

A review of current PES practices across NATO nations and a “best practice” for the development of Physical Employment Standards, with consideration of Combat Integration

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Physical Employment Standards (PES) are used for selection and retention of employees that are capable of safely and effectively completing their role-related job tasks.





Physical Training

Thermal Strain Evaluation

Specialist Role Tests

Equipment Development

Physical Activity Exposure

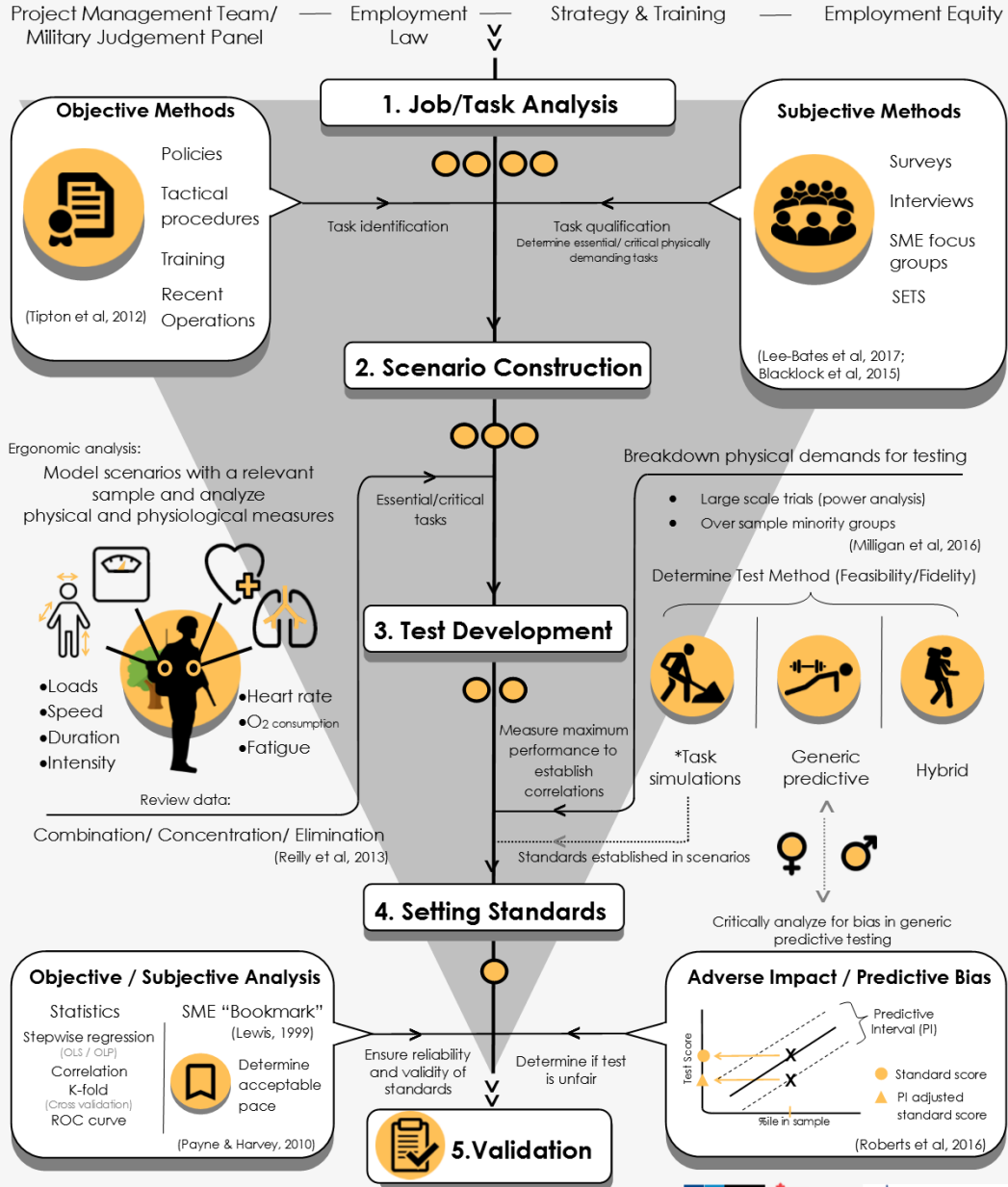
Nutritional Strategies

Fitness Tests / Physical Employment Standards

Job Task Analysis

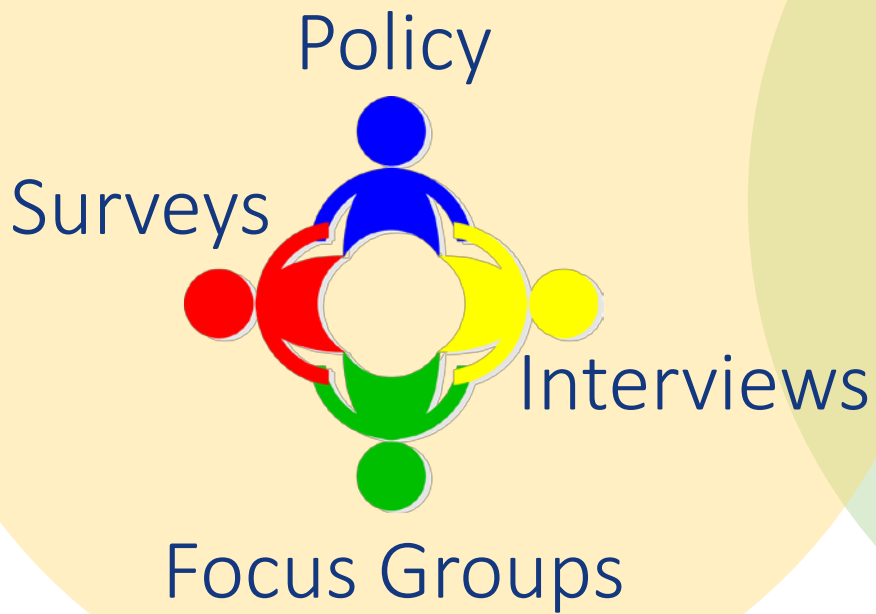
PES Development Process

(Reilly et al, 2018)



Step 1 - Job Task Analysis

Subjective



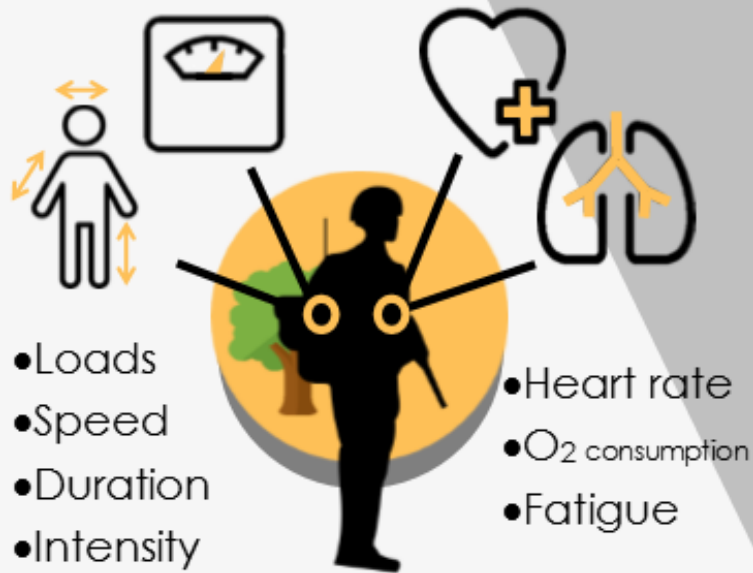
Objective



Step 2 – Scenario Construction

Ergonomic analysis:

Model scenarios with a relevant sample and analyze physical and physiological measures



Review data:

Considerations

- Single vs. Team Simulations
- Pacing
- Performance outcome (e.g. completion, time, distance)
- Method of Task Delivery
- Participant sample characteristics
- Environmental Conditions

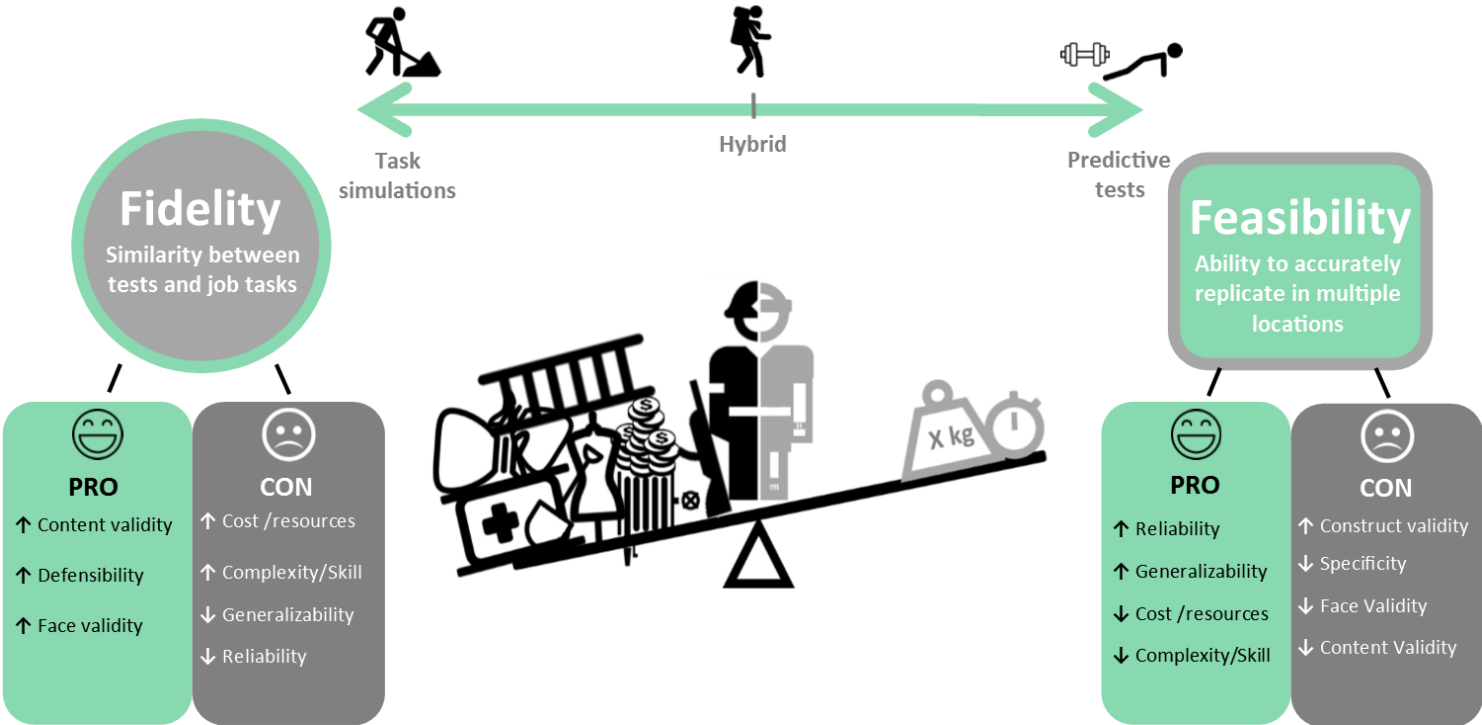
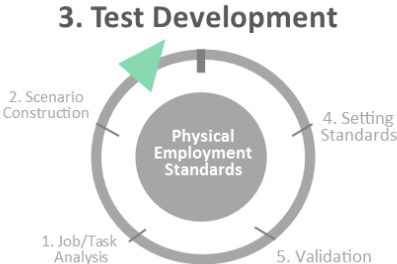
Step 3 – Test Development



NATO HFM RTG 269 Combat Integration: Implications for Physical Employment Standards

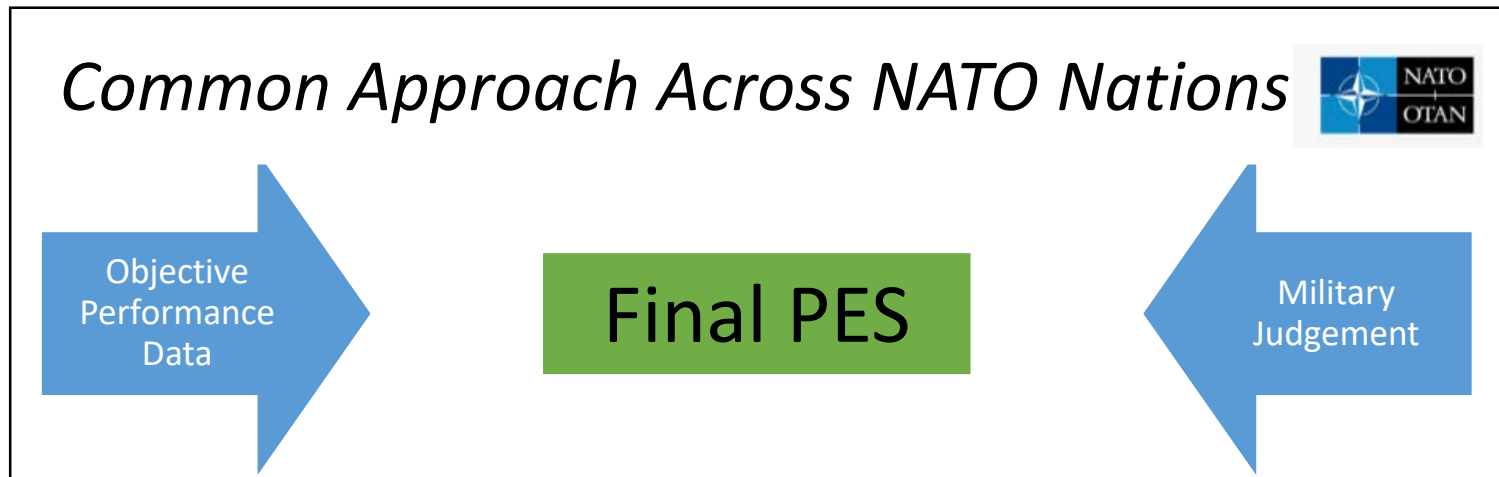
BALANCING FIDELITY AND FEASIBILITY

(concept adapted from RAND National Defense Research Institute, 2018)



Step 4 – Standard Setting

Task Simulations



Example of British Army PES Task Simulations

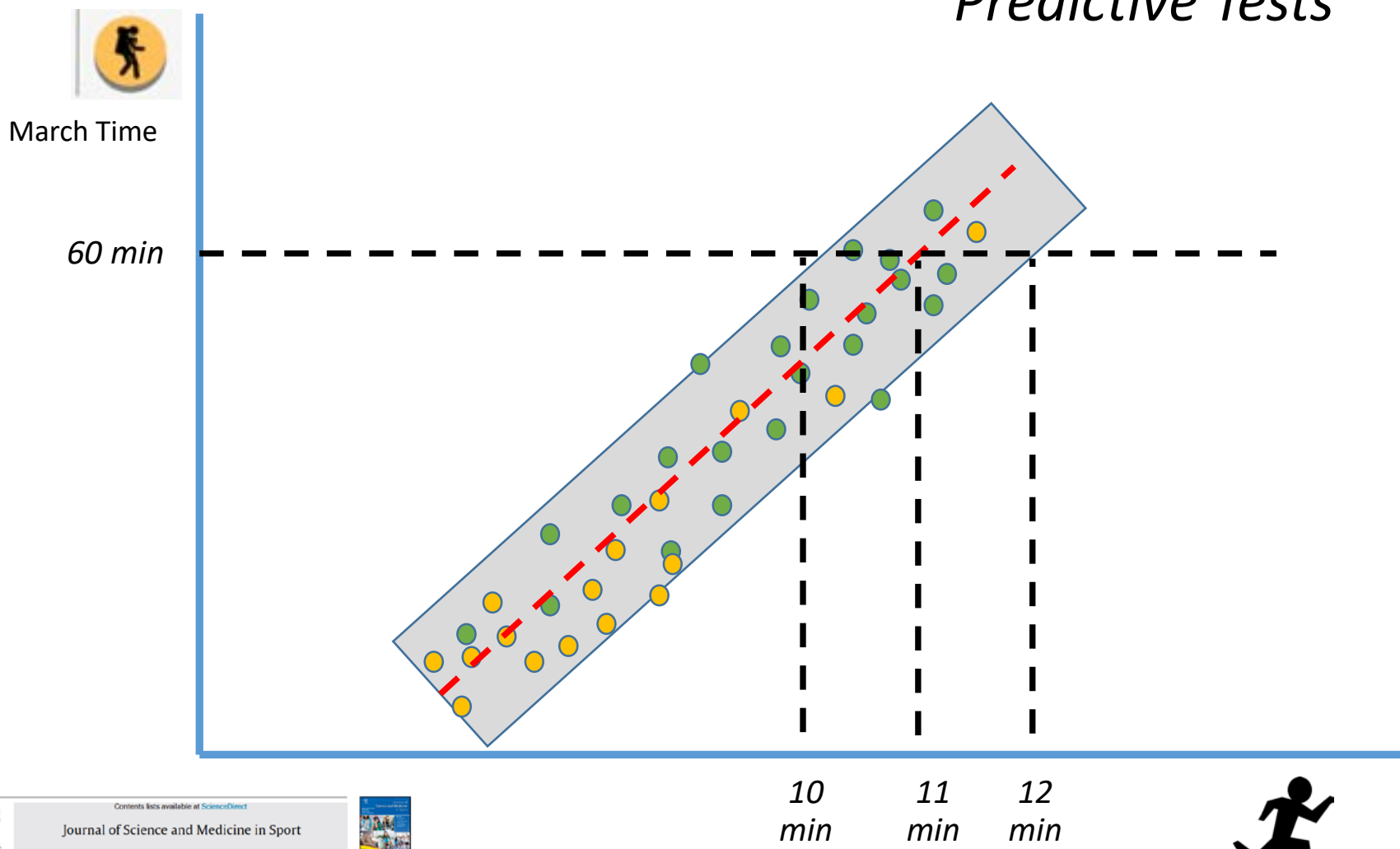
| | | | | | |
|---|--|--|--|--|---|
| <p>1: LOADED MARCH</p> <p>Infantry/RAC: 4km tab with 40kg within 50 mins followed by a further 2km with 25kg in 15 mins</p> <p>16AAB/Para: 4km tab with 40kg within 35mins followed by a further 2km with 25kg in 12 mins 30 secs</p>  | <p>2: FIRE & MOVEMENT</p> <p>Twenty 7.5m tactical bounds controlled by a PTI, followed by a 15m crawl and 15m sprint in 55 secs</p>  | <p>3: CASUALTY DRAG</p> <p>110kg bag pulled over 20m in 35 secs</p>  | <p>4: WATER CAN CARRY</p> <p>Simulates moving with a stretcher. Carry two 22kg cans over 240m in 4 mins</p>  | <p>5: VEHICLE CASEVAC</p> <p>70kg lift, hold for 3 secs</p>  | <p>6: REPEATED LIFT & CARRY</p> <p>Shifting bags weighing 20kg 20 times over a 30m distance in 14 mins</p>  |
|---|--|--|--|--|---|

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<https://www.army.mod.uk/physical-employment-standards/>

Step 4 – Standard Setting

Predictive Tests



Step 5 – Validation

- Impact analysis – pass/fail in serving personnel
- Ongoing data collection and review
- Periodic review of Job Task Analysis (~2-5 years)
- Effect of modifications to physical training on PES

PES Development Process

(Reilly et al, 2018)

