

Is it time to change how we talk about climate change? The effect of uncertain climate change messages

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Introduction

Certainly, human activities have caused climate change which will have consequences on the planet such as extreme weather.

However, many elements of climate change, e.g. the extent & timing of its effects, remain uncertain (1).

Communicating climate uncertainty

The current consensus in research is that uncertainty should not be mentioned in climate change messages (2).



With the argument that uncertain climate change messages may cause anxiety, distrust (3) and be used to delay action (4). However, as of yet, the role of individual differences has yet to be explored in this area of research.

Individual differences & uncertainty



Individuals have different tolerance levels and personality traits which affect their responses to uncertainty (5). Thus individual differences may play a role in our cognitive, behavioural and emotional responses to uncertain messages.

Climate Anxiety

Climate anxiety is a psychological distress response to direct or indirect (e.g. via messages) climate change exposure.



Climate anxiety has differential impacts & can be maladaptive causing anger & passivity, or adaptive creating drive & action (6). Further research is needed to address how climate change messages cause adaptive & maladaptive climate anxiety.

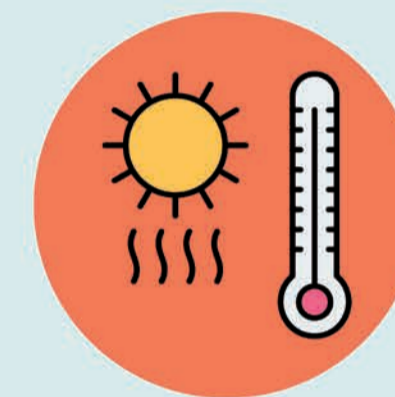
Aims

1. To investigate the effect of uncertainty in climate change messages on climate anxiety post message.
2. To determine what predictive effect individual differences, have on response to climate change message uncertainty.

Methods

167 participants took part in an online survey. They answered demographic, baseline and personality questions and then read one of 4 randomly assigned climate change messages which featured one of two types of extreme weather, storms and heatwaves. The messages either emphasised certainty or uncertainty.

After reading a message participants answered questions on their cognitive, behavioural and emotional responses to the message and the message itself.



Discussion

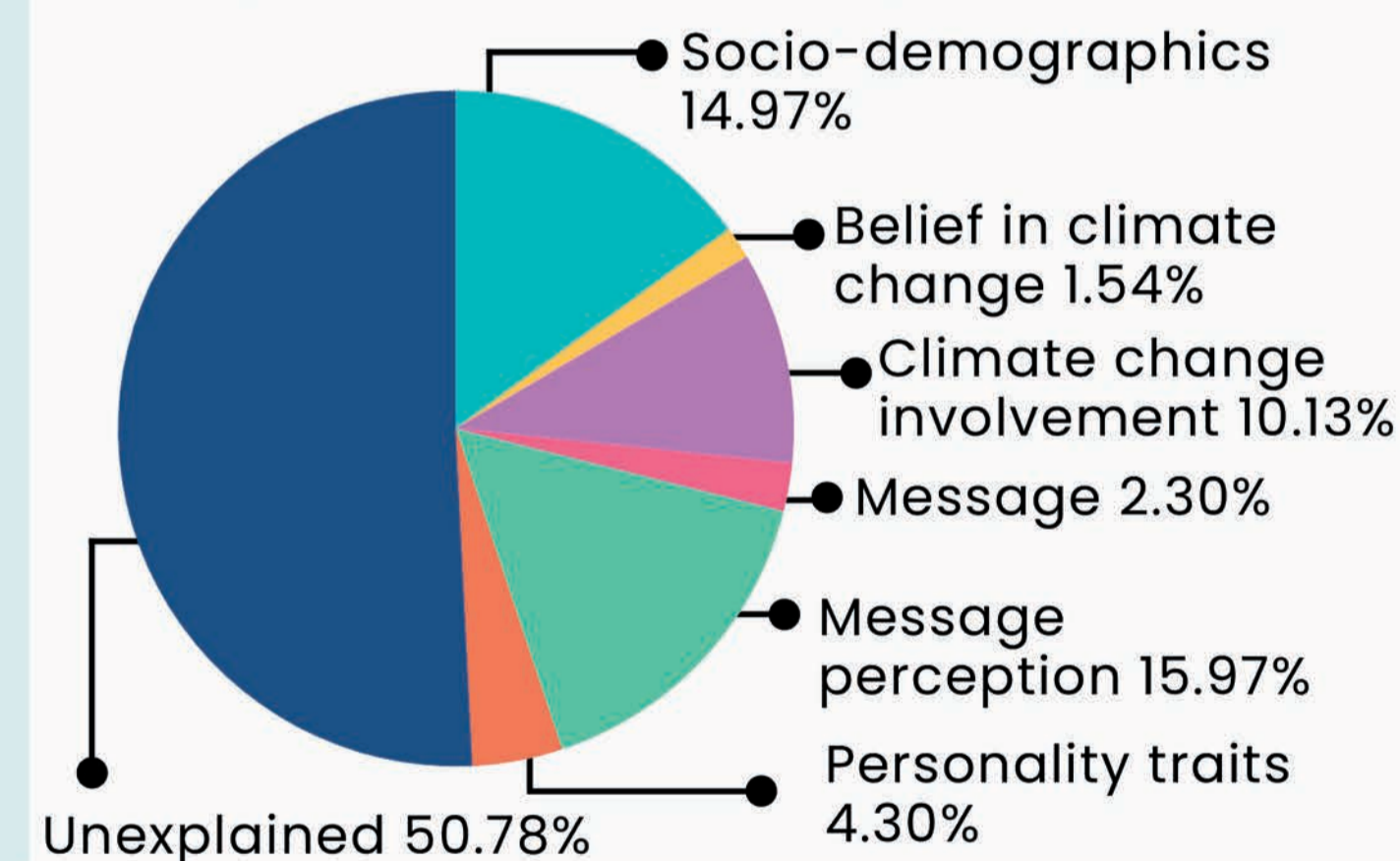
Contrary to current literature, the present study found that message uncertainty was not a significant predictor of post-message anxiety.

Significant predictors of post-message anxiety were youth, not being a cisgender man, pre-existing involvement in climate change, adverse message perception and higher intolerance of uncertainty.

Our results highlight that post-message anxiety is more closely correlated with the audience's psychosocial characteristics than the message's contents. This brings into question the accuracy of current guidelines which do not account for the audience or their individual differences (2).

Results

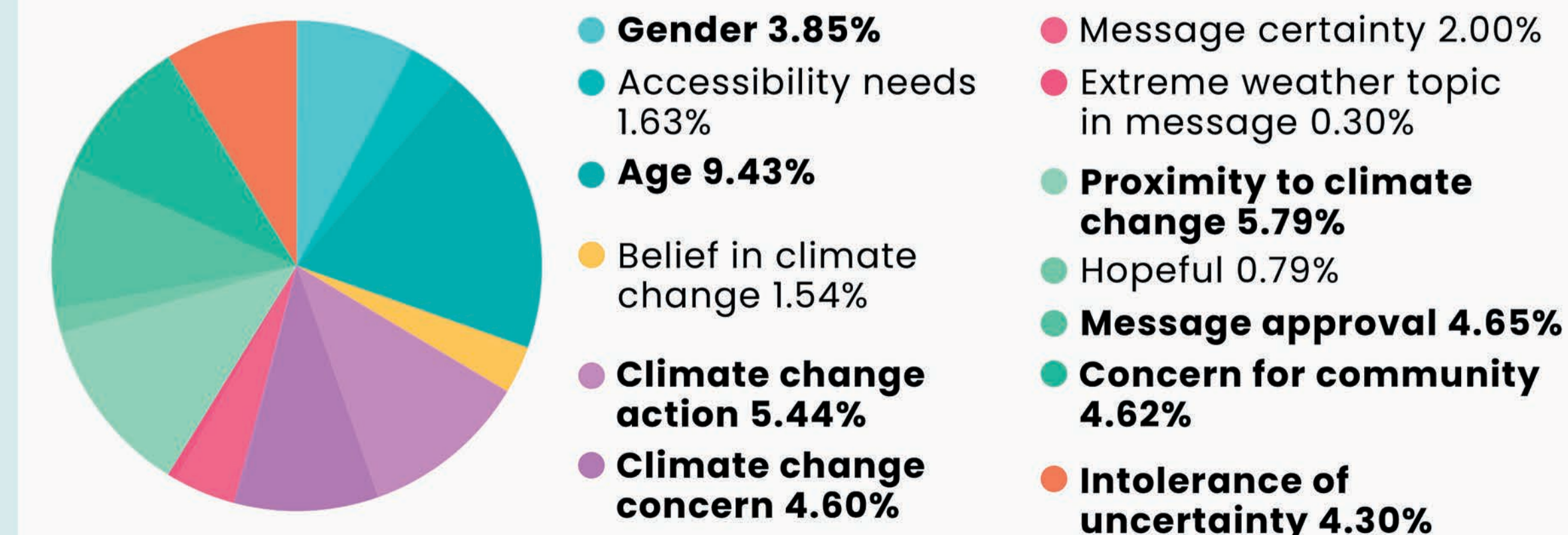
Figure 1. Variable groups prediction of post-message anxiety by percentage (%)



Participants' post-message anxiety was partially predicted by 6 groups of variables. The groups predicted a different percentage of anxiety, shown in figure 1. Groups were made up of predictor variables, shown in figure 2.

Several variables significantly predicted anxiety post-message. However, the message's uncertainty did not significantly predict anxiety at the end of the survey, shown in figure 2.

Figure 2. Variables prediction of post-message anxiety by percentage (%)



Note: Significant results in bold

Conclusion

In conclusion, the study's findings suggest that message uncertainty does not predict post-message anxiety. However, far more influential than previously assumed the message audience and individual differences significantly predict post-message anxiety.

It is vital that the nuanced issue of climate change messaging & climate anxiety continue to be investigated. In order to establish accurate guidelines for motivational rather than immobilising climate change messages.

Finally, this study demonstrates the crucial need for psychologists' involvement in climate science, in response to the climate crisis.



References

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