

Confidence in Context: How Self Beliefs Shape Discovery

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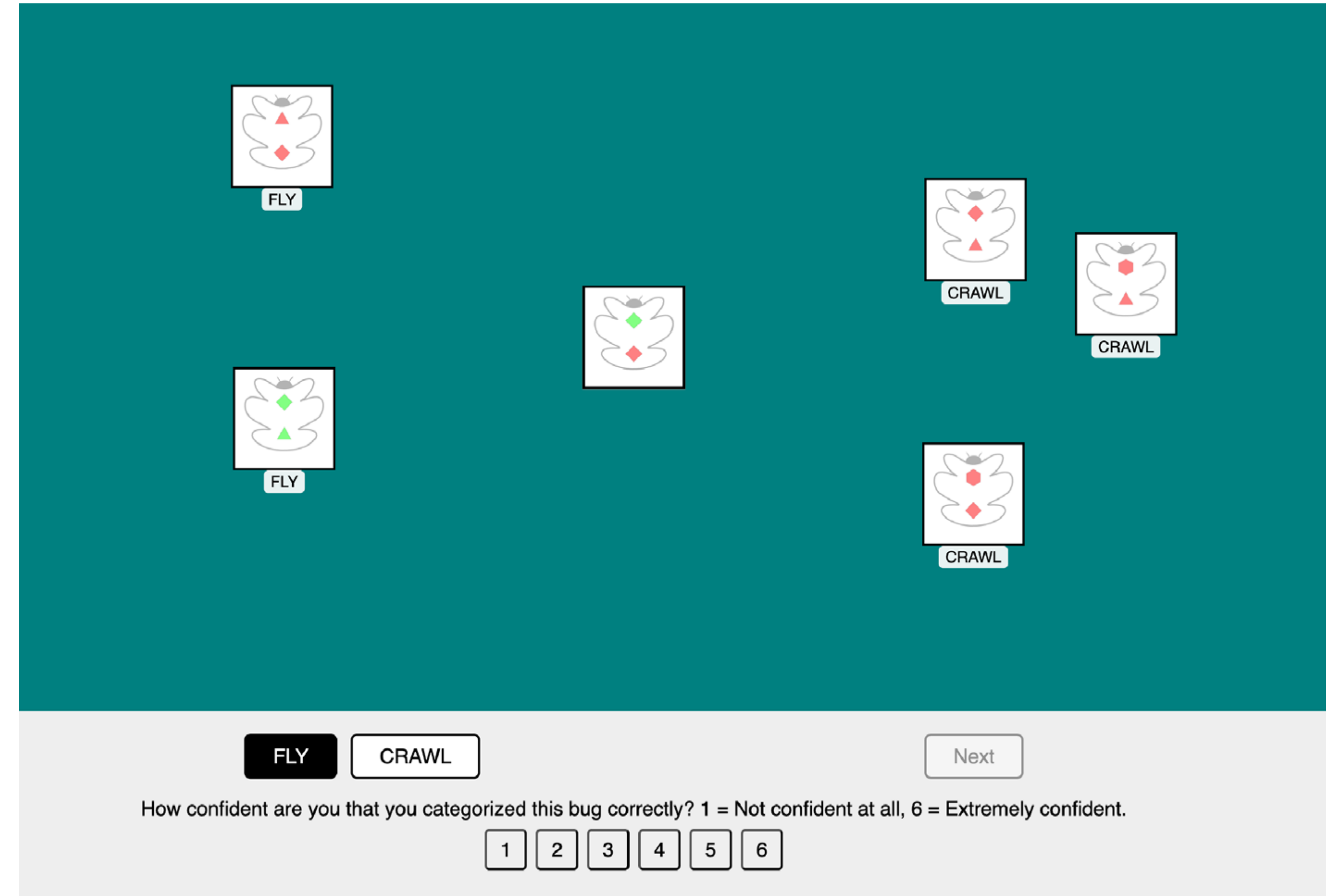
Discovery is hard,
and often takes many attempts

Scientists are able to find success anyway
What allows us to persist?



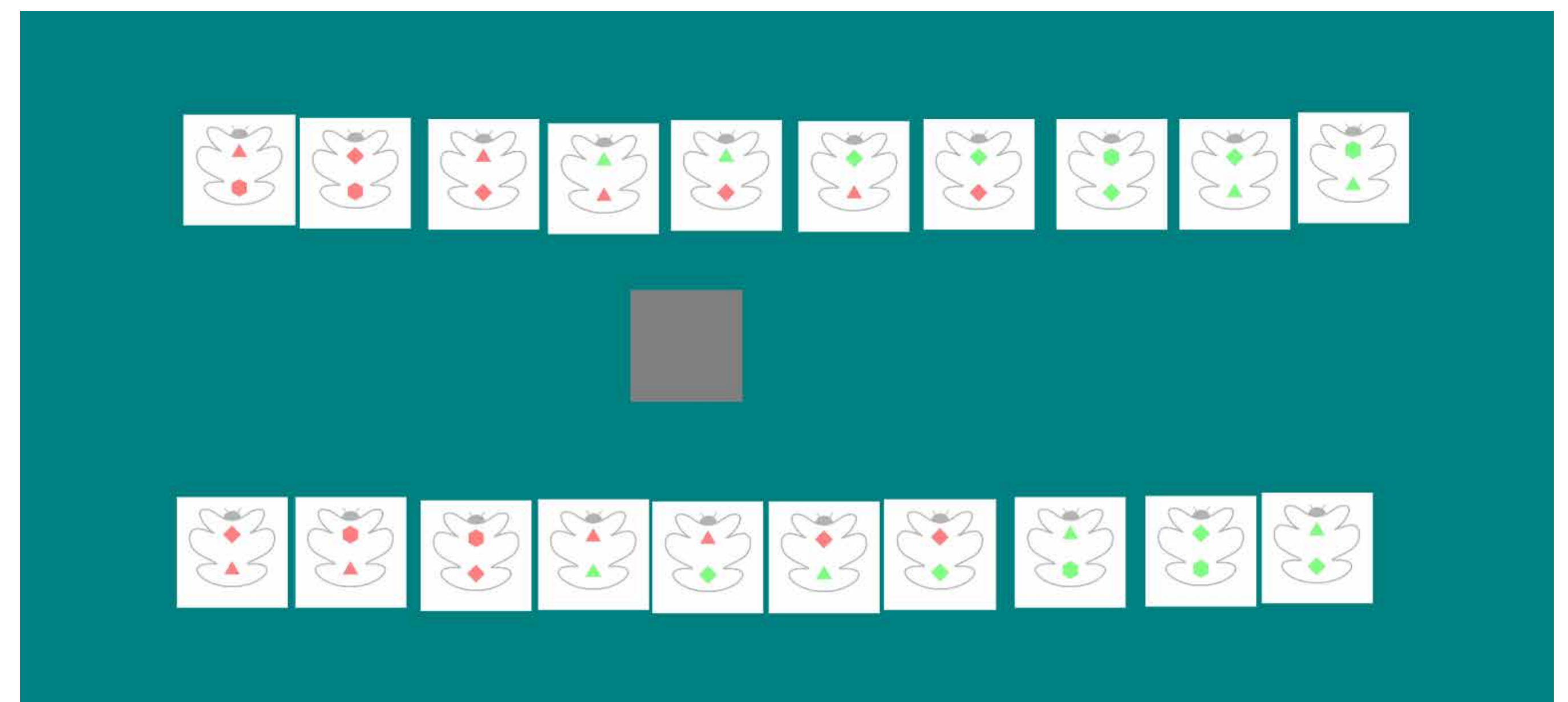
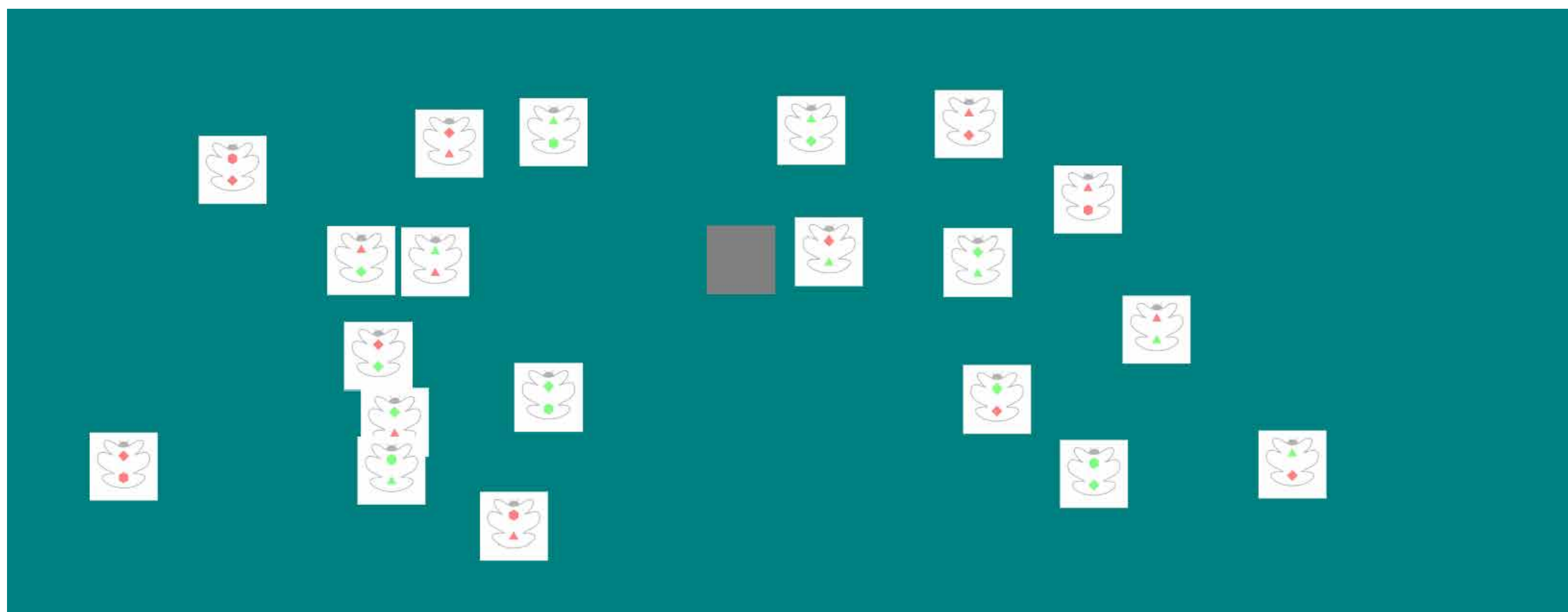
Here we operationalize skepticism as low
initial judgments of learning (estimated intercept)

Participants completed a self-guided
relational rule discovery task (n=200, Prolific)

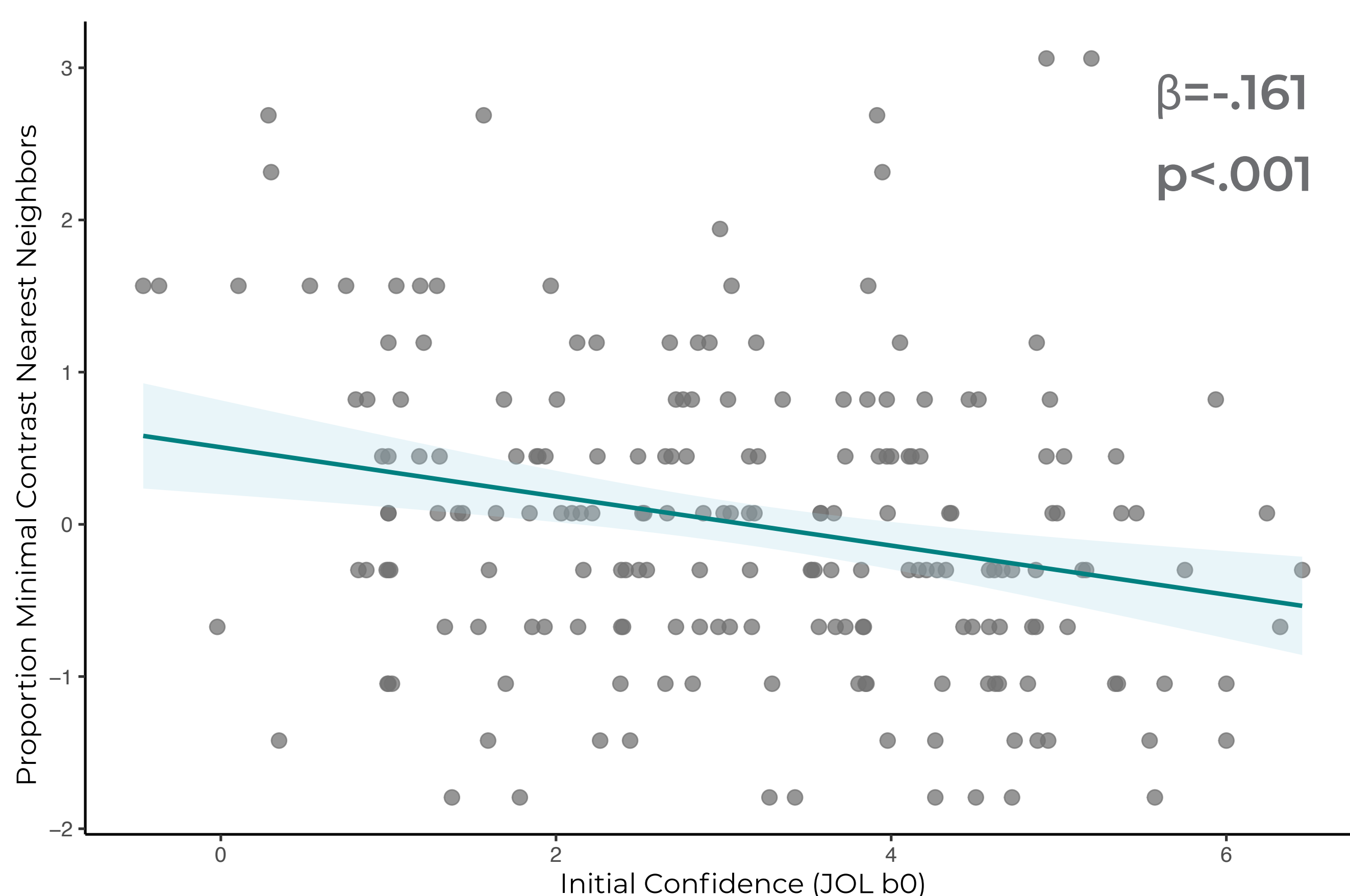


Does skepticism facilitate discovery?

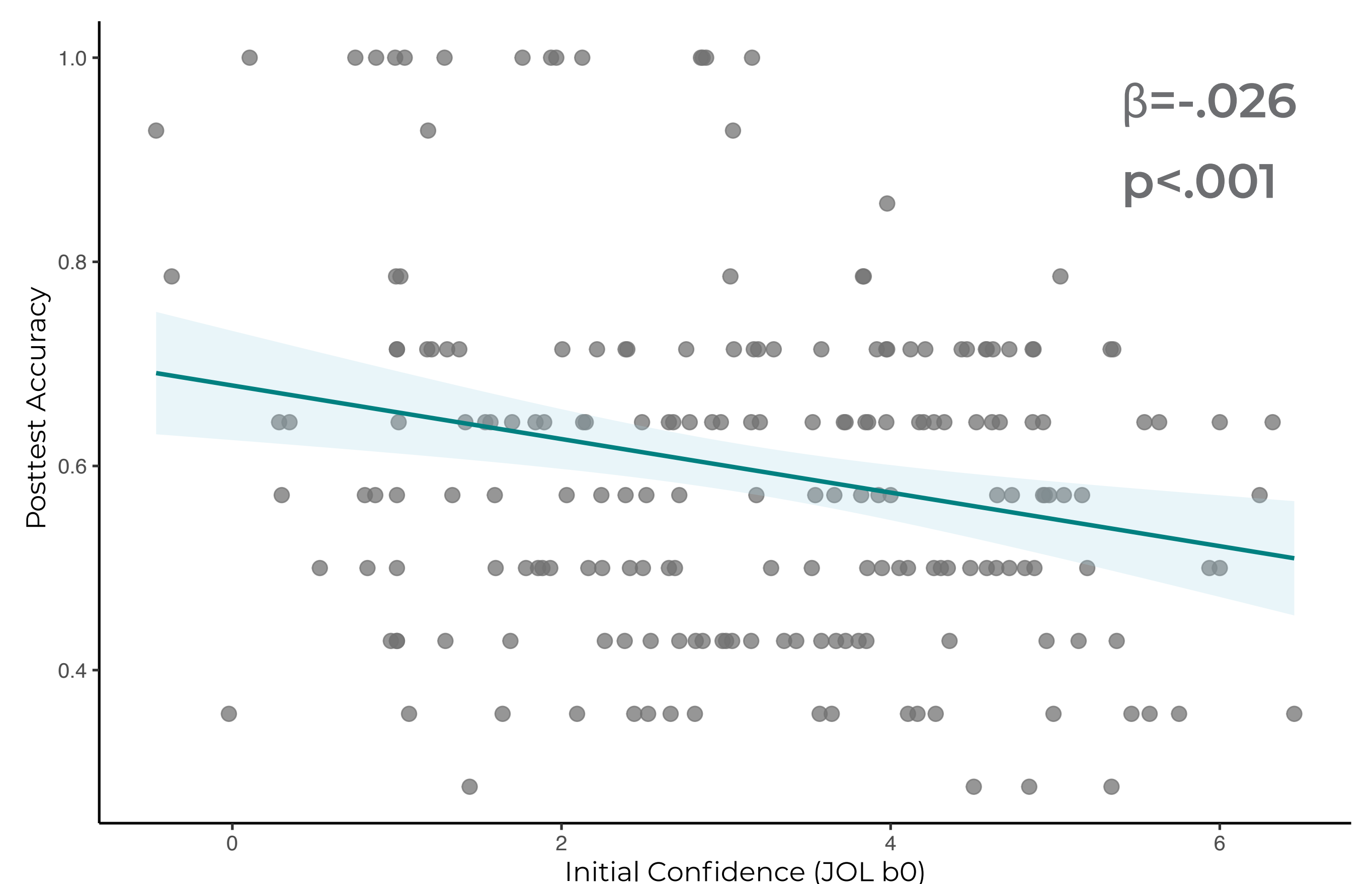
Organizational strategies vary



Skeptics show more systematic behavior



Skepticism predicts successful discovery



Skeptics start with low confidence that grows with evidence,
accumulated via self-guided organizational strategies

