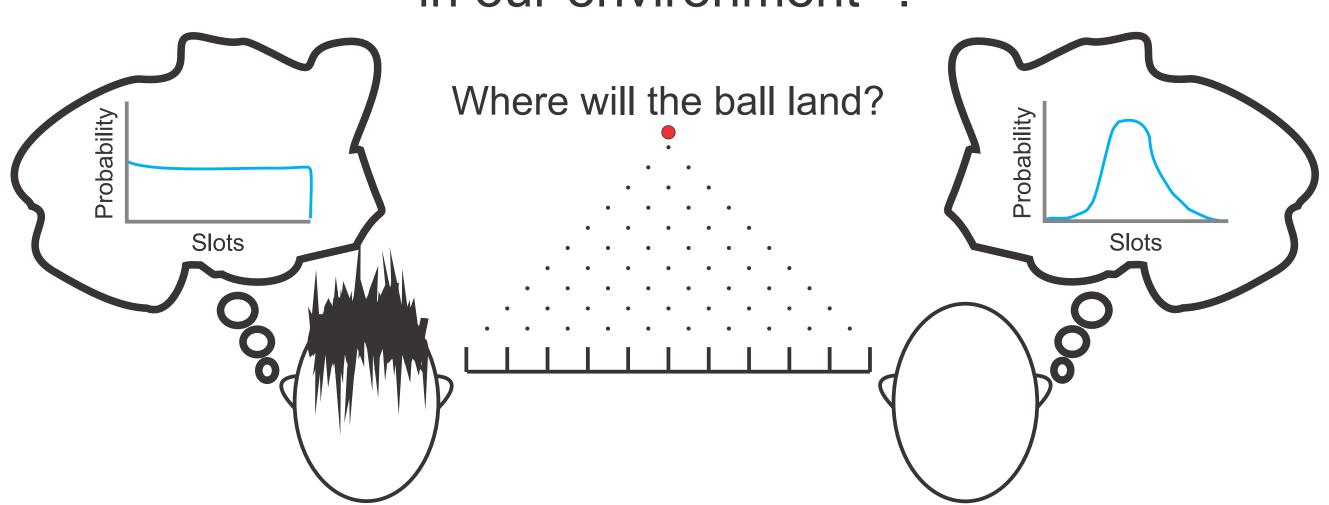
Measuring the influence of prior beliefs on probabilistic estimations

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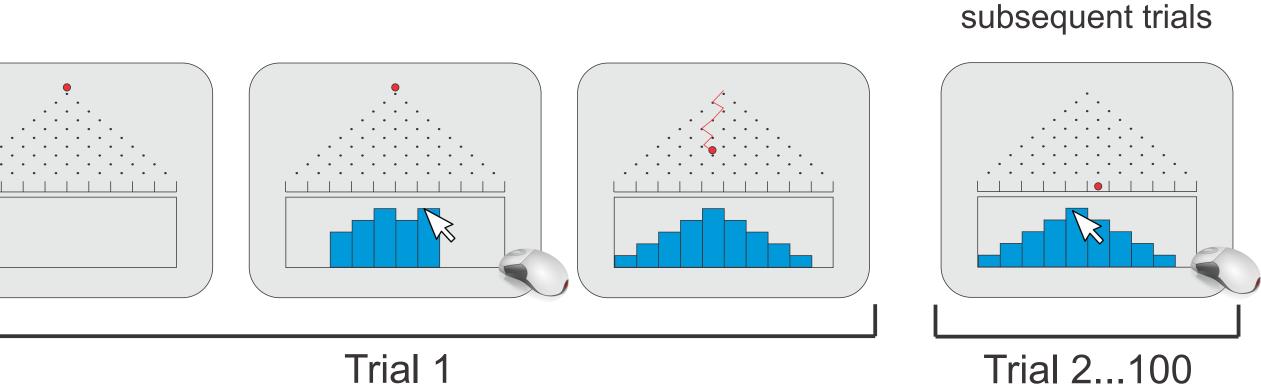
How do prior beliefs influence learning?

The beliefs we hold can influence the way interpret events in our environment^{1,2}.



We measured participant beliefs before observing events and tracked their representations of new events.

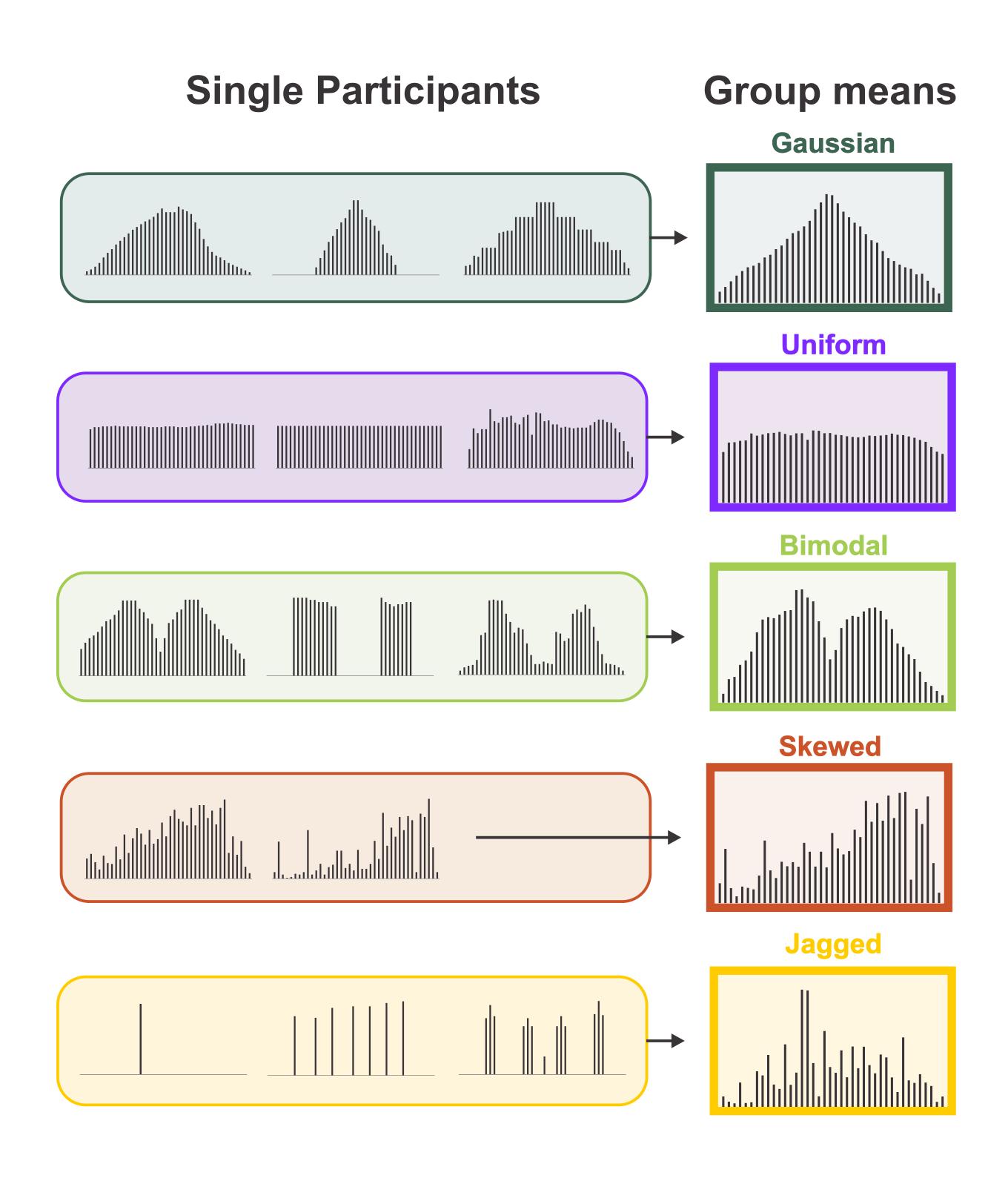
Participants can update Participants report their estimates before seeing first ball drop estimates on

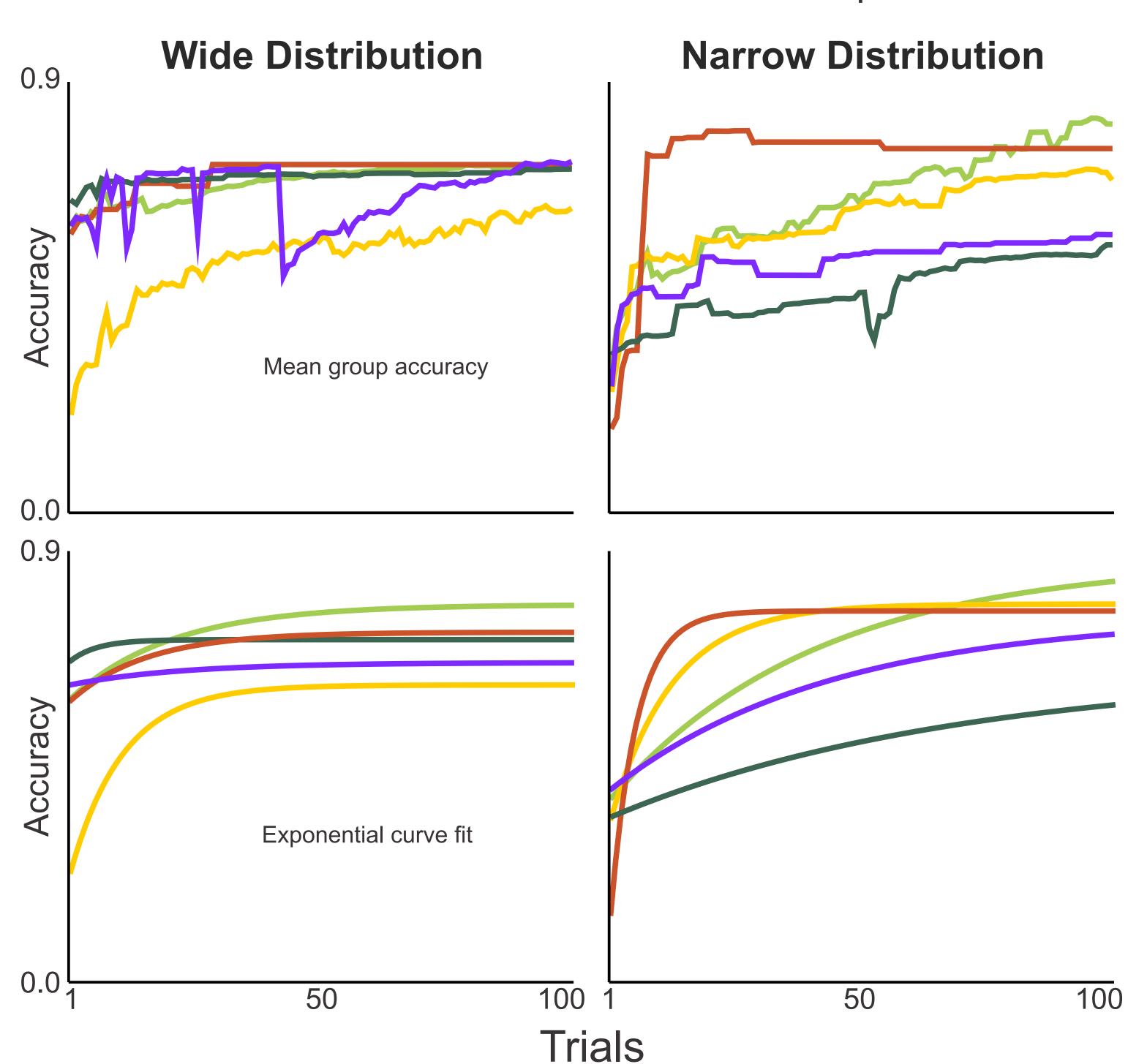


Prior beliefs influenced accuracy in representing task contingencies

Participants started the task with various prior beliefs.

Prior beliefs influenced how accurately participants estimated distributions of ball drops.





Beliefs are less likely to change when they predict observations.

Salient mismatches result in steepest learning.

and Discovery Grant (J.D.) and a CIHR Operating Grant (B.A. and J.D.)

Prior beliefs are not always set in stone.

