

Individual differences · supported focus

International Baccalaureate · IB Diploma · Sports, Exercise and Health Science · HL

Scope and prerequisites

Supported HL focus. First assessment 2026; current SL/HL brief acquired. Remaining guide, assessment and practical requirements retain their recorded holds.

Prerequisites: read the stated quantities and units, use arithmetic and the model conditions below. Each lesson develops its own method before independent transfer.

These are original or explicitly fictional teaching examples, not actual measurements or completed assessed learner investigations.

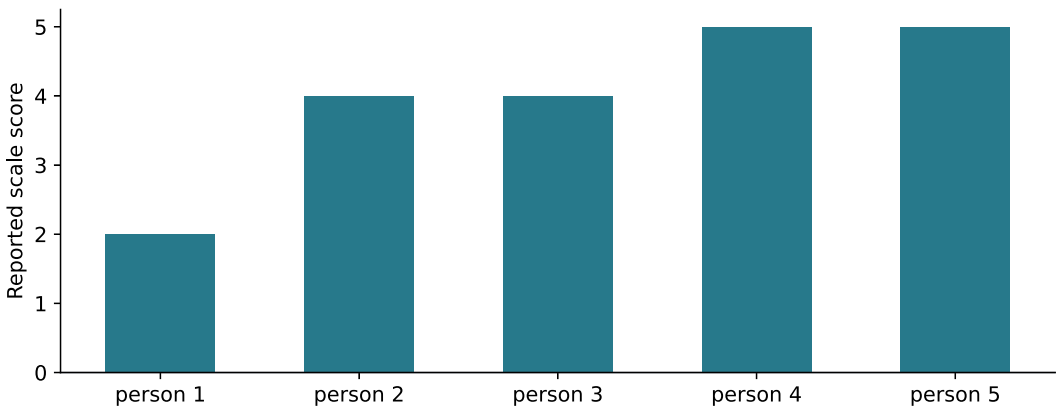
Motivation , stress and evidence in sport

■ What would explain this observation?

- Two athletes can react differently to the same competition. Their appraisal, experience and **coping** strategies affect the response.
- Start with a prediction. State the quantities or features you would compare, then decide what evidence could distinguish two explanations.

■ Build the model

- **Motivation** concerns initiation, direction and persistence of behaviour. Stress depends partly on the relationship between perceived demands and perceived resources. Arousal and anxiety are related but distinct constructs.
- motivation: Processes influencing initiation and persistence; coping: Strategies used to manage demands.



■ Choose evidence that can test it

- A self-report scale measures reported experience under its design. It does not diagnose a disorder or establish a universal relationship between arousal and performance. Analyse within-person and between-person variation separately.
- Use anonymous voluntary questionnaires approved by the school, avoid sensitive personal disclosure, and allow withdrawal. Compare the same task and time point, define the scale and explain its limitations.

■ Work from known quantities

- State the known values and their units. Choose the relation because its assumptions fit this case, then rearrange before substitution.
- Known: reported scores are 2, 4, 4, 5 and 5. $\text{Mean} = \text{sum}/\text{count} = 20/5 = 4$. $\text{Range} = \text{maximum} - \text{minimum} = 5 - 2 = 3$. The mean summarizes this sample and scale, without proving why the participants differ.

Example:

Scores are 3, 5, 5 and 7. Find the mean. Use the same sequence: known quantities → model → relation → substitution → unit and interpretation.

■ Check the conclusion and its limits

- Correlation does not prove that stress caused a performance result. Students should not induce distress to investigate coping.
- Return to the original observation. Explain what the result supports, which conditions it assumes, and one way to test a competing explanation.

Warn:

A self-report stress score is a medical diagnosis. This claim is false: Correlation does not prove that stress caused a performance result. Students should not induce distress to investigate coping.

Key:

Motivation, stress and evidence in sport: A self-report scale measures reported experience under its design. It does not diagnose a disorder or establish a universal relationship between arousal and performance. Analyse within-person and between-person variation separately.