

Helping Young Athletes Get the Most from Sport

*What parents, coaches and
Athletes need to know*

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ATHLETICS 365



Session Outcomes

Current Thinking

- What is British & England Athletics approach to Youth Development
- Why Multi Skills / Events Before Event Specialism

Helping Young Athletes Get the Most from Sport

- Why do children participate in sport?
- Why do children dropout of sport?
- What contributes to early success?



Why are people Successful?

Nature / Nurture

- Nature – Inherited genes / genetic potential
- Nurture – Environment (family, culture, etc)

- Probably the most widely accepted reason (by the average person) for why people are successful and skilled

But is there more to it?

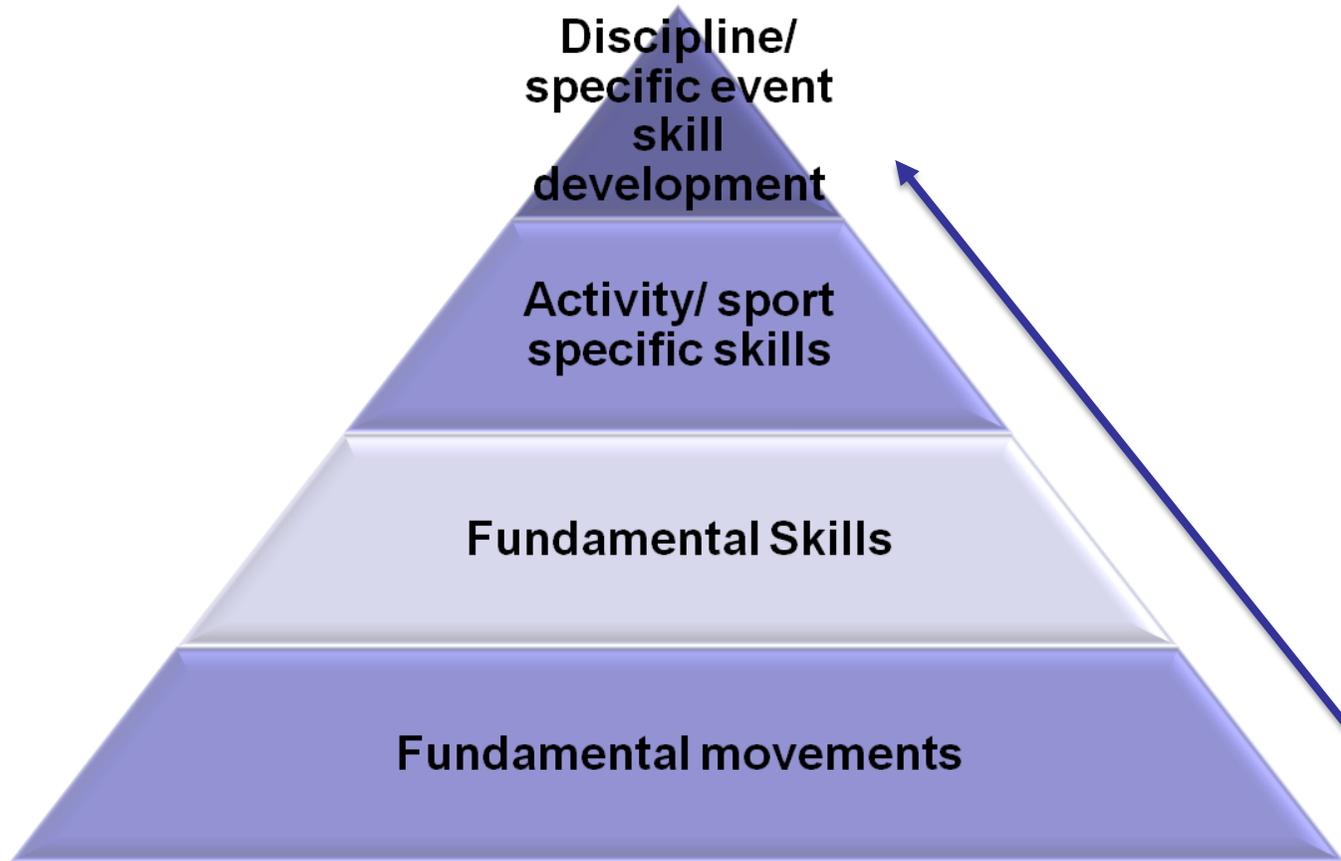


British Athletics Approach to Young Athlete Development

- Athlete Development Model produced, which supports the 'Long Term' development of an athlete
- Model based on extensive research
- Aimed at improving performance and promoting lifelong participation in the sport
- Move from a broad Multi skills / Multi Sport base to Multi Events, Event Group and finally Event Specialism



Long Term Athlete Development



UKA Athlete Development Model (V1.2)

Developmental Age +/-																		
Chrono. Age	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26+
Stage of Development	Pre-Puberty			Puberty						Post-Puberty				Adulthood				
Education	Primary			Secondary					Further Education		Employment Higher Education/University							

Figure 4: Training and Competition Requirements

Sports Focus	Multi-Activity			Multi-Event				Event Group				Event Specialisation (inc. Hep/Decathlon)					
Training Freq	→										Frequency stabilises						
Total Physical Activity	12+ hours week (including training) <small>*European Youth Heart Study published in July 2006</small>										Generally Training Only						
Athletics Specific Weeks/Year											All Year						
Ratio General : Specialised activity	Generalised										Specialised						
Competition Priority	Local			Regional			National		Entry International			Olympics WCs					
Facilities	Grass / Sports Hall			Track / Grass / Sports Hall			Track / Grass / Sports Hall / Gym		Good Outdoor / Indoor Facility / Gym / Pool			Altitude / Hypoxic Environment / Alter-G etc...					
Performance	Fun >			Club Competition >			International Representation >			Top 8 Finish >			Podium OG/WC				

*These diagrams are for illustration purposes only. They can only be fully interpreted after reading the accompanying notes and audio presentations.

Suggested Athlete Progression

Multi-sport: (Up until the age of around 12)

- All children should ideally be engaged in multiple sports with little specific focus.
- This period coincides with the periods of rapid skill acquisition for both girls and boys.
- The broadest range of sports possible will allow the young athletes to rapidly pick up all the fundamental movement patterns required for training in the future.

Multi-event: (Athletes Aged around 12-16 years of age)

- Athletes participate across a range of Athletics events (running, jumping and throwing))
- At this stage of development it is very difficult to predict what event or even event group an athletes may be best suited to when they are fully mature.
- Furthermore, as a fully mature athlete, regardless of event, their training will to some degree involve a variety of running, jumping and throwing activities and so a background in a range of events will provide a solid foundation for the future.

Event group: (around the ages of 15-16)

- Athletes will probably begin to focus on a specific event group (sprints, endurance, jumps, throws or multi-events) as they begin to realise where their potential and interests lie.
- At this point the athlete should focus on a range of events within the event group so as to develop a good all round event group specific conditioning and co-ordination base.



Why this Approach?

- Recognised across the World as the best approach to supporting Long Term Athlete Development
- Used by most sports across the UK
- Extensive research and evidence in this area
- Helps develop the fundamental and foundation skills necessary for every sport
- Helps minimise injury through all round conditioning
- Helps develop coordination
- Gives greater opportunity and choice to excel



Why this Approach?

- Athletes are not mini adults
- Sport and Exercise should promote growth and development not hinder it
- This approach can help athletes access critical points (windows) of development
- Allow them to discover new skills and ability
- Many of our most success international athletes started like this



What are the benefits of Sport?

- Improved Health
- Supports Growth and Development
- Helps with emotional development
- Improves skills and has been shown to improve academic studies, reading and memory
- Helps develop Self Esteem, Self Worth
- Make new social friends (peer acceptance)



Issues with Early Specialisation

- Insufficient development of the fundamental movement skills – Effecting higher skill development
- Immature (developing) body unable to stand specialised training
- Risk of ‘Over Use’ injuries
- Stagnation
- Boredom
- Risk of ‘Burn Out’
- Putting all your eggs in one basket



Why do Children do sport?

- “To have fun, improve skills, belong to a group, be successful, gain recognition, get fit and find excitement”
- “Children don’t join a team to sit around and do nothing. Sport is not enjoyable if they don’t get much opportunity to play”.
- *A 1992 study conducted by Dr Martha Ewing & Dr Vern Seefeldt asked 26,000 students age 10-18 years their reasons for participating in sport and found that ‘fun’ was the pivotal reason for being in sport.*

(Straight Talk by CAC)



What about winning?

- “Winning is often cited last when children are asked about their reason for participating” (*Straight Talk by CAC*)
- “Young children are more concerned with mastering their own environment and developing skills than beating others – at least until someone tells them that it is important to win” (*Coaching Children in Sport - Dr J Whitehead*)
- Research conducted on 3000 youngsters aged 9-16 years (by Dr J Whitehead) found that kids describe success as follows:
 - *“I did my first back dive ever in front of my brother and dad”*
 - *“We were practicing and I was the only one who could do it”*
 - *“I practiced and practiced, then one day I did it!”*



Why do Children dropout of sport?

- Boredom
- Lack of Success
- To much pressure (*from parents, coaches, peers*)
- Loss of Interest
- Friends Leaving
- Because it cease to be fun
- **Lack of fun is the leading reason for drop out**

A 1992 study conducted by Dr Martha Ewing & Dr Vern Seefeldt



Why do Children dropout of sport?

- Time for something new;
- Competing social interests;
- Conflict with other interests (time);
- Lack of players;
- Lack of support from schools;
- Poor coaching / teaching;
- Transition from junior to senior leagues;
- Not enough opportunity to play in matches

The Women's Sports and Fitness Foundation (WSFF) 2010



Why do Children dropout of sport?

- Injuries that prevent the athletes from recovering to where they were previously
 - Including poor rehab leading to continual breakdown
- Being caught up by other athletes whose physiological development was not as advanced initially
 - “My times didn’t seem to improve no matter how hard I trained, my 800m time stayed the same for 4 years as did my 400m. When I first set these times they were very respectable but the older I became the less so” **Athlete no longer in the system**
 - “From under 15s, those that are very good at Under 15s tend to be the large athletes that have matured earlier, and I’ve found they don’t handle it well when the others start to catch them up or improve”. **Coach**

What contributes to early success?

- Relative Age Effect
- Stage of Maturation
- Genetics (Nature)
- Environment (Nurture)
 - Opportunities
 - Support
- Types of training (both positive and negative)
- Controllable Factors (Athlete's Approach)



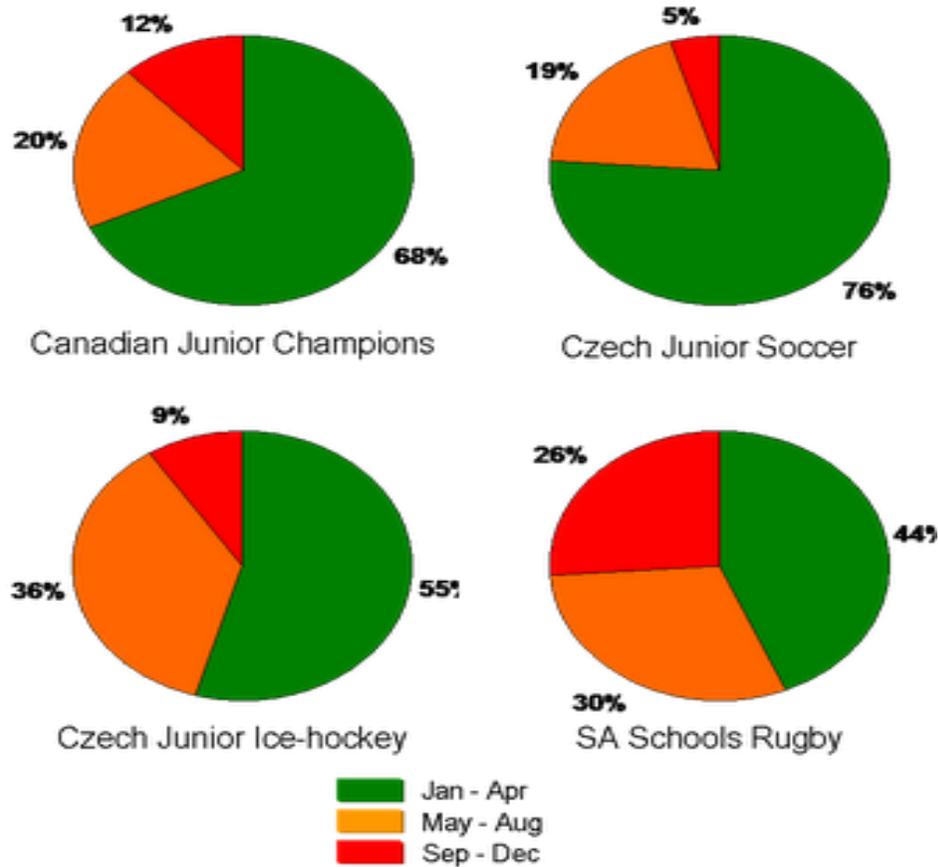
Relative Age Effect

- The stage you are born in a competition year can have a major impact on early success and progress
- UK Competition Years U13 – U17 (Sept to August)
- Up to 11 months difference in one year alone
- Research undertaken throughout the world
- Not just physical and mental advantages, but also opportunities

(See Outliers by Malcolm Gladwell)



Relative Age Effect



By Ross Tucker and Jonathan Dugas



Stage of Maturation

- +/- 2 years difference in maturation through Puberty
- Rate of development differs for Physical, mental, social and emotional
- PHV can help understand the athletes stage of development
- Early developers have an initial advantage over late developers, **BUT....**



+/- 2 years differences



Early and Late Maturation

Early Developers:

Advantages

- Physical advantage over peers
- Early success (ESAA, etc)
- Early Talent ID selection
- Access to higher coaching
- Success can come with little effort

Issues (observed)

- Eventual stagnation in growth
- Peers catch up in physical growth
- Success is harder to achieve
- Potential lack of determination
- Developed a Fixed Mindset

Late Developers:

Disadvantages

- Lose out to early developers
 - Performance and selection
- Harder to achieve same success

Potential Issues & Benefits

- Drop out due to lack of opportunity
- Believe they haven't got what it takes

- Focus on skill development
- Develop greater determination
- Do not rely on physical advantages but benefit from these at a later stage
- Develop a Growth Mindset

When you praise skill, kids tend to react by protecting their status – they don't want to take risks that might harm their standing.

When you praise for effort, on the other hand, kids tend to react by taking on more challenging tasks, making mistakes and fixing them, spending time in the sweet spot where skill is truly acquired.

Carol Dweck Author of Mindset



Genetics

- Inherited from our parents
- Can have a significant effect on performance
- Do athletes have the right genetics to excel in a chosen event or sport?
- Do athletes have genetic limitations in a chosen event or sport?
- How and when can we determine whether an athlete has the right genetic potential to succeed?



“If early sports training does nothing more than speed a child along to a predetermined genetic limit, it would make sense to concentrate early training on elementary skills, strategies, training education and fun rather than subject the child to arduous workouts that might lead to injury and early burnout and withdrawal from sport.”

Children's Exercise Physiology by Thomas W Rowland

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Environment (Nurture)

Opportunity

- Access to clubs / coaching
- Access to facilities and equipment
- Selection for teams and TID Programmes

Support

- Family, Friends, school, etc
- Financial
- Emotional, social



Types of Training

May included (in order to get greater initial gains) :

- Adult type training for underdeveloped body
 - Including advance S&C training
- Underdeveloped foundation skills
- Incorrect balance of Volume, Intensity & Recovery
- Aimed at short term games and not LTD
- Undue pressure placed on athlete
- Measurements of success only measured by time or distance and not on execution of movement



Types of Training

Training Should:

- Be progressive and relevant for LTD
- Have the correct balance of Volume, Intensity & Recovery
- Focus on Age and Stage Appropriate Training
 - Children are not mini adults
- Be athlete focused rather than Group Delivered (where possible)
- Consider other commitments (avoid overload)

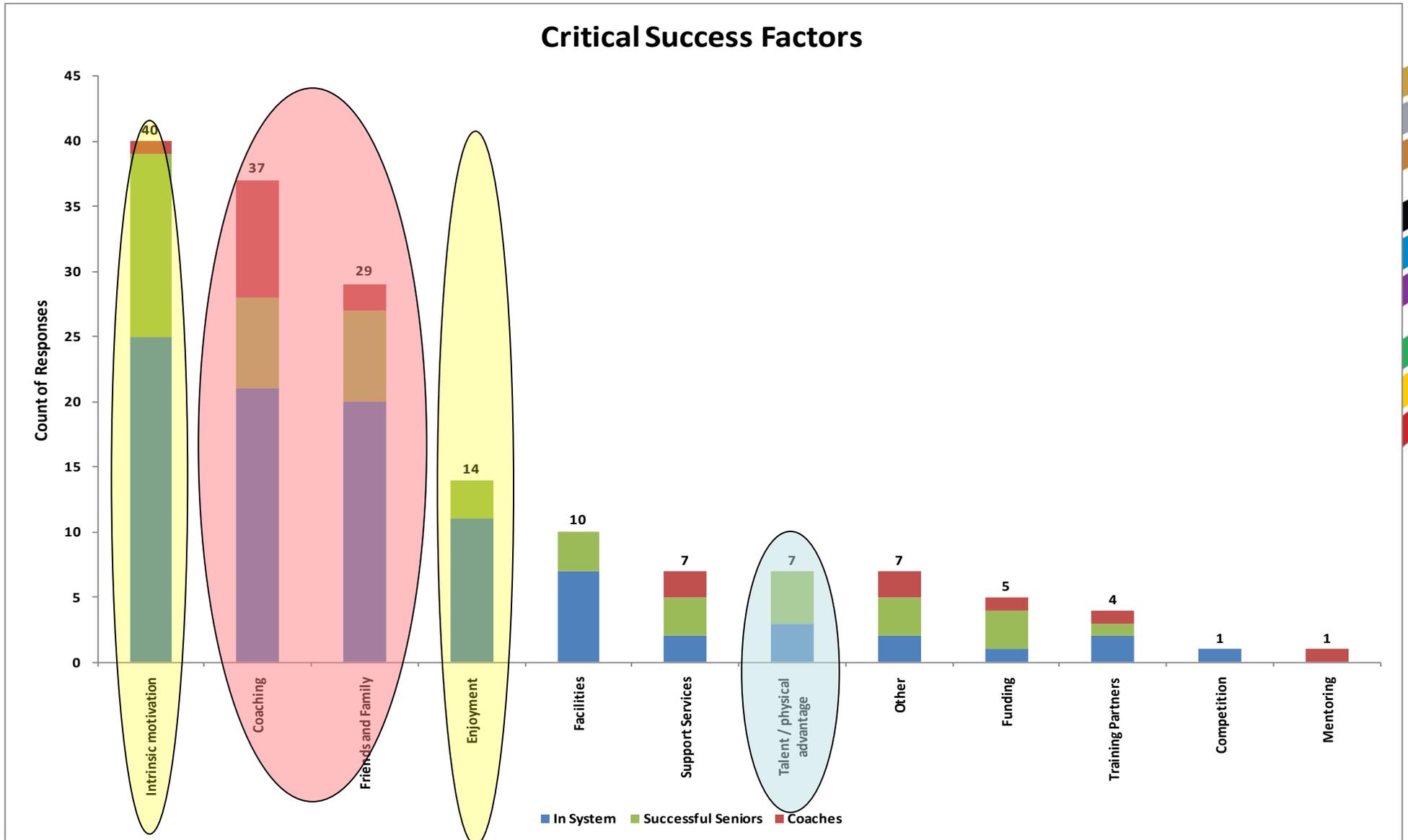


Why do so many successful young athletes never achieve at senior level?

What is important to senior success?



Critical Success Factors

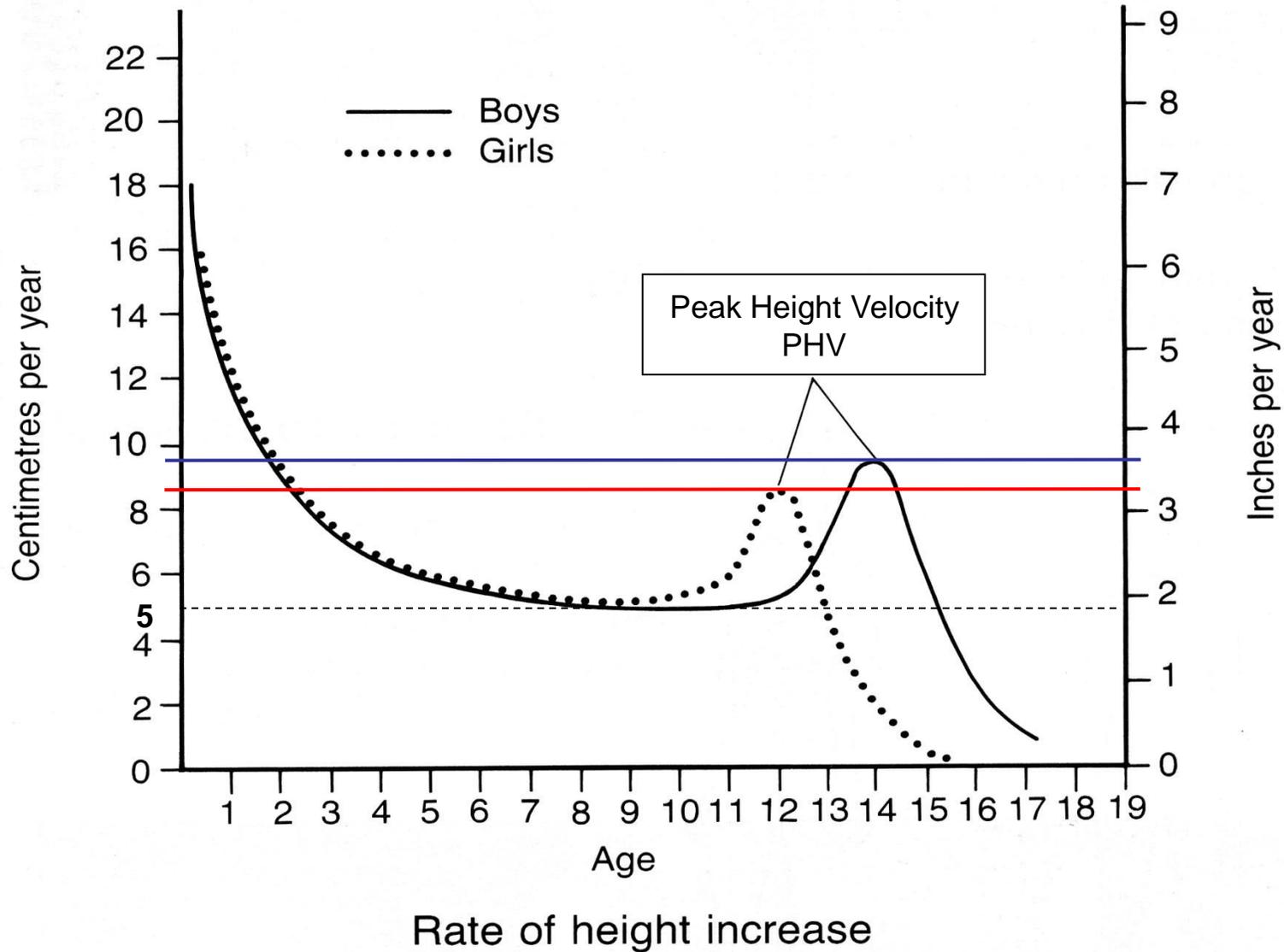


“To win the game and lose the child is totally an unworthy sacrifice.”

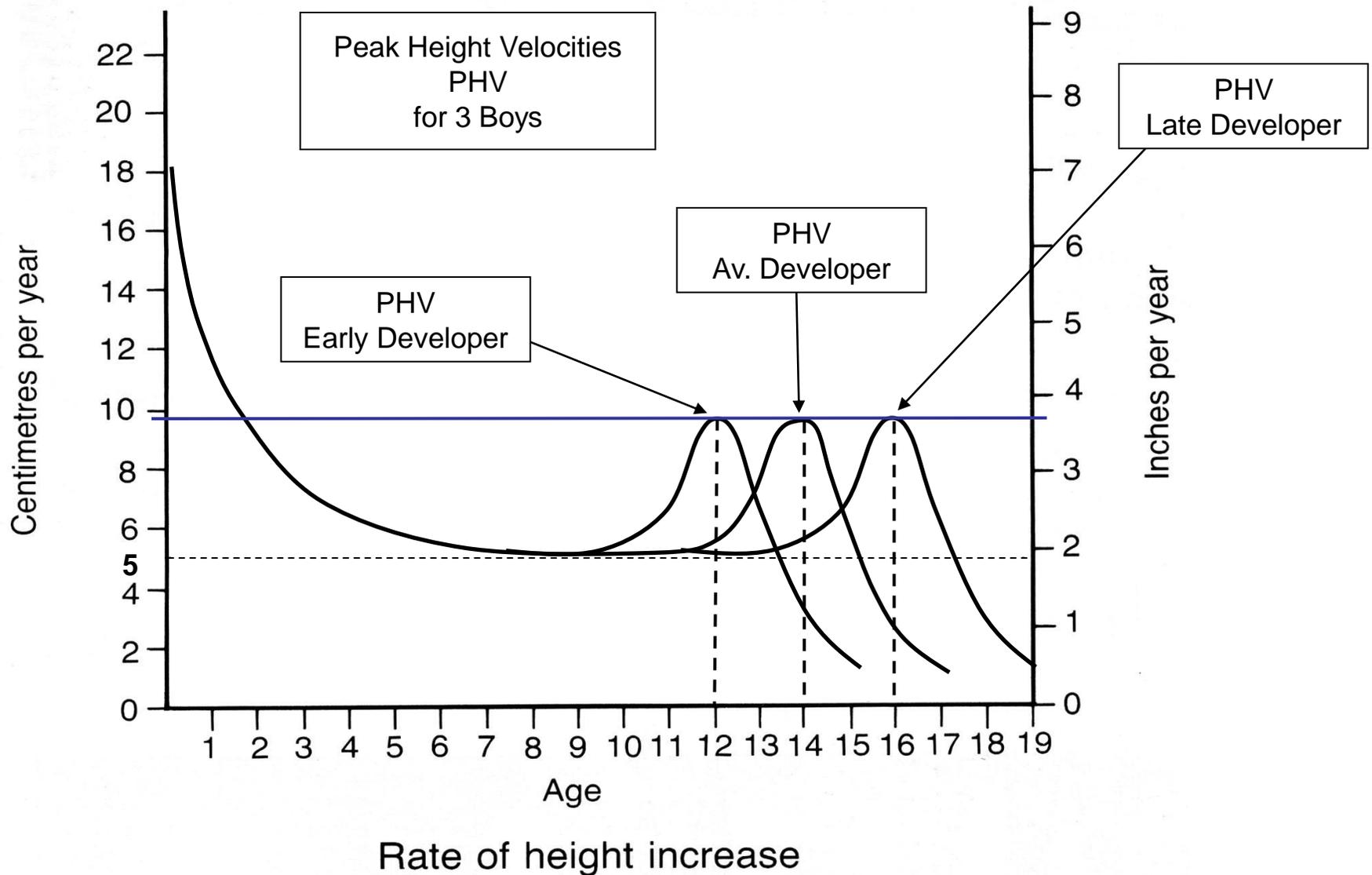
Dr Terry Orlick, Dr Cal Botterill

Every Kid Can Win

Age / Height Graphs



Early and Late Developers - Boys



Early and Late Developers - Girls

