

Reviewer #2

The study examined whether advocacy in climate change texts affects how the public perceives the credibility of the scientist authoring them, comparing two roles: Science Arbiter (neutral) and Issue Advocate (advocating). It presents some interesting findings - with the key finding being that advocacy doesn't undermine the scientific credibility of the text and scientist.

We thank the reviewer for their supportive comments and suggestions, which we have incorporated into the revised version of our manuscript.

There are some areas in which this paper can be improved, my main concern is method section. All results presented in the section should be moved to the results sections. As it stand the data analysis section is not well structure. Removing results from this section would give room to cleary explain how the Measures in 3.5 where adapted to suite this study and answer the hypothesis of the study.

We agree with the reviewer that our discussion of the measures could have been clearer. In the revised manuscript, we have moved the results from the old section 3.5 (Measures) to the Results section and renamed it Section 4.1. We have further expanded section 3.5, and moved the Perceived Credibility description to a new section 3.6 (since it is not technically a measure).

My specific points are as follows

Abstract L10- The opening statement would benefit with an expansion of why climate scientists rephrain from advocacy

We feel it is already clear in the first sentence that climate scientists refrain from advocacy “*because they worry it decreases their credibility*”. We don’t see how we can further clarify this, while keeping the abstract concise and to-the-point.

Introduction L26- examples of consequences would give a clearer picture to the reader.

In the revised manuscript, we have now added the “*fear of repercussions or reprimands from their institutes or peers*” as examples of negative consequences (lines 21-22 of the track-changed pdf).

There are a lot typos than need addressing

We have done a careful rereading of the manuscript and removed all the typos we found. If any typos remain, we are confident that the GC copy-editors will fix them during typesetting.

Section 2, L100 - It will important to reference other Geoscience studies which critically looked at the effects of visuals and effects of colours when lobbying (e.g. Williams et al 2023, <https://doi.org/10.5194/gc-6-111-2023>). Also prior experience also influences how the individual understands the visual. Which is in line to my other comments on the composition of the participants (a table or figure) is required to show education levels of the participants, and this need to clear how this was handled in the data analysis (Sect 3.4)

We have now added the Williams et al (2023) reference to the theory on credibility in visual elements (lines 102-103 of the track-changed manuscript).

As for the composition of the participants, we now expand section 3.4 to highlight that the participants “*had a similar distribution of education levels as the Dutch public as a whole*” (lines 188-189 of the track-changed pdf). Since all our data is also publicly available, we do not feel that an extra table is required.

Theory section should be condensed a bit more, there has been a lot of repetition.

In the revised manuscript, we have now somewhat shortened the theory section, especially the first few paragraphs of section 2.1 (lines 58-78 of the track-changed pdf). However, we feel that the rest of the theory is important and necessary to introduce our research questions and hypotheses.

I would like to see more detailed explanation in section 3.2, with reference to the key figures in the Appendix. This link has been missing throughout the Method section. For example in section 3.3 the authors mention about the excel bar chart I looked for it but couldn't, then i saw it in the appendix. Please make reference where appropriate.

The reviewer has a very good point here; in the original manuscript we omitted explicit references to the Appendices in sections 3.2 and 3.3. We have now added these in the revised version of the manuscript (lines 157, 165, 179 and 180 of the track-changed pdf).