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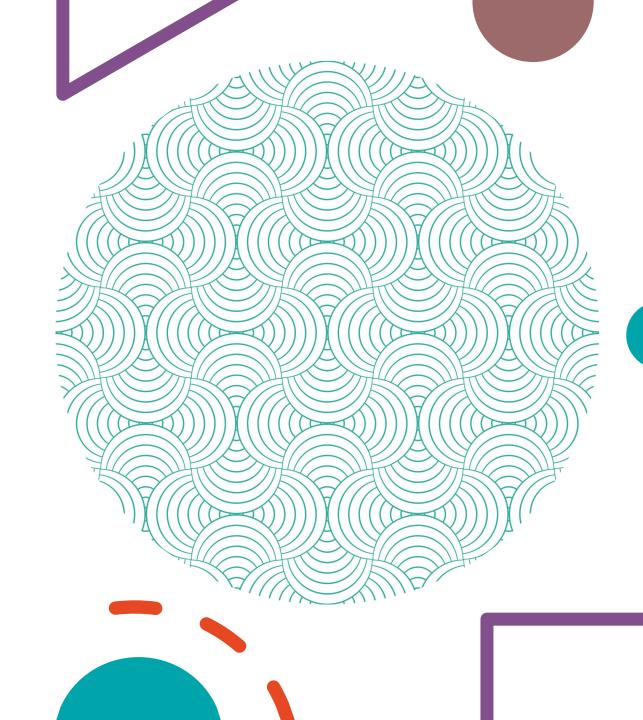
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# Is the athlete REALLY ready to return to sport following injury?

Dr Dale Forsdyke MSST, CSCS, FHEA @forsdyke\_dale





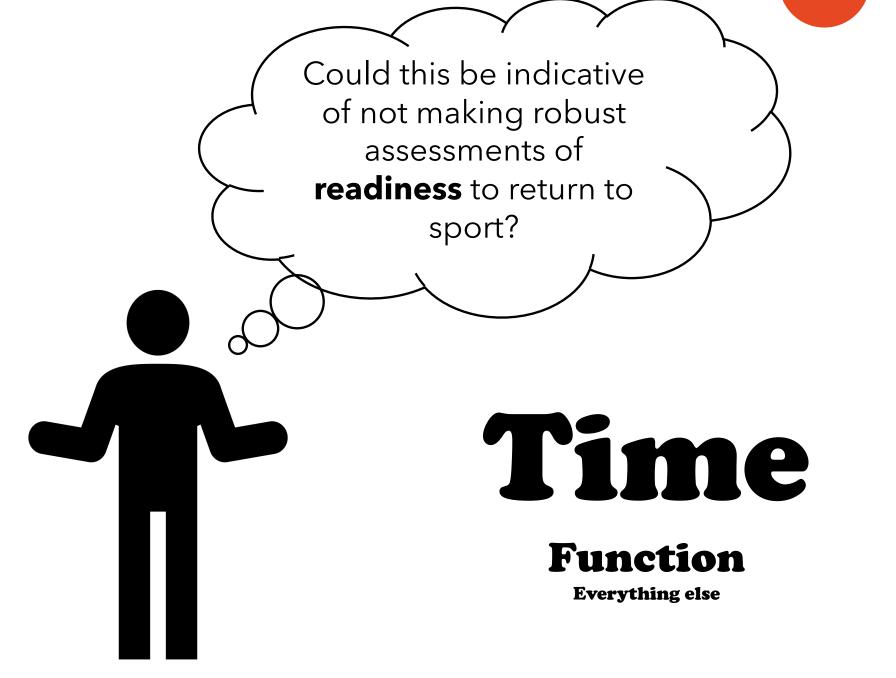
## Session aims

- Evaluate the return to sport landscape
- Define what readiness to return to sport is
- Discuss how readiness impacts return to sport
- Explain different dimensions of readiness and how these can be assessed



# The return to sport landscape

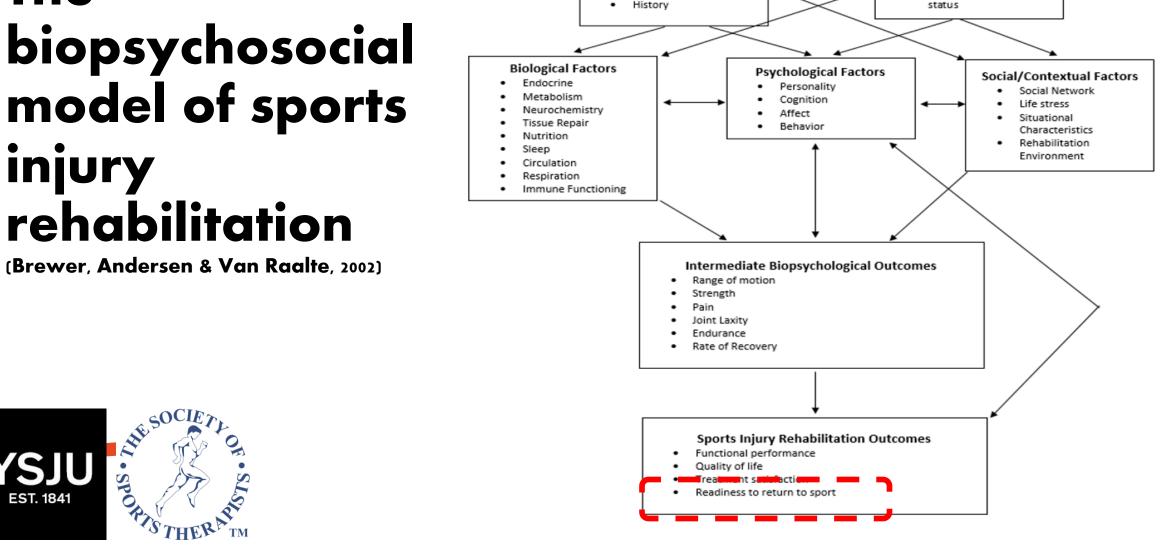






# The biopsychosocial model of sports injury

(Brewer, Andersen & Van Raalte, 2002)



Characteristics of the Injury

Type

Couse

Severity

Location

Sociode mographic Factors

Race/ethnicity

Sociodemographic

Age

Gender





2016 Consensus statement on return to sport from the First World Congress in Sports Physical

Clare L Ardern, <sup>1,2,3</sup> Philip Glasgow, <sup>4,5</sup> Anthony Schneiders, <sup>6</sup> Erik Witvrouw, <sup>1,7</sup>

Clare L Ardern, <sup>1,2,3</sup> Philip Glasgow, <sup>8,9</sup> Boris Gojanovic, <sup>10,11</sup> Steffan Griffin, <sup>12</sup>

Benjamin Clarsen, <sup>8,9</sup> Ann Cools, <sup>8,9</sup> Stephen A Mutch, <sup>14,15</sup> Nicola Phillips, <sup>16</sup>

Benjamin Clarsen, <sup>8,9</sup> Ann Moksnes, <sup>8,9</sup> Stephen A Silbernagel, <sup>18</sup> Kristian Thorborg, <sup>20,21</sup>

Karim M Khan, <sup>13</sup> Håvard Moksnes, <sup>18</sup> Karin Grävare Silbernagel, <sup>18</sup> Kristian Thorborg, <sup>20,21</sup>

Gustaaf Reurink, <sup>17</sup> Robin Sadler, <sup>20</sup> Mario Bizzini<sup>23</sup>

Arnlaug Wangensteen, <sup>1,8</sup> Kevin E Wilk, <sup>20</sup> Mario Bizzini<sup>23</sup>

Psychosocial factors associated with outcomes of Review sports injury rehabilitation in competitive athletes: a mixed studies systematic review

Dale Forsdyke, <sup>1</sup> Andy Smith, <sup>2</sup> Michelle Jones, <sup>3</sup> Adam Gledhill <sup>4</sup>

## We need to be evaluating readiness to inform decisions over return to sport





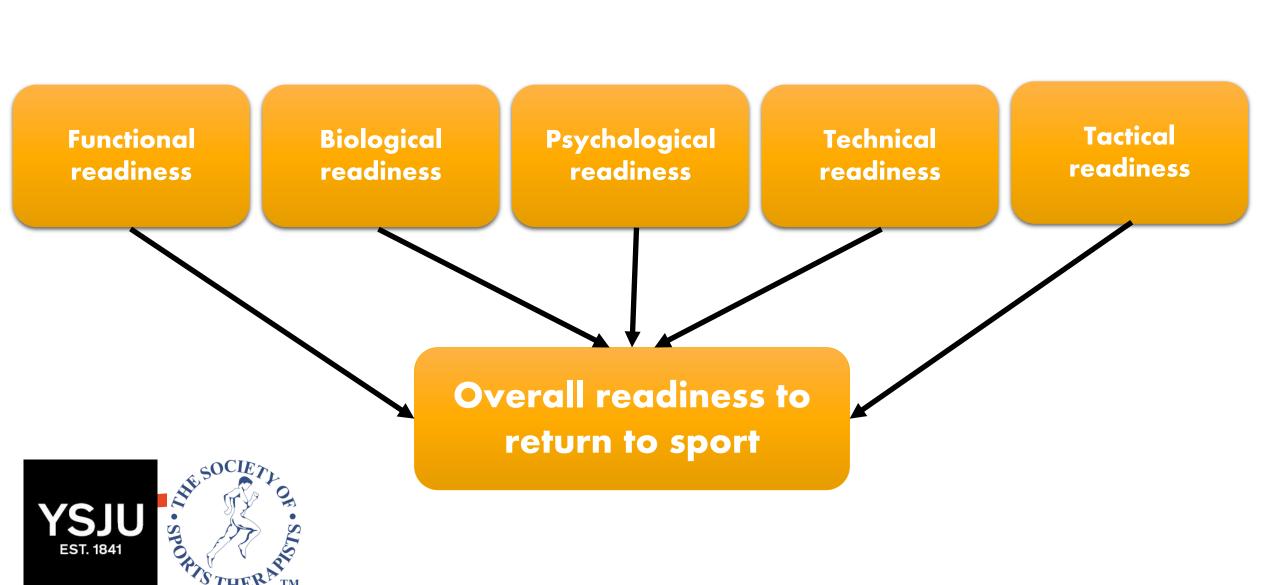
Practitioners need to ensure injured athletes are physically, psychologically, socially, tactically and technically ready to return to sport

## But what is readiness?

Not well conceptualised or operationalised in the literature

A set of <u>multidimensional</u> qualities that are developed over the course of rehabilitation and reconditioning, that will enable the athlete to return to sport (training and competition) and perform to expectations while remaining injury-free





# Example methods to assess dimensions of readiness

#### **Functional readiness**

- Hop tests
  - Distance
  - Time
  - Number of repetitions
- Isokinetic dynometer (IKD)
  - · Peak force
  - · Work done
- Athletic shoulder test (ASH)
  - Peak force
  - Rate of force development
- Running T-test
- Y-balance
  - Lower extremities
  - Upper extremities

### **Psychological readiness**

I-PRRS scale (Glazer, 2009)

ACL-RSI (Webster et al., 2008)

ACL-RSI (SF) (Webster et al., 2018)

SI-RSI (Geromotta et al., 2018)

ALR - RSI (Signonney et al., 2020)

PRIA-RS (Gomez-Piqueras et al., 2014)

TSK (Miller, Kori & Todd, 1991)

RIAI (Walker, Thatcher & Lavallee, 2010)

K-SES (Thomee et al., 2007)

#### **Biological readiness**

Time

**Imaging** 

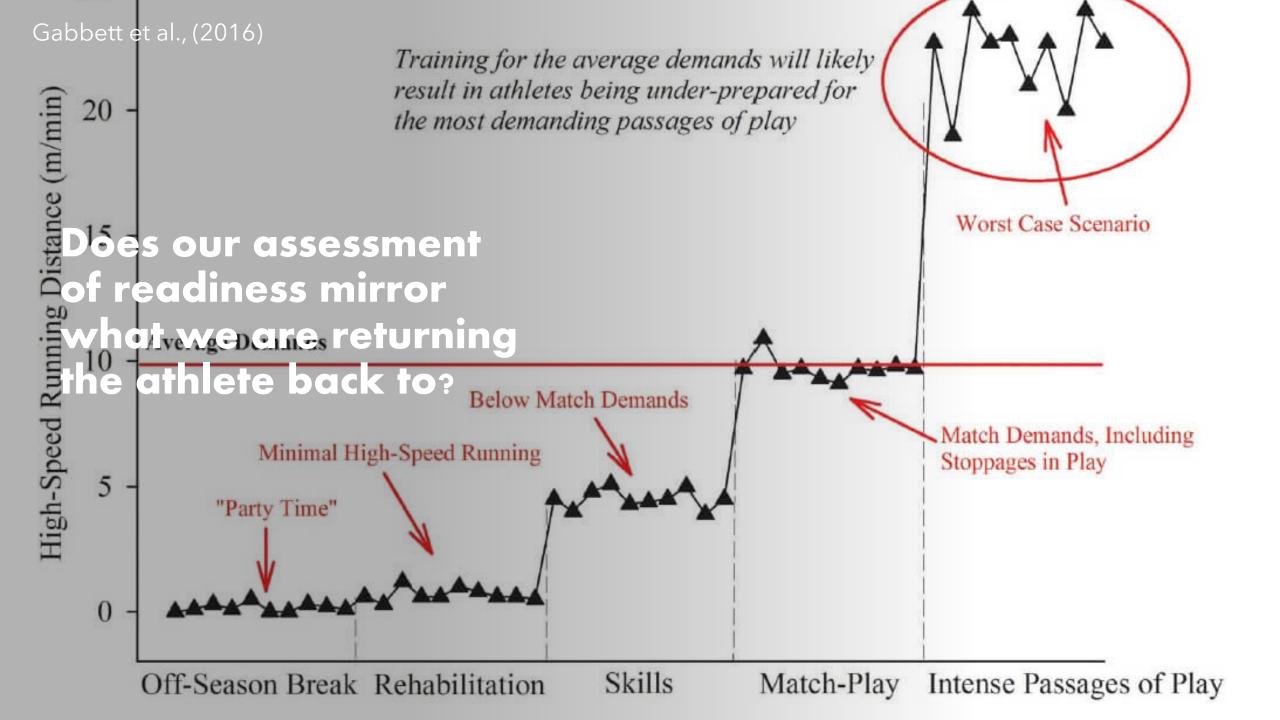
Tensiomyography (TMG)

# A Return to sport – 'Quadrant of doom' (Forsdyke & Gledhill, 2021)

Functional readiness to return to sport







# Maybe we should also consider tactical and technical readiness too

- May fill the gap between current assessments of readiness and demands of what we are returning the athlete back to
  - Open skills and chaotic
  - Cognitively demanding
  - Evaluate other dimensions of readiness in context
- Practically this may mean
  - Periodising your pitch-based reconditioning for tactical and technical demands
  - Observe the athlete on return to training
  - Gain perspectives on readiness from coaches (training form) and sports scientist/performance analysist (key performance indicators)



Functional readiness

Biological readiness

Psychological readiness

Technical readiness

Tactical readiness

Overall readiness to return to sport





'Being back out there on the pitch has been brilliant. I feel fit, I feel confident and I feel like myself again'

## So, in summary

- Readiness to return to sport appears associated with several important outcomes
- Readiness to return to sport is multidimensional, and as such decisions over returning to training and competition should consider these different dimensions
- Although dimensions of readiness can be measured, we must consider the limitations of these measurement methods



