ELIGIBILITY AND CLASSIFICATION OF ELITE ATHLETES WITH INTELLECTUAL DISABILITIES (ID) FOR THE PARALYMPICS: THE ROLE OF PSYCHOLOGY
History

- Sydney Paralympics 2000 – Spanish 10/12 basketball team found to be cheating due to not having an ID

- ID athletes disallowed from competing until can provide evidence that can comply with International Paralympic Committee (IPC) governance
IPC Rules and Procedures

- Eligibility i.e. Have they the disability they claim to have?
- Classification i.e. what impact does the disability have on the sport?
- Appeals & Protests i.e. How do we test if the classification is challenged?
What does ‘classification’ mean for athletes with ID in the Paralympics?

Initial Eligibility

+ Sports Classification

Confirmed as eligible for that sports class at Paralympic sanctioned events
Primary eligibility

- Adopt a universally accepted definition of ID
  - Disability evident before age 18
  - IQ below 75
  - Significant impairment of adaptive behaviour

- Adopt a ‘gold standard’ approach to assessment
  - International Association for the Scientific Study of Intellectual Disabilities (IASSID)
  - Make appropriate adaptations based on available evidence to treat nations fairly
INAS Registration Procedure

Primary evidence submitted, signed off by psychologist

Screened by INAS admin.

Insufficient evidence more requested

Panel of two-three review evidence

Criteria not met

Sufficient information submitted

Criteria met

Athlete rejected

Athlete registered
Part 2: Classification

- Does having an intellectual disability impact on the ability to perform the sport and in what way?
IPC General Assembly Oct 2009 agreed that ID athletes could re-join for London 2012

3 sports
- Athletics
  - 1500m
  - Shot
  - Long jump
- Table tennis
- Swimming 100m
Research Questions

1. Does ID impair sports performance?

2. If so how, and in what way for different sports?

3. So how do classify ID athletes?
Starting from a conceptual model

- Impact of ID on sports performance
- Cognitive skills impacted by ID
- Sports performance
- Understanding
Key components of intellectual functioning that likely have sport specific applications include:

- Reasoning
- Visual-spatial perception
- Working Memory
- Attention & Concentration
- Reaction time & processing speed
- Executive function

Sports Intelligence
Developing the classification system

- An assessment generic of sport intelligence
- A sports specific assessment of sport intelligence
The Sport Cognition Test Battery

- Collection of proven psychometric tests chosen to test each area
- Able to be administered largely non-verbally
- Quick to administer
- Largely touch screen computer, with some ‘table top’ tests
- Easy and quick to score
- Sport specific assessment

Two components
1. Observation in competition – video analysis of relative stroking speed, mid-pool. ID athletes have relative low stroke speeds compared to non-disabled athletes
2. TSAL-Q – a questionnaire based inventory of training and experience
Sports intelligence tests – Bandwidth model

- Statistical analysis of the results of the tests are used to create a profile of the athlete
- A standardised profile is also taken for non-disabled athletes
- The two profiles will then be compared and the parameters by which to identify an ID athlete will be agreed on a sport by sport basis
Bandwidth model

Non-disabled sample

Tests

1 2 3 4 5 6 7 8

High scores

Disabled Sample

Low scores

High scores

Low scores
Bandwidth model

Tests | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8

- High scores
- Low scores

Non-disabled sample

Overlap

Cut-off scores

Disabled Sample
<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>Tests</th>
<th>Task</th>
<th>Scoring</th>
<th>Cut-off Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory and Learning</td>
<td>Corsi</td>
<td>To remember a sequence of blocks and to repeat the sequence in the same order</td>
<td>Average length of a sequence</td>
<td>6.69</td>
</tr>
<tr>
<td>Executive Functioning</td>
<td>Tower of London</td>
<td>To copy the frame structure by moving balls in the least number of moves possible</td>
<td>Number of items solved correctly</td>
<td>12.43</td>
</tr>
<tr>
<td>Visual Perception &amp; Fluid</td>
<td>Block Design</td>
<td>To copy patterns with 3D white/red cubes</td>
<td>Raw total performance score</td>
<td>58.31</td>
</tr>
</tbody>
</table>
What next?

- Lots more to do
- Other sports, basketball, skiing, football
- Funding
- However, good developments and we will see ID athletes compete in London this summer
- Questions?

Thank you for listening