I’ve enjoyed following this study through the RR stages, and I think this is an excellent Stage 2 RR. I believe all the criteria for acceptance at Stage 2 are either met or can be met with very minor revisions. I’ve added specific notes in relation to each criterion below.

**2A. Whether the data are able to test the authors’ proposed hypotheses (or answer the proposed research question) by passing the approved outcome-neutral criteria, such as absence of floor and ceiling effects or success of positive controls or other quality checks.**

They were; the inferential criteria relating to manipulation checks were met.

**2B. Whether the introduction, rationale and stated hypotheses (where applicable) are the same as the approved Stage 1 submission. This can be readily assessed by referring to the** [**tracked-changes manuscript supplied by the authors.**](https://apc01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fosf.io%2Fdownload%2F8zs3c%2F%3Fview_only%3D5286ad5b89584a0ba7d1f238db9aa0b4&data=05%7C01%7Cm.n.williams%40massey.ac.nz%7C06a090be270b498542cd08dbd13b791b%7C388728e1bbd0437898dcf8682e644300%7C1%7C0%7C638333825609962885%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=XPwxwSKH5%2Bb5IctkR9Jpl8FyLm83IZTn9cCP7HCD5w0%3D&reserved=0)

They are nearly identical. There are a couple of minor tracked changes in the introduction on page 15, but they simply provide a bit more elaboration about how equivalence testing works. I think this is fine.

**2C. Whether the authors adhered precisely to the registered study procedures.**

They did. The closest thing to a change from the original plan I could identify was that there were a couple of unforeseen technical errors that resulted in the need to exclude 3 participants (as noted in the Recruitments). While the Stage 1 RR naturally doesn’t specify how they would deal with this unanticipated issue, the way the authors chose to deal with it seems appropriate.

**2D. Where applicable, whether any unregistered exploratory analyses are justified, methodologically sound, and informative.**

I agree that they were. One minor note: The exploratory analyses say, “For these analyses, we used the largest sample we had available (i.e., all participants that passed the inclusion criteria and completed the study until October 15, 2023).” Does this mean that the exclusion criteria specified in the Recruitment of Participants subsection were not applied for these exploratory analyses? Or just that the sample from the second/final look was used?

**2E. Whether the authors’ conclusions are justified given the evidence.**

I believe they were. I just have a handful of minor notes:

1. Re. “A worry-thinking-style (which is similar to brooding) has been proposed as a causal factor involved in the development and maintenance of paranoid delusions (Foster et al., 2010; Freeman et al., 2015; Freeman et al., 2012). **Based on our findings**, it appears likely that brooding is a causal factor that conspiracy beliefs and paranoid delusions share”. I think it would be clearer to phrase this as something like “In conjunction with our findings, this suggests…” That makes it clearer this conclusion comes partly from the citations in the previous sentence, and avoids inadvertently implying that the present findings (in isolation) justify the conclusion.

2. Re. “Rumination in general, and brooding in particular, represent a risk factor for many psychological disorders (Aldao et al., 2010), and could explain why conspiracy believers tend to be more vulnerable to a variety of mental health problems (Barron et al., 2018; Chen et al., 2020; Coninck et al., 2021; Furnham & Grover, 2021; Leibovitz et al., 2021).” This is an interesting idea, but naturally speculative – e.g., it doesn’t necessarily follow from brooding being a risk factor for mental health problems that brooding necessarily *causes* mental health problems, and even if it does it’s probably only a partial explanation for the relationship between conspiracism and mental health problems (since there are presumably many other third variables that affect both). The word “could” signals this idea is just a *possibility* rather than a claim warranted by the findings presented, but I’d wonder about being a bit explicit about the fact that this is a speculative hypothesis that would need to be tested in future studies.

3. “Exploratory analyses showed that reflection may also have increased conspiracy beliefs.” I mulled over this one a bit, given that conspiracy beliefs *decreased* from T1 to T2 in the reflection condition, just less so than the (surprisingly large!) T2-T1 difference in the control condition. As best I can tell, I think this inference is warranted *if* we assume that the control condition cannot have itself decreased conspiracy beliefs (such that the apparent decrease is just a measurement artefact or similar). But perhaps a little more elaboration of the justification for the claim would be useful.

4. “The decrease in conspiracy beliefs from T1 to T2 might also be attributed to the way they were measured at both time points. During T1, participants were asked to choose the societal issue that concerned them the most from a list of six topics. Being confronted with numerous social issues might have in itself contributed to higher scores on the conspiracy belief measure. Perhaps, the plurality of social problems has been interpreted as evidence for a conspiracy or being confronted with multiple worry topics resulted in spontaneous brooding.” That makes sense, but if exposure to the social issues affected conspiracy beliefs at T1, wouldn't it continue to exert an effect a few minutes later at T2? Or would this effect be very transient?

5. “The finding that brooding increased conspiracy beliefs implies that interventions aimed at reducing conspiracy beliefs could focus on brooding as a potential cause and facilitator.” True, but does this jibe with the observation that the estimated effect of brooding on conspiracy beliefs was too small for us to be confident it’s practically meaningful? The effect of something like psychoeducation or CBT on brooding might itself not be very large, and then the effect of brooding in turn on conspiracy beliefs appears to be quite small… So do we have strong reason to suspect that psychoeducation, CBT etc. would yield practically meaningful changes in conspiracy beliefs?

6. In the Limitations and Directions… section: “Lastly, it is important to consider the possibility of an effect in the reversed causal direction”. This is absolutely a possibility, but I wonder if it could lead inattentive readers into thinking this is a limitation in the specific sense of being an alternative explanation of the effects found in this study? (It isn’t, of course, given the experimental design). This is definitely an optional suggestion, but the author might prefer to reframe this slightly to head off such an interpretation.

7. It was noticeable that there was a lot less dropout in the control condition (n = 703) than in the brooding condition (n = 546) or the reflection condition (n = 499). I believe the exclusion of participants with incomplete responses implicitly assumes the data is missing completely at random (MCAR), and the pattern of dropout suggests the data is not in reality MCAR. There is consequently at least some possibility of bias here (e.g., imagine, say, if people in the brooding condition who would have displayed lower changes in conspiracist beliefs from T1 to T2 were also more likely to drop out). I don’t think this necessarily merits any substantial changes, but perhaps the dropout issue merits some brief discussion under limitations?