

SINGAPORE SPORT & PERFORMANCE CONFERENCE 2022

**From Youth to Elite Sport:
Harnessing Potential and the Pursuit of Excellence**

2nd - 4th November 2022

Organised by



SINGAPORE SPORT & PERFORMANCE CONFERENCE 2022

From Youth to Elite Sport: Harnessing Potential and the Pursuit of Excellence

Talent Inclusivity and Development

Laying the foundation for future elite success

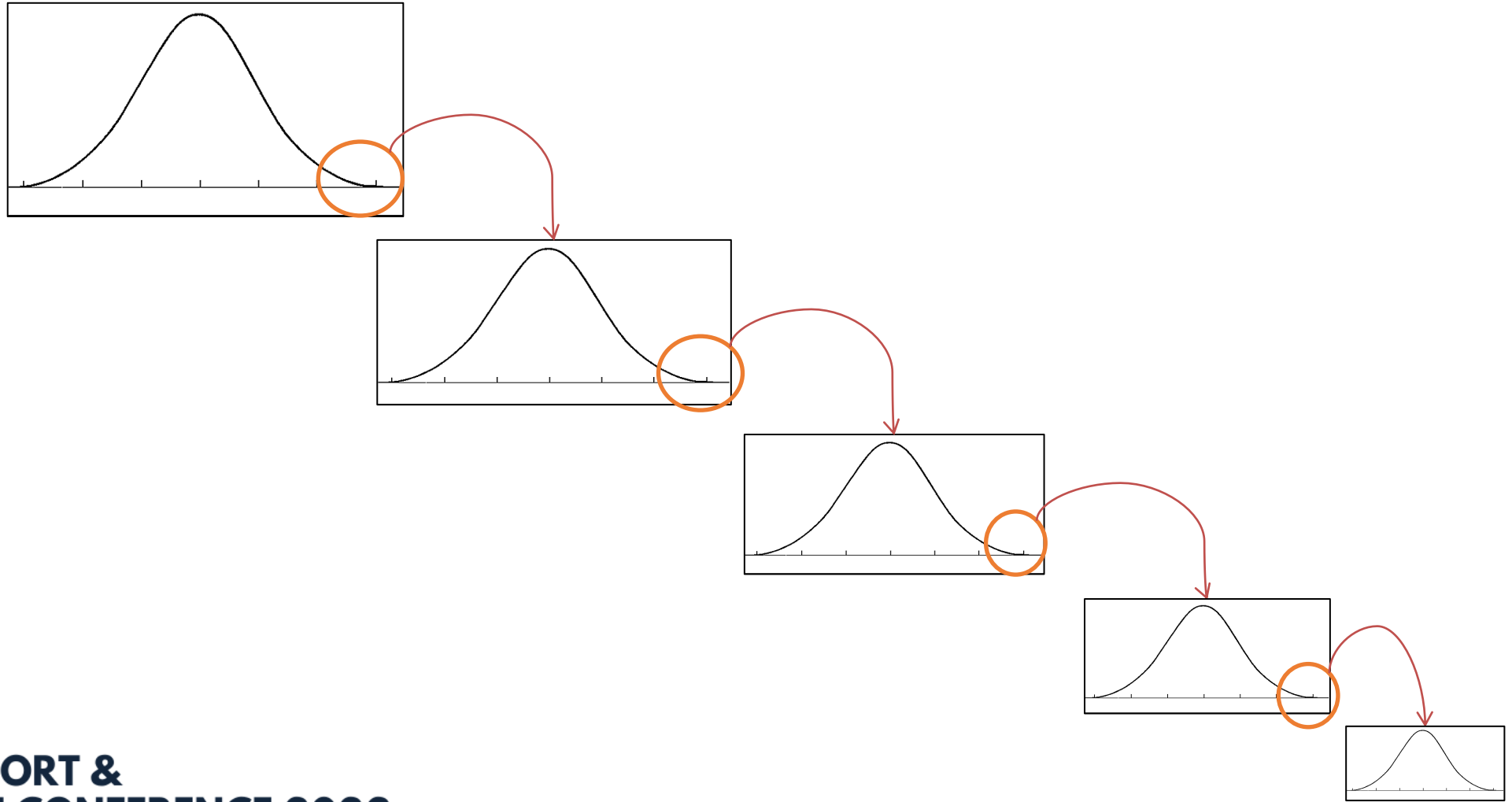
Dr. Joe Baker - York University

The Reality of High-Performance Sport

There are considerably more athletes in the system than can possibly achieve expert/elite status.

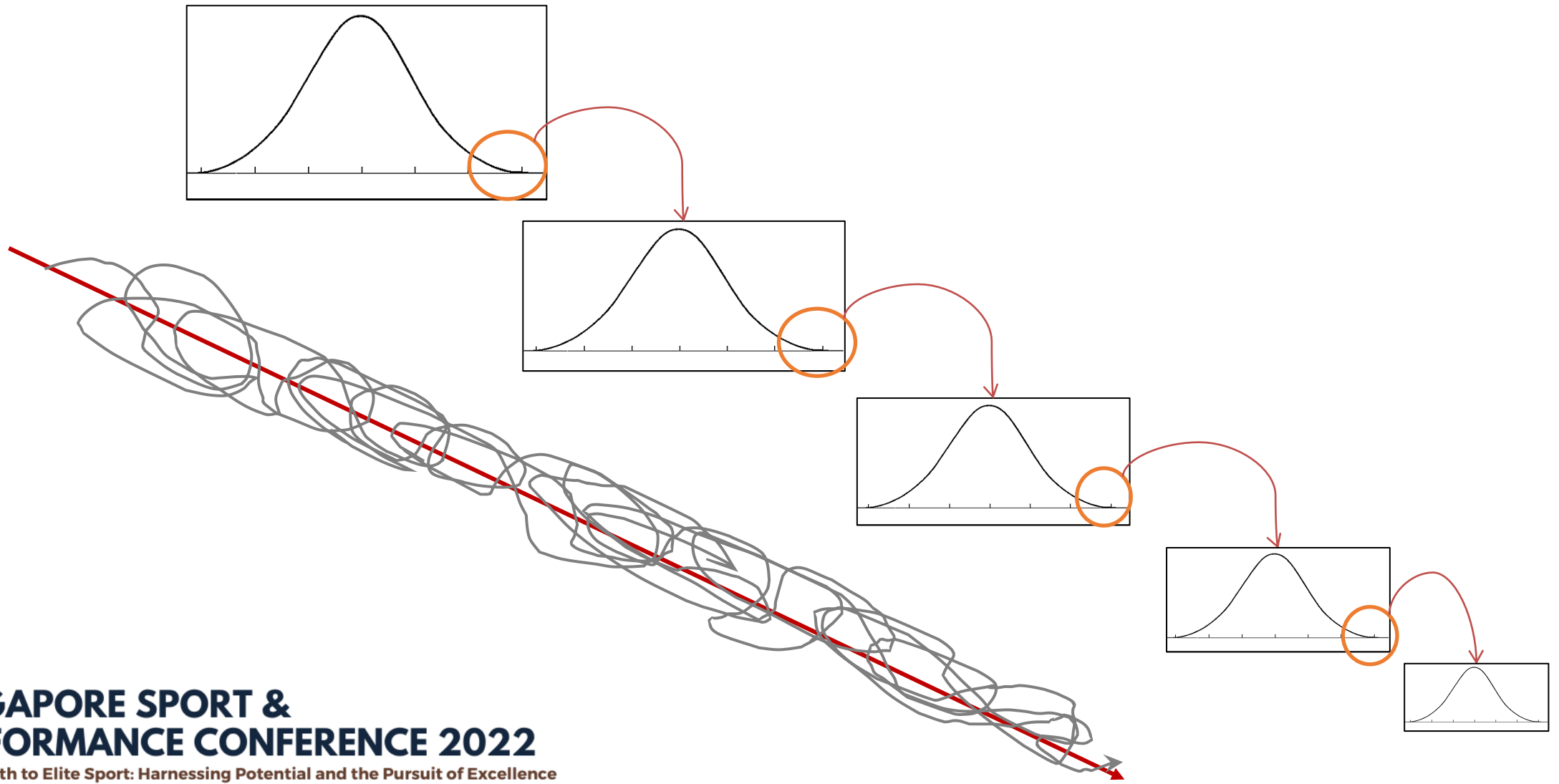
Sport is a resource limited system.

Therefore, sports must attempt to use their limited resources efficiently.



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What is talent?

Talent as a scientific concept – refers to the variables that differ between individuals in a population that affect their likelihood of success.

Talent in practice – refers to those elements that can be measured in the 'here and now' that allow coaches/scouts to make more accurate predictions about who should get limited resources.

Why does this matter?

Focusing on what 'talent' means to coaches/practitioners forces us to focus on what it means from a utilitarian perspective - how can it help coaches and support staff do their jobs better?

The notion of 'talent' has important meanings for researchers who use theory to explain human development and achievement...

... but has limited value to practitioners.

Shifting the focus to development

Shifting focus to development does not mean everyone is equal in their potential for success, it just acknowledges:

- Currently, we aren't very good at selecting talent
- Selection decisions impact whether and how athletes engage with training
- Continued engagement with training is critical for long-term development

A first principle of athlete development: In order for athletes to meet their potential, they must continue engaging with their sport.

Shifting the focus to development

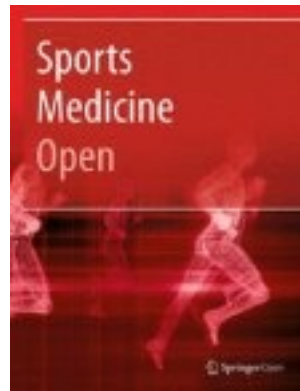
A focus on development considers what is best for all participants in a program rather than trying to single out those with the 'most potential'.

- What general principles would help all athletes thrive/improve?
- What is possible in our current system?
- What needs to change?

A scaffolding approach to athlete development

This approach considers development relative to specific needs of athletes at different stages of their pathway

- 'Why' instead of 'What'
- Helps mitigate cohort and survivor effects



CURRENT OPINION

Survival Versus Attraction Advantages and Talent Selection in Sport

Joseph Baker , Kathryn Johnston and Nick Wattie

British Journal of Sports Medicine

What do we really know about elite athlete development? Limitations and gaps in current understanding

Joseph Baker ,¹ Kathryn Johnston ,¹ Magdalena Wojtowicz,²
Nick Wattie ³

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Level X – The Goal

Level One – The Base

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Psychologically

1. Foundations of long-term motivation

- Enjoyment (does the activity meet immediate needs of the participant)
- Increasing competence
- Support (usually from parents)

Level One – The Base

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Motor Learning/Skill Acquisition

2. Broad base of skills necessary for future success
 - Injury prevention
 - Creativity
 - Breadth of motor experiences (talent transfer)

Level One – The Base

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Physically

3. Management of load

- Appropriate for stage of growth and maturation
- Optimized to maximize training adaptation

Level One – The Base

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Managing the 'Noise'

Optimizing Load

- How do we optimize amount (intensity) and type (play/practice) of load?

Level X – The Goal



Level One – The Base

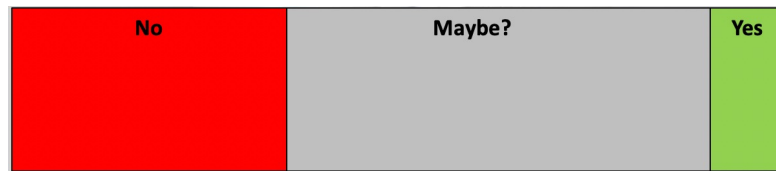
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Managing the 'Noise'

Optimizing Selection

- When is it best for selection to occur by the system (never?) and how do we do this more effectively?



Level X – The Goal



Level One – The Base

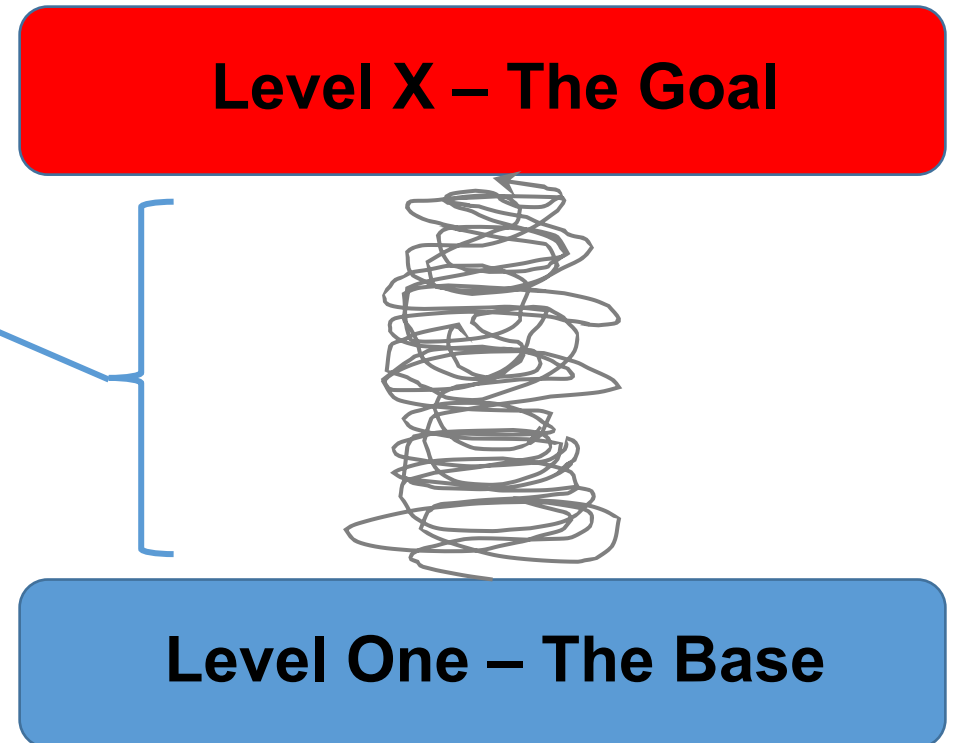
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Managing the 'Noise'

Optimizing Resourcing

- What key resources are necessary for the system to provide?
- How does this change across the developmental pathway?



A scaffolding approach to athlete development

This approach considers development relative to specific needs of athletes at different stages of their pathway

Managing the 'Noise'

Optimizing Motivation

- How do we manage the shift from extrinsic motives to intrinsic ones.
- When/how do social connections diminish in their importance?
- How do we manage dropout in adolescence?

Level X – The Goal



Level One – The Base

Comparisons to other approaches (e.g., FTEM, LTAD)

These models generally suggest delineated phases/stages athletes move through on their way to 'mastery'.

This approach (structured models of athlete development) present standardized, progressive, and 'knowable' approaches to athlete development.

They are generally designed for effective management of limited resources... not for optimizing individual development.

System Needs

Effective management of resources across:

- Athlete development
- Changes in governmental pressure
- Changes in system factors

Individual Needs

Effective management of long-term development should always:

- Nurture motivation/engagement
- Provide opportunities for skill acquisition
- Balance load relative to adaptation and developmental stage



Designing a more 'inclusive' approach to selection

Recognize limits of current knowledge and limitations of current approaches.

- We are not very good at assessing long-term potential

Why is talent selection so difficult?

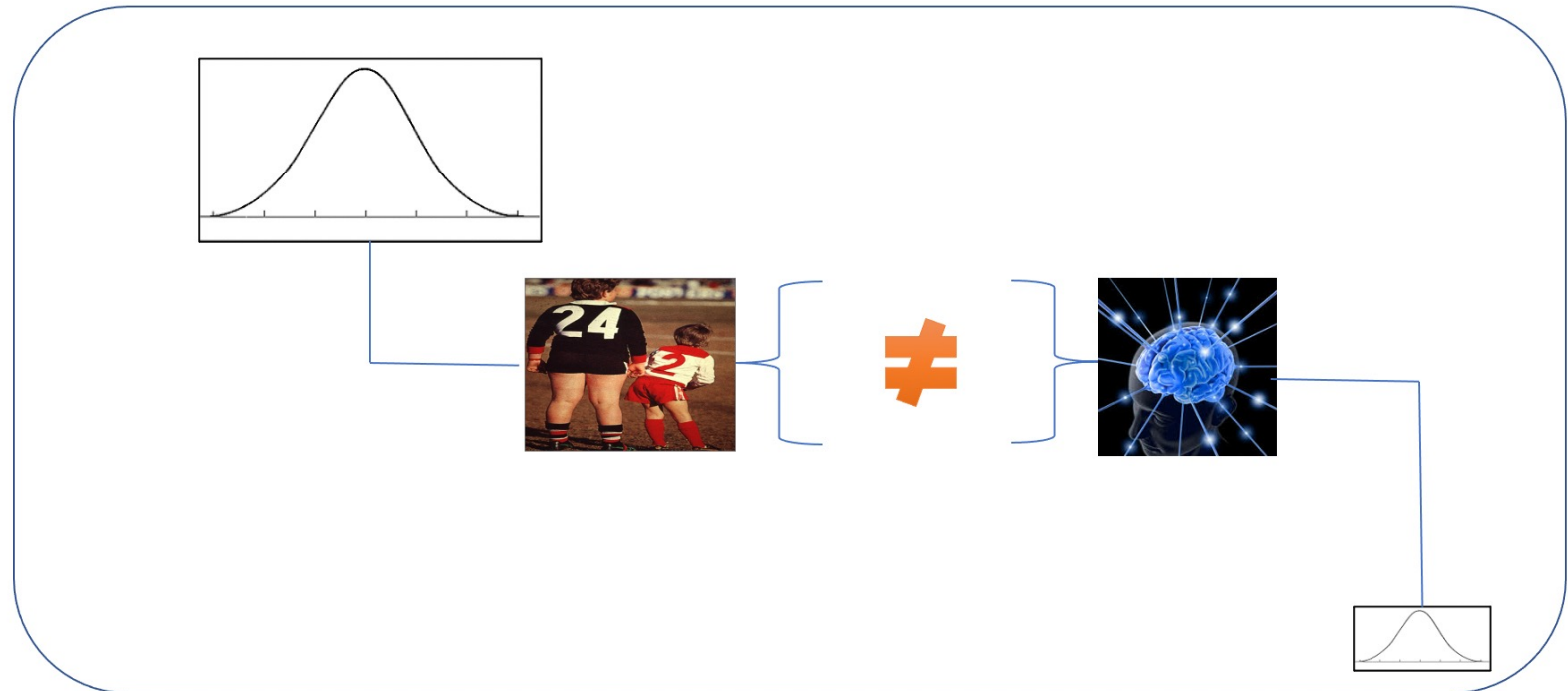
1. Lack of appropriate theory/models

Talent isn't one thing:

- Physical
- Mental
- Psychological
- Cognitive-Perceptual

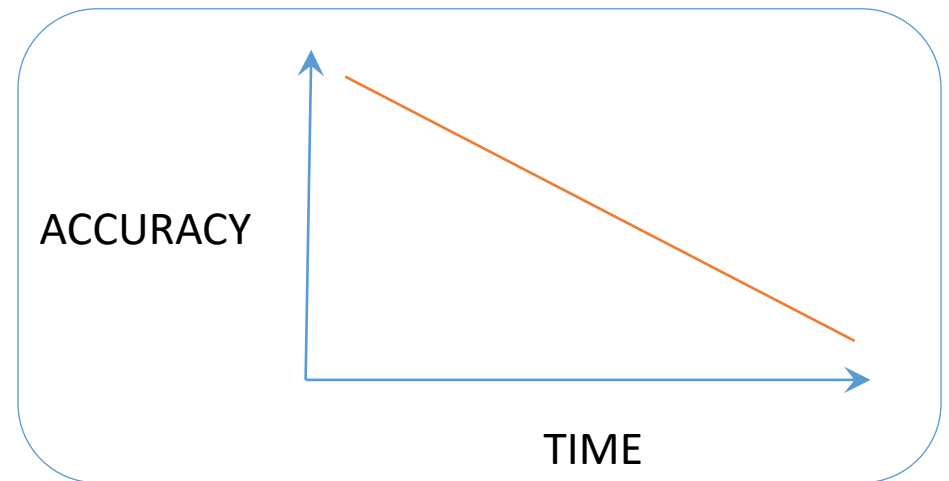
Why is talent selection so difficult?

1. Lack of appropriate theory/models
2. Absence of early indicators



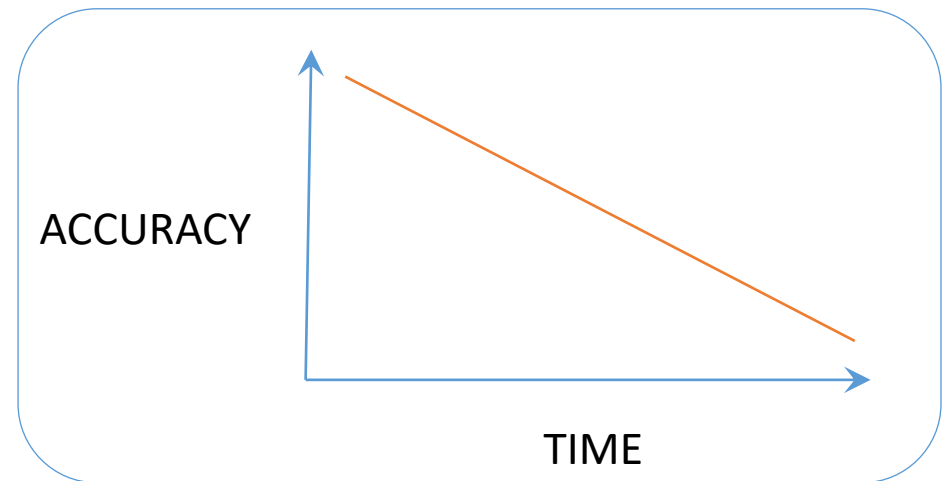
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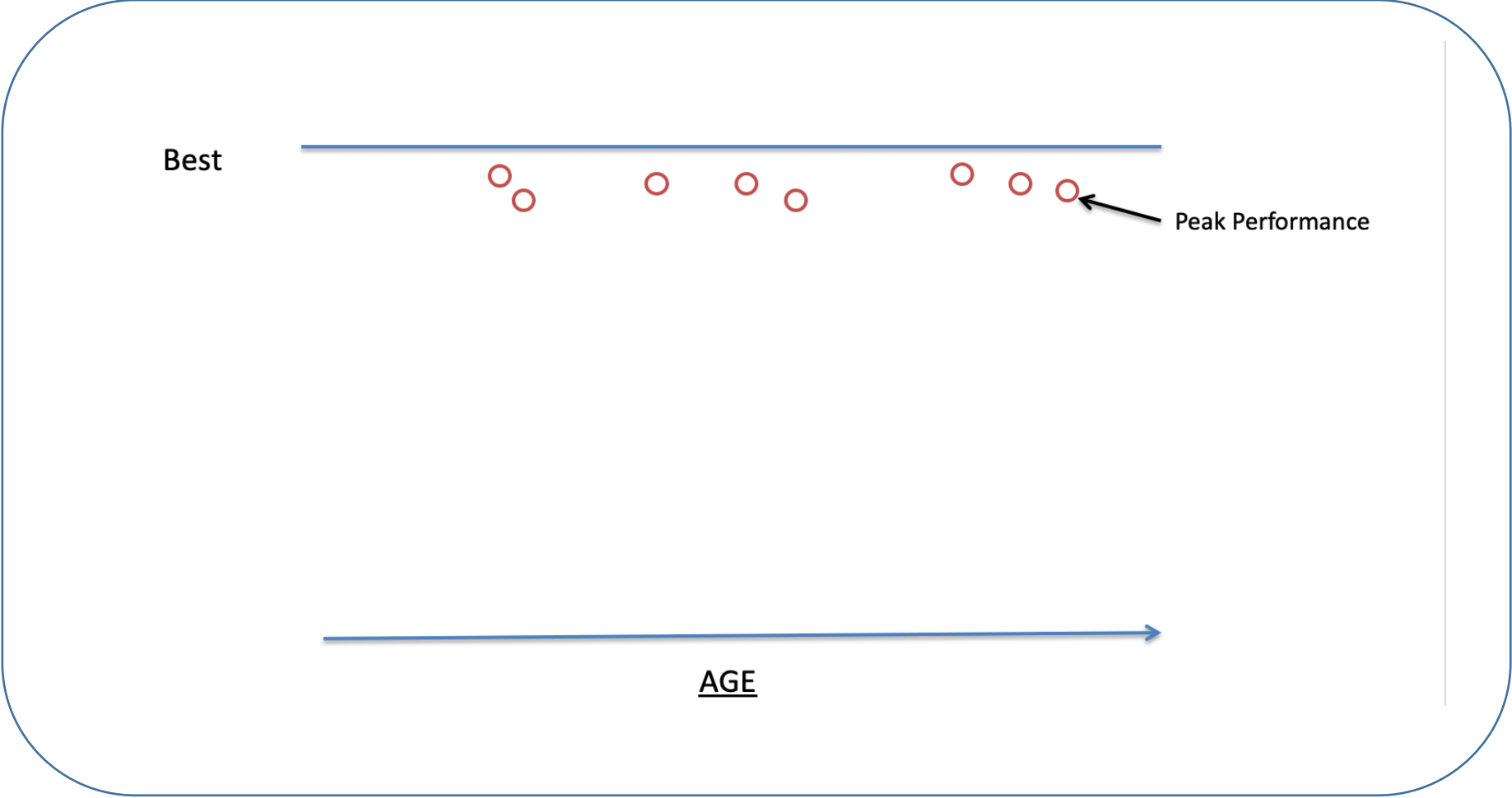
1. Lack of appropriate theory/models
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3. We don't know how talent changes across development

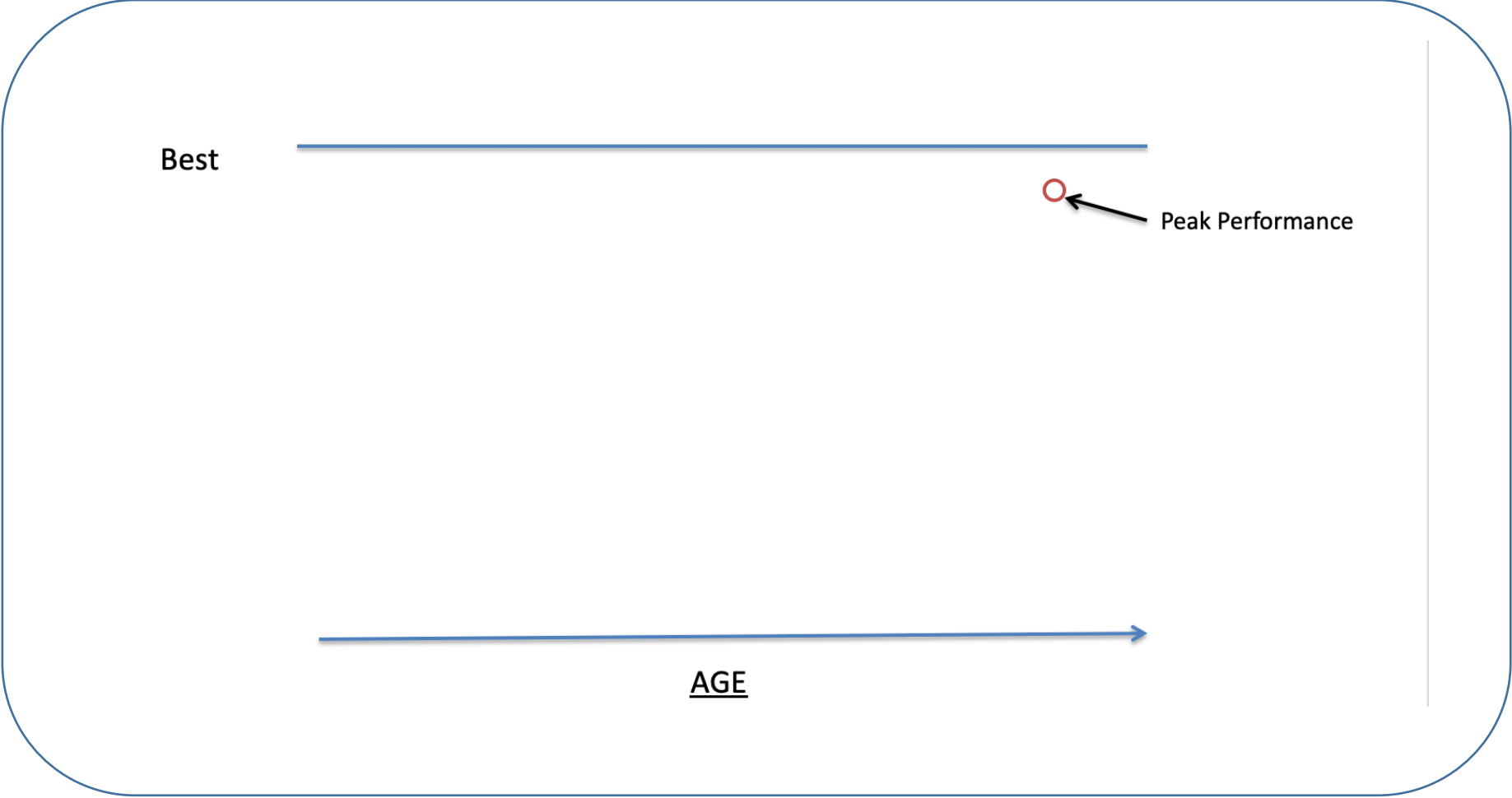


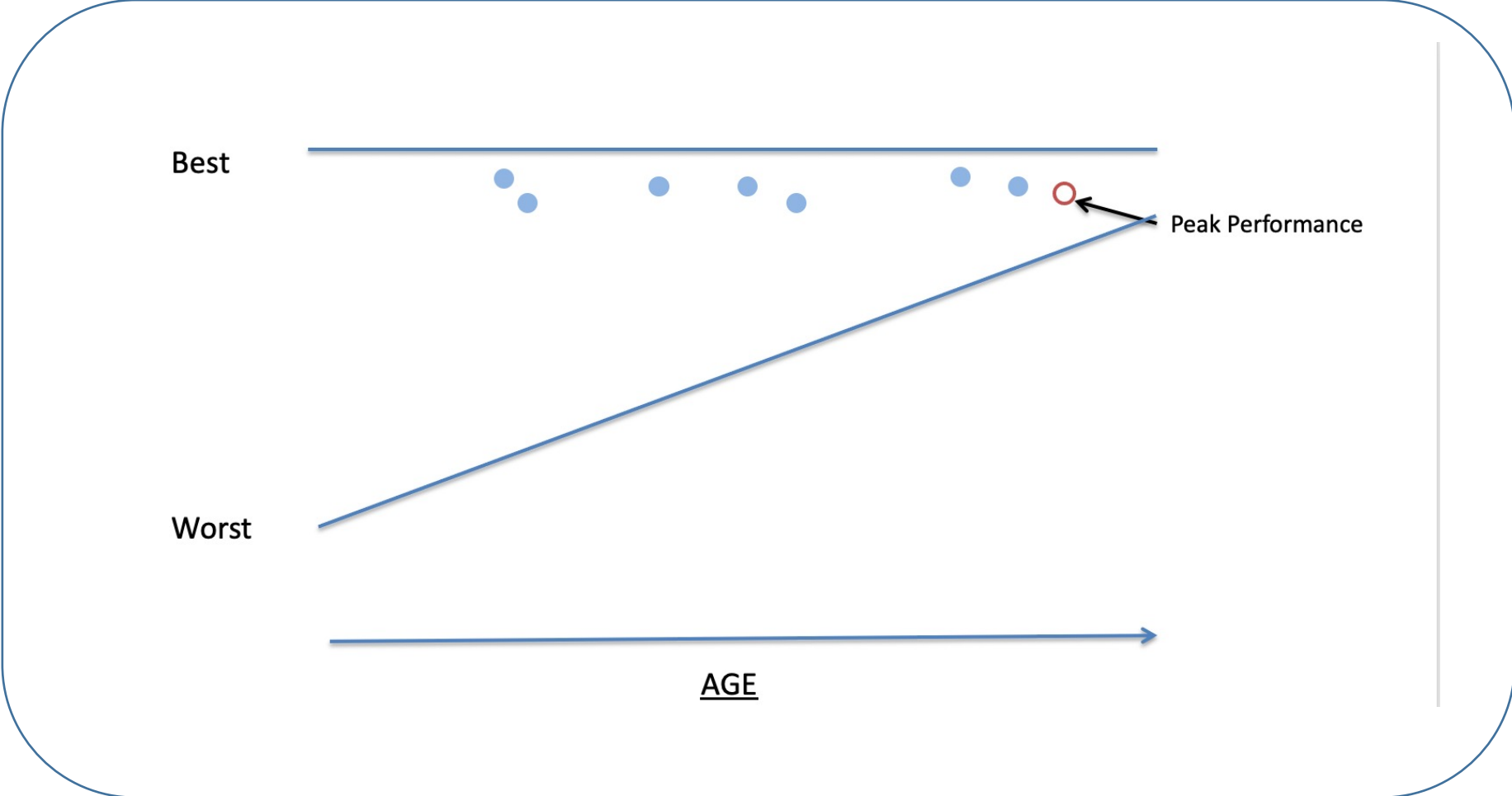
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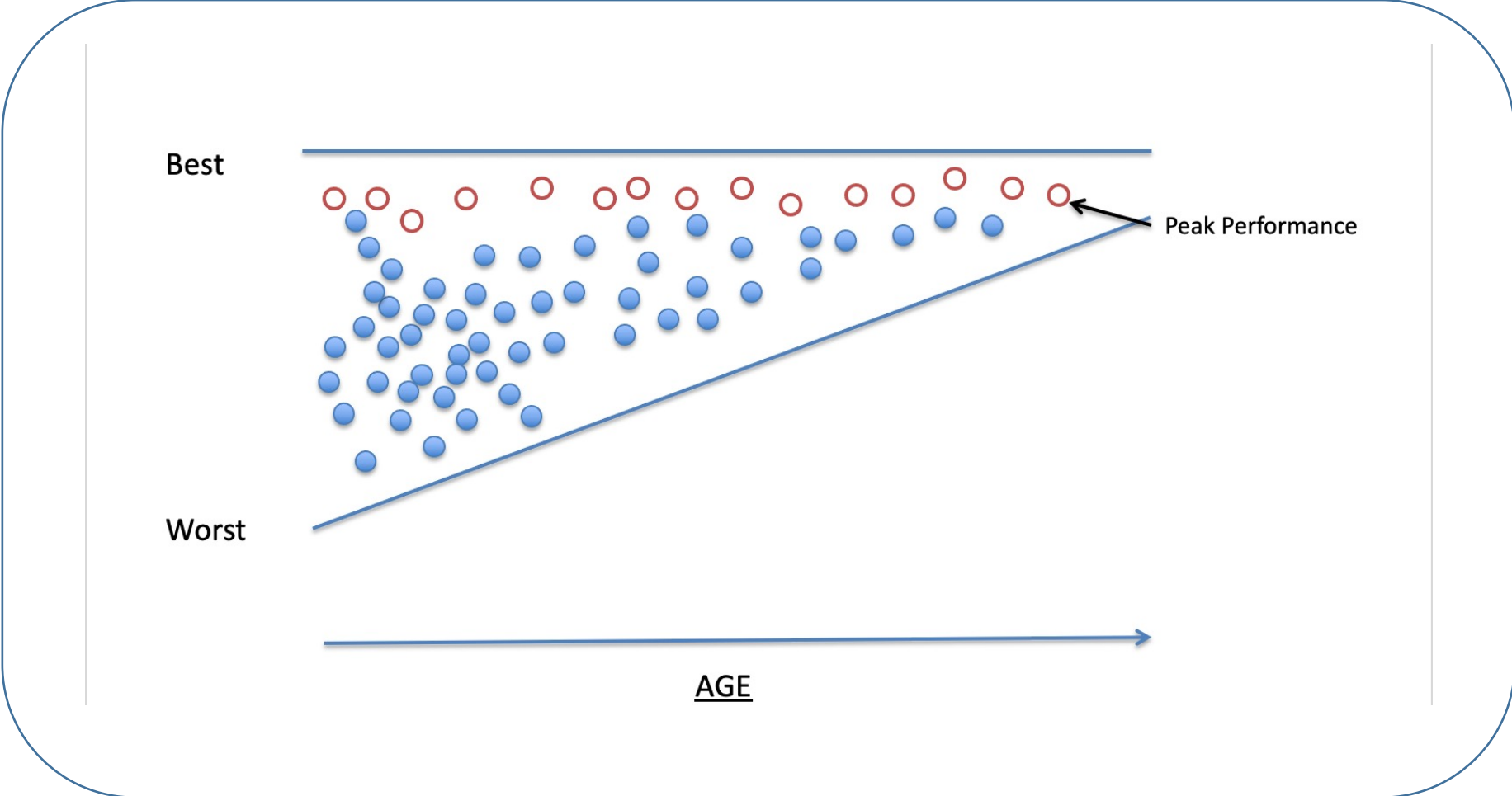
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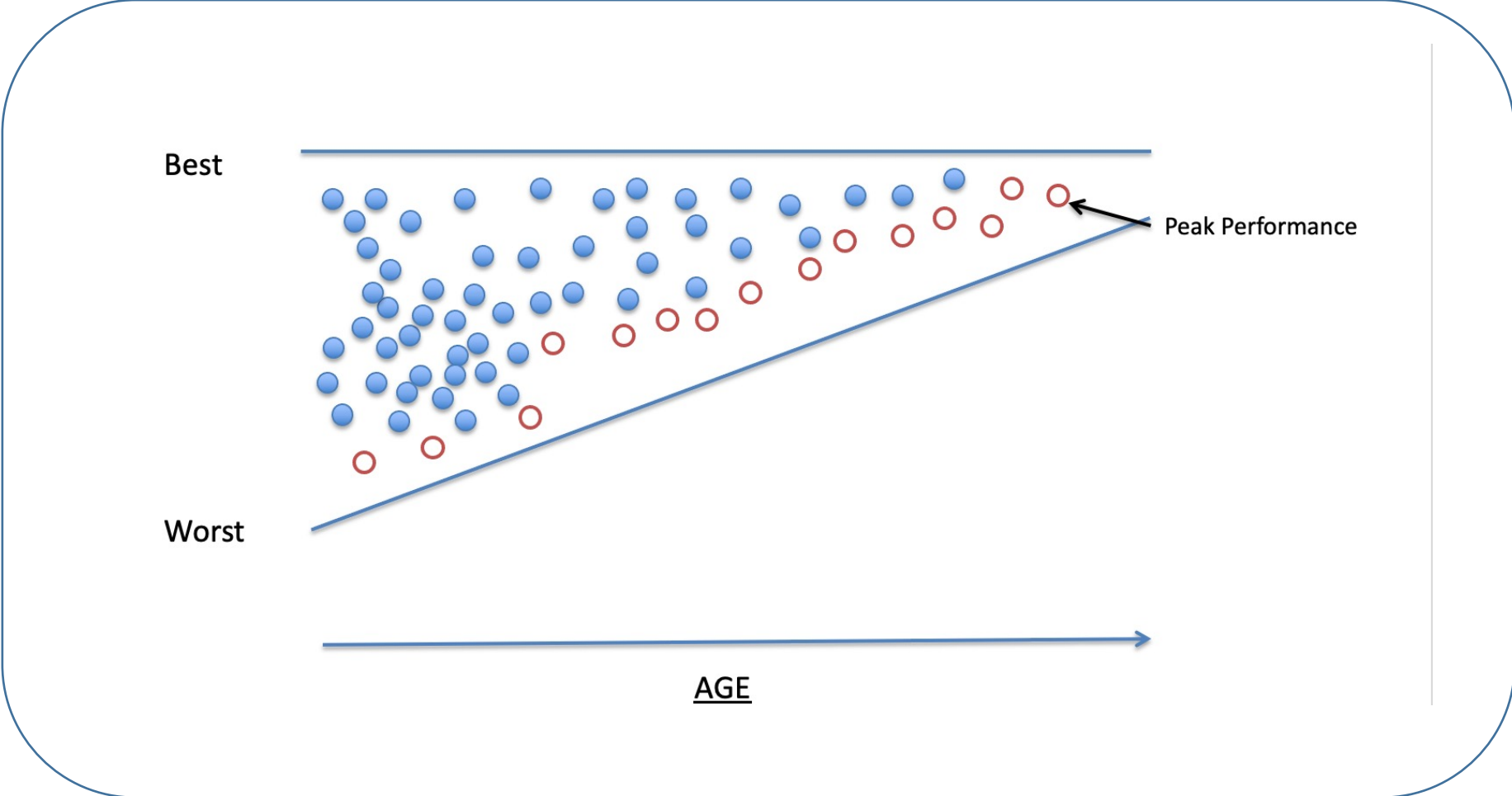


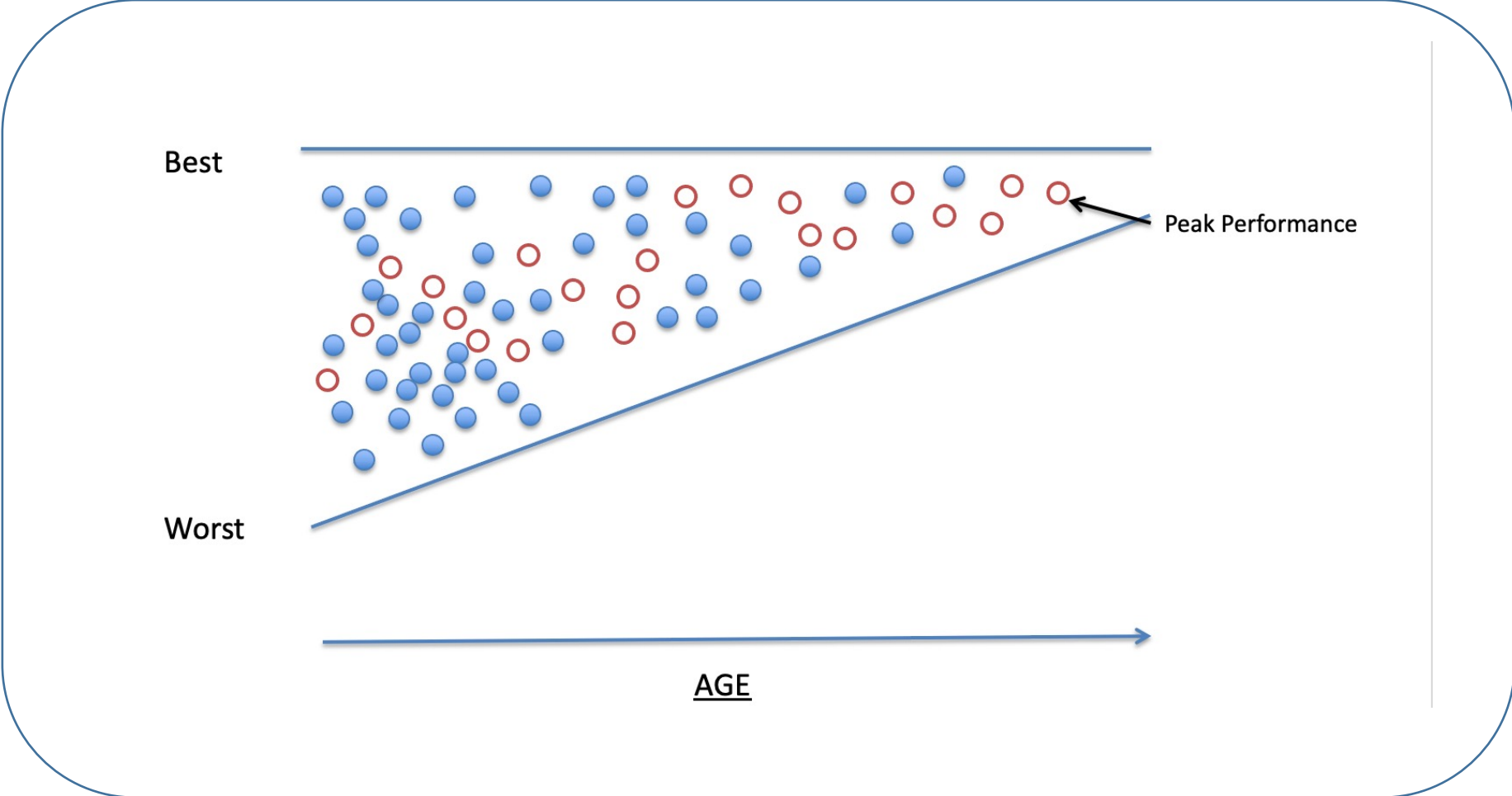


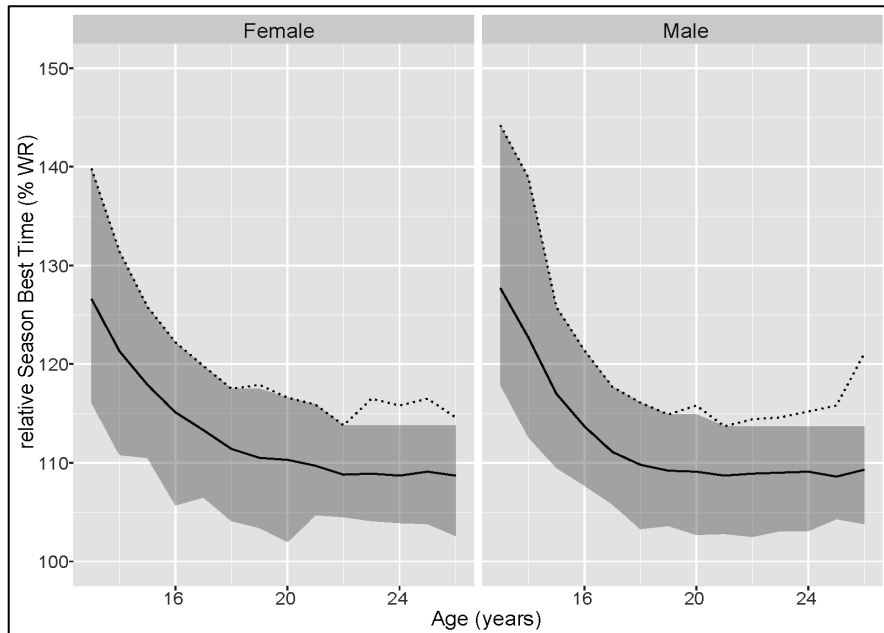




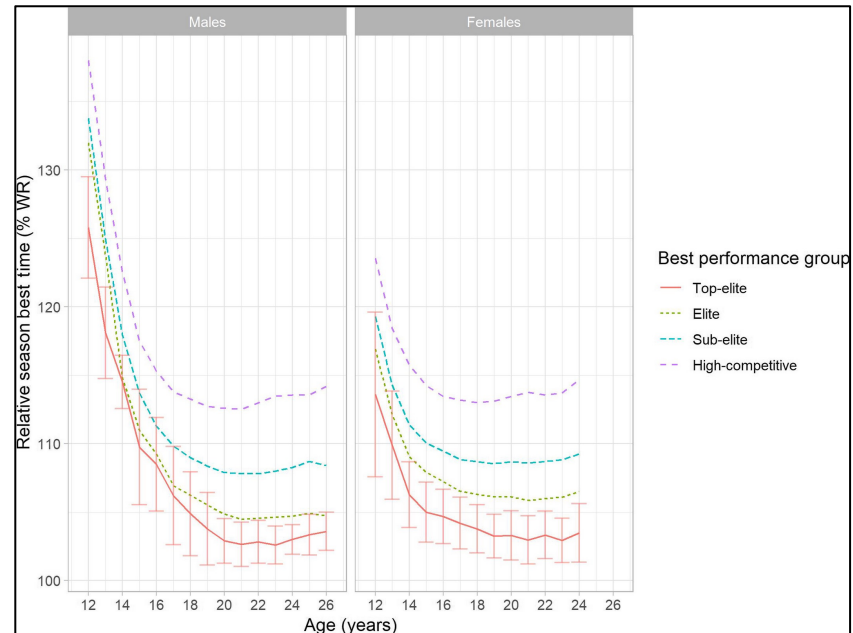








Elite performance benchmarks for
1500m long track speed skating

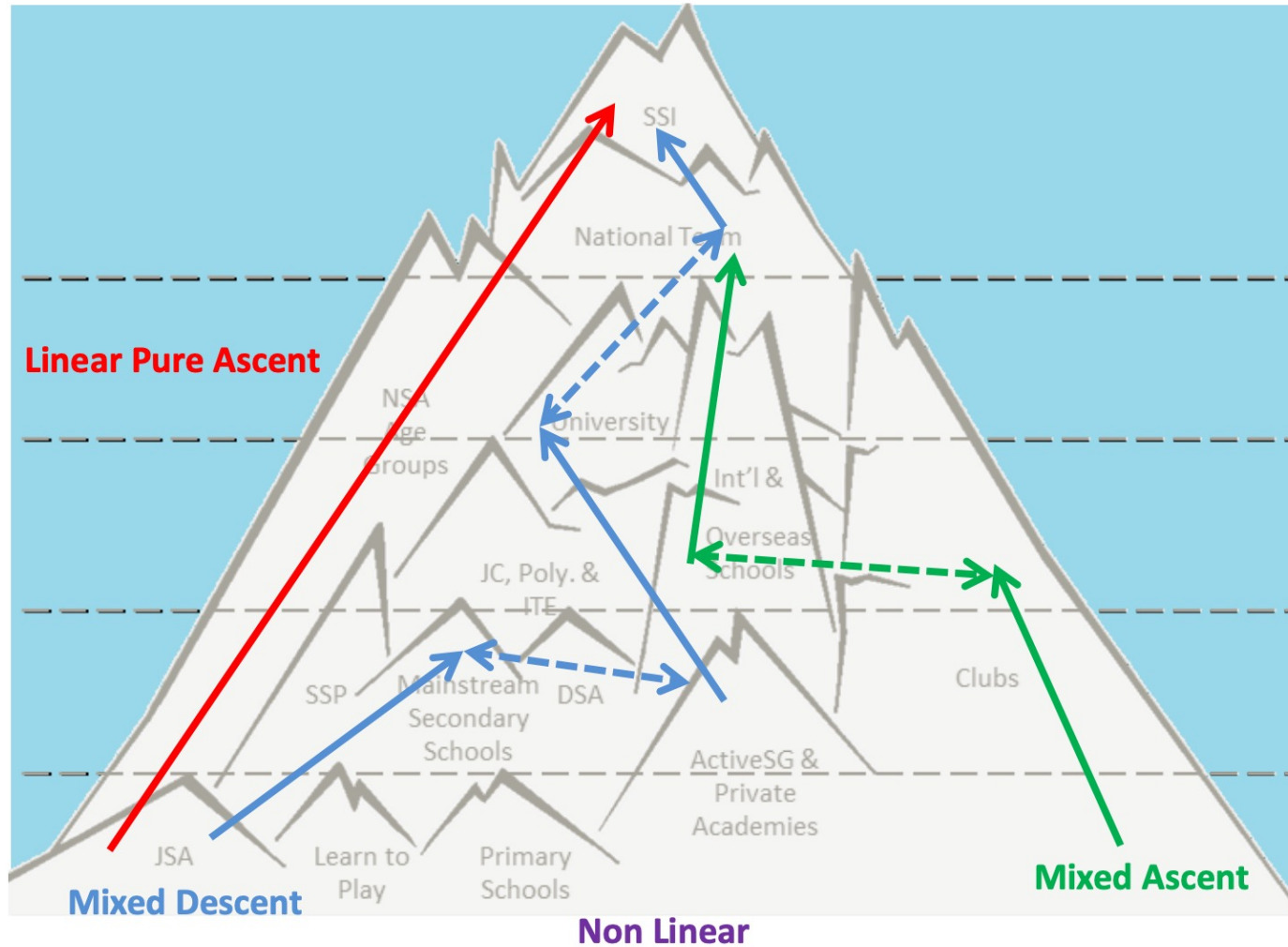


100m freestyle development in top 4
competitive groups

Stoter et al. (2019). Creating benchmarks for the future elites in speed skating. Journal of Sports Sciences

Post et al. (2019). Multigenerational performance development of male and female top-elite swimmers—A global study of the 100 m freestyle event. Scandinavian Journal of Medicine and Science in Sports

Youth Sports Pipeline

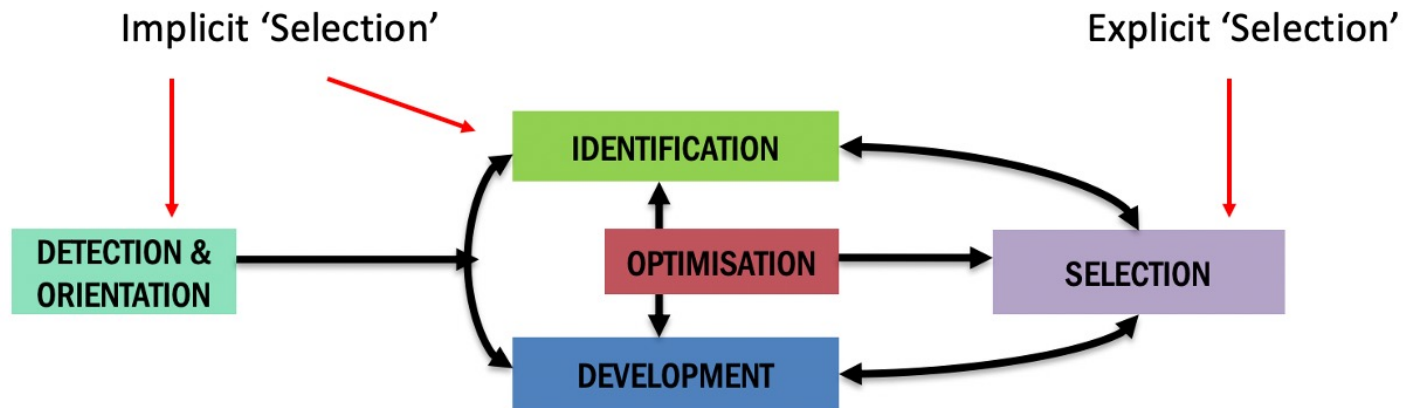


Why is talent selection so difficult?

1. Lack of appropriate theory/models
2. Absence of early indicators
3. We don't know how talent changes across development
4. Current athlete development approaches are flawed
 - System biases (e.g., relative age, SES and geography-based biases)
 - Coach limitations (e.g., cognitive bias, conceptual predispositions, lack of training in measurement)

Making better selection decisions

1. Improve accuracy through better models, more precise measures, reducing the impact of biases, etc.



Making better selection decisions

1. Improve accuracy through better models, more precise measures, reducing the impact of biases, etc.
2. Decrease the effect 'selection' has on an athlete's development.

Decreasing the impact of selection

1. Better treatment of athletes who are deselected
 - Conversations with athletes to 'soften their landing'
 - Feedback about why they were deselected so they are motivated to improve
2. Parallel development pathways
 1. 'B' and 'C' squads in addition to an 'A' team

Make it easier for athletes to re-engage with the system later in their development

Takeaways

- Athlete identification and selection have consequences.
- Decisions we make about talent are generally not as good as we think. Therefore, we should avoid them whenever possible.
- Shifting from a focus on identification to development may keep more athletes in the system, training in environments that are better matched for their developmental needs.

Questions/Comments

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