

Below, we respond (in black) to the comments by reviewer 1 (in blue):

The manuscript presents an interesting and relevant subject that is a good fit for *Geoscience Communication*. The study explores the effects of personalization in climate communication, specifically looking at the credibility of climate scientists. Overall, the manuscript is well-structured and easy to read. However, there are several areas that require further development to enhance the clarity and impact of the work.

We thank the reviewer for this very positive assessment and clear summary of our work. We agree that these comments will help us enhance its clarity and impact.

Major comments

1. **Introduction expansion.** The introduction needs expanding, particularly around the IMPACTLAB instrument. It is currently unclear what this instrument is, how it is implemented, and its relevant strengths and weaknesses compared to other approaches. This additional detail will provide a stronger foundation for your study.

In the revised version, we will more clearly explain that the *IMPACTLAB* instrument is a toolbox specifically designed for science communication, that provides a set of tools to measure the effect of public engagement activities. It also includes a decision tree to choose the most appropriate measurement tool for a particular activity. It's based on a theoretical framework to measure three features that help evaluate science communication interventions: science capital (what Peeters *et al* [2022] term "output"), emotional memory ("outcome") and long-term effect ("impact"). Within the framework, it is realized that measuring output is relatively straightforward, but that measuring impact can be extremely difficult. The strength of the tool is that it is very practical and easy to adapt to a wide variety of public engagement activities.

2. **Section 1.2 on personalization.** While Section 1.2 on Personalization is good, it would benefit from a more thorough discussion of how other publics, such as lobbyists and politicians, might use this rhetorical technique to undermine the work of scientists. Additionally, exploring how scientists and science communicators can learn from this approach would be valuable. Including examples and references where this approach has worked effectively (or not) in contexts like vaccinations and anti-smoking campaigns would strengthen this section.

The introduction funnels towards the target audience of the KlimaatHelpdesk, so we don't want to broaden it too much with other audiences etc. However, we will mention that lobbyists use manipulation of narrative elements in the revised manuscript. We have also searched for examples and references where personalization of scientific texts has been studied, but couldn't find much.

3. **Selection of KH article.** Clarify how the KH article was chosen in terms of topic. Discuss the implications of this choice for the results. For instance, consider whether topics such as ocean acidification or sea level rises affecting Indigenous communities might have yielded different outcomes.

The reviewer has a good point that the motivation for choosing this particular text was missing from the original manuscript. In the revised manuscript, we will explain that we chose this text on the climate impact of train versus plane travel because it had received a big readership on the website, so we knew it was a popular topic, was a relatively short text, and because it was not too technical and therefore relatively easy to adapt.

4. **Translation and personalization.** The issue of translation requires further exploration. Discuss how personalization might differ in Dutch compared to English, and what this implies for other languages. This will help in understanding the broader applicability of your findings.

In the revised manuscript, we will highlight that Dutch is very similar to English (they share linguistic roots and numerous similarities in vocabulary, grammar, and syntax), so we expect that our results are generalizable to English too.

5. **SurveySwap details.** Provide more information about *SurveySwap*. Explain what it is and how it works in terms of reliability. This will help readers assess the robustness of your methodology.

In the revised manuscript, we will explain that SurveySwap is an online platform that operates on a reciprocal basis where users can earn credits by completing other users' surveys, and then use those credits to have their own surveys completed. This system is particularly used by students and academics who need to collect a significant amount of data for their research projects or dissertations, but the pool of respondents may therefore be limited in diversity.

6. **Consent forms and ethical considerations.** Expand on the discussion around consent forms. What risks and benefits did you consider and communicate to participants? How was the data stored securely? Include more details on these aspects. Additionally, bring some of the 'Ethical statement' (line 325) into the main body of the text, such as the classification of the study as low risk, which negated the need for further ethical review or privacy assessment.

This is a good idea. We will add a few sentences on the topic of privacy and ethics to the beginning of section 2.3 in the revised manuscript.

7. **Determining personalization levels.** Explain how you determined if a text was slightly or highly personalized. Acknowledge the potential subjectivity here and discuss how this assessment could be repeated reliably.

The level of personalization was not determined *a posteriori*, but was defined a priori in our research setup. As discussed in section 2.2, 'slightly personalized' means changing definite articles and indefinite pronouns to second-person (possessive) pronouns. In the 'highly personalized' texts, we furthermore added the first-person voice of the writer. Indeed, some of this might be subjective, but the results in Figure

3 suggest that indeed the highly personalised text was perceived as the most personal one.

In the revised manuscript, we will clarify this further, by repeating this difference at the start of the discussion section.

8. **Title scope.** The study focuses on one example – sustainable travel. The current title, "The (non)effect of personalization in climate texts on the credibility of climate scientists," is too broad. Consider revising the title to better reflect the scope of the study, such as "The (non)effect of personalization in climate texts on the credibility of climate scientists: A case study on sustainable travel."

This is a good suggestion; we will change the title in the revised version of the manuscript.

9. The conclusions currently read more like a summary of the article. Expand this section to include the significance of the work and its implications for future studies. This will provide a more impactful closing to your manuscript.

This is also a good suggestion. In the revised manuscript, we will add that this is only one study on one text with one type of audience (Dutch young adults). If our results hold up in a wider variety of texts and audiences, this suggests that adding personalization does not harm the message in climate communication materials, which is a useful finding for communication professionals who aim to make climate texts more engaging.

Minor Comments

1. **Abstract.** The abstract is well-crafted and easy to digest. No changes are necessary here.

We are happy to hear this.

2. **Figures and captions.** The figures are clear, well-produced, and effectively support the text. However, the captions could benefit from a little more detail so they can be understood independently of the main body of the article.

In the revised version, we will end each caption with a one-sentence take-home message of the figure, to indeed help readers that aim to understand the point of the paper from the abstract and figures alone.

3. **Section 2.5 on quantitative statistics.** Section 2.5 on quantitative statistics for the control is sound and well-explained but does not integrate smoothly with the preceding and following sections. Improving the transitions will enhance the overall flow of the manuscript.

We now understand that 'Control' may be too vague a term, so we will change the title of section 2.5 to "Assessment of differences between conditions", and will reword this section to make it more in line with the rest of the manuscript.

4. **Statistical tests explanation.** Every time you introduce a statistical test or method, such as the Cronbach-Alpha score, provide an explanation of what the test is and what certain scores mean. This will help the reader understand the methodology better and make the manuscript more accessible.

We will add explanations and references to the literature for statistical tests such as Cronbach's alpha and Holm correction.

5. **Discussion and Research Questions.** The discussion would benefit from clearer presentation of the Research Questions and their integration throughout the text. This will help in drawing direct connections between your findings and the questions posed.

While we do mention both Research Questions in the Discussion, we realise that this might not be too easy to find. In the revised manuscript, we will therefore repeat the verbatim research questions in the discussion and highlight them through italics font.

6. **Fair discussion of limitations.** The discussion of limitations is very fair and well done. This transparency strengthens the credibility of your study.

We thank the reviewer for this supportive comment.