDOW: 5-10 years  
SPECIALIZATION WINDOW: 10-15 years  
INVESTMENT WINDOW: 15+ years

Within each window we show the **age** groups as a guide for training. It is important to note this is a sliding scale and is never an exact science based on the players' chronological age. Players can easily transcend one or more windows depending on their **growth** and

**maturation** periods. These characteristics also determine the **training adaptations** for youth as key elements to consider when planning different types of activities. With a focus on speed **step characteristics**, the earlier focus should be on increasing the **frequency** of steps and gradually evolves towards targeting **step length** as it relates to speed development. The focus for each window and the specific components of speed that should be trained are also highlighted. However, it is crucial that all are delivered through **soccer specific skills** that can easily be implemented within a typical practice. With these principles in place, the outcomes will take care of themselves!

Check out our blog post that shares some simple ideas as to how Speed Training can be applied across the three windows and start training speed in your players today!

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# PHYSICAL QUALITIES DEVELOPMENT PLAN ↘



























**SAMPLING YEARS**



**SPECIALISATION YEARS**



**INVESTMENT YEARS**

| Age                  | 5   | 6 | 7 | 8 | 9 | 10 | 10   | 11 | 12 | 13 | 14 | 15 | 15  | 16 | 17 | 18 |  |  |
|----------------------|---|---|---|---|---|----|--|----|----|----|----|----|---|----|----|----|--|--|
| Structure            | <b>LOW</b>  |   |   |   |   |    | <b>MODERATE</b>  |    |    |    |    |    | <b>HIGH</b>   |    |    |    |  |  |
| Growth Rate          | <b>STEADY</b>   |   |   |   |   |    | <b>RAPID</b>   |    |    |    |    |    | <b>DECLINE</b>  |    |    |    |  |  |
| Maturational Status  | <b>PRE PEAK HEIGHT VELOCITY</b>   |   |   |   |   |    | <b>PEAK HEIGHT VELOCITY</b>  |    |    |    |    |    | <b>POST PEAK HEIGHT VELOCITY</b>  |    |    |    |  |  |
| Training Adaptations | <b>MAINLY NEURAL</b>  |   |   |   |   |    | <b>NEURAL &amp; HORMONAL</b>   |    |    |    |    |    | <b>NEURAL &amp; HORMONAL</b>  |    |    |    |  |  |
| Step Characteristics | <b>FREQUENCY</b>  |   |   |   |   |    | <b>LENGTH</b>  |    |    |    |    |    | <b>LENGTH &amp; FREQUENCY</b>   |    |    |    |  |  |
| Outcome              | <b>FUN &amp; ENJOYMENT</b>  |   |   |   |   |    | <b>REDUCE DROP-OUT RATES</b>   |    |    |    |    |    | <b>REALISATION OF ATHLETIC POTENTIAL FOR ALL PLAYERS</b>  |    |    |    |  |  |
|                      | <b>Soccer specific skills</b><br> Aerobic & Anaerobic Fitness<br> Agility<br> Dynamic single leg balance<br> Flexibility<br> Landing Mechanics<br> Maximal Speed<br> Strength<br> Power |   |   |   |   |    | <b>Soccer specific skills</b><br> Aerobic base<br> Agility<br> Dynamic single leg balance<br> Flexibility<br> Landing Mechanics<br> Maximal Speed<br> Strength<br> Power |    |    |    |    |    | <b>Soccer specific skills</b><br> Aerobic & Anaerobic Fitness<br> Agility<br> Dynamic single leg balance<br> Flexibility<br> Landing Mechanics<br> Maximal Speed<br> Strength<br> Power |    |    |    |  |  |

## BIOS AND COMPANY OVERVIEW ↴

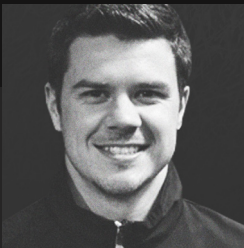


### JOHNNY WILSON/**BP**

Johnny was born and raised in County Cork, Ireland. He has a Master's in Sports Medicine, and has dedicated the last 16 years to the profession.

He was recently appointed as Head Physiotherapist at Chesterfield FC after 7 years with Notts County. At Notts County, Johnny's sports medicine team was named "Best Sports Science and Medicine department in League Two".

Passionate about helping athletes achieve their goals, the move into professional sport was a natural fit.



### MICHAEL SUP/**BP**

Michael is a Ph. D. candidate at Ohio University with a degree in Curriculum and Instruction. He gained his Masters Degree in Coaching Education and has a Bachelors in Sport Studies.

Michael is also a UEFA, USSF and United Soccer Coaches qualified soccer coach with experience in the professional academy system in the UK. He has been coaching across multiple levels of youth soccer here in the US for the past six years.



### ASHLEY LEIR/**USCS**

Ashley Lehr is the Operations Manager for US Club Soccer. She manages the Players First initiative, which promotes a holistic club soccer experience for parents and players.

Lehr has an MBA specializing in Sport Management from ESERP Madrid School of Business and a Bachelor of Arts in Managerial Economics and in Spanish from Allegheny College.

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Through our smart monitoring technologies, we provide simple health data and impactful educational guidelines that help coaches create better training curriculums, while improving every player's health and overall performance.

Beyond Pulse is the ultimate soccer coaching diagnostic tool, empowering coaches with critical health data, resulting in better training, improved player health and performance.

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