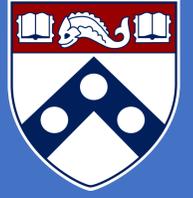


Debiasing Overconfidence

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Introduction

- ◆ Individuals and groups often engage in tasks involving predictions or estimates of unknown quantities.
- ◆ Group discussion can help or hurt accuracy. When, prior to discussion, more knowledgeable members of the group are more confident and less knowledgeable members are less confident (i.e., the group is better collectively calibrated), then subsequent discussions improve accuracy.
- ◆ However, people are often overconfident (e.g., Russo & Schoemaker, 1992).
- ◆ To help groups improve collective calibration, we aim to reduce overconfidence in three different ways: 1) reversing the confidence scale, 2) educating participants about overconfidence, and 3) specifying different conversation goals that could potentially increase or decrease overconfidence.

Methods

- ◆ Participants:
 - ◆ Reversing the Confidence Scale: $N = 897$, mean age = 40.5, 48.9% females
 - ◆ Instruction about overconfidence: $N = 3212$, mean age = 39.5, 43.4% females
 - ◆ Conversational Goals: $N = 1439$, mean age = 40.6, 44.1% females

Schematic of experimental design

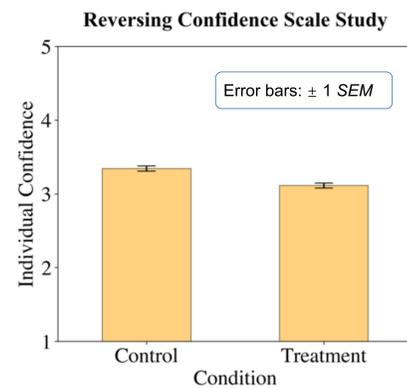


Sample Question:

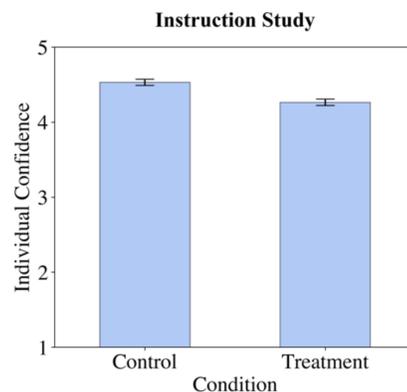
- ◆ What will be the price of one ounce of gold (in dollars) in the United States be one week from today?

Confidence Reduction

- ◆ Confidence ratings are on a scale from 1 to 7. In the graphs below, a score of 1 means Not At All Confident.
- ◆ We found that our treatment significantly reduced confidence ratings.

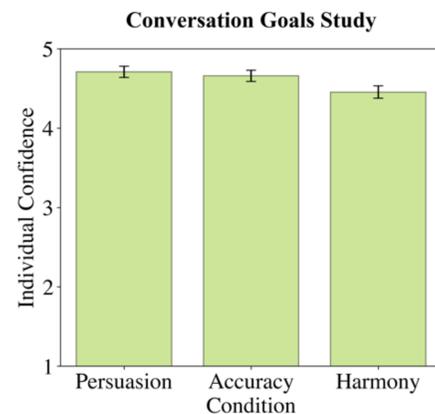


- ◆ Confidence is significantly lower in the Treatment condition than Control condition.
- ◆ $t(4479) = -4.705$, $p < 0.001$



- ◆ Confidence is significantly lower in the Treatment condition than Control condition.
- ◆ $t(3197) = -4.491$, $p < 0.001$

- ◆ We also found that discussion goals influence confidence.



- ◆ Confidence is significantly lower in the Harmony condition than Persuasion condition ($t(887) = 2.405$, $p = 0.016$) and Accuracy condition ($t(938) = 1.959$, $p = 0.050$).

Conclusion

- ◆ Reversing the confidence scale and providing instructions about overconfidence significantly reduces individuals' self-reported confidence in their estimates of unknown quantities.
- ◆ When people aim to be persuasive or achieve high accuracy in a subsequent group discussion, they are also significantly more confident compared to when they expect to be harmonious.
- ◆ We have conducted preliminary analyses using nominal groups of 4, and the results suggest that confidence reduction can improve collective calibration.
- ◆ Our next step is to use these methods prior to actual conversations to reduce confidence and see if it makes groups better calibrated collectively.

References

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