Reviewer’s report

Title: Fossil fuels are harming our brains: Identifying key messages about the health effects of air pollution from fossil fuels

Version: 0 Date: 30 Apr 2019

Reviewer: Yung-Jaan Lee

Reviewer's report:

p.2
Line 24-25 "…a non-probability internet panel"
→ this could cause some statistical issues.

p.4
Line 75 "the health effects air pollution…"
→ "the health effects of air pollution…"

p.5
Line 86 "(Asensio & Delmas, 2015, 2016)"
→ "(23, 24)"
Line 104 "…by surveying a diverse group of people…"
→ how?

p.6
Line 105-111 "…a series of ten statements that included 1) general…"
→ based on what?
Line 119 "the health effects air pollution…"
→ "the health effects of air pollution…"

p.7
Line 147 "lead people take protective…"
→ "lead people to take protective…"

p.11
Line 231 "on the unique, unduplicated, effect…"
→ "on the unique, unduplicated effect…"
Line 232 "In a communications setting"
→ meaning unclear.

p.12
Line 254-255 "(1=No risk at all; 2=Very small risk; 3=Small risk; 4=Medium risk; 5=Large risk; 6=Very large risk)"
→ this is a 6-point Likert scale, why is it different from "Line 264-265" with 5-point Likert scale and Line 271 with 7-point Likert scale?

p.13
Line 281 "a new fossil fuel plant"
→ "a new fossil fuel power plant"?

p.15
Line 313 "Consumer advocacy intentions was the…"
→ "Consumer advocacy intentions were the…"
Line 322 "Political advocacy intentions was the…"
→ "Political advocacy intentions were the…"

p.18
Line 392-393: "However, we did not find support for our second hypothesis…"
→ any particular reason for this result?

p. 19
Line 409 "it is also important talk about…"
→ "it is also important to talk about…"

p.21
Line 464 "it's also important to…"
→ "it is also important to…"
Line 466-467 "we cannot say how effective any individual message will be in isolation" → this deserves exploration for future research.

In the conclusion part, the authors should add a few sentences related to the application of findings and conclusions to other setting/cultures.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes
**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.
I declare that I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal