Athlete Journey's and their trajectories

Some dynamics around those trajectories

How we might be able to exploit those dynamics to better inform our TD

The Rocky Road to the Top

Non linear talent development

Ralph Waldo Emerson

As to methods, there may be a million and then some, but principles are few. The man who grasps principles can successfully select his own methods.

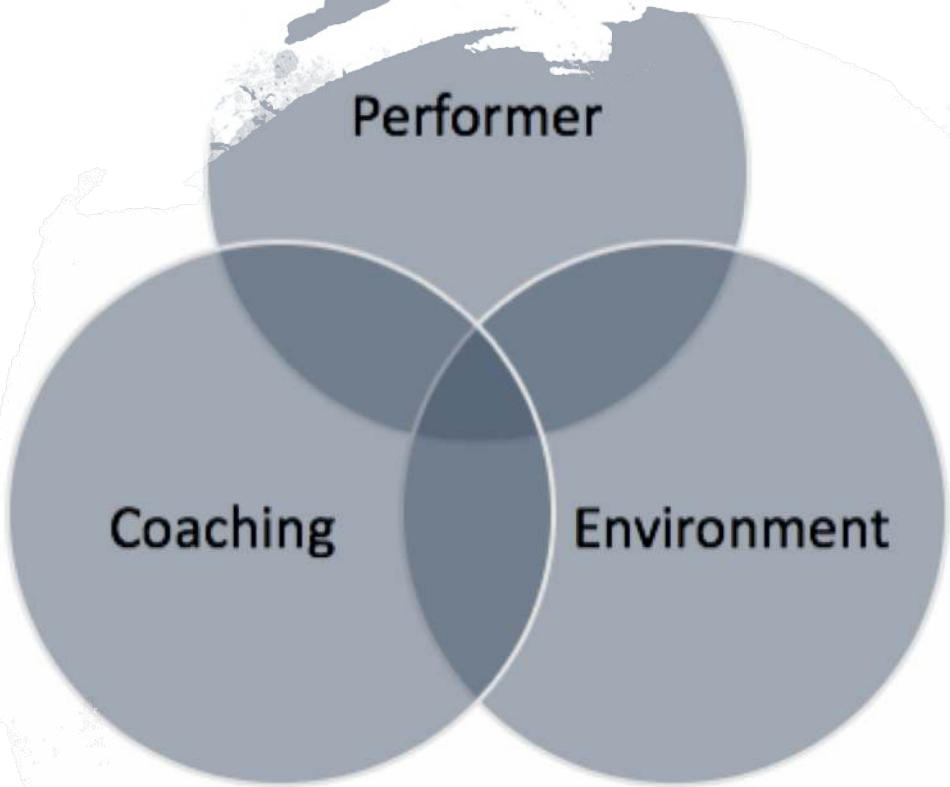
The journey to the top is anything but a stable concept.

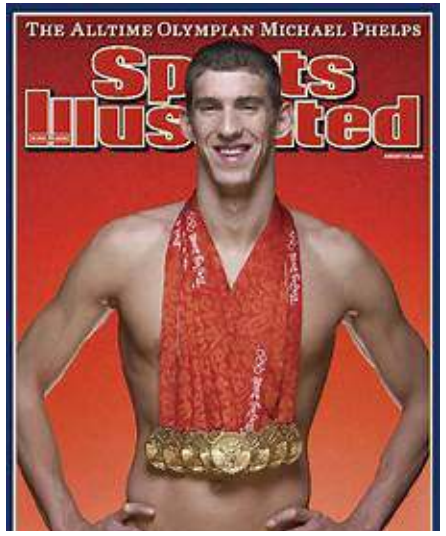
Complex, dynamic and individualized

Athlete will generally do one of three things…

Some will achieve early and late success

Most will do one or the other





Those that fly are rare!

Table 1. Review of characteristics of developmental practice patterns leading to early success in adolescence and to long-term success in international senior elite sport.

Training and Competitions	Early Success	Senior Success
In the Athlete's respective Domain Sport		
Early competitive success	+	o
Early start of training and competitions	+	–
Early specialization	+	–
Training intensity in childhood	+	–
Training intensity in late adolescence/adulthood		o
Aggregated training volume	+	o
In Other Sports		
Training intensity in childhood	–	+
Training intensity in adolescence/adulthood		+
Competitions in childhood	–	+
Competitions in late adolescence/adulthood		+
Aggregated volume of training and competitions	–	+

+ = positive correlation with success, o = no systematic correlation, – = negative correlation with success

@TeamGB

Home sweet home for the next two weeks🏠

#BuenosAires2018 #YouthOlympics

04/10/2018, 20:08

High early rise often precedes train wrecks!

Motivation, burn out

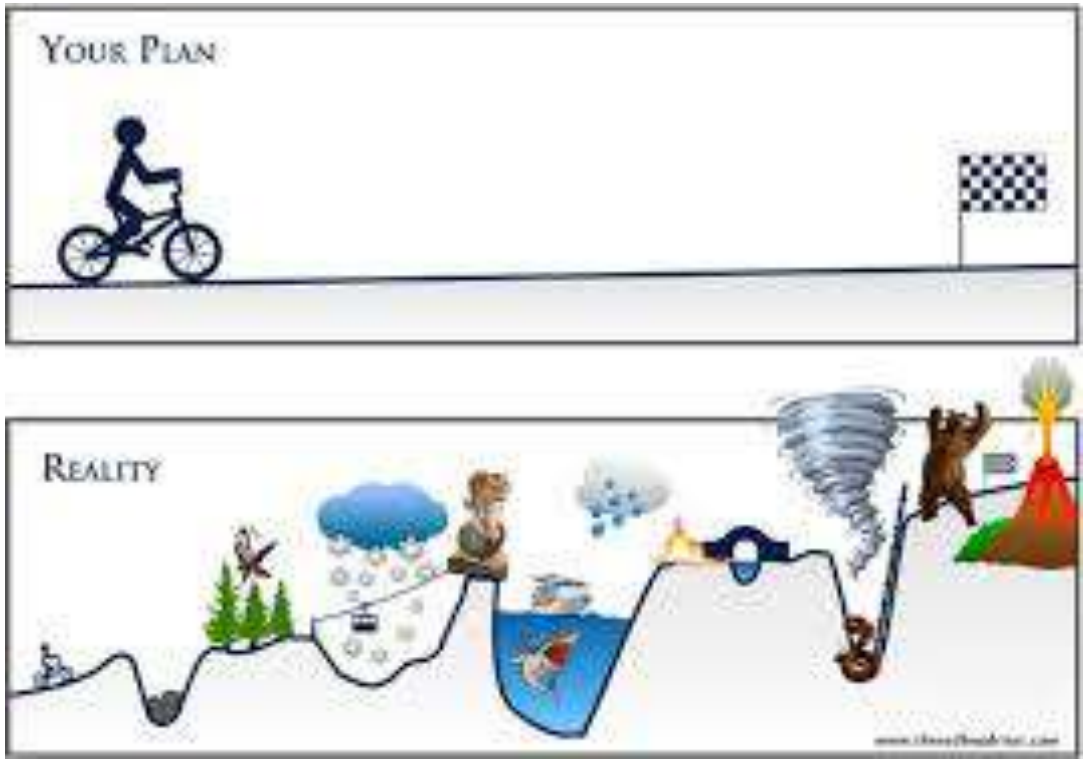
gland U17s celebrate their World Cup win

land won the U17 World Cup in India with a thrilling 5-2 final victory r Spain.

Challenge precedes progression for the long term (Rocky Road)

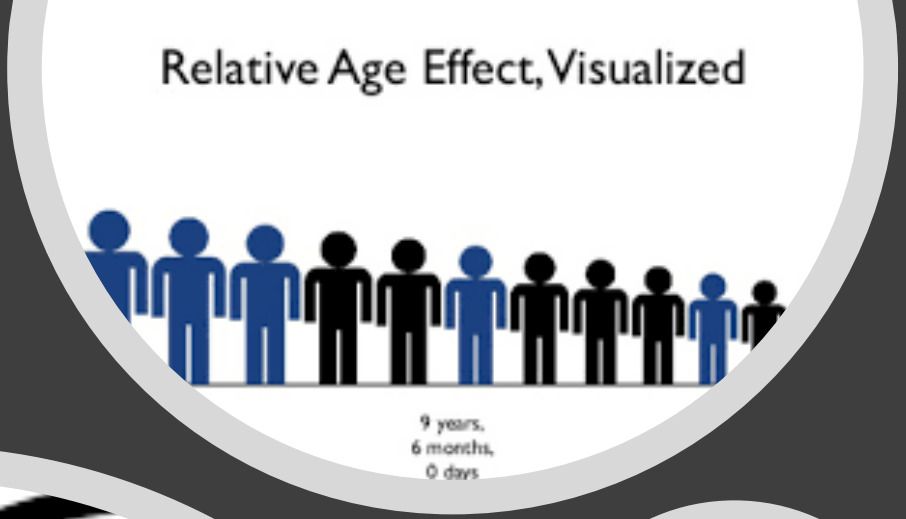
So… why is this happening?

https://www.youtube.com/watch?v=dcUAIpZrwog



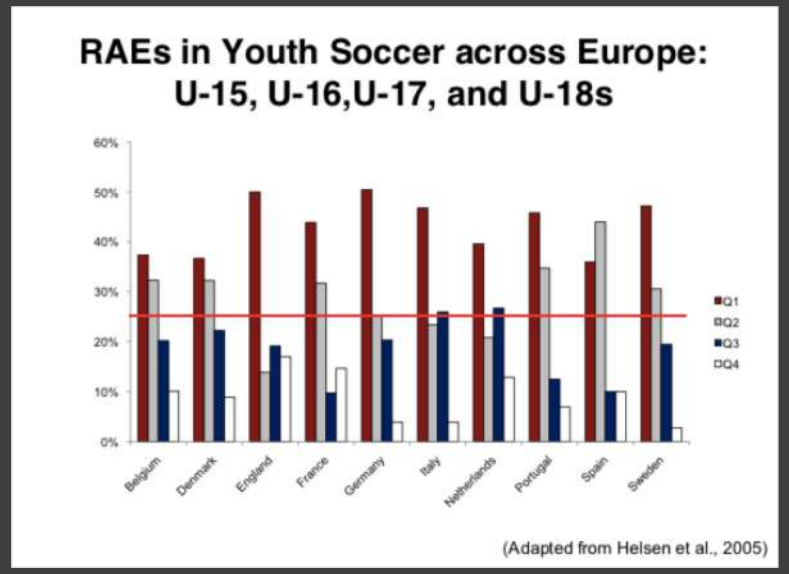
So… in a sporting context the same applies

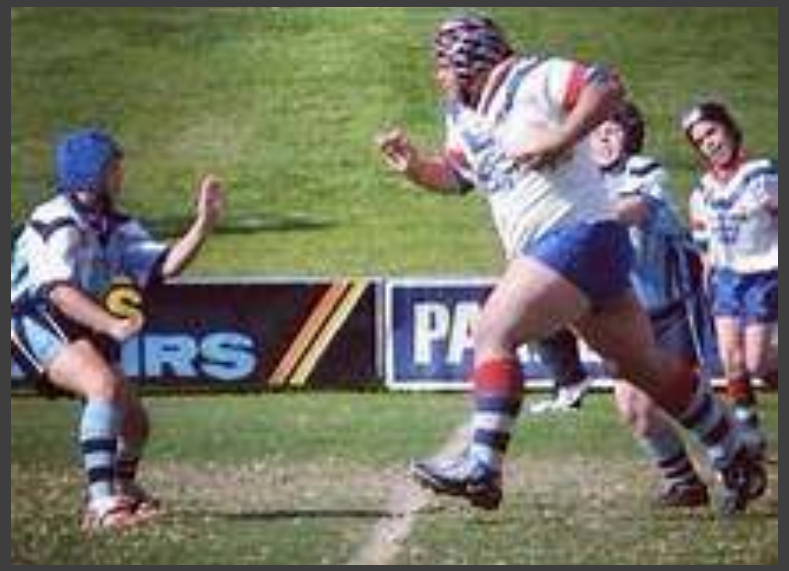
- Slumps and crashes (ADVERSITY) are good providing… YOU ARE PREPARED and ANTICIPATE THEM
- Conversely you may want to deliberately slow athletes up (road blocks and speed bumps… reversing an identification advantage)
- How might we be able to anticipate?



12 MONTHS

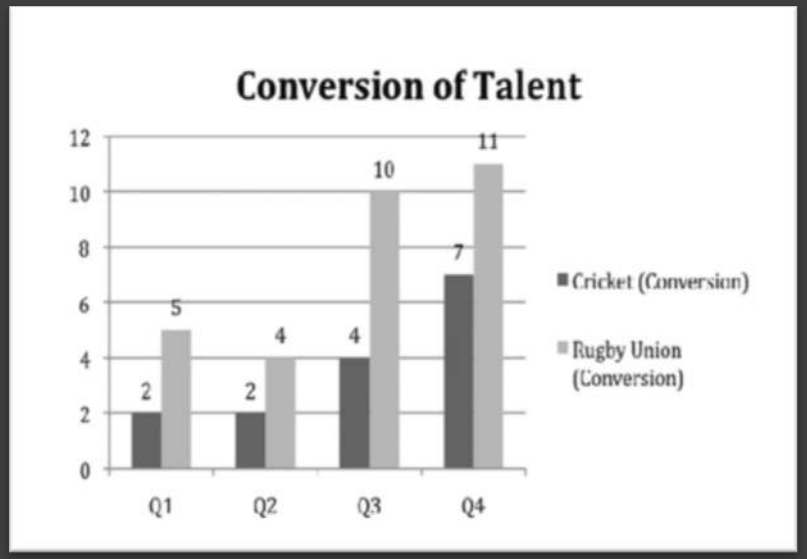
A good example of this non linear development pattern is the relative age effect

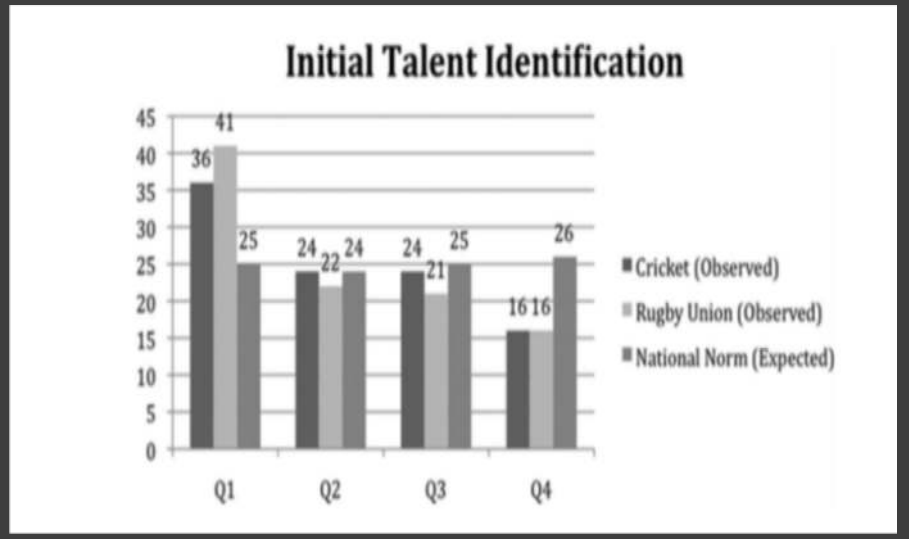




How does this play out in performance pathways?

Performance Pathway's (Rugby & Cricket)





Expressed as percentages

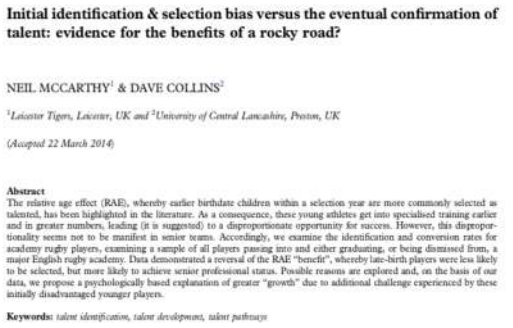
Why is this happening?

- Developing evidence the long term affects may not be such an issue for the relatively young.
- Greater injury rates for the relatively old (Ashworth & Heynolds, 2007)
- Higher salaries (Ford &Williams, 2011)
- Education & business output attainment (Roberts & Stott, 2015; Du, et al. 2011)
- Greater psychological growth through overcoming selection bias? (Gibbs, 2011, (McCarthy et al, 2014; 2016)

The Rise of the Underdog? The Relative Age Effect Reversal Among Canadian-born NHL Hockey Players: A Reply to Nolan and Howell

Start hard, finish better: further evidence for the reversal of the RAE advantage

Neil McCarthy, Dave Collins & David Court



Initial identification & selection bias versus the eventual confirmation of talent: evidence for the benefits of a rocky road?

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(Accepted 22 March 2014)

Abstract

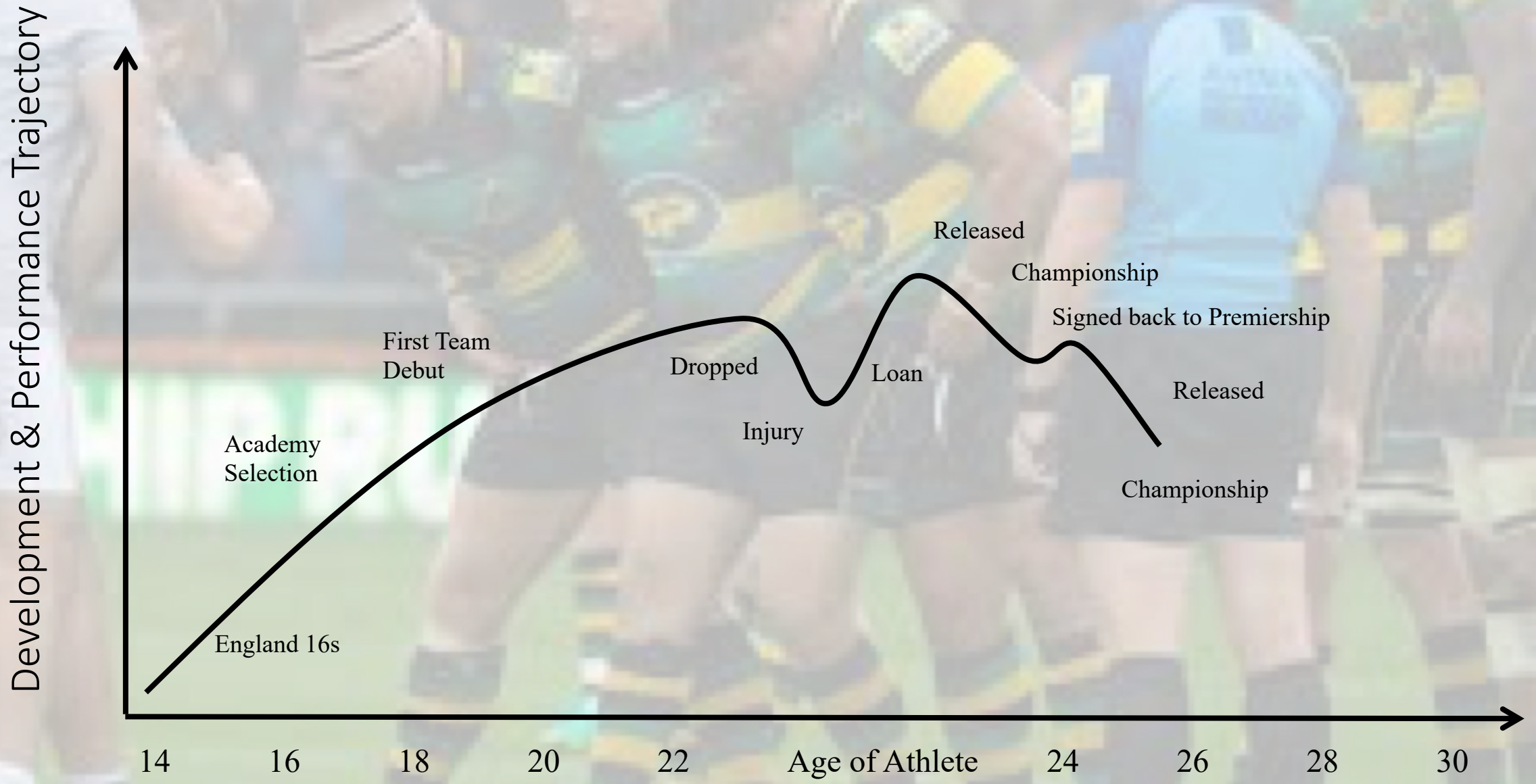
The relative age effect (RAE), whereby earlier birthdate children within a selection year are more commonly selected as talented, has been highlighted in the literature. As a consequence, these young athletes get into specialised training earlier and in greater numbers, leading (it is suggested) to a disproportionate opportunity for success. However, this disproportionality seems not to be manifest in senior teams. Accordingly, we examine the identification and conversion rates for academy rugby players, examining a sample of all players passing into and either graduating, or being dismissed from, a major English rugby academy. Data demonstrated a reversal of the RAE "benefit", whereby late-birth players were less likely to be selected, but more likely to achieve senior professional status. Possible reasons are explored and, on the basis of our data, we propose a psychologically based explanation of greater "growth" due to additional challenge experienced by these initially disadvantaged younger players.

Keywords: *talent identification, talent development, talent pathways*

For example…


Development & Performance Trajectory
County 15
England 16s 3rd XV
Position Transition
Academy Selection
England 20s
Loan
XV Debut
Injuries
Dropped
England WC 2011
Injuries
Lions
England WC 2015
Lions
14
16
18
20
22
Age of Athlete
24
26
28
30

For example…

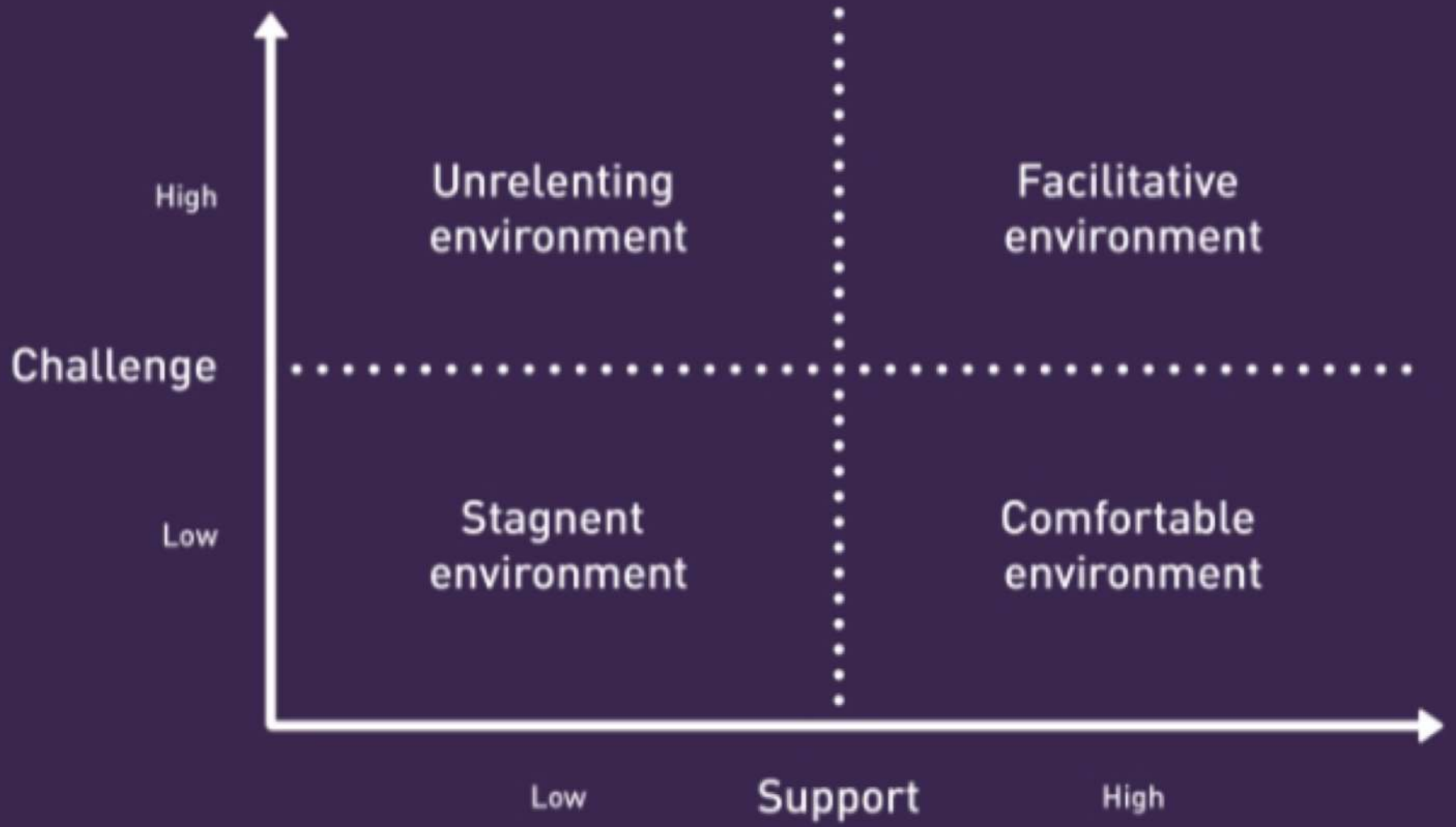

Development & Performance Trajectory
Academy Selection
England 16s
First Team Debut
Dropped
Injury
Loan
Released
Championship
Signed back to Premiership
Released
Championship
14
16
18
20
22
Age of Athlete
24
26
28
30

So what is this suggesting?

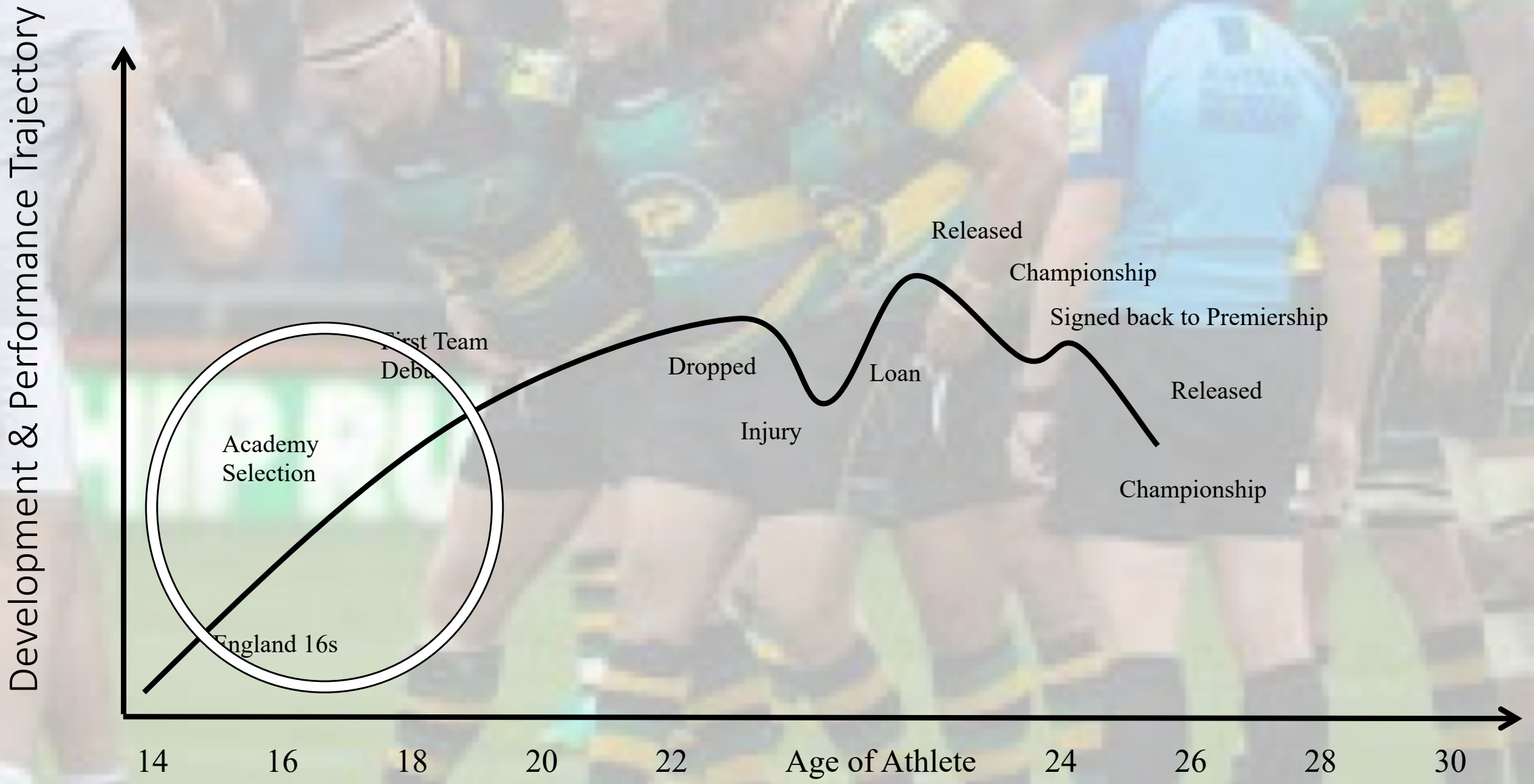
- Early experience
  - GB Medallists Study (Rees et al)
  - Resilience (Sarkar & Fletcher)
- Attitude
  - Growth Mindset (Dweck)
  - Grit (Duckworth)
- Skills
  - Self Control (Toering et al.)
  - Psychological characteristics of developing excellence… PCDEs (MacNamara et al)

A Challenge-Support Matrix for Developing Resilience

(Sarkar & Fletcher)



So… what would you do if you had your time again?



Some examples…

- Physical (psycho-motor)
  - Playing up & down pathways
  - Playing out of position
- Emotional (affective)
  - Release & build expectations
  - Exposure to senior environments
  - Reaction to adversity – loan club
- Cognitive
  - Presentations - IDPs
  - Information overload & underload
- Consequences (not punitive)
  - High standards

Acknowledgments & thanks to those that have contributed to this work.

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Some Key References

https://doi.org/10.3389/fpsyg.2015.02009
https://doi.org/10.3389/fpsyg.2016.01482
https://doi.org/10.1080/02640414.2015.1119297

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