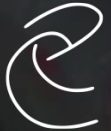




Rethinking Soccer: What an Ecological Dynamics Framework could offer skill, learning and development – Session 5

# Session Intentions

- Moving away from prescription
- Information-Movement Couplings (and the role of *functional variability*)
- Planning Goalkeeping Programmes



# Traditional Understanding of Goalkeeper Skill Learning

- Prescribed sequences
- Focus on a technical aesthetic model
- A baseline set of competencies



# Repetition... Repetition... Repetition...

- Use of traditional practice scheduling (i.e blocked practice)
- Coaching practice (re)produced from previous athletic experience
- Difficulties from a coach development context in some areas



# An Ecological Dynamics Conceptualisation of Skilled Goalkeeping

- Manifest in the mastering of a functional organism-environment fit.

- Predicated on the functional actualization of affordances.

- Variability as a necessity.

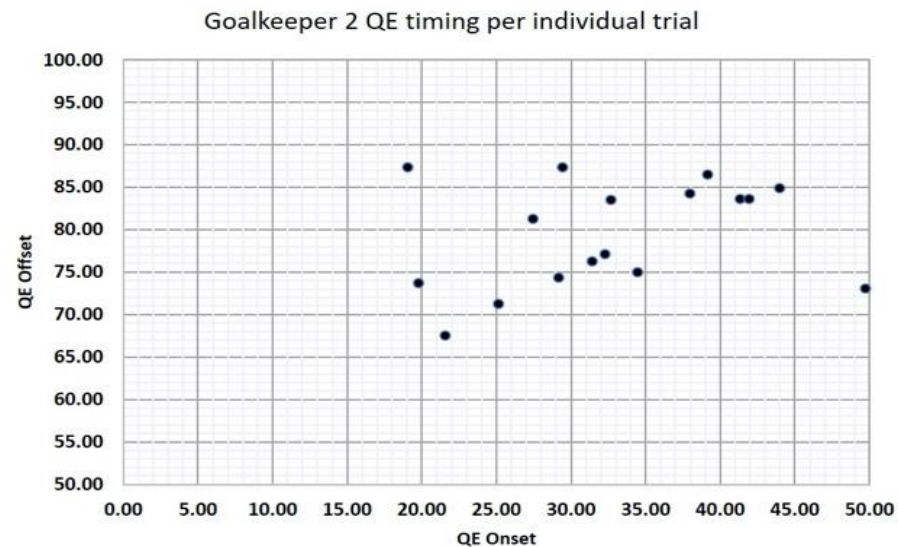
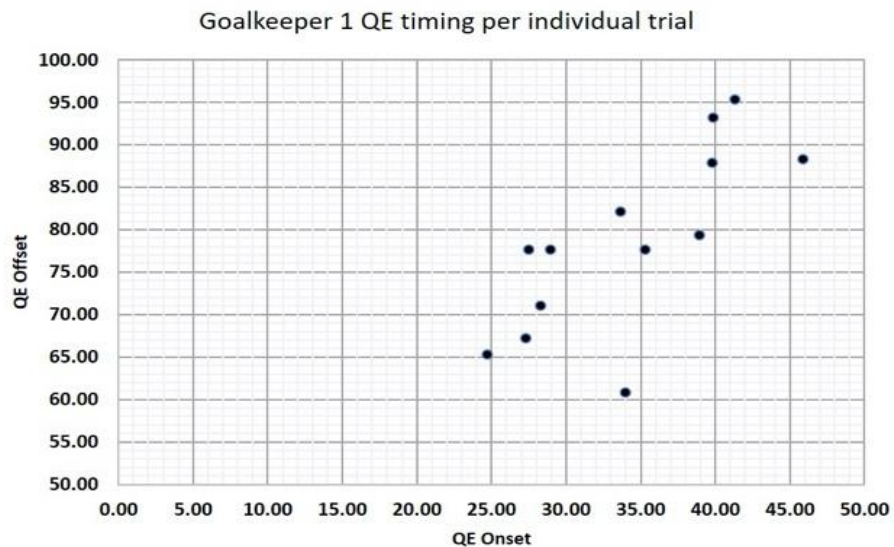


# Forming skilled perception-action couplings

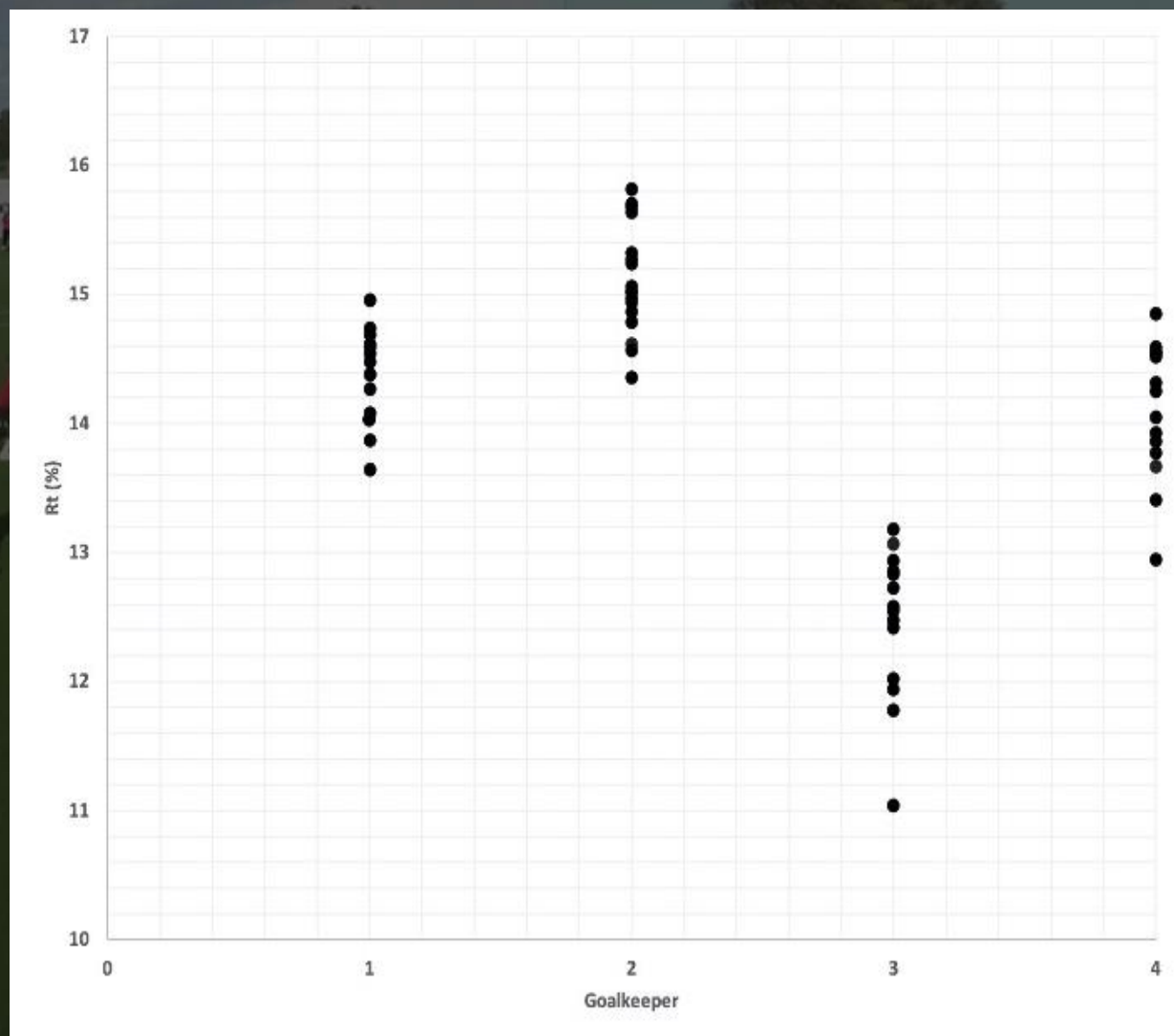
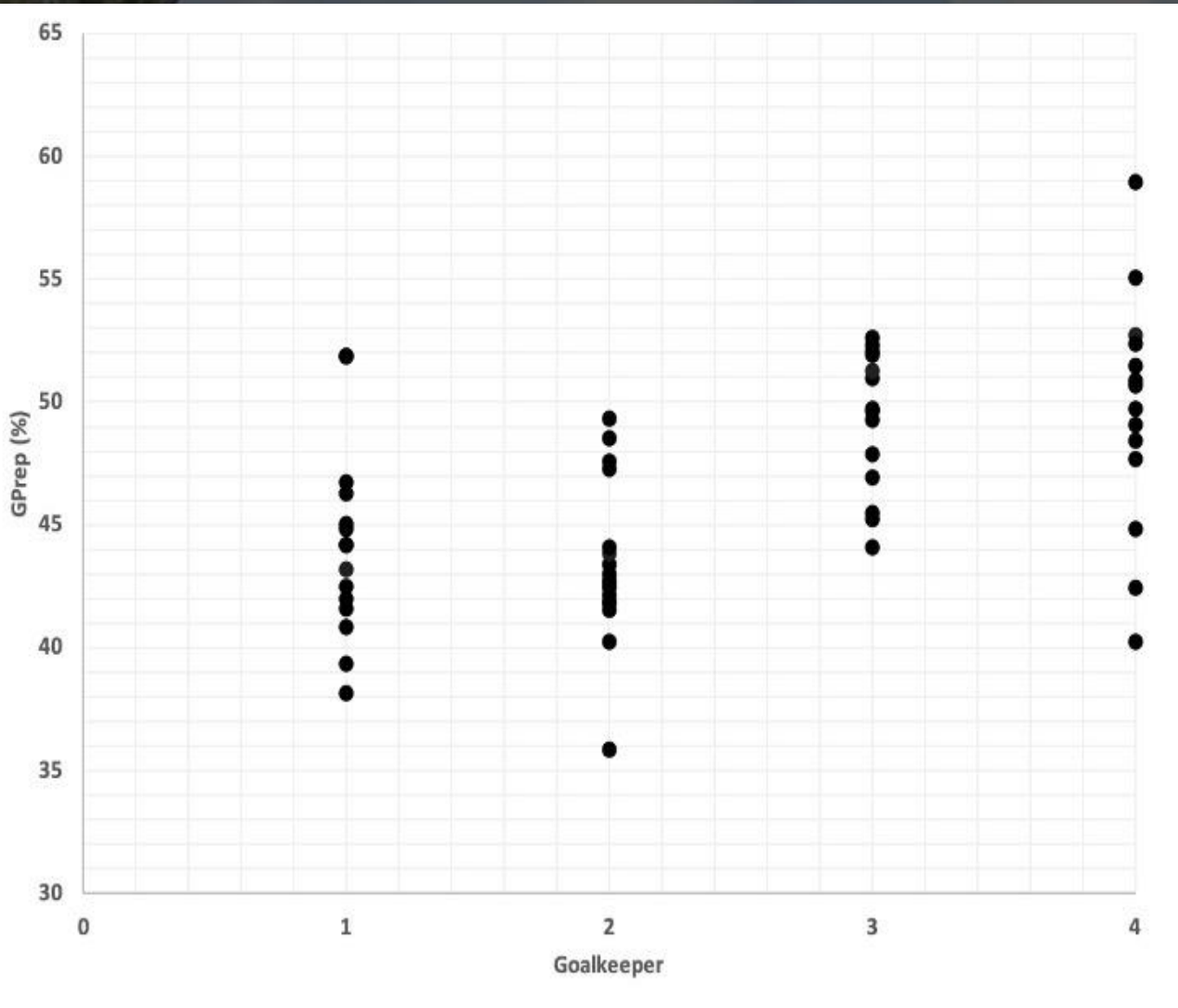
- Savelsbergh et al (2002; 2004; 2005 and 2010) – early work, use of video projection screens to detect information-movement couplings of goalkeepers.
- Dicks et al (2009, 2010, 2011 and Ramsey et al 2020) – shift to in-situ research in goalkeeper gaze patterns.



# The case for functional variability



# The case for functional variability





# Mastering perceptual degrees of freedom

- Navigating a complex, information rich landscape.

- Skilled goalkeepers have to be able to exploit the informational constraints available.

- *Degeneracy* may be key here.





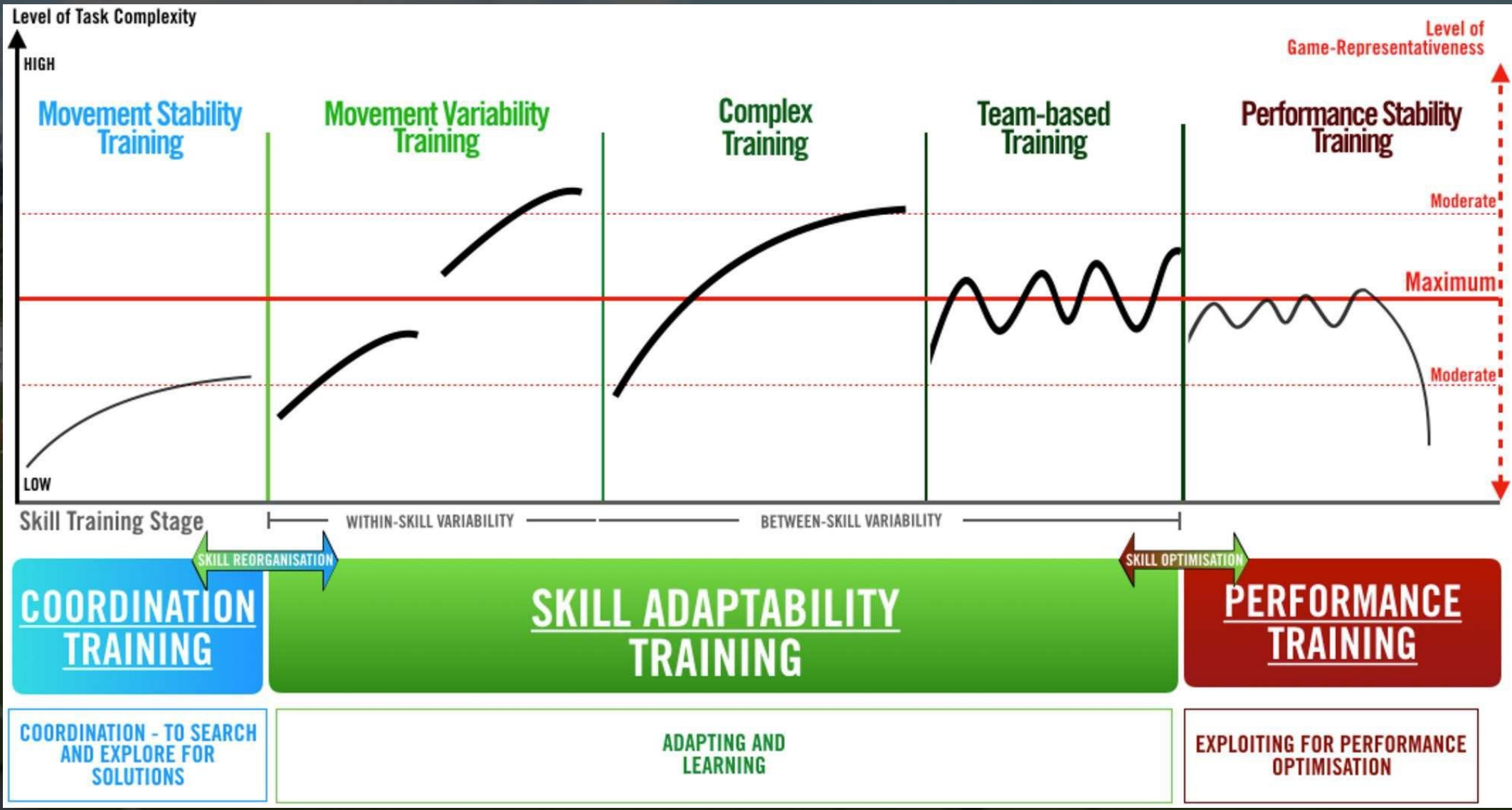
# So how can our environments exploit this?

- Designing in opportunities to *select among affordances*

- Informational constraints shape functional organism-environment fit

- Learn in contexts, not prescription





# Co-ordination Training

- Learners search and explore for coordination patterns.
- Relatively low levels of environmental variability and task complexity.
- Task simplification methods.



# Skill Adaptability training

- Movement Variability Training

- Complex Training

- Team Based Training



# Performance Training

- Closer to competition.
- Shift away from a skill development focus.
- Primary focus of exploiting the performance environment.



# Example

