Stress and coping

C.4 · SL and HL

Safe participation and appropriate support

> Stopping an unsafe action is different from assuming any withdrawal is poor coping.

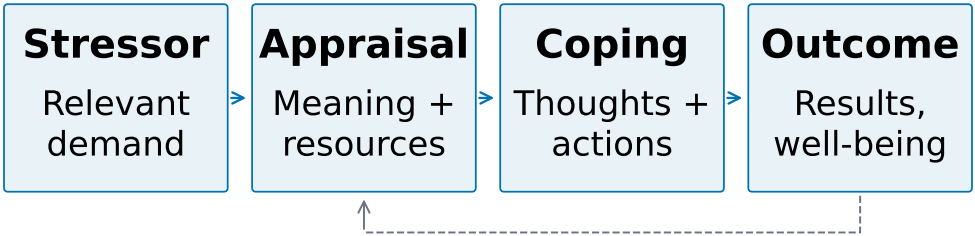
- USA Gymnastics documented Biles's Tokyo 2021 withdrawal for health and safety.
- She returned to win balance-beam bronze on 3 August.
- Dated events do not let a classroom observer diagnose an athlete.

Sources of stress

Source	Example
Competitive	A penalty, the crowd
Organisational	Selection, travel, the coach
Personal	Exams, family, social media
Injury	Fear of re-injury

exercises.lol exercises.com.cn

Appraisal



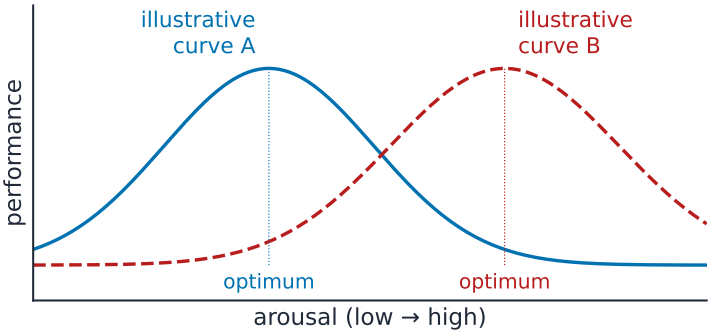
> Reappraisal changes with information; a belief does not remove a real barrier.

The stress response

> Alarm, resistance and exhaustion form a historical model, not inevitable dates.

- Sympathetic activation and adrenaline can act rapidly.
- HPA signalling links hypothalamus, pituitary ACTH and adrenal-cortex **cortisol**.
- One pulse or hormone value does not diagnose stress or coping capacity.

The inverted U



Compare the model with appropriate repeated evidence.

Drive theory

Appropriate likely response

Reinforcing it may help.

Expert status is not a guarantee.

Inappropriate likely response

Reinforcing it may hinder.

Experience alone does not remove error.

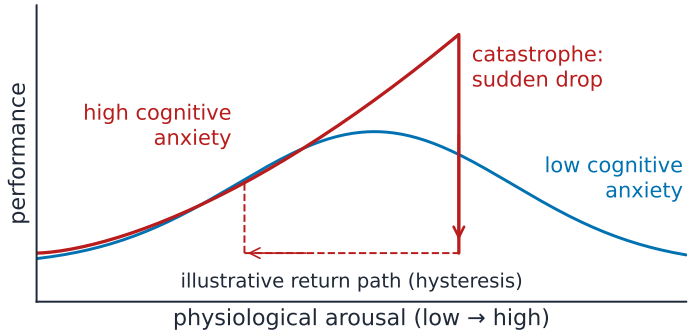
Describe selected previous reports

1. **Given.** Invented selected ratings on one 10–40 scale: 19, 21, 22, 24, 25. Current rating: 31.
2. **Describe** Mean $= 111/5 = 22.2$; range width $= 25 - 19 = 6$
3. **Compare** Current 31 is above those five reports
4. **Limit** Selection does not validate an optimal zone

Decision

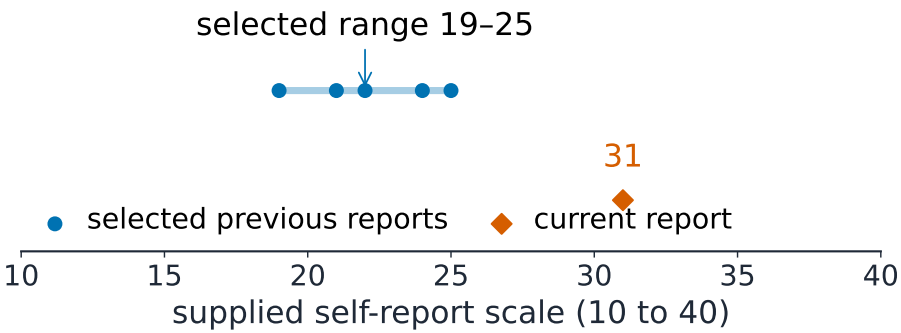
Do not prescribe calming down or psyching up from this comparison alone.

Catastrophe theory



A sketch supplies neither universal trigger values nor a recovery treatment.

A selected range is not an optimal zone



Other outcomes and contexts are needed before inferring an optimum.

Types of anxiety

Cognitive

Worry and negative thoughts.

Interpretation depends on task and context.

Somatic

Bodily sensations and activation.

These can have several causes.

Direction of anxiety

> Helpful or harmful meaning is separate from how much activation is reported.

- Equal intensity scores can have different interpretations.
- The same performer can interpret different events differently.

Measuring anxiety

Tool	Measures
SCAT	Trait-focused report; use correct scoring
Original CSAI-2	Three 9-item subscales; raw 9–36 each
Pulse, BP, skin response	Proxies affected by exercise, heat, posture and timing

Read a supplied original-format profile

1. **Given.** Invented original-format CSAI-2 scores: cognitive 30, somatic 16, confidence 14. Each raw subscale ranges from 9 to 36.
2. **Separate** Different dimensions, not one undifferentiated total
3. **Ask** What is reported, in which task and conditions?
4. **Limit** No supplied clinical cutoffs or guaranteed intervention

Decision

A profile invites appropriate discussion; it does not diagnose or prescribe.

Keep timescale separate from content

Trait / state

Relatively enduring tendency.

A report at a particular moment.

Cognitive / somatic

Worry and thoughts.

Bodily experience.

Original and revised questionnaires differ

Original CSAI-2

27 items, three 9-item subscales.

Each raw 9–36.

Revised CSAI-2R

Different 17-item structure.

Use its actual scoring instructions.

Calculate invented classroom ratings

Set	Supplied ratings (1–4)	Sum	Mean = sum/9
A	2, 3, 4, 2, 3, 2, 4, 3, 3	26	$26/9 \approx 2.889$
B	1, 2, 2, 1, 2, 2, 1, 2, 2	15	$15/9 \approx 1.667$
C	3, 2, 3, 2, 3, 2, 3, 2, 3	23	$23/9 \approx 2.556$

Use the evidence

Invented classroom items, not the questionnaire. Each set has nine ratings. Arithmetic does not validate a scale or supply diagnostic cutoffs.

Design a low-risk measurement comparison

Protect voluntary participation and interpret the actual measurement.

- Use an approved low-risk task and non-sensitive measures.
- Explain consent, confidentiality and withdrawal arrangements.
- Standardise timing, posture, activity and environment.
- Do not induce **distress** or publicly label classmates.

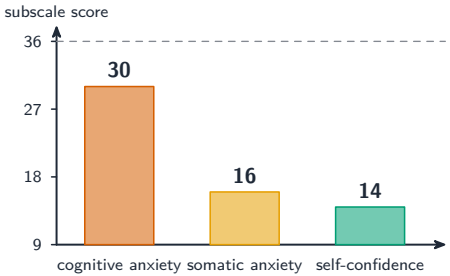
Four kinds of anxiety

	cognitive (worry)	**somatic (body)**
trait stable tendency	tends to worry before most competitions	usually feels tense and jittery before events
state right now	“I’m going to miss this putt” on the 18th green	racing heart and sweaty hands over the last putt

Trait relates to state, but appraisal and context decide the moment

> ”I’m going to miss this putt”: state cognitive

Reading a CSAI-2 profile



three dimensions, nine items each: read them **separately**

do not add them into one "anxiety" total; no score here is a diagnosis

Read the three dimensions separately; do not add them

Coping strategies

Strategy	**Example**
Problem-focused	Seek timetable information or address a demand
Emotion-focused	Manage feelings or seek understanding
Avoidance-focused	Distance oneself from the **stressor**

Check: choose the coping

Your turn

A learner asks the coach for timetable information to resolve a schedule clash. Which function is most direct?

A. Problem-focused coping
B. Emotion-focused coping
C. Avoiding all future discussion
D. A clinical diagnosis

Use a concise self-talk mechanism

Form	Example use
Recall a helpful experience	Remember a useful response to a previous task
An agreed acronym	Cue a practised routine
A simple action cue	Scan, choose, pass

A pulse fall does not prove an intervention

1. **Absolute change** $72 - 66 = 6$ beats/min
2. **Relative fall** $6/72 \times 100 = 8.333\ldots\%$
3. **Alternatives** Ordinary rest, posture, timing or measurement

Decision

Measure experience and relevant outcomes with a suitable comparison.

AHL: Separate the controllable features

Not directly changeable	Potentially changeable
Tomorrow's wind.	A safe plan and permitted equipment.
A fixed examination date.	Some timetable or resource decisions.

AHL: Combine functions when justified

Address feasible demands while supporting responses to remaining conditions.

- Problem-focused action can change a relevant demand.
- Emotion-focused action can help regulate the response.
- Reframing does not remove an incompatible timetable or real injury.

AHL: Support can serve different needs

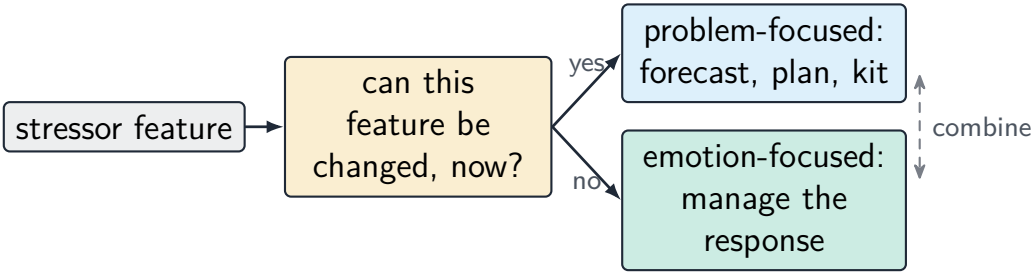
Support	Function
Informational	Clarify options or a plan
Practical	Improve resources or access
Emotional	Provide care and understanding

AHL: Evaluate strategy and context

> A strategy's name does not establish its effectiveness for every athlete.

- Logical analysis, relaxation, imagery, thought control and effort address different demands.
- A brief regulating distraction differs from leaving a necessary action unresolved.
- Necessary rest, reporting injury and leaving danger can be protective.
- Define implementation, comparison, experience and follow-up outcomes.

Match coping to controllability



> The two can be combined

Three kinds of social support

informational
clarifies a plan: rehabilitation steps, a revised schedule

practical
removes a barrier: transport, access, adjusted commitments

emotional
understanding and connection with feelings

useful support depends on who gives it, what is needed and whether it is accessible

Emotional: offers understanding

Burnout

> Exhaustion, reduced accomplishment and sport devaluation are patterns to interpret in context.

- Demands, recovery, pressure and support can interact.
- A classroom score or one absence does not diagnose a disorder.

Recognition should lead to appropriate support

> A classroom questionnaire does not diagnose a mental-health disorder.

- Listen respectfully and examine actual demands and resources.
- Use appropriate trusted adults and qualified professionals when needed.
- Safe withdrawal and help seeking are compatible with effective coping.

Exam tips

> Classify coping by function; examine the person, task and feasible resources.

- Explain what a model predicts and which evidence would test it.
- Keep **arousal**, anxiety dimensions and diagnosis distinct.
- Use unrounded working and the correct measurement version.

Check yourself

Try these

Explain why selected reports do not validate an optimal zone.

Compare a sudden model drop with a smooth inverted U.

Calculate pulse change without claiming it proves anxiety treatment.