REVISION

# Reviewer #1

I believe my comments have been addressed satisfactorily. I think this study and its conservative analysis warrant publication. I have a few questions, which could potentially improve the clarity of the paper further

We would like to thank the reviewer for reviewing the revised submission and for providing detailed comments to improve the paper further.

p. 7: Participants "respond" on the Yoni task, which is said to be a behavioral task. What kind of responses are these: button presses, eye tracking, something else?

We have added more information to describe the kind of response required. In line 115, we added, “Participants were instructed to respond as quickly as possible using the corresponding keys on the given keyboard.”

P. 11: "the three cognitive-behavioural tasks (i.e., the deception task, HCT and the Yoni task) were administered to participants while their physiological signals (ECG, RSP, and EDA) were being recorded." --> Was ECG also recorded - and more importantly visible to the participant - while they did the heartrate counting task? The word 'while' is unclear, but this could potentially be a confound?

Yes, ECG was recorded and was subsequently used to derive the HR data. We do not display the physiological recording to the participants. As stated in the manuscript, even though we informed the participants in the Polygraph condition that they would be viewing the live recording of their physiological signals, the recording was a prerecorded signal; the same recording was displayed for all participants.  
  
My only other comments are for the final proofs/type setting:  
\*       p. 5: "told significantly less egoistic lies" --> "FEWER egoistic lies"

Revised accordingly.  
\*       p. 6: "The final sample consists of" --> should this not be 'consistED' (past tense) in APA style?

Revised accordingly.  
\*       P. 6: "from these 2 participants" --> "TWO participants"

Revised accordingly.  
\*       P. 6 slightly off-centered heading with the text that follows for "Theory of Mind (ToM)."

This should be fixed.  
\*       P. 8: "convince another participant that would" --> "another participant WHO would"

Revised accordingly.  
\*       P. 10: "assesses 4 dispositional lying dimensions" --> "FOUR dispositional"

Revised accordingly.  
\*       P. 10: "comprised of 2 sessions" --> "TWO sessions"

Revised accordingly.  
\*       P. 12: "we will in the manuscript focus on significant, i.e., - in this context - statistically reliable and in our opinion theoretically relevant." --> Flow is not great, is it missing a word like significant 'findings'?

Rephrased to “All analyses and data have been made publicly available. Therefore, in this manuscript, we will focus on discussing significant findings, which - in this context - are statistically reliable and in our opinion theoretically relevant results.”

\*       Pp. 13-16: sometimes the terms "95% CI" and "pd" are in italics, sometimes not. This should consistently follow APA style.

We have reviewed the manuscript and italicized all "95% CI" and "pd" to align with APA style which requires italicization of letters when they are statistical symbols or algebraic variables.

\*       P. 17: "Truth in the interrogation conditions" --> "THRUTHS in the interrogation CONDITION"

Revised accordingly.  
\*       P. 17: missing a full stop after "… for lies and heart rate in both conditions"

Revised accordingly.