



Social Responses to Miscalibration

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Introduction

Theoretical Motivation:

- Prevalence of Overconfidence has been linked to its social benefits (Kennedy et a., 2013).
- Social rationality of overconfidence depends on how we socially perceive underconfidence.
- **Do social responses to underconfidence and overconfidence differ?**

Practical Motivation:

- High costs of overconfidence in managerial settings.
- Is underconfidence also a costly phenomenon that managers need to consider?
- **Are the managerial costs of underconfidence equal to those of overconfidence?**

Study 1

Study 1 (N=1798) tested social responses to underconfidence and overconfidence.

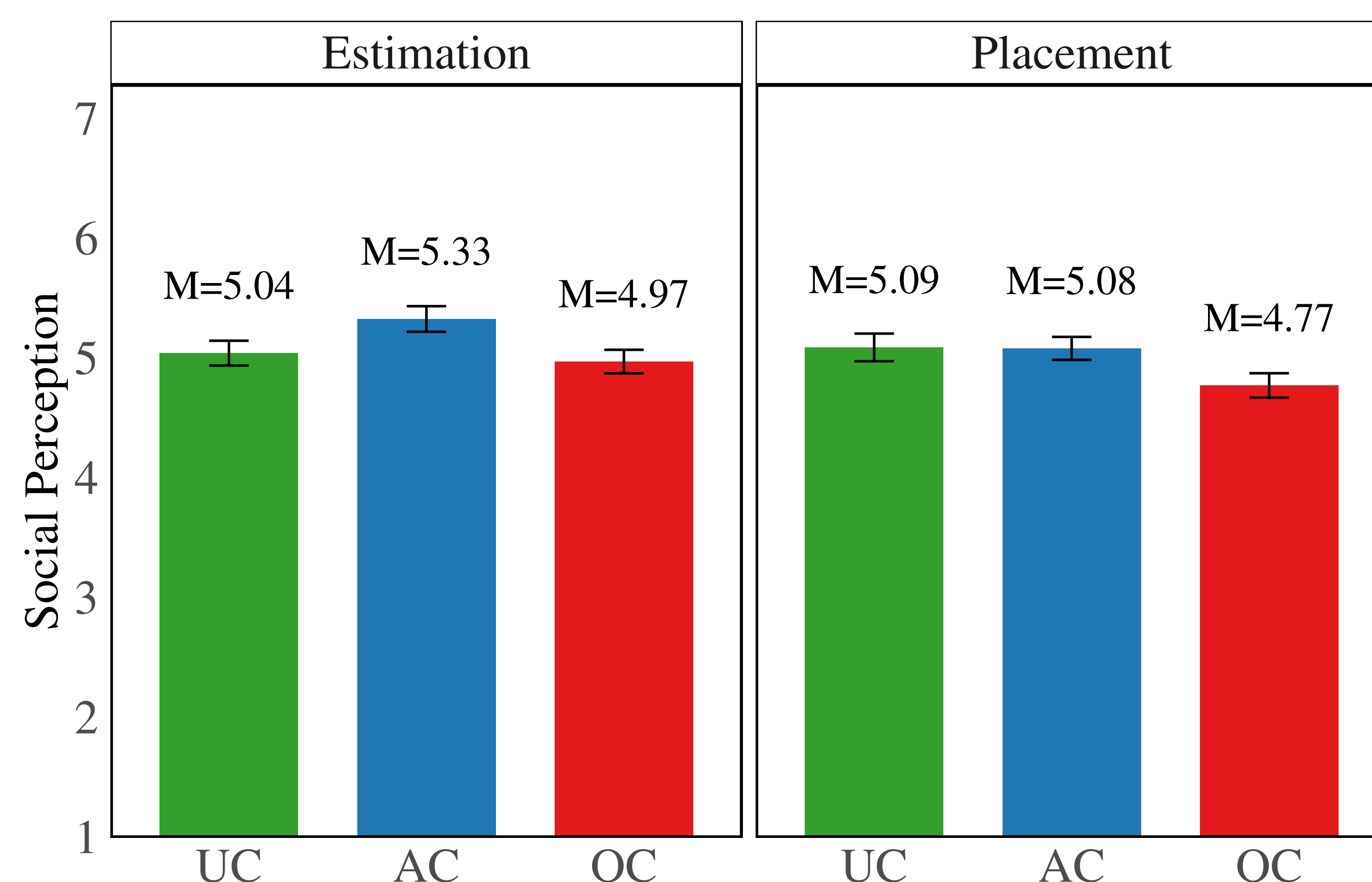
Methods

- Participants evaluated a partner who was 20% underconfident (UC), calibrated (AC), or 20% overconfident (OC).
- Either in context of Estimation (confidence in own ability), or Placement (confidence in ability relative to others):
- **DV:** Ratings of Trust and Competence of the partner on Likert scale items of 1-7, averaged to create DV of Social Perception ($\alpha = 0.88$)

Results:

- **Symmetry in Estimation:** Both OC $\beta = -0.38^{***}$ and UC $\beta = -0.30^{***}$ are socially penalized relative to AC.
- **Asymmetry in Placement:** Penalty for OC $\beta = -0.33^{***}$ but not for UC $\beta = 0.01$, $p = 0.941$, relative to AC.

Study 1- Average Social perception by Condition



Study 2

Study 2 (N=301) set out to understand why we see asymmetric social Responses to OC and UC in Placement.

Methods:

Participants socially judged 3 partners. Measured mediators.

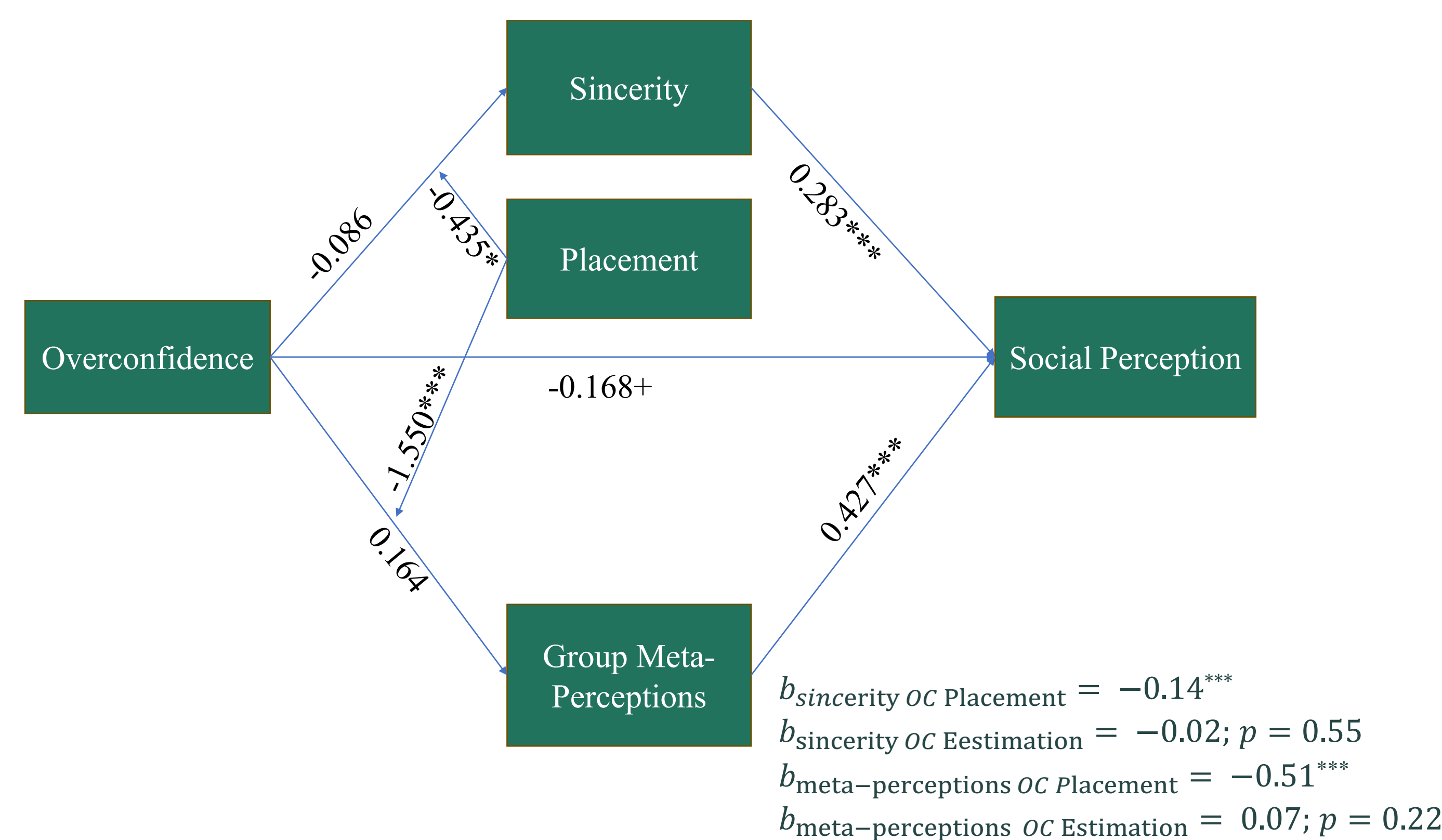
Mediator 1: Perceptions of Sincerity (Blake's prediction was sincere) (1=totally disagree 7= totally agree)

Mediator 2: Group Meta-perceptions (Blake views others in a positive way) (1=totally disagree 7= totally agree)

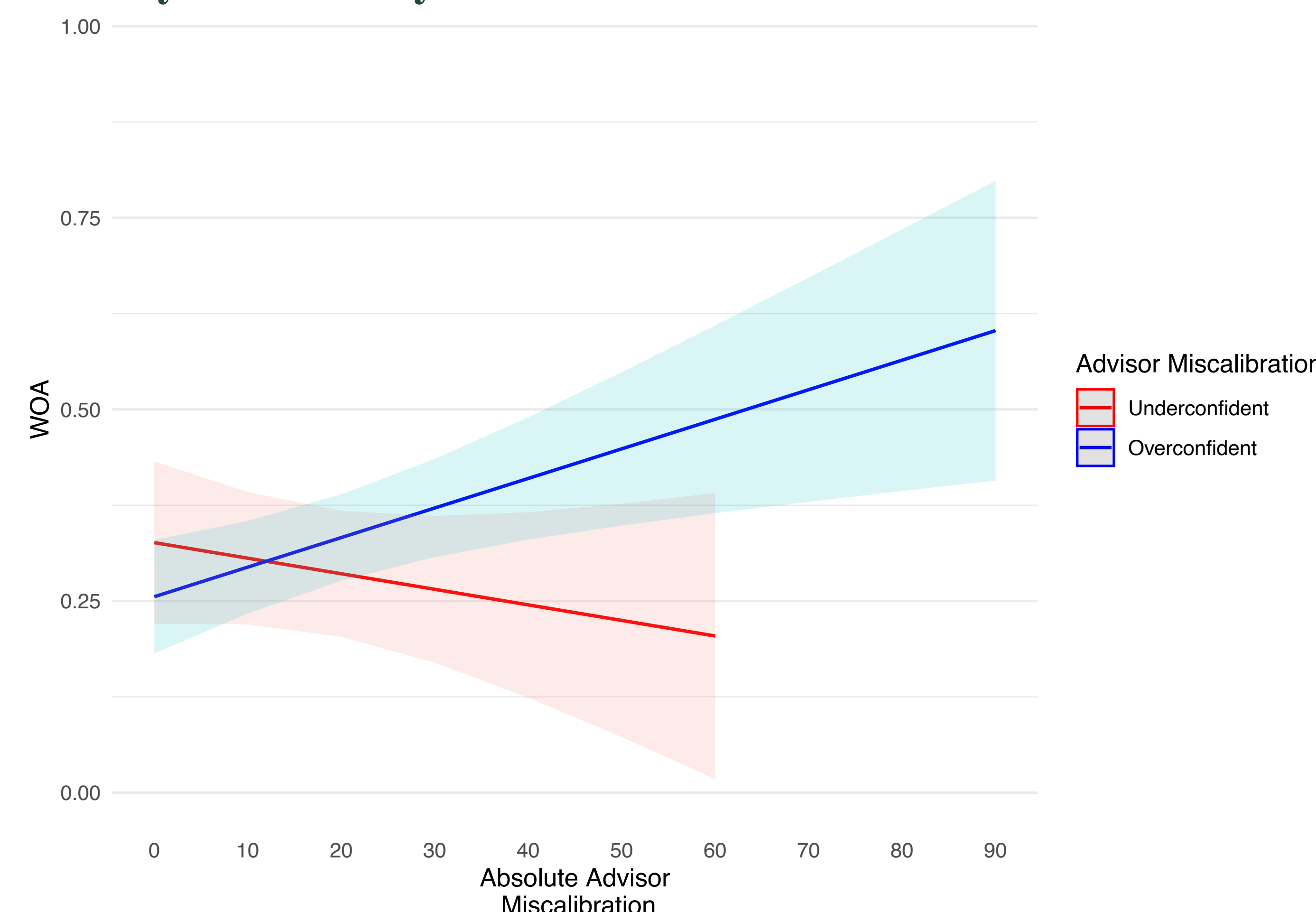
Results:

- In Placement, OC is penalized relatively more harshly than UC, compared to Estimation $\beta = -0.55^{***}$.
- In Placement, OC is socially penalized relatively more harshly via lower group meta-perceptions $b = -0.51^{***}$ and sincerity $b = -0.14^{***}$ than UC, compared to in Estimation.

Study 2- Moderated Mediation Model Comparing OC to UC



Study 3- WOA by Advisor Miscalibration



Study 3

Study 3 (N=375) tested organizational costs of UC and OC in contexts of Placement

Methods

- Incentivized Newsvendor problem with a known distribution, and an optimal order (120).
- Participants can revise their order with the help of an advisor's estimate, as well as their confidence.
- Participants learn the accuracy of advisors and socially evaluate them.
- Quality of final estimate: Absolute Deviation (AD) between participant's final estimate and the optimal order of 120.

Results:

- OC is socially penalized relative to UC $\beta = 0.18^{**}$.
- OC advice did not lead to worse estimates than UC advice $\beta = -0.078$, $p = 0.419$.
- Higher *absolute Miscalibration* leads to worse estimates $\beta = 0.11^{**}$, regardless of whether it is UC or OC
- Weight on Advice (WOA) increases with advisor confidence $\beta = 0.13^*$.
- As advisors become *more OC*, we listen to their advice *more*, even though it becomes worse
- As advisors become *more UC*, we listen to their advice *less*, even though it becomes better.

Discussion

- In Estimation, OC and UC are equally socially penalized: Given benefits of being highly confident generally (Price & Stone 2004), it is often socially rational to be OC.
- In contexts of Placement, OC is penalized socially more than UC: it might be less socially rational to be OC.
- Penalties for miscalibration are mediated by perceived sincerity and group meta-perceptions: Implies that miscalibration can be widespread if it is perceived to be sincere.
- UC can be as costly as OC from a managerial perspective: More future research on UC necessary.

References

Kennedy, J. A., Anderson, C., & Moore, D. A. (2013). When overconfidence is revealed to others: Testing the status-enhancement theory of overconfidence. *Organizational Behavior and Human Decision Processes*, 122(2), 266–279. <https://doi.org/10.1016/j.obhdp.2013.08.005>

Price, P. C., & Stone, E. R. (2004). Intuitive evaluation of likelihood judgment producers: Evidence for a confidence heuristic. *Journal of Behavioral Decision Making*, 17(1), 39–57. <https://doi.org/10.1002/bdm.460>