




LEEDS
BECKETT
UNIVERSITY

NAVIGATING the RESEARCH & PRACTICE Continuum

Prof. Ben Jones
b.jones@leedsbeckett.ac.uk

 @23benjones



une
University of
New England



AUT SPORTS PERFORMANCE
RESEARCH INSTITUTE NEW ZEALAND

 KINGDOM

 KINGDOM

 KINGDOM

DW
SPORTS
STORES

If you don't
want to know

DW
FITNESS
CLUBS

Industrial & Commercial Lighting
Manufacturer Designers & Importers
Light Distribution Ltd
lightdistribution.co.uk

A B C

Asbestos Business
Contractors Ltd
www.asbestos.com

 GALIPER  GALIPER
ENGINEERING ENGINEERING



LEEDS
BECKETT
UNIVERSITY



@23benjones

Purpose?

My WORLD....

1. No one reads research papers
2. Coaches don't care or want change
3. Everyone thinks research is easy and states the obvious or is too complicated..
4. No one wants to share because it's top secret
5. Nothing gets finished, and is too slow
6. Academics think practitioners are stupid, and practitioners think academics are weird....



@23benjones



LEEDS
BECKETT
UNIVERSITY

Wants vs. Needs

Could vs. Should





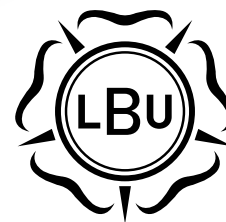


***“Without data, you're just
another person with an opinion.”***

~ W. Edwards Deming



**Not everything that can
be counted counts, and
not everything that
counts can be counted.**



**LEEDS
BECKETT
UNIVERSITY**



@23benjones



@23benjones

Discuss
approaches to
research..

How to undertake
research in practice...

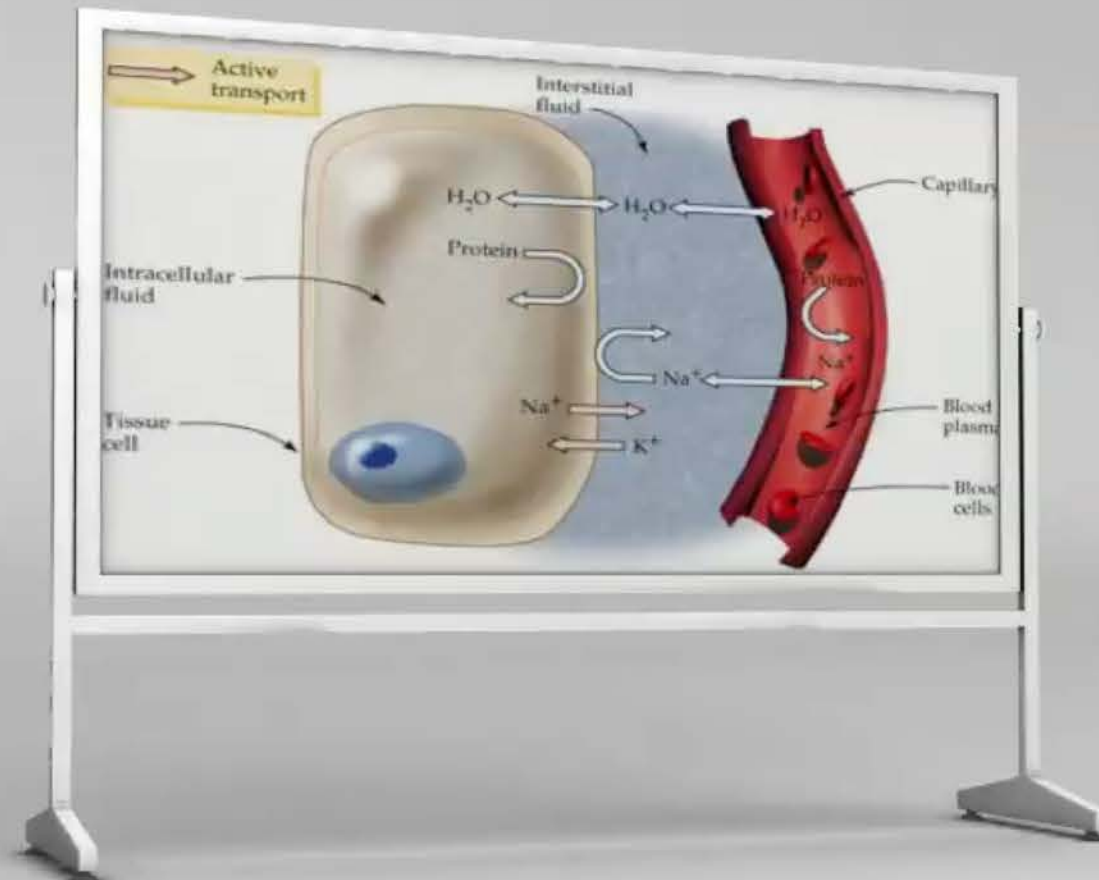
Purpose?


How to fund
research....

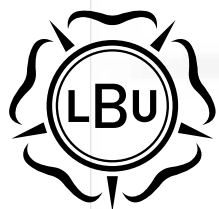
How not to do
research....



LEEDS
BECKETT
UNIVERSITY



 @23benjones



LEEDS
BECKETT
UNIVERSITY

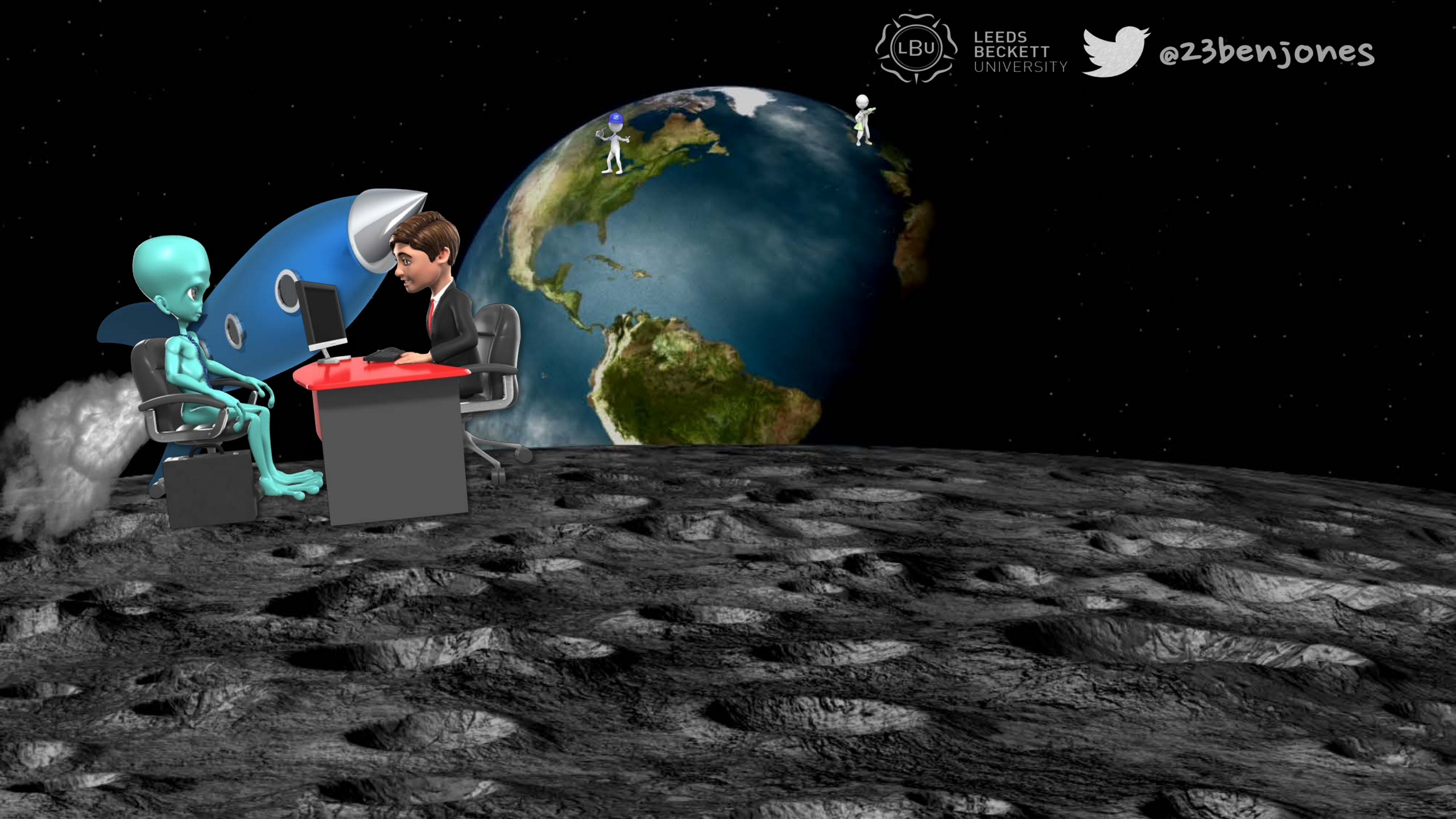




LEEDS
BECKETT
UNIVERSITY



@23benjones





LEEDS
BECKETT
UNIVERSITY



@23benjones



LEEDS
BECKETT
UNIVERSITY



@23benjones




LEEDS
BECKETT
UNIVERSITY



@23benjones







FINISHED FILES ARE
THE RESULT OF YEARS
OF SCIENTIFIC STUDY
COMBINED WITH THE
EXPERIENCE OF YEARS.



LEEDS
BECKETT
UNIVERSITY



@23benjones



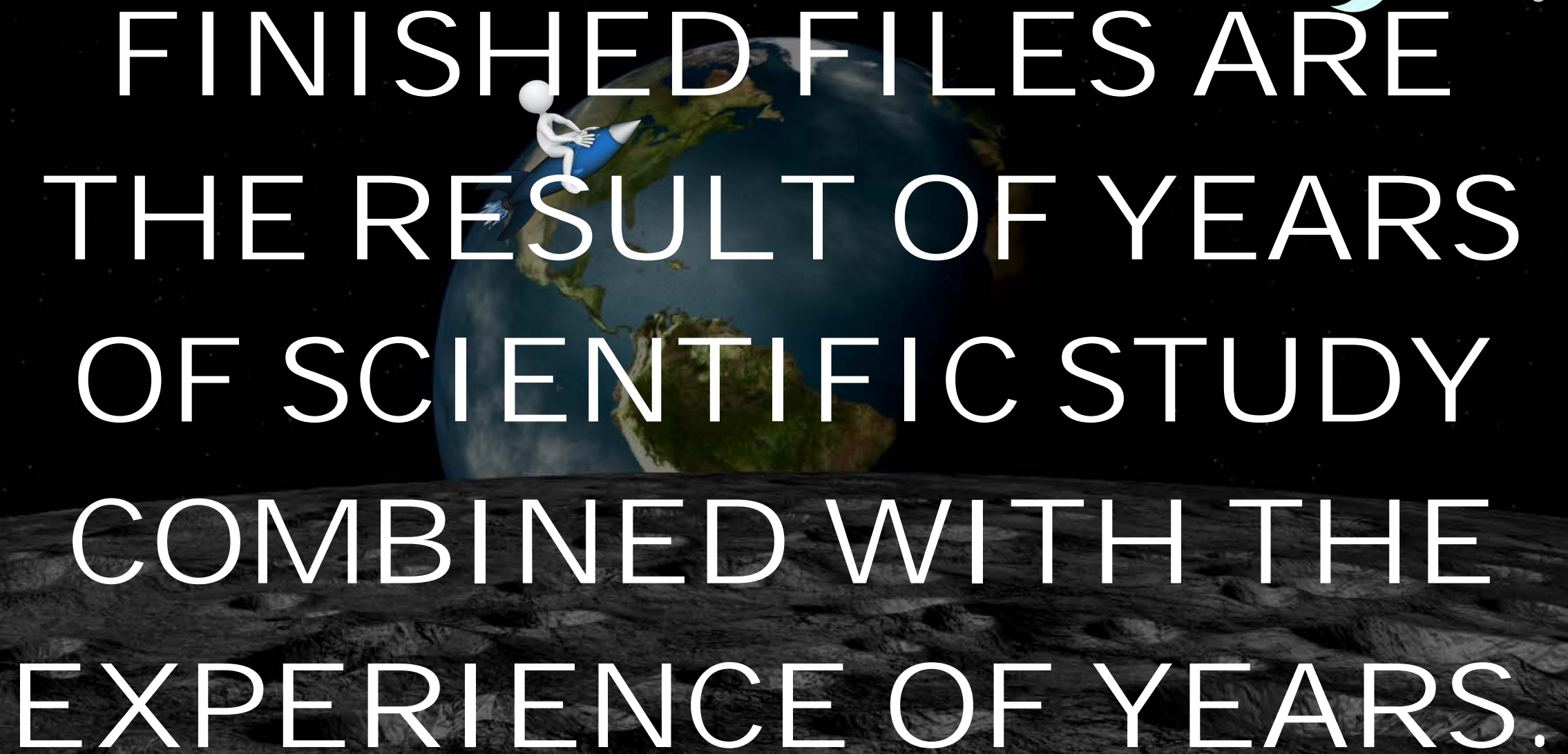
How many F's?



LEEDS
BECKETT
UNIVERSITY



@23benjones



FINISHED FILES ARE
THE RESULT OF YEARS
OF SCIENTIFIC STUDY
COMBINED WITH THE
EXPERIENCE OF YEARS.

A surreal image showing a person surfing on the Earth from the perspective of the Moon. The Earth is a blue and green sphere in the background, and the Moon's cratered surface is in the foreground. A small white figure is surfing on a blue wave on the Earth's surface.

How many F's?



LEEDS
BECKETT
UNIVERSITY



@23benjones

6

FINISHED FILES ARE
THE RESULT OF YEARS
OF SCIENTIFIC STUDY
COMBINED WITH THE
EXPERIENCE OF YEARS.



LEEDS
BECKETT
UNIVERSITY



@23benjones



LEEDS
BECKETT
UNIVERSITY



@23benjones





LEEDS
BECKETT
UNIVERSITY



@23benjones





LEEDS
BECKETT
UNIVERSITY



@23benjones





LEEDS
BECKETT
UNIVERSITY

Research and Practice

A Romantic Love Story

By Ben Jones



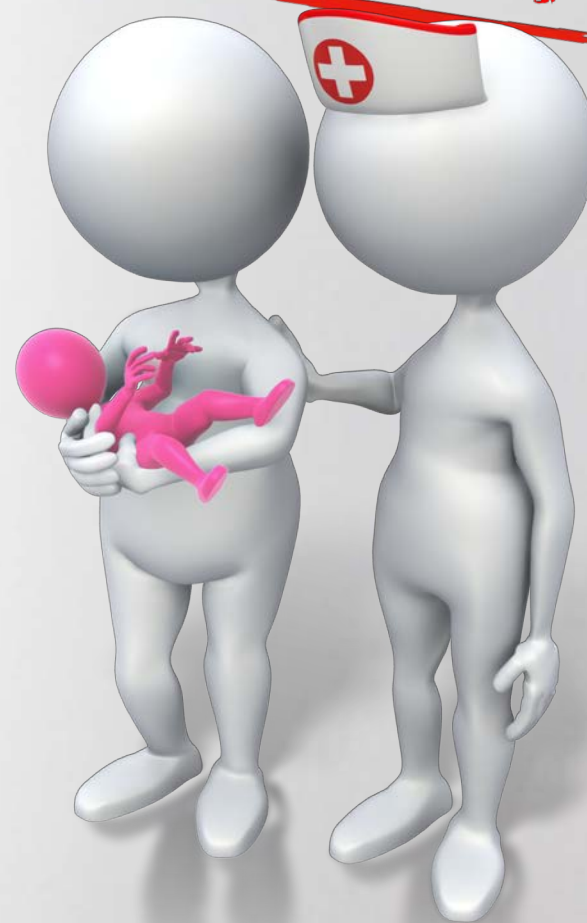
@23benjones

Research



@23benjones


Practice



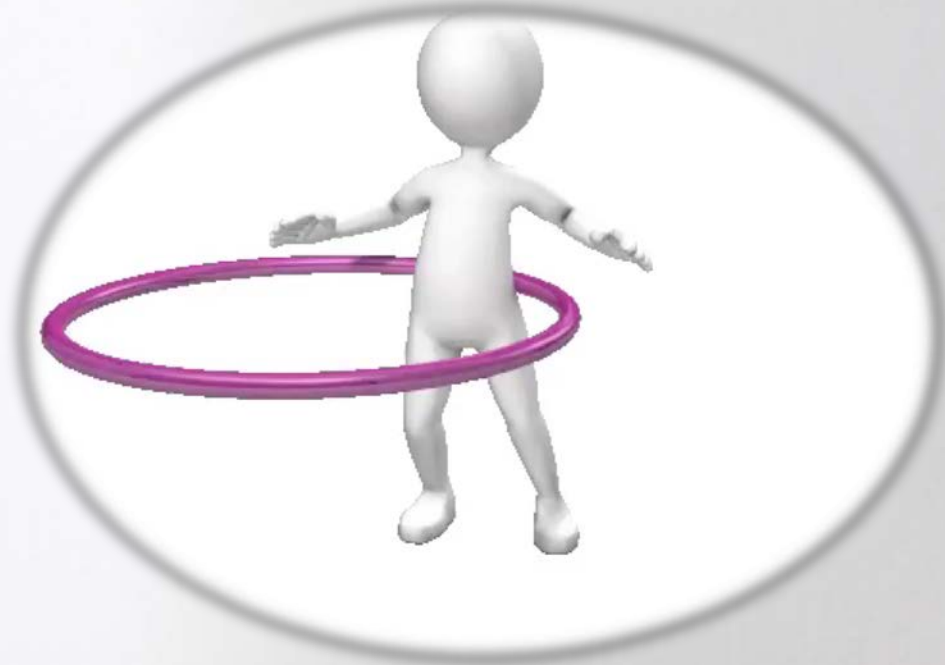
LEEDS
BECKETT
UNIVERSITY

Research



 @23benjones

Practice




LEEDS
BECKETT
UNIVERSITY

Research

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$



 @23benjones

Practice



LEEDS
BECKETT
UNIVERSITY

Research



@23benjones



Practice



LEEDS
BECKETT
UNIVERSITY

Research



COMPLICATED



@23benjones



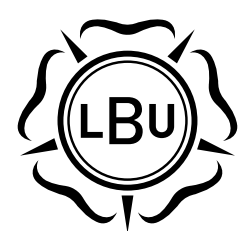
Practice



NEEDY



LEEDS
BECKETT
UNIVERSITY



LEEDS
BECKETT
UNIVERSITY

Sports Science

How to win
(Physiology)



How to win
(Biomechanics)



@23benjones

How to win
(Psychology)

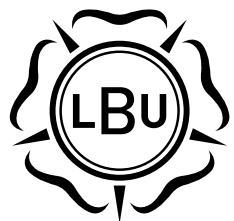
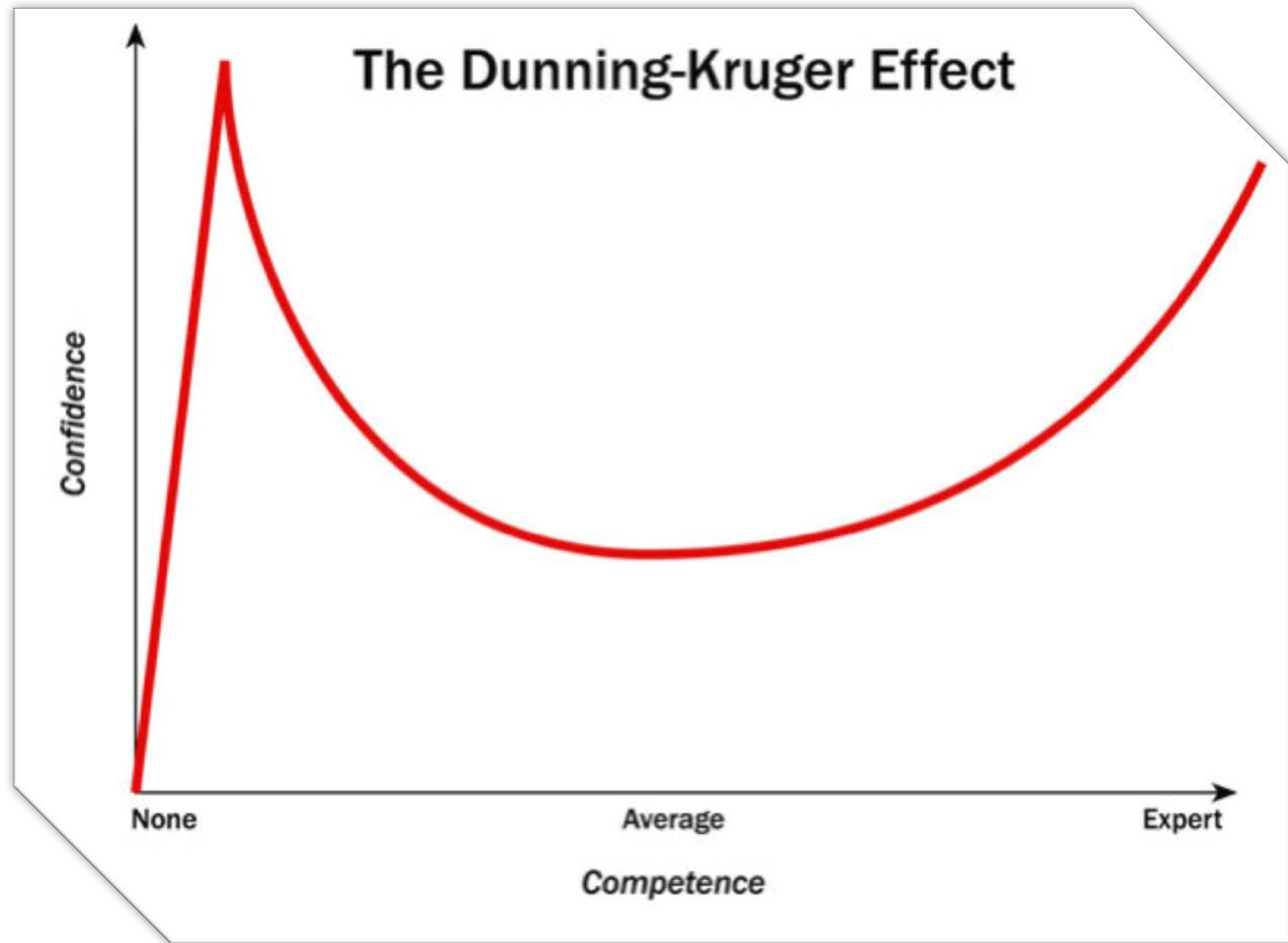
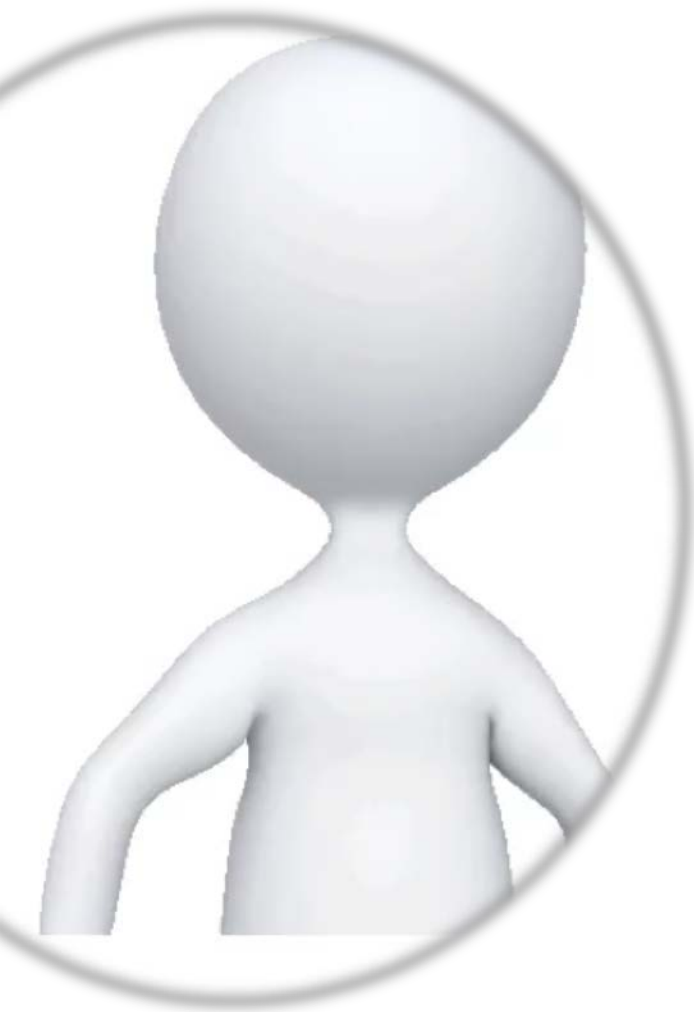


How to reduce injury risk
and improve performance

TOP SECRET

Free
access for
Academics

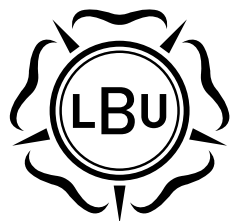
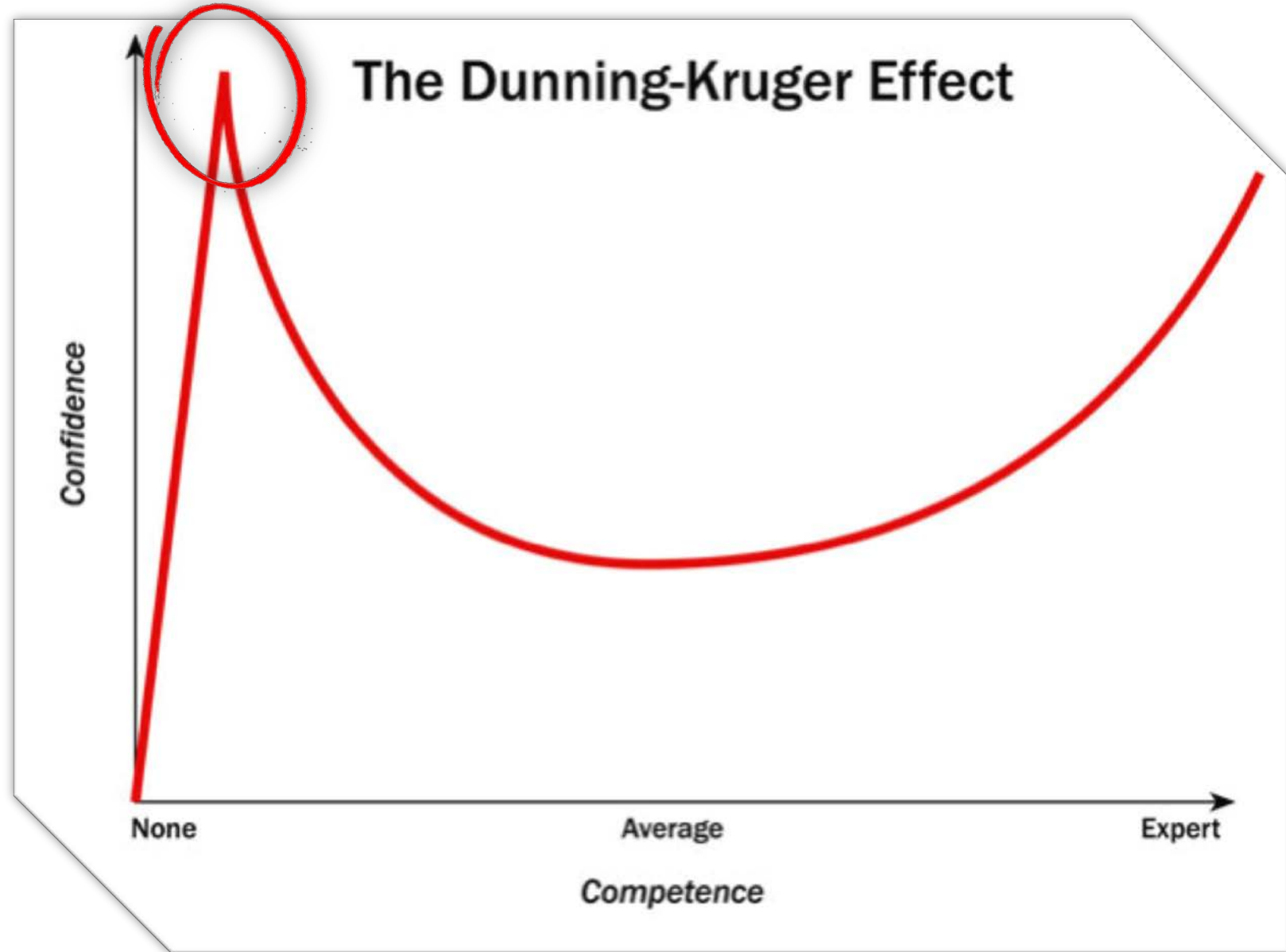
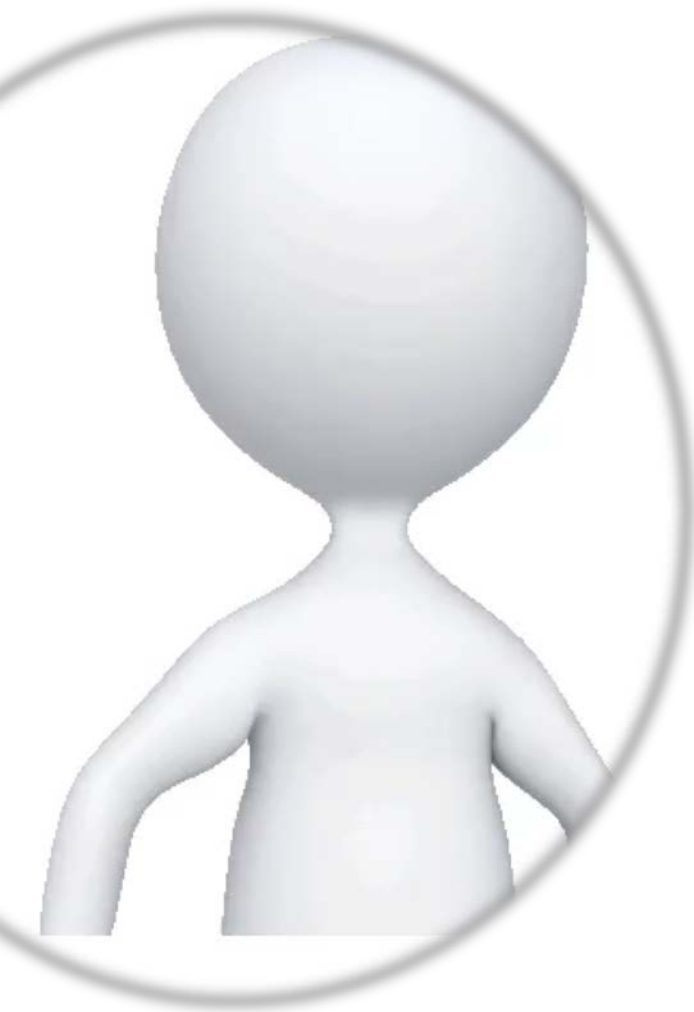
Subscription
required



LEEDS
BECKETT
UNIVERSITY



@23benjones



LEEDS
BECKETT
UNIVERSITY



@23benjones

The Dunning-Kruger Effect

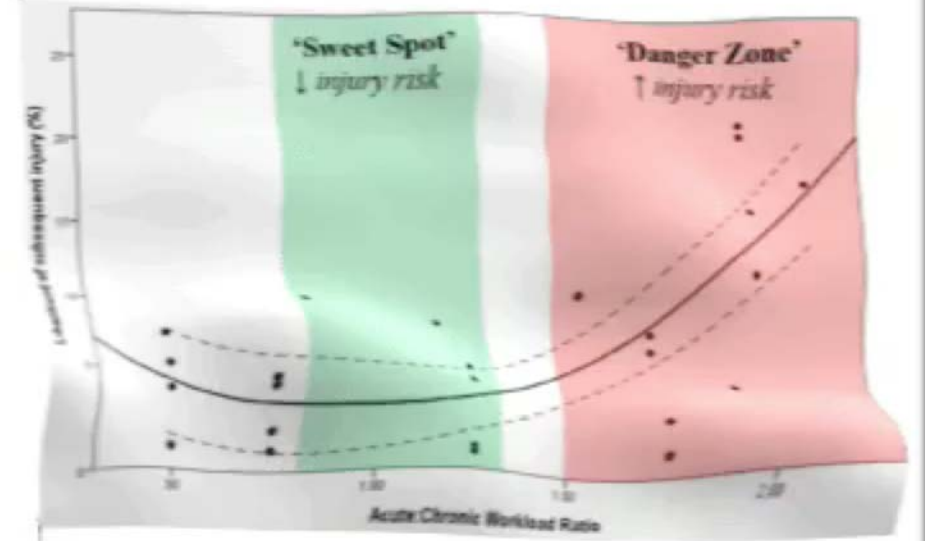
Confidence

None

Average

Expert

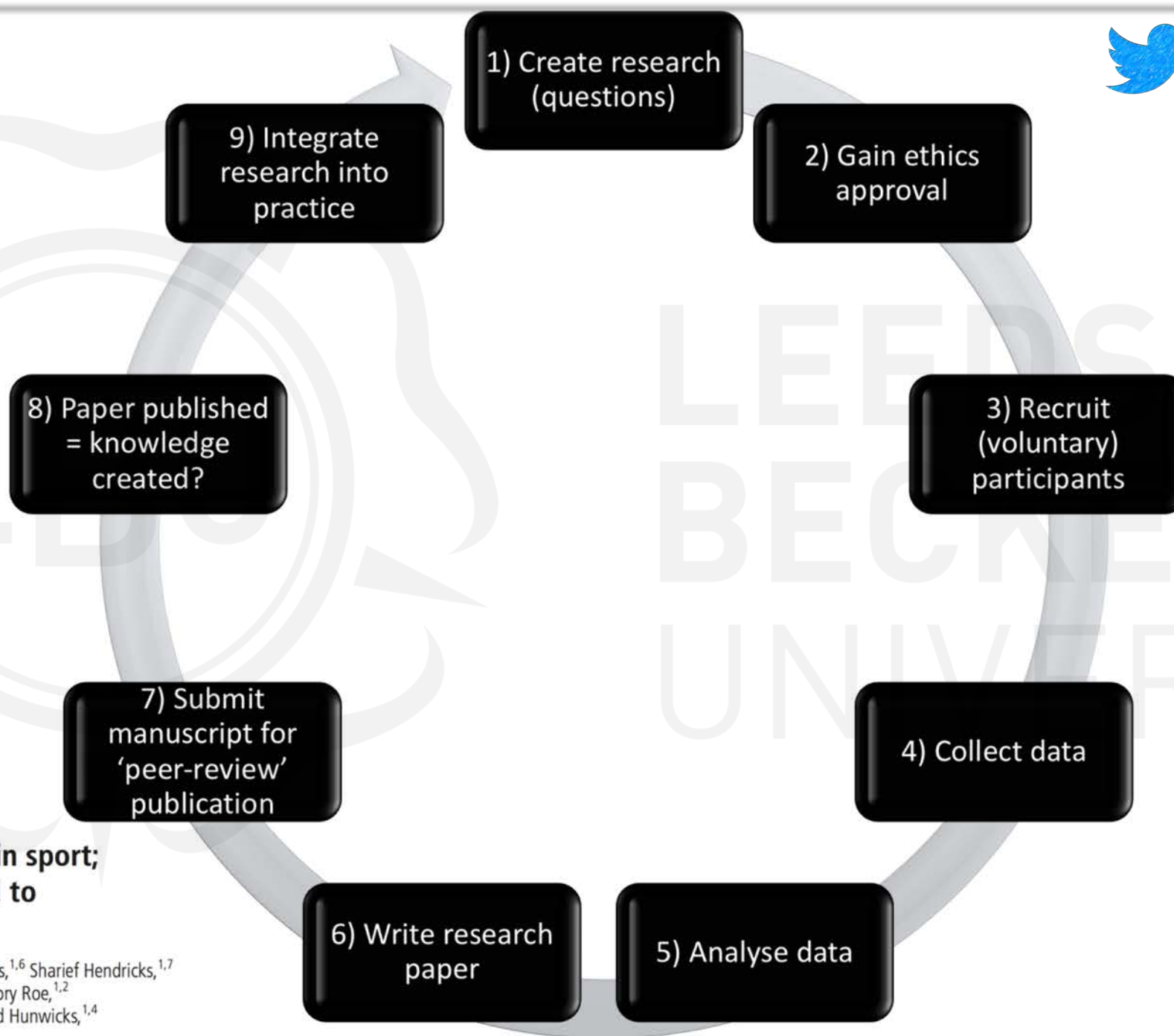
Competence



LEEDS
BECKETT
UNIVERSITY

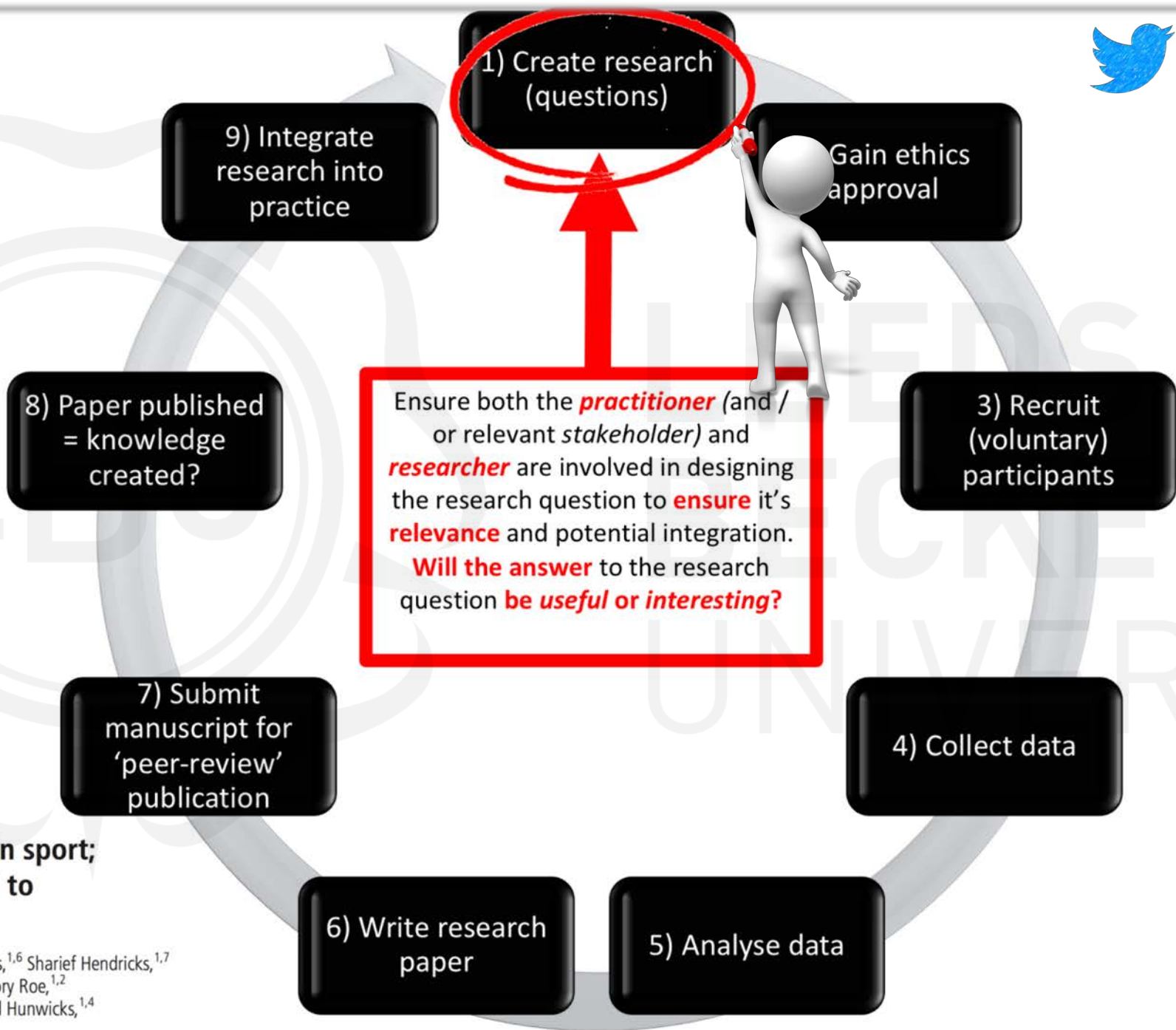


@23benjones



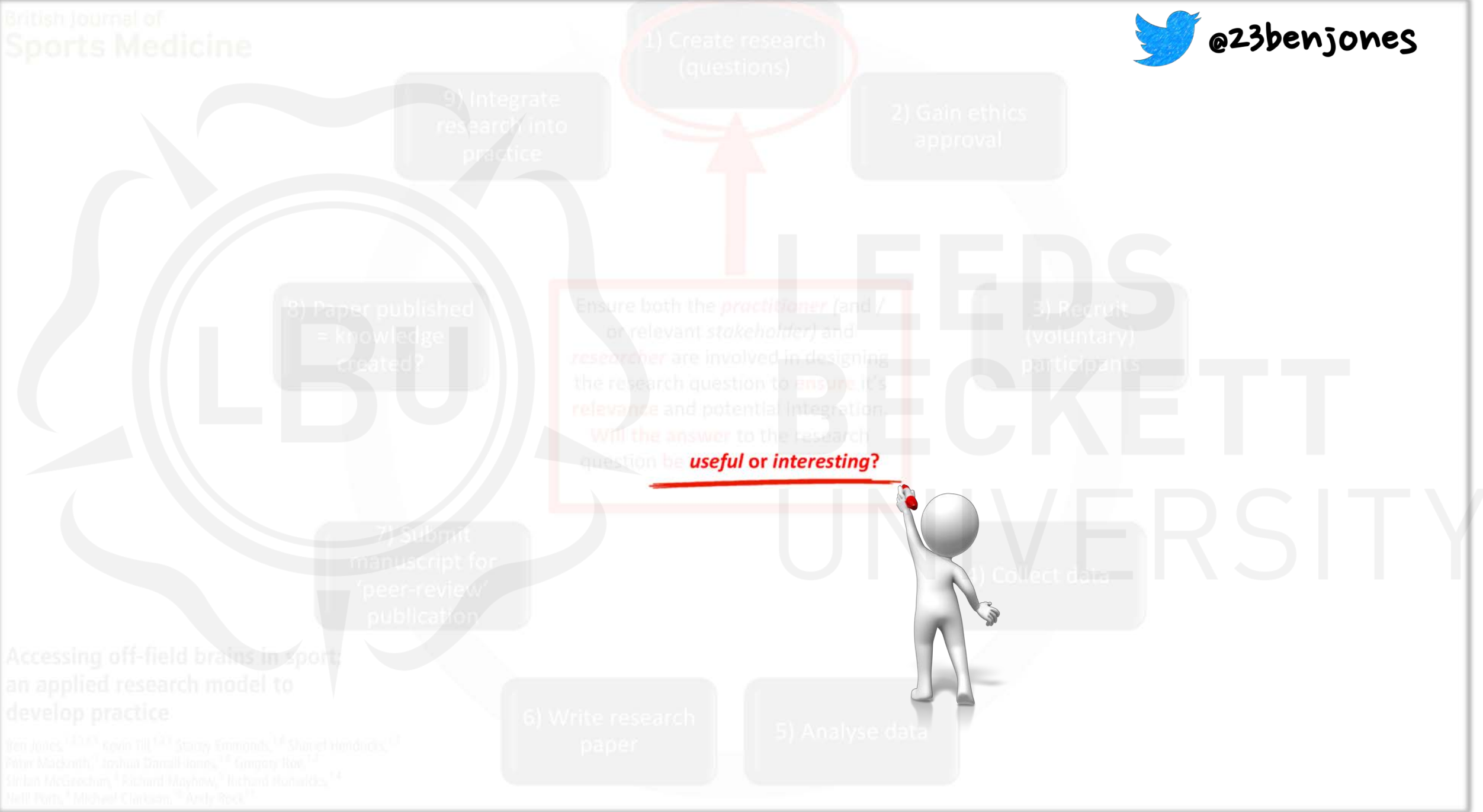
**Accessing off-field brains in sport;
an applied research model to
develop practice**

Ben Jones,^{1,2,3,4,5} Kevin Till,^{1,2,3} Stacey Emmonds,^{1,6} Sharief Hendricks,^{1,7}
Peter Mackreth,¹ Joshua Darrall-Jones,^{1,8} Gregory Roe,^{1,2}
Sir Ian McGeechan,² Richard Mayhew,⁵ Richard Hunwicks,^{1,4}
Neill Potts,⁹ Michael Clarkson,¹⁰ Andy Rock¹¹



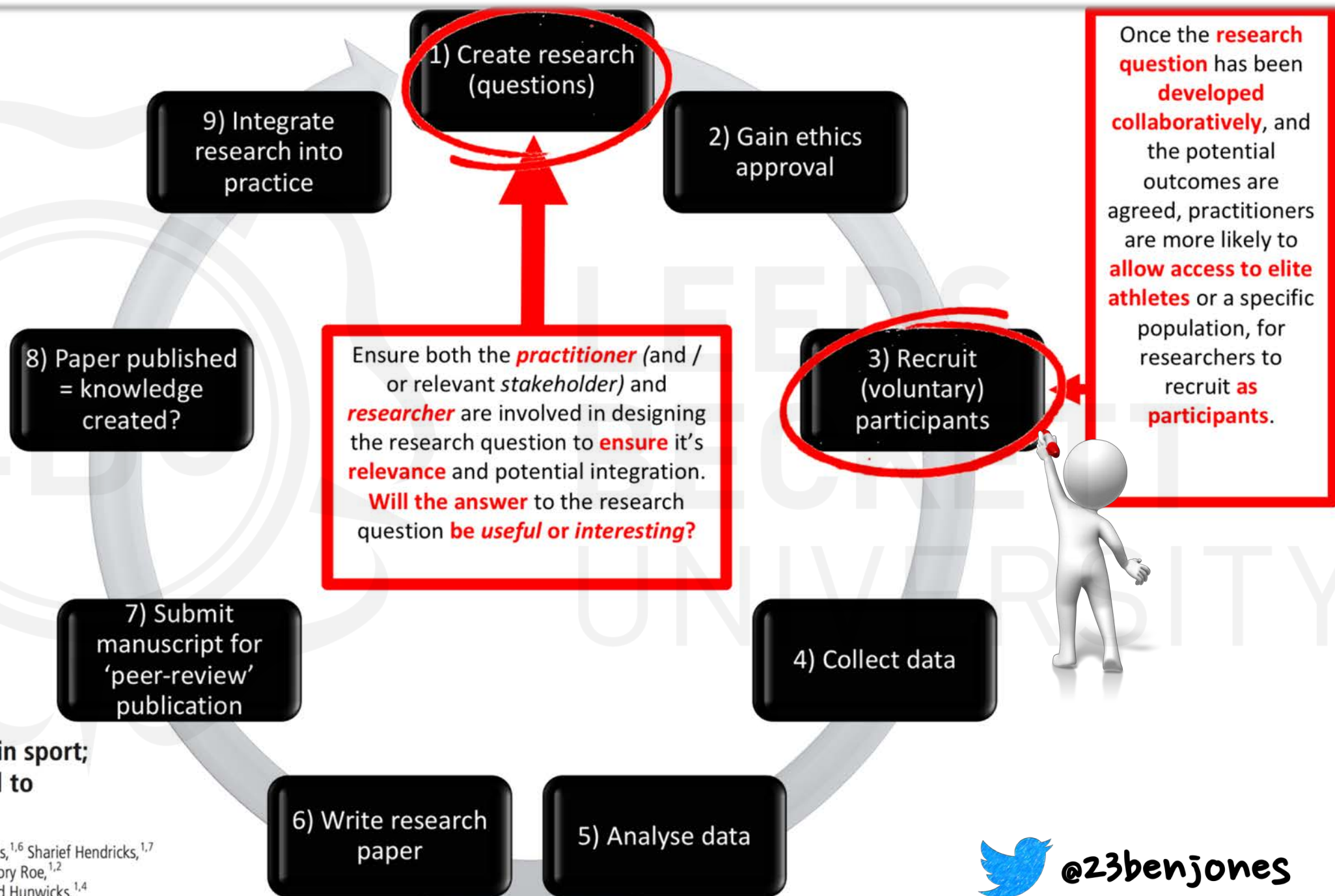
Accessing off-field brains in sport;
an applied research model to
develop practice

Ben Jones,^{1,2,3,4,5} Kevin Till,^{1,2,3} Stacey Emmonds,^{1,6} Sharief Hendricks,^{1,7}
Peter Mackreth,¹ Joshua Darrall-Jones,^{1,8} Gregory Roe,^{1,2}
Sir Ian McGeechan,² Richard Mayhew,⁵ Richard Hunwicks,^{1,4}
Neill Potts,⁹ Michael Clarkson,¹⁰ Andy Rock¹¹



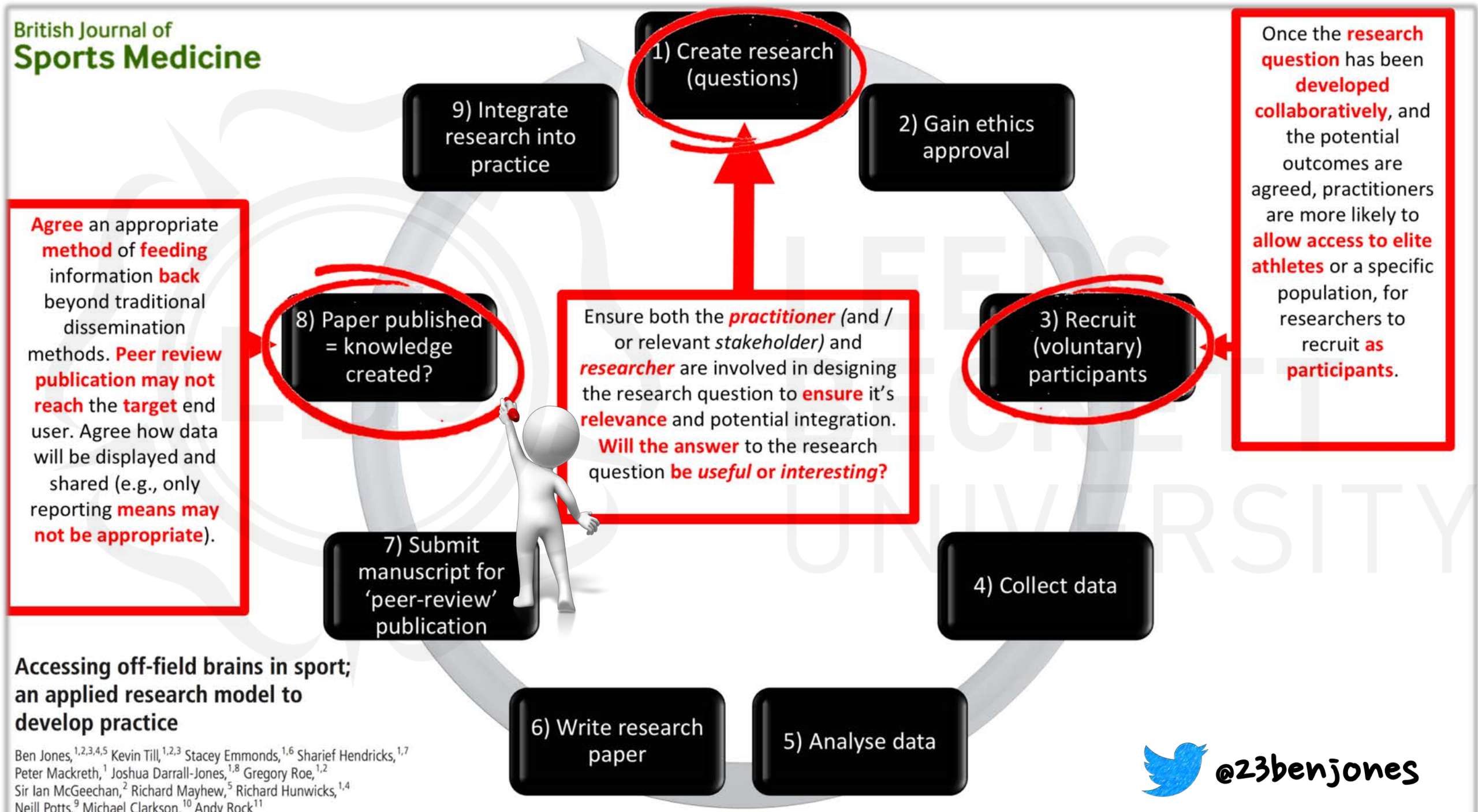
Accessing off-field brains in sport:
an applied research model to
develop practice

Ben Jones,^{1,2,3,4} Kevin Till,^{5,6} Stacy Emmonds,^{1,6} Shirel Handrick,^{1,7}
Peter Mackintosh,¹ Joshua Dancall-Jones,^{1,6} Emory Roe,^{7,8}
Sibran McGeechan,¹ Richard Mayhew,¹ Richard Huxwicks,^{1,4}
Neil Potts,¹ Michael Clarkson,¹ Andy Rock^{1,1}



**Accessing off-field brains in sport;
an applied research model to
develop practice**

Ben Jones,^{1,2,3,4,5} Kevin Till,^{1,2,3} Stacey Emmonds,^{1,6} Sharief Hendricks,^{1,7}
Peter Mackreth,¹ Joshua Darrall-Jones,^{1,8} Gregory Roe,^{1,2}
Sir Ian McGeechan,² Richard Mayhew,⁵ Richard Hunwicks,^{1,4}
Neill Potts,⁹ Michael Clarkson,¹⁰ Andy Rock¹¹



Accessing off-field brains in sport; an applied research model to develop practice

Ben Jones,^{1,2,3,4,5} Kevin Till,^{1,2,3} Stacey Emmonds,^{1,6} Sharief Hendricks,^{1,7}
Peter Mackreth,¹ Joshua Darrall-Jones,^{1,8} Gregory Roe,^{1,2}
Sir Ian McGeechan,² Richard Mayhew,⁵ Richard Hunwicks,^{1,4}
Neill Potts,⁹ Michael Clarkson,¹⁰ Andy Rock¹¹

Try and **integrate** the **findings into practice**. If they do **not** integrate, **consider why** when designing the next research question

Agree an appropriate **method** of **feeding** information **back** beyond traditional dissemination methods. **Peer review publication may not reach** the **target** end user. Agree how data will be displayed and shared (e.g., only reporting **means may not be appropriate**).

Once the **research question** has been **developed collaboratively**, and the potential outcomes are agreed, practitioners are more likely to **allow access to elite athletes** or a specific population, for researchers to recruit **as participants**.

Ensure both the **practitioner** (and / or relevant *stakeholder*) and **researcher** are involved in designing the research question to **ensure** it's **relevance** and potential integration. **Will the answer** to the research question **be useful or interesting?**

9) Integrate research into practice

1) Create research (questions)

2) Gain ethics approval

3) Recruit (voluntary) participants

4) Collect data

5) Analyse data

6) Write research paper

7) Submit manuscript for 'peer-review' publication

8) Paper published = knowledge created?



Accessing off-field brains in sport; an applied research model to develop practice

Ben Jones,^{1,2,3,4,5} Kevin Till,^{1,2,3} Stacey Emmonds,^{1,6} Sharief Hendricks,^{1,7} Peter Mackreth,¹ Joshua Darrall-Jones,^{1,8} Gregory Roe,^{1,2} Sir Ian McGeechan,² Richard Mayhew,⁵ Richard Hunwicks,^{1,4} Neill Potts,⁹ Michael Clarkson,¹⁰ Andy Rock¹¹



@23benjones

Try and **integrate** the **findings into practice**. If they do **not** integrate, **consider why** when designing the next research question

Agree an appropriate **method** of **feedback** information beyond traditional dissemination methods. **Peer-reviewed publication** **reach** the target user. Agree on what will be displayed and shared (e.g. reporting **measures** **not be appropriate**

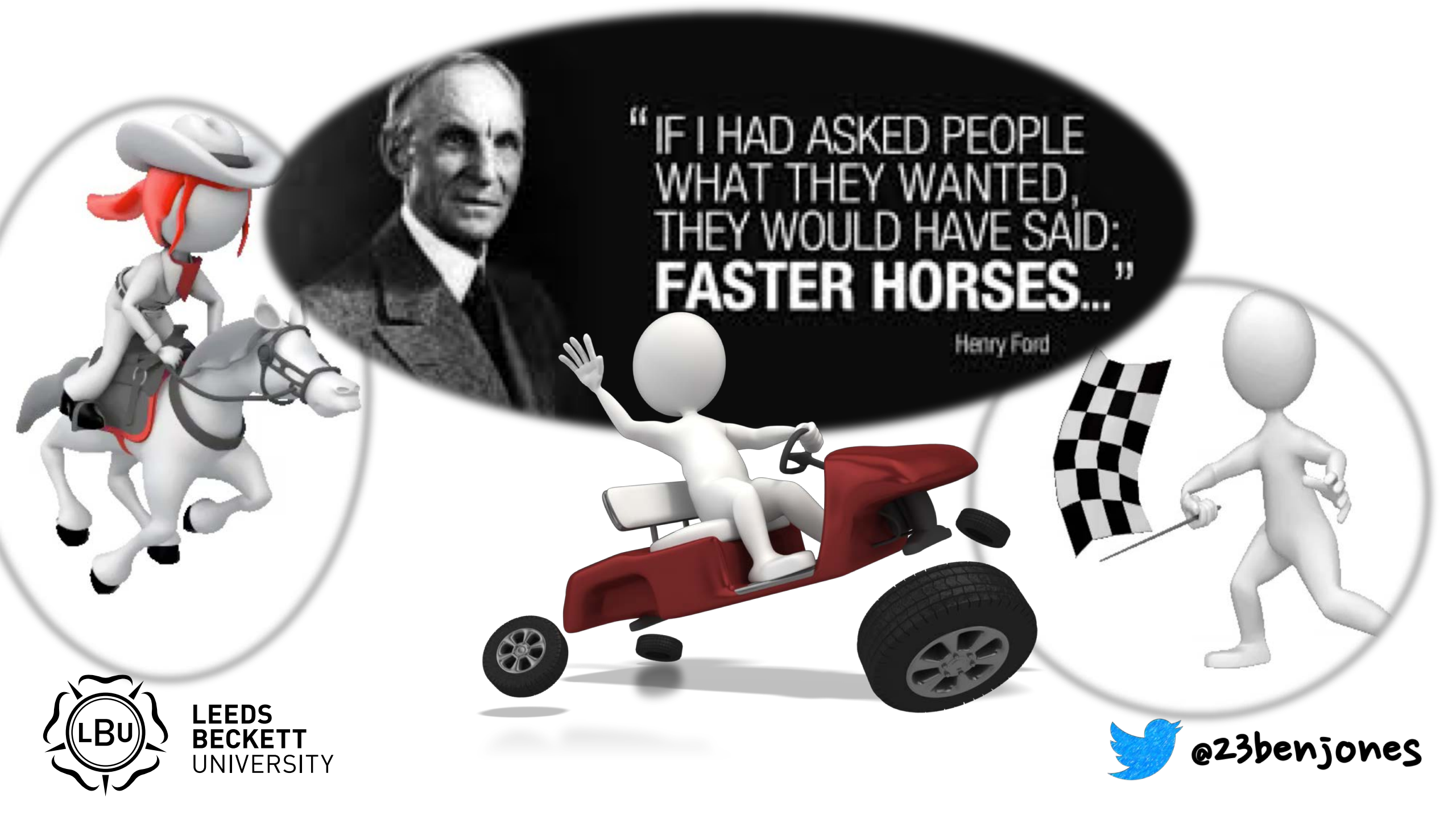
Once the **research question** has been **developed collaboratively**, and the potential outcomes are agreed, practitioners agree to be likely to **access to elite athletes** or a specific population, for researchers to recruit **as participants**.

Ensure the **practitioner** and / or relevant **stakeholders** are involved in developing the **research** and its relevance to the **question**. What is the **answer** to the **research question** **useful or** **helping?**

Accessing off-field brains in sport; an applied research model to develop practice

Ben Jones,^{1,2,3,4,5} Kevin Till,^{1,2,3} Stacey Emmonds,^{1,6} Sharief Hendricks,^{1,7} Peter Mackreth,¹ Joshua Darrall-Jones,^{1,8} Gregory Roe,^{1,2} Sir Ian McGeechan,² Richard Mayhew,⁵ Richard Hunwicks,^{1,4} Neill Potts,⁹ Michael Clarkson,¹⁰ Andy Rock¹

 @23benjones



“IF I HAD ASKED PEOPLE
WHAT THEY WANTED,
THEY WOULD HAVE SAID:
FASTER HORSES...”

Henry Ford



LEEDS
BECKETT
UNIVERSITY



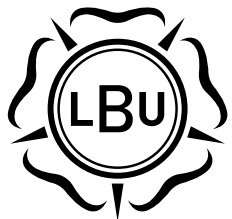
@23benjones

WE OFFER 3 KINDS OF SERVICES
GOOD-CHEAP-FAST
BUT YOU CAN PICK ONLY TWO

GOOD & CHEAP WON'T BE **FAST**

FAST & GOOD WON'T BE **CHEAP**

CHEAP & FAST WON'T BE **GOOD**



**LEEDS
BECKETT
UNIVERSITY**



@23benjones

WE OFFER 3 KINDS OF SERVICES

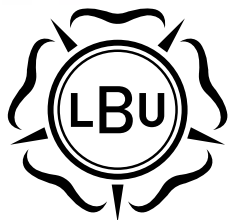
GOOD-CHEAP-FAST

BUT YOU CAN PICK ONLY TWO

GOOD & CHEAP WON'T BE FAST

FAST & GOOD WON'T BE CHEAP

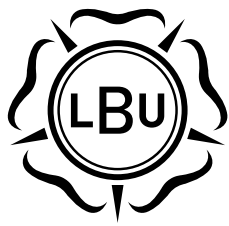
CHEAP & FAST WON'T BE GOOD



LEEDS
BECKETT
UNIVERSITY



@23benjones



LEEDS
BECKETT
UNIVERSITY



@23benjones

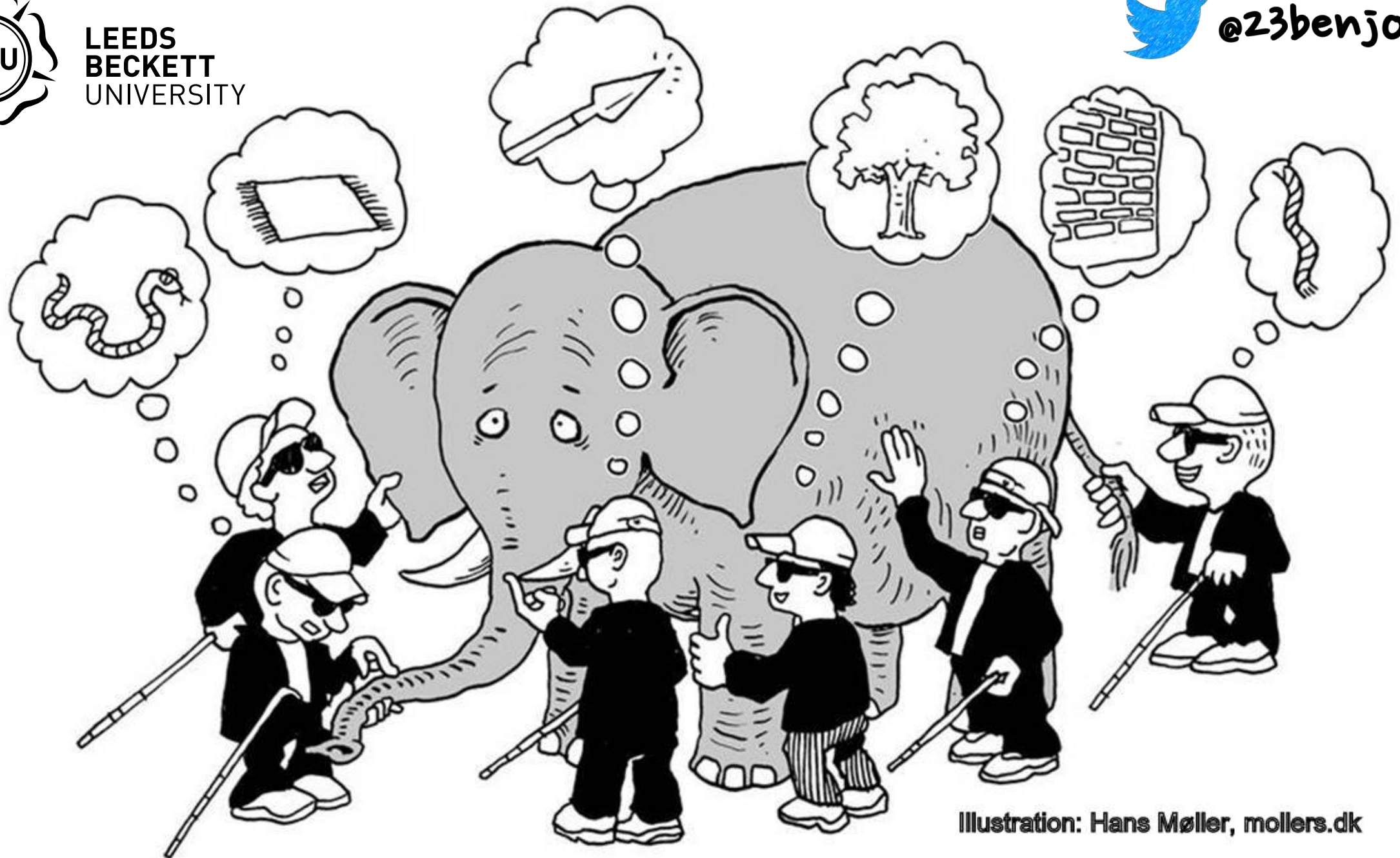



Illustration: Hans Møller, mollers.dk



@23benjones



WE OFFER 3 KINDS OF SERVICES
GOOD-CHEAP-FAST
BUT YOU CAN PICK ONLY TWO

 @23benjones



**ENGLAND
RUGBY
LEAGUE**



RFU

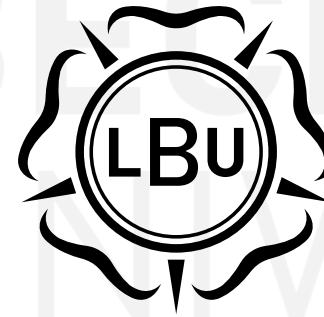


@23benjones



CATAPULT

Play Smart. Defy Limits.



**LEEDS
BECKETT
UNIVERSITY**



@23benjones



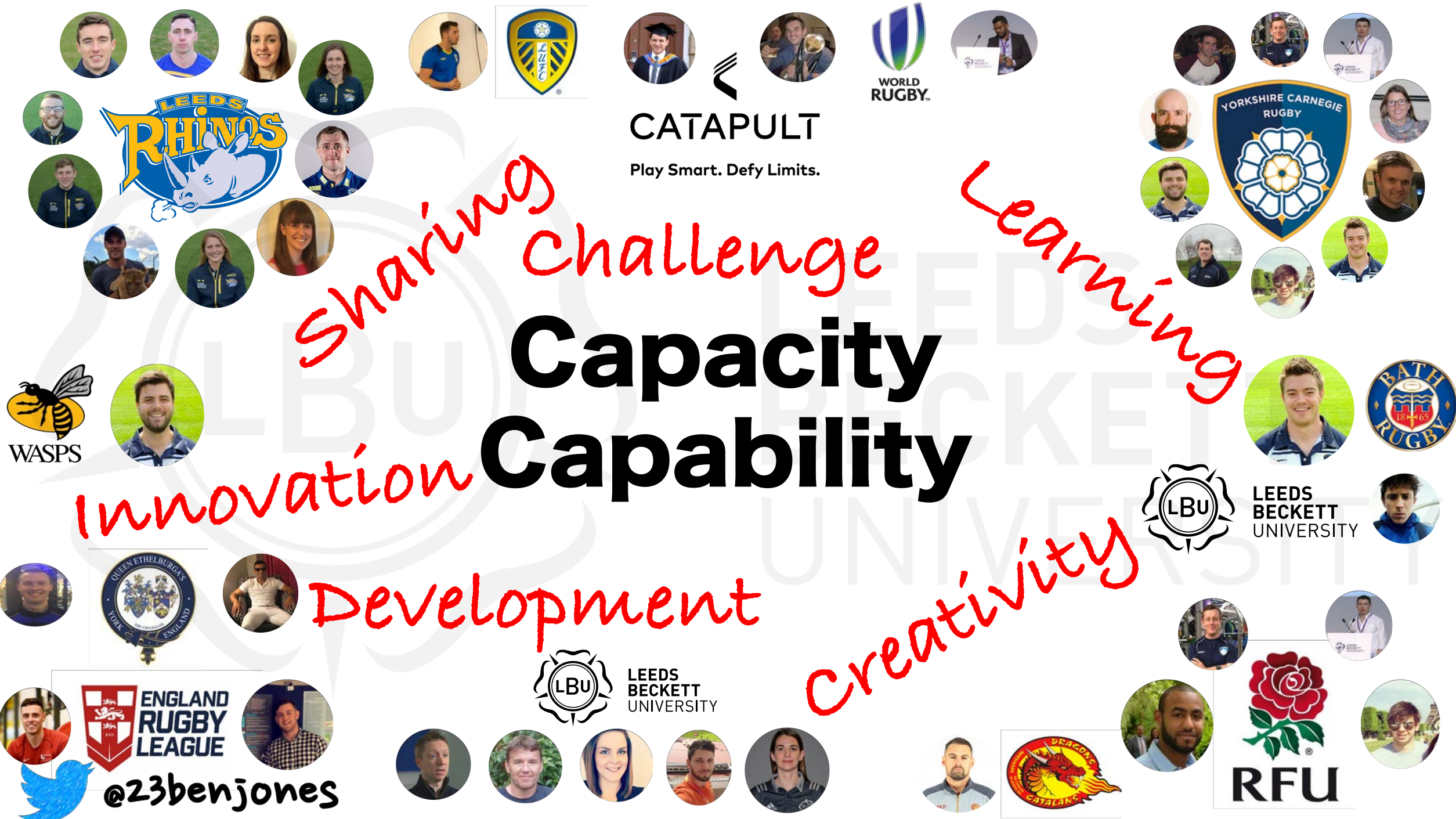


@23benjones





@23benjones



CATAPULT
Play Smart. Defy Limits.

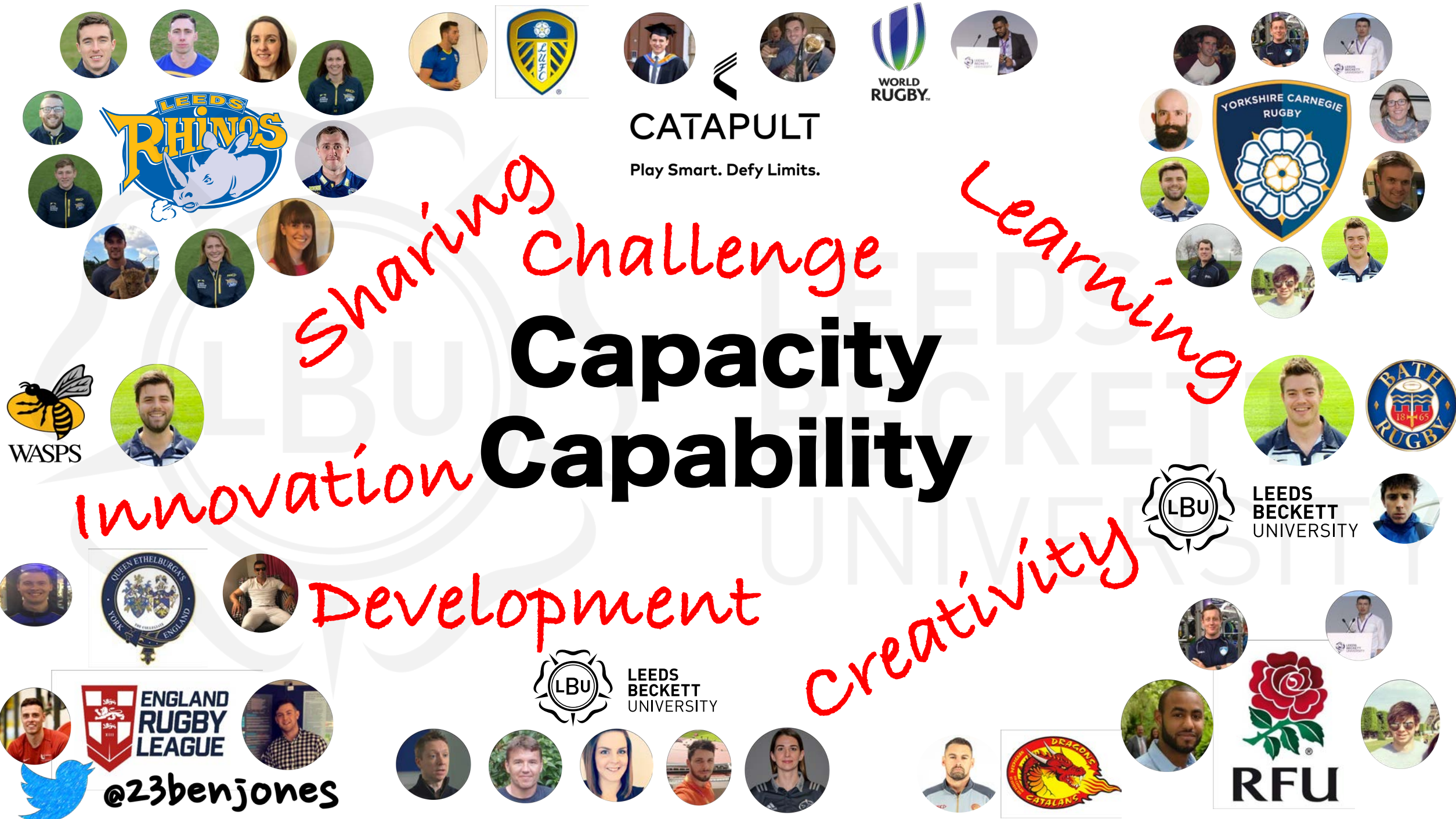
Capacity Capability

Sharing
Challenge

Learning

Innovation
Development

Creativity



LEEDS BECKETT UNIVERSITY



LEEDS BECKETT UNIVERSITY



RFU



@23benjones

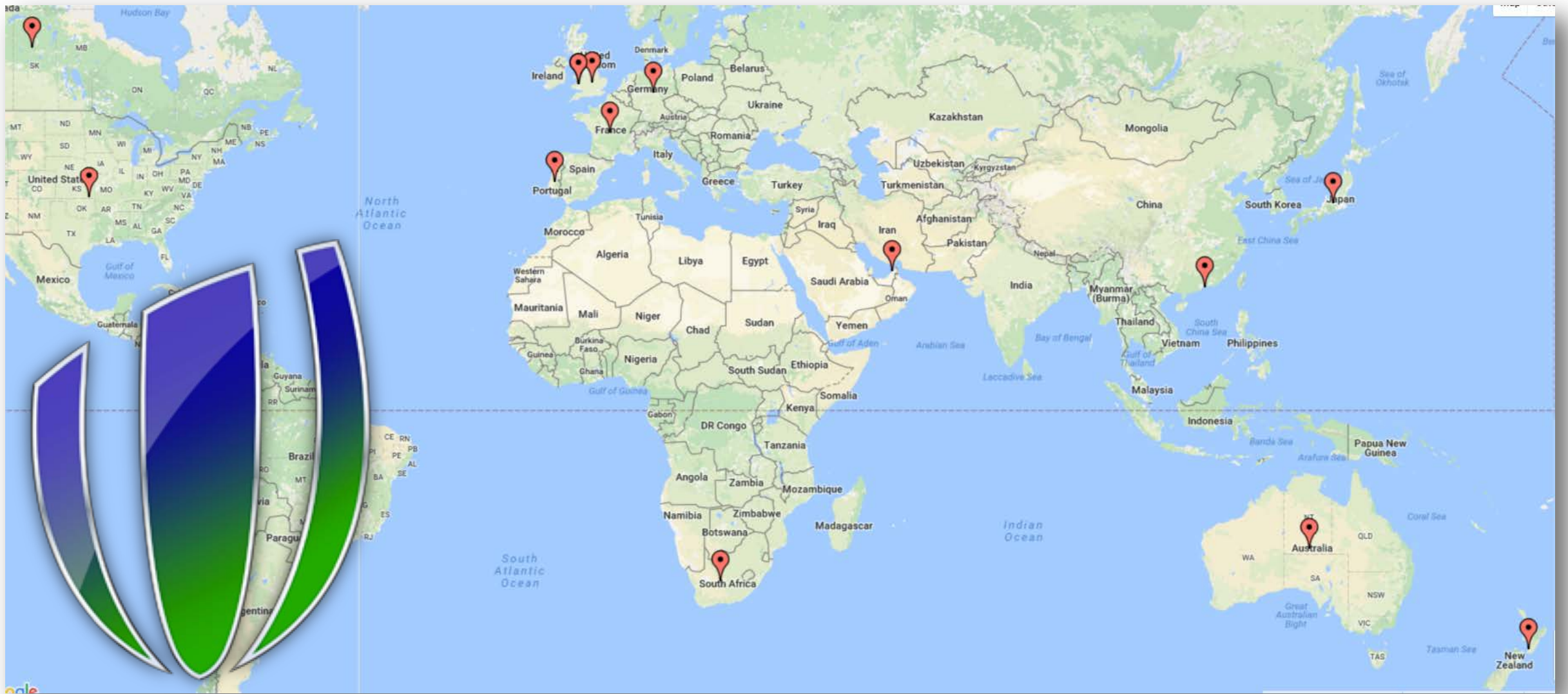
Physical development, training load, injury risk in young rugby union players



LEEDS
BECKETT
UNIVERSITY



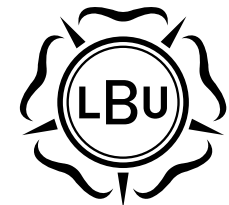
UNIVERSITY OF
BATH



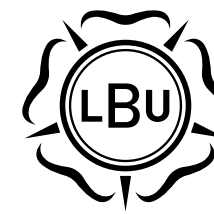
**WORLD
RUGBY™**



@23benjones



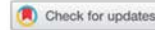
**LEEDS
BECKETT
UNIVERSITY**



**LEEDS
BECKETT
UNIVERSITY**



ARTICLE



Whole, half and peak running demands during club and international youth rugby league match-play

Sarah Whitehead^{a,b}, Kevin Till^{b,a,b,c}, Dan Weaving^{a,b}, Richard Hunwicks^{a,d,e}, Rob Pacey^{f,g} and Ben Jones^{g,a,b,c,d}



Forwards Backs

ESL

Senior	97 to 98	94 to 103
Academy	98 to 100	94 to 106
Youth		
International	104	101
Scholarship	99	103

Forwards Backs

NRL

90 to 95	97 to 105
?	?
?	?

 **@23benjones**


CATAPULT
Play Smart. Defy Limits.



The peak duration-specific locomotor demands and concurrent collision frequencies of European Super League rugby

Dan Weaving^{a,b}, Thomas Sawczuk^{id a,c}, Sean Williams^d, Tannath Scott^{a,e,f}, Kevin Till^{id a,b,g}, Clive Beggs^{id a}, Rich D Johnston^{id h} and Ben Jones^{id a,b,g,i}


CATAPULT
Play Smart. Defy Limits.



 @23benjones

10 minute collisions in peak m·min¹

Full Back	102 ± 2	6 ± 3
Adjustables	98 ± 2	5 ± 3
Middle forward	97 ± 2	9 ± 3
Edge forward	97 ± 2	9 ± 3
Outside Back	94 ± 2	5 ± 3





LEEDS
BECKETT
UNIVERSITY



@23benjones



WIDNES VIKINGS



Play Smart. Defy Limits.





LEEDS
BECKETT
UNIVERSITY



@23benjones

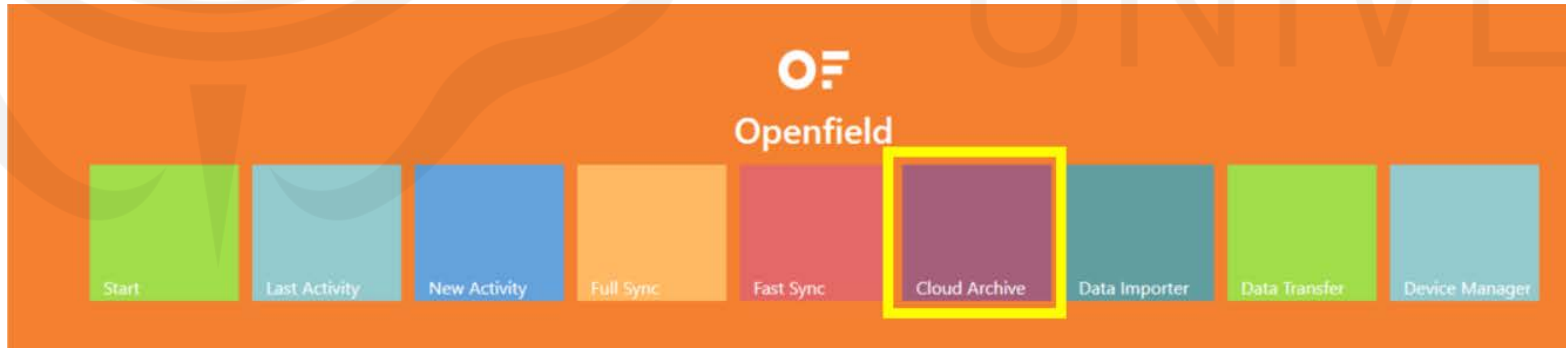
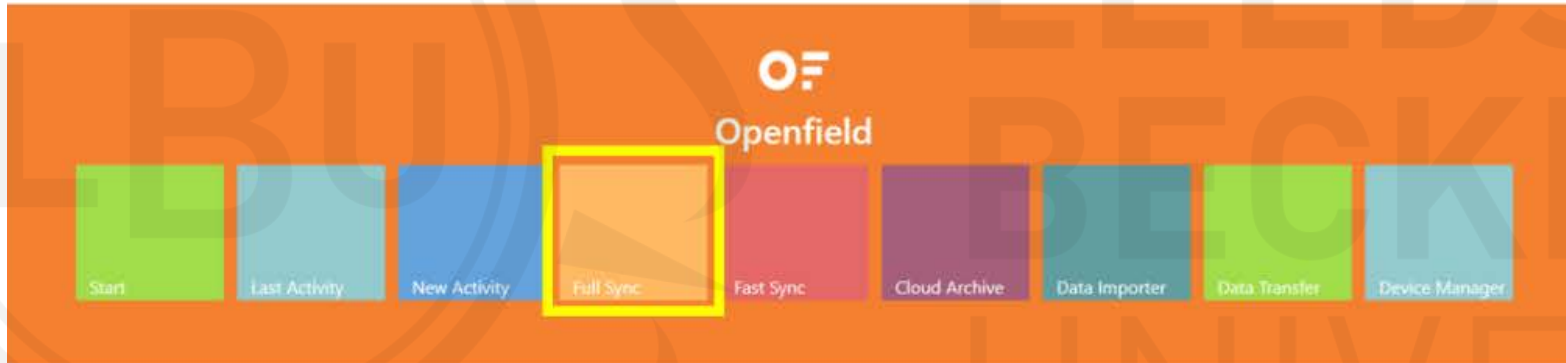


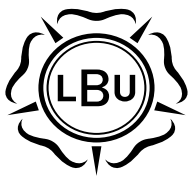
Play Smart. Defy Limits.



1

2





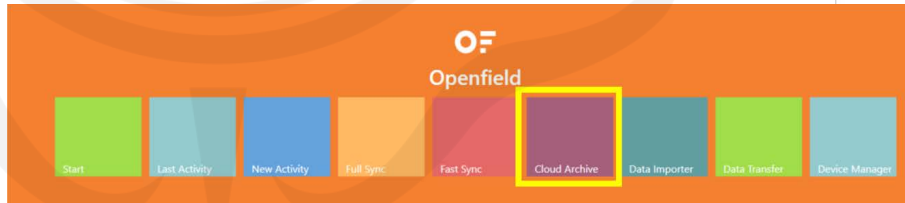
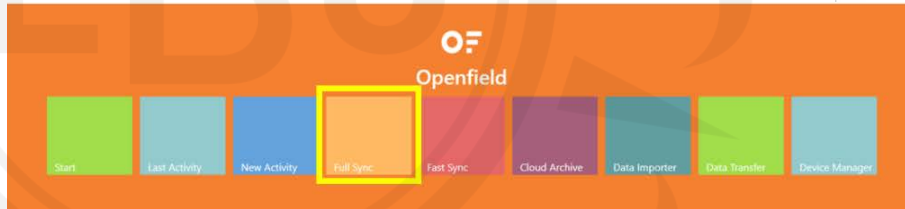
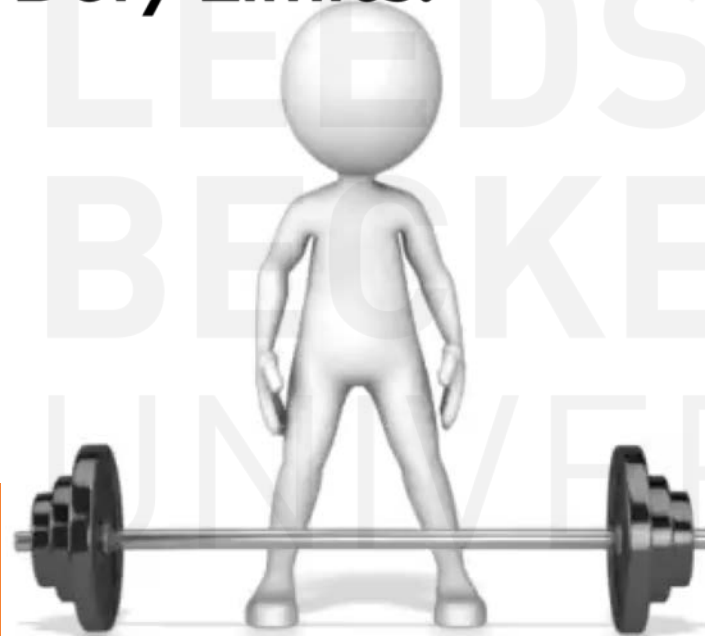
LEEDS
BECKETT
UNIVERSITY



@23benjones

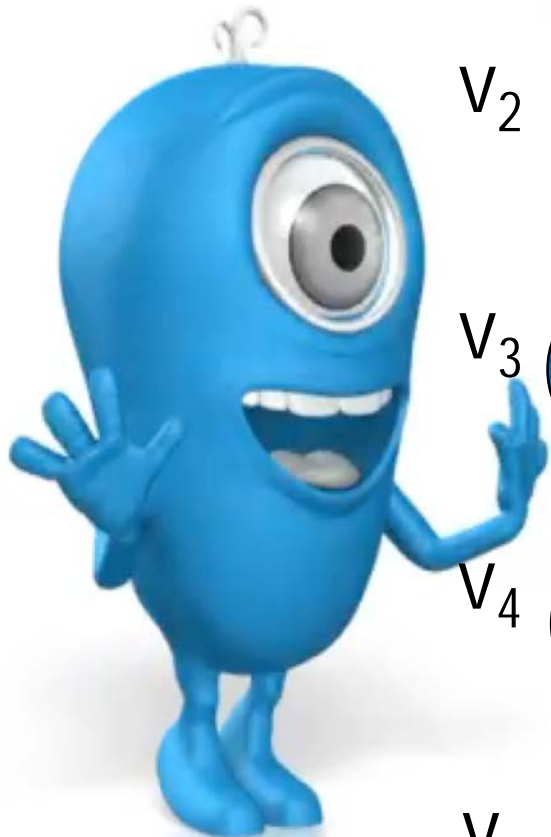


Play Smart. Defy Limits.





LEEDS
BECKETT
UNIVERSITY



V_2

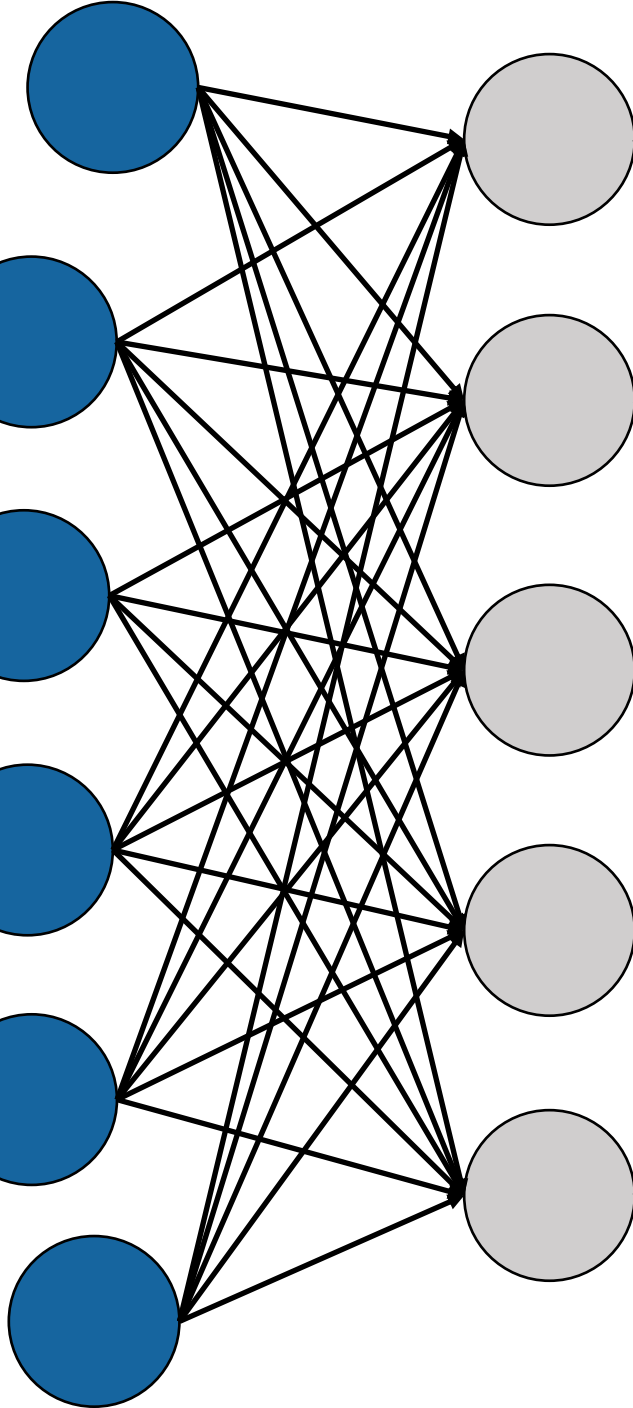
V_3

V_4

V_5

\dots
 V_n

V_1



Variables

Relative
distance
($\text{m} \cdot \text{min}^{-1}$)

Complexity

CATAPULT

Play Smart. Defy Limits.



@23benjones



Prof Ben Jones

@23Benjones

Why u shouldn't share 'top secret data' (😬)

2014 data 'collected'

2015 @cbperform wrote it up

2016 peer-review process

2017 accepted

Today (2018) 'published'

[dx.doi.org/10.1177/174795...](https://dx.doi.org/10.1177/1747954117711094)

Don't share & exposure ur secrets from 4 yrs ago... *unless u got better & no longer do this!



**LEEDS
BECKETT
UNIVERSITY**

Original research

Top secret training data? External training loads of a cup winning English Super League rugby league team

Christopher J Black^{1,2}, Kevin Till^{1,2,3}, John P O'Hara¹, Jason Davidson³ and Ben Jones^{1,2,3,4}

International Journal of
Sports Science
& Coaching

International Journal of Sports Science
& Coaching

0(0) 1-7

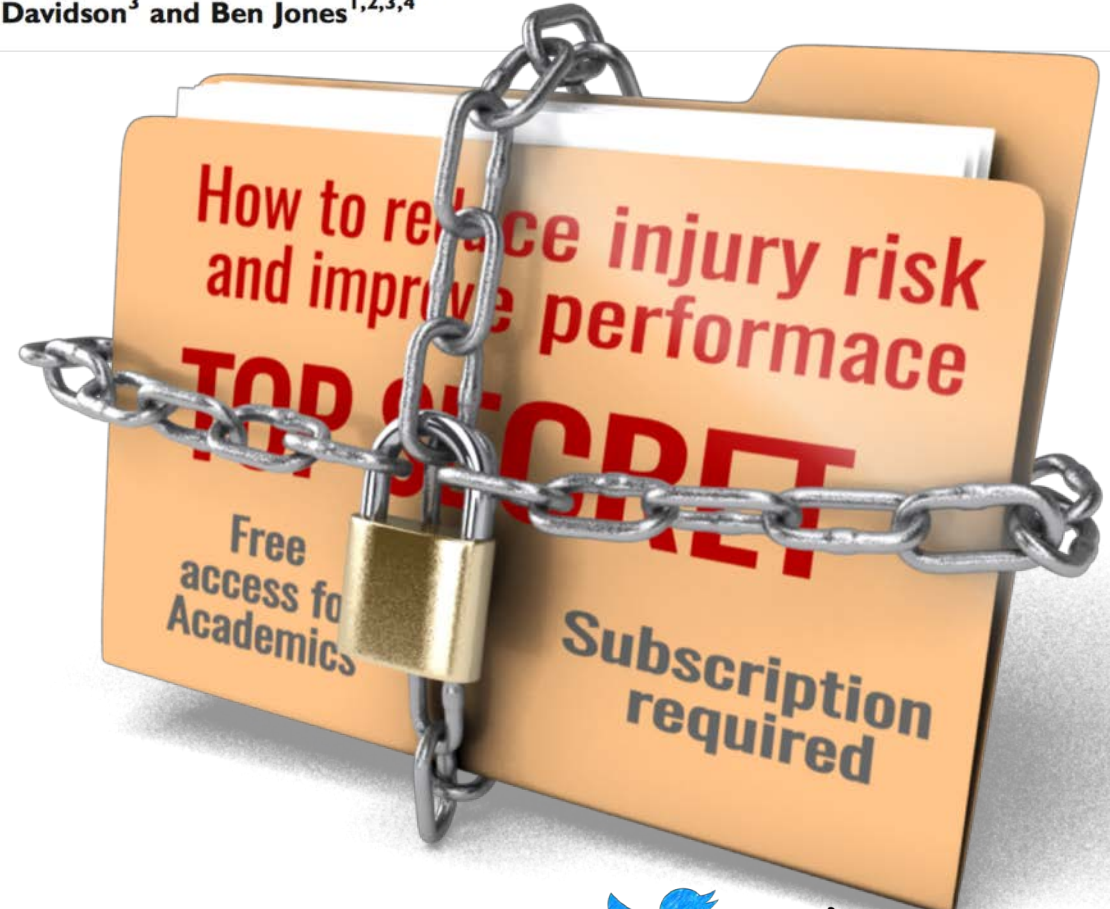
© The Author(s) 2017

Reprints and permissions:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/1747954117711094

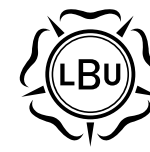
journals.sagepub.com/home/spo



@23benjones



Our WORLD....



LEEDS
BECKETT
UNIVERSITY



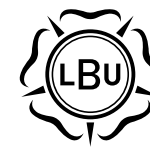
@23benjones

1. No one reads research papers, so find a different way.



AUT SPORTS PERFORMANCE
RESEARCH INSTITUTE NEW ZEALAND

Our WORLD....



LEEDS
BECKETT
UNIVERSITY



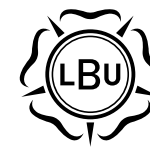
@23benjones

1. No one reads research papers, so find a different way.
2. Coaches don't will care or want change if they are involved early, and we listen to their questions.



AUT SPORTS PERFORMANCE
RESEARCH INSTITUTE NEW ZEALAND

Our WORLD....



LEEDS
BECKETT
UNIVERSITY



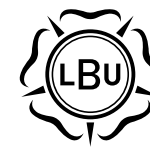
@23benjones

1. No one reads **research papers**, so find a different way.
2. Coaches ~~don't~~ **will** ~~care~~ ~~or want change~~ **if** they are **involved** early, and we **listen** to their questions.
3. ~~Everyone thinks~~ **research is easy and states the obvious**, when you know. The research process, provides solutions and challenges status quo.



AUT SPORTS PERFORMANCE
RESEARCH INSTITUTE NEW ZEALAND

Our WORLD....



LEEDS
BECKETT
UNIVERSITY



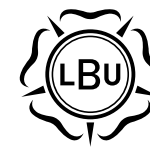
@23benjones

1. ~~No one reads research papers~~, so find a different way.
2. Coaches ~~don't~~ ~~will~~ ~~care~~ ~~or want change~~ ~~if~~ they are involved early, and we listen to their questions.
3. ~~Everyone thinks research is easy and states the obvious~~, when you know. The research process, provides solutions and challenges status quo.
4. ~~No one wants to share~~ because it's ~~top~~ ~~not~~ a secret. Showcase your work, allow others to build on it.



AUT SPORTS PERFORMANCE
RESEARCH INSTITUTE NEW ZEALAND

Our WORLD....



LEEDS
BECKETT
UNIVERSITY



@23benjones

1. ~~No one reads research papers~~, so find a different way.
2. Coaches ~~don't~~ ~~will~~ ~~care~~ ~~or want change~~ if they are involved early, and we listen to their questions.
3. ~~Everyone thinks research is easy and states the obvious~~, when you know. The research process, provides solutions and challenges status quo.
4. ~~No one wants to share~~ because it's ~~top~~ not a secret. Showcase your work, allow others to build on it.
5. Nothing gets finished, and is too slow at the moment. Lets work together, we all have the same challenges.



AUT SPORTS PERFORMANCE
RESEARCH INSTITUTE NEW ZEALAND




LEEDS
BECKETT
UNIVERSITY



THANK YOU

Prof. Ben Jones
b.jones@leedsbeckett.ac.uk

 @23benjones



une
University of
New England



AUT SPORTS PERFORMANCE
RESEARCH INSTITUTE NEW ZEALAND