

Confidence Trumps Calibration in Making Decisions with Multiple Advisors



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Research questions

Do participants acquire the **calibration** of an advisor as learned though trial-by-trial accuracy?

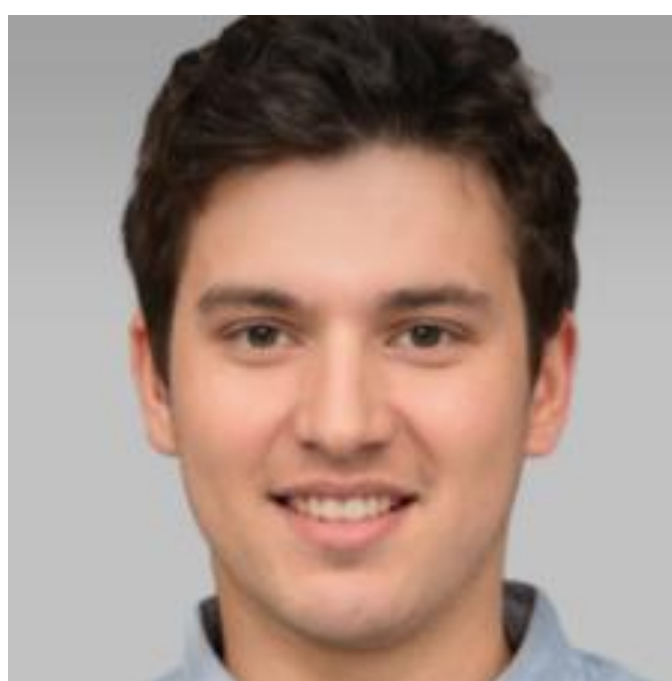
Do they use calibration to selectively determine when to trust an advisor's **confidence**?

Task: Which horse will win the race?



I THINK horse 2 will win.

Uncalibrated advisor



Calibrated advisor



I'm SURE horse 1 will win.

High confidence <i>I'm SURE...</i>	70% Accuracy	80% Accuracy
Low Confidence <i>I THINK...</i>	70% Accuracy	60% Accuracy

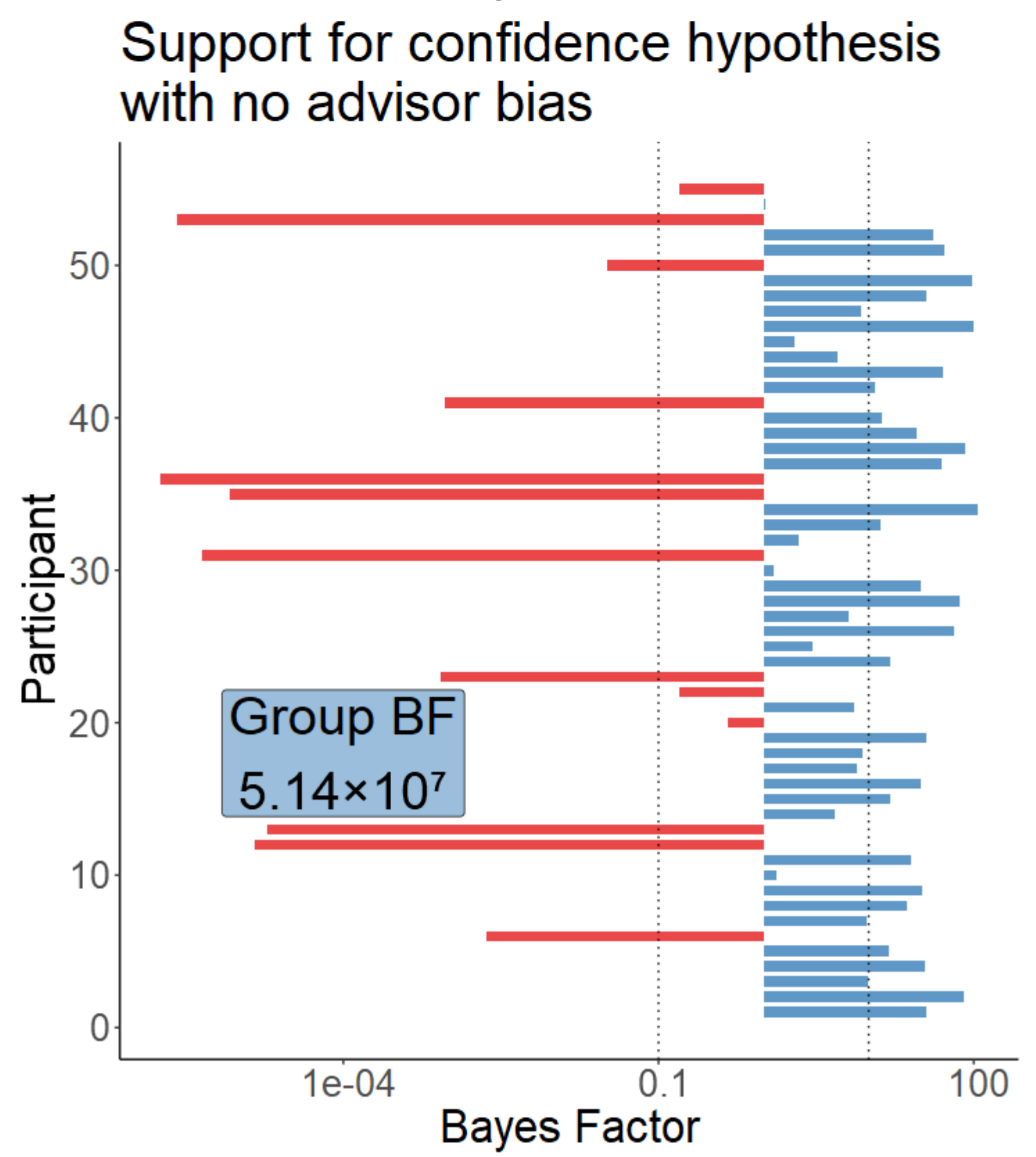
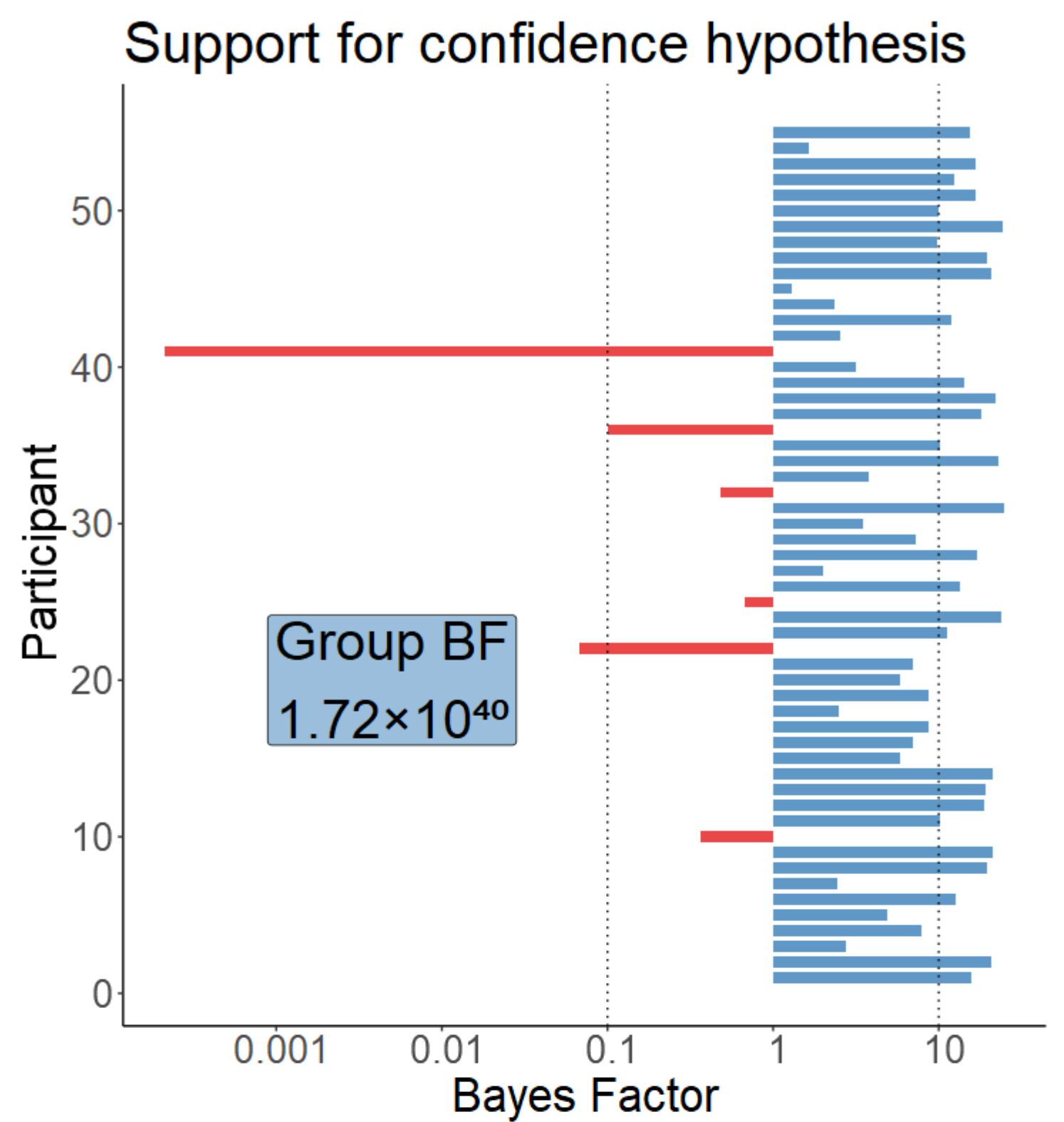
Calibrated: High Conf
vs.
Uncalibrated: Low Conf

Calibrated: High Conf
vs.
Uncalibrated: High Conf

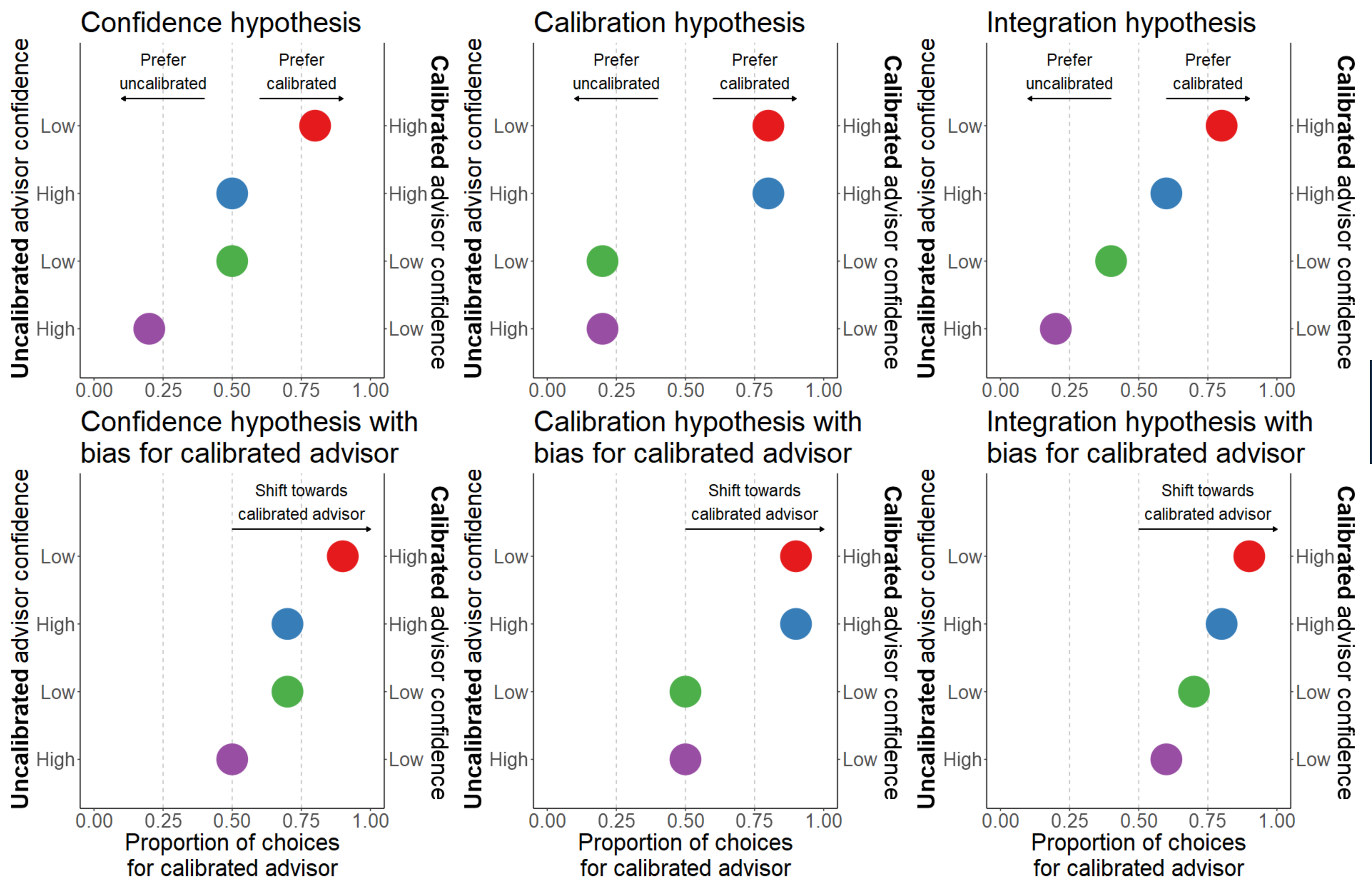
Calibrated: Low Conf
vs.
Uncalibrated: Low Conf

Calibrated: Low Conf
vs.
Uncalibrated: High Conf

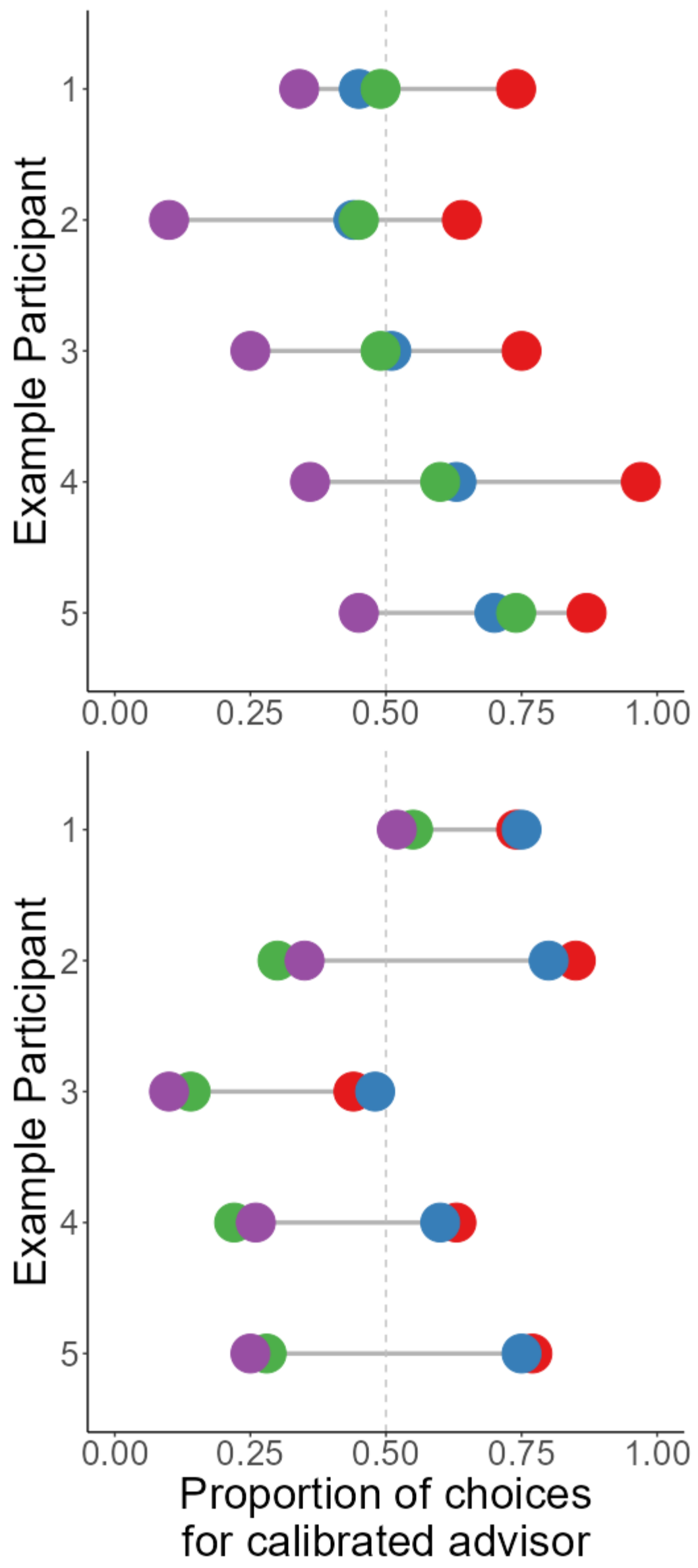
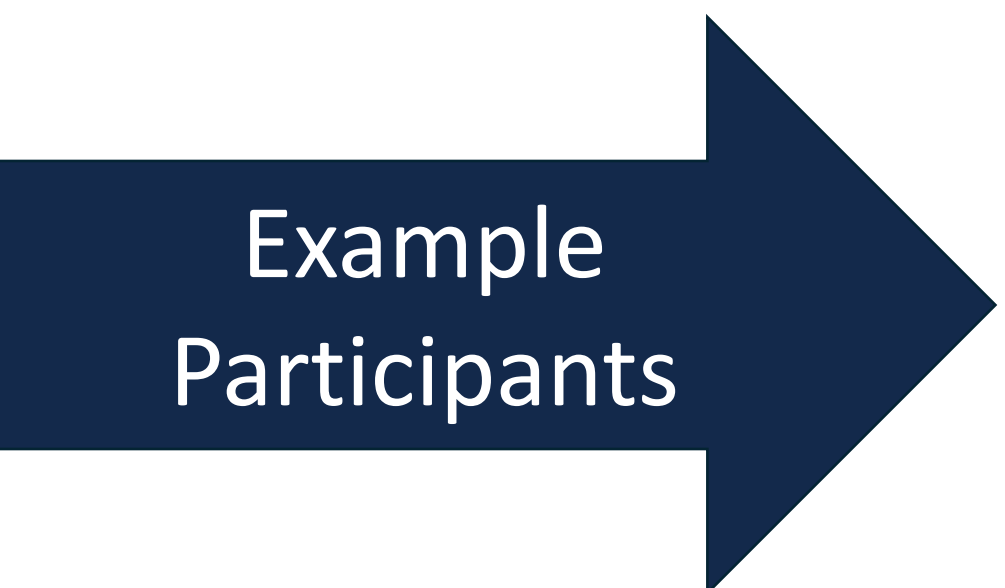
Overwhelming support for the confidence hypothesis



Nine competing hypotheses distinguish contributions of advisor confidence & calibration



Order-constrained inference for every individual participant



Supports confidence hypothesis

Supports calibration hypothesis

Participants used confidence but disregarded calibration



Poster & more