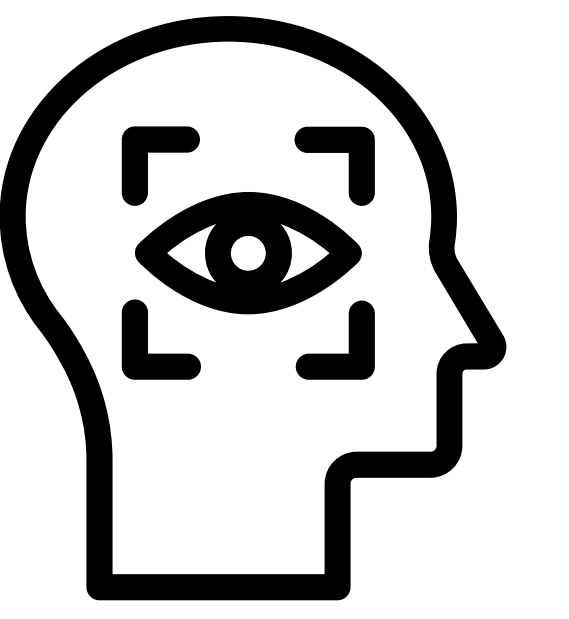




# What's the Best Way to Know Oneself?

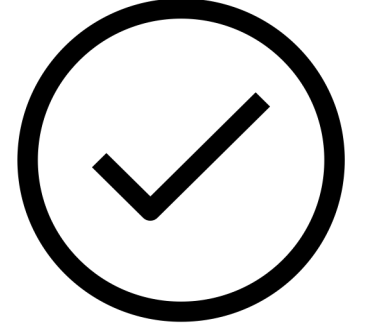
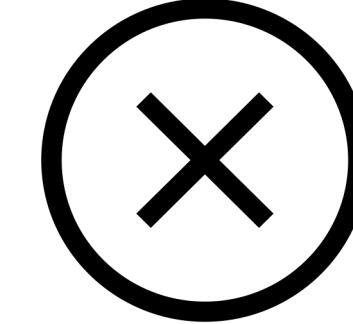
## The Role of Internal and External Feedback on Metacognitive Enhancement

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# Can metacognition be trained?



### What is metacognition?

Capacity to monitor & control first-order states

*Do I need more time to study?  
Am I confident of this answer?*

### Possible training targets

**INDIRECT**

Task performance  
*% correct,  $d'$*

Metacognitive insight  
*confidence, meta- $d'$ , m-ratio*

**DIRECT**

External cues  
*stimulus properties,  
difficulty labels*

Internal cues  
*vividness, familiarity,  
arousal, feelings of difficulty*

### What hasn't worked...

- o feedback on task performance<sup>1</sup>
- o trial-by-trial reward<sup>2</sup>
- o task-difficulty labels<sup>3</sup>

### ...and what might work!

- o internal + external feedback<sup>4</sup>
- o allow participants to reassess their confidence<sup>5</sup>
- o train introspective attention<sup>6</sup>

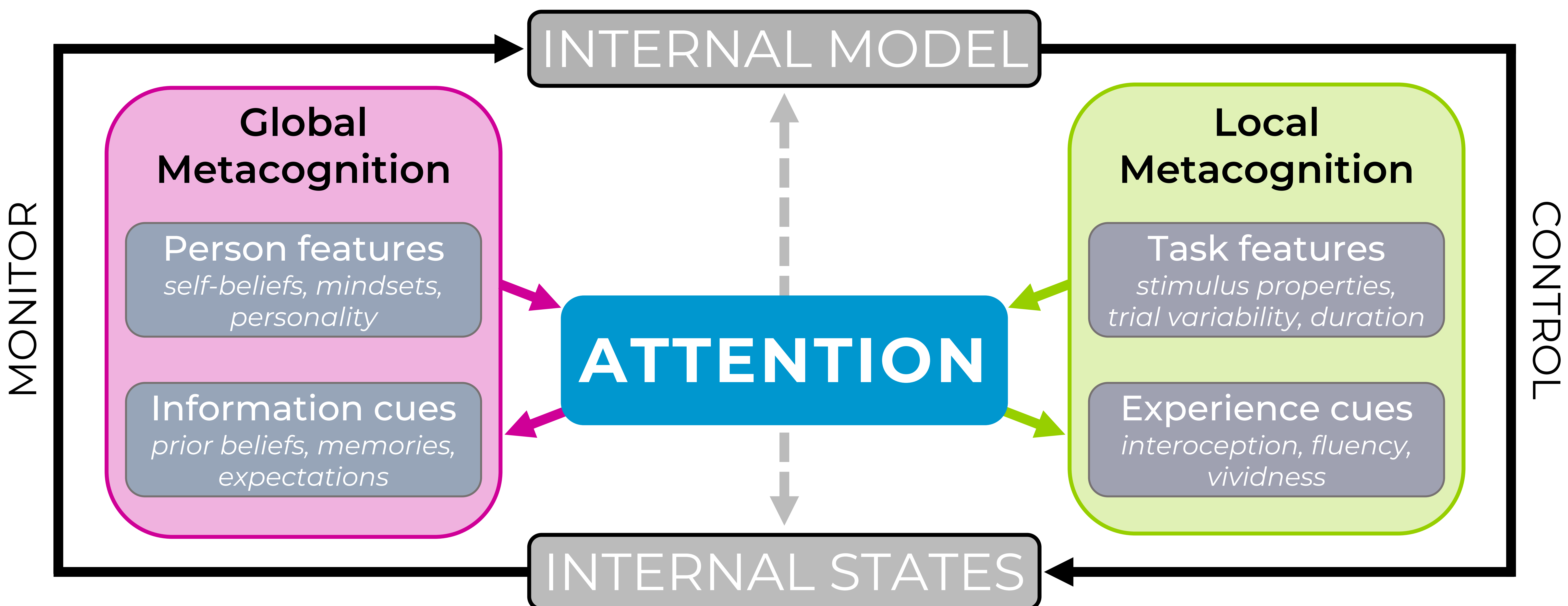
### How do we measure it?

By determining how well confidence judgments track task performance

*e.g., metacognitive sensitivity (meta- $d'$ )*

# Attention Allocation Training Model

Guide attention to explicit associations between cues and confidence



While metacognitive monitoring may work implicitly, **explicitly attending to cues** we rely on for making metacognitive judgments may be key for **enhancing introspective accuracy**.



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