Psychological skills

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

Scope and prerequisites

This handout covers selected HL topics for the course first assessed in 2026; it is not the whole syllabus.

Prerequisites: read the stated quantities and units, and use arithmetic and the model conditions below.

The examples are original and fictional: they are not real measurements or real student investigations.

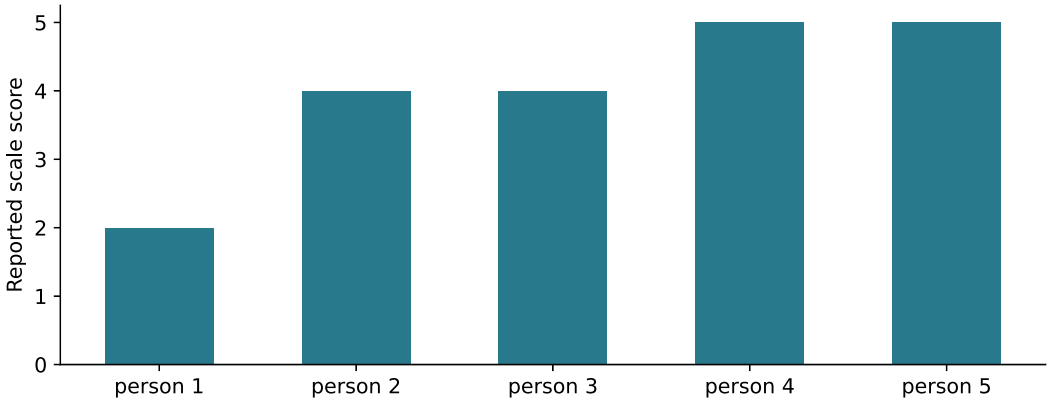
Psychological skills: trained, not innate

■ What would explain this observation?

- A basketball player adds a pre-shot routine and her free-throw rate rises over six weeks. **Psychological skills** are trained techniques, and the before-and-after comparison is the evidence.

■ Build the model

- **Goal setting**: outcome goals (win), performance goals (rate), process goals (routine steps); process goals specify actions during performance that the athlete can practise and control.
- Imagery: rehearsing the movement in detail, including what it feels like.
- Self-talk: a short instructional or calming cue, practised like a physical skill.
- Arousal regulation: breathing or routine steps that settle the response.
- psychological skills: Trainable mental techniques supporting performance.



■ Choose evidence that can test it

- Measure before and after a training block under the same conditions.
- One skill introduced at a time, or the cause is unattributable.
- Analyse within-person change with the conditions stated.

In the lab: Keep the practice log (skill, dose, session) beside the score log: the claim rests on both.

■ Work from known quantities

- Known: baseline 12 free throws of 20 over three sessions.
- Intervention: a three-step process goal (breath, word, shot) practised for six weeks.
- After: 15 of 20 over three matched sessions, same ring, same ball count.
- The claim: within-person improvement under stated conditions, one skill changed.

Your turn: Her teammate copies the routine AND changes balls in the same week. Why does her 16-of-20 not support the routine?

■ Check the conclusion and its limits

- A six-week block shows a change under those conditions, not a permanent ability.
- Reported confidence and measured rate can move in opposite directions; report both.

Not true: Imagery replaces physical practice. Imagery supports the rehearsed movement; the shot still needs the physical repetitions.

Key:

- Process goals are the trainable handle.
- One skill at a time, before-and-after under matched conditions.
- Watch for: two changes in one training block.