



PSYCHOLOGICAL INTERVENTIONS FOR CLIMATE CHANGE ANXIETY

Balancing individual, social, & environmental needs

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Objectives of this report

1

Systematically review psychological interventions to address climate change anxiety

2

Propose a framework for understanding the impact of these interventions on individuals, groups, and the natural environment

3

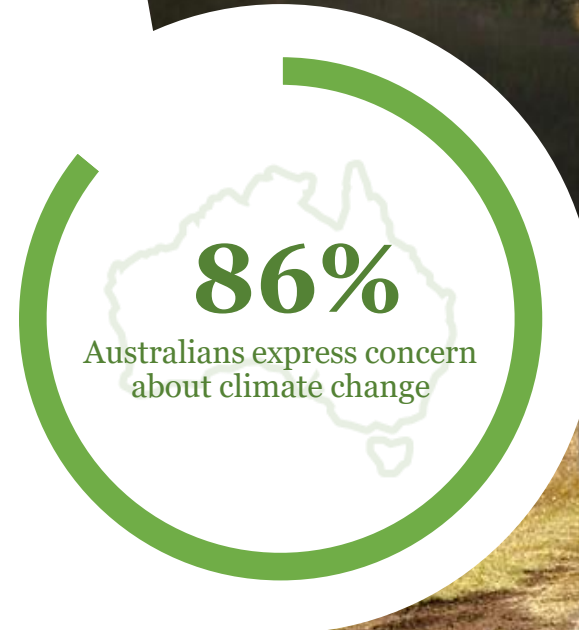
Facilitate a discussion on how to apply the framework practically, so that stakeholders can address climate change anxiety with an intervention that best suits them



Understanding the psychological impact of climate change

From bushfires to floods, Australians are no strangers to extreme weather events that are becoming increasingly common as a result of climate change. As such, 86% of Australians express some level of concern about climate change ¹. Similarly, 79% of Victorians are concerned about the negative impacts of climate change, not just on us but also on future generations ².

For people most affected by climate change and extreme weather events, the resulting distress can impair their ability to perform daily tasks ³. This can result in **climate change anxiety**.





What is climate change anxiety?

Climate change **anxiety** is a negative affective state related to **anticipation about the future threat posed by changes to the climate.**

It is important to note that climate change anxiety is not always a clinical diagnosis. Anxiety itself can be beneficial since it alerts us to potential dangers ⁴.

In fact, a lack of anxiety is sometimes even harmful ⁵. As such,

climate change anxiety may constitute an anxiety disorder to the extent that it is excessive, persistent, or out of proportion, as **judged by a clinician and taking contextual factors into account.**



The outcomes of climate change anxiety interventions

Research attention has predominantly focused on the individual impacts of climate change anxiety ⁶. Accordingly, a variety of interventions have been proposed to alleviate climate change anxiety within individuals. However, a number of researchers have proposed that some level of climate change anxiety is necessary for individuals to take action to address environmental challenges ^{7,8}.

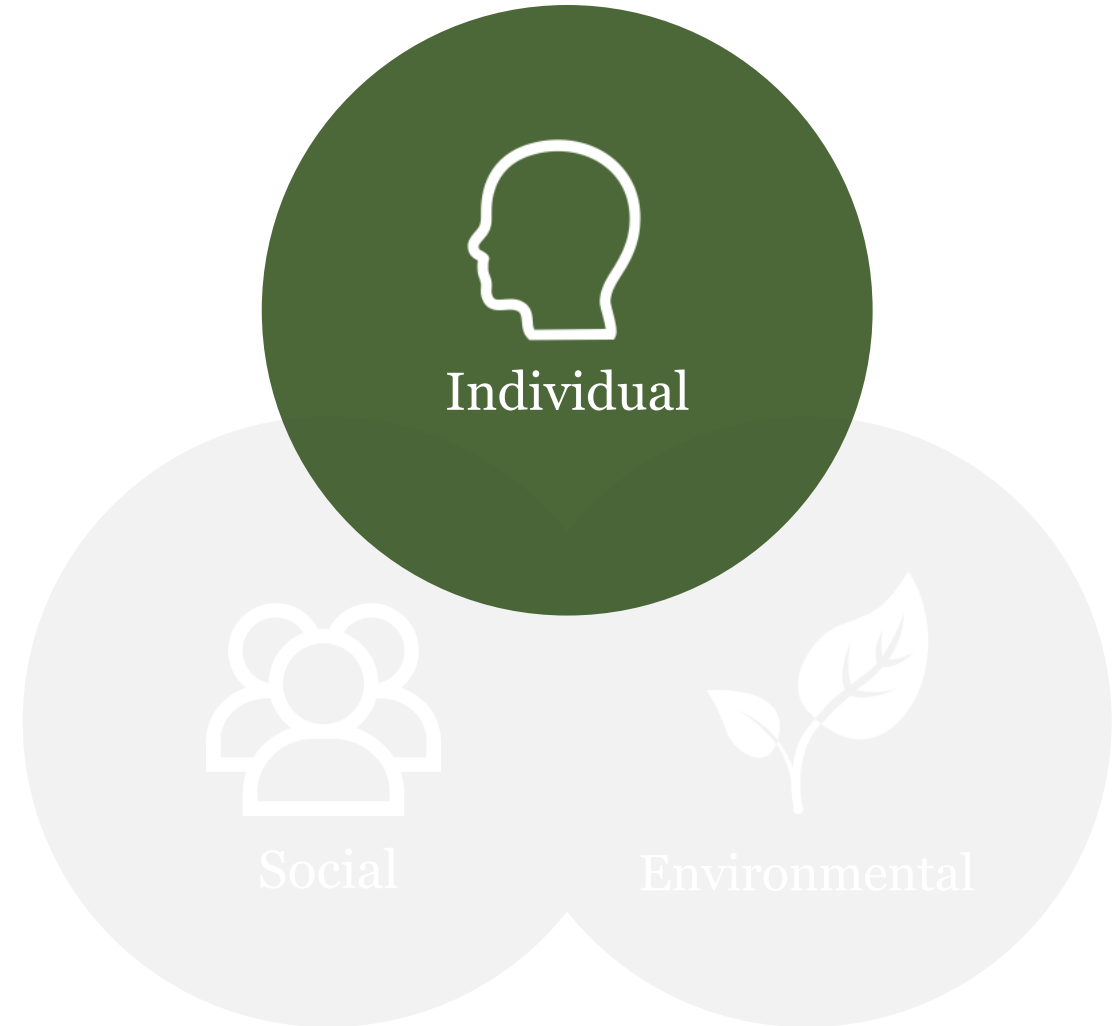
For climate change anxiety interventions, there is tension between reducing anxiety on an individual level and promoting pro-social and environmental actions. It is therefore important to consider all potential outcomes before implementing any intervention.



Individual outcomes

Climate change anxiety is an unpleasant emotional state, which individuals want to reduce ⁹. Moreover, climate change anxiety can be pathological to the extent that it interferes with functioning ⁶.

Interventions that address climate anxiety may therefore target the individual outcomes of reducing anxiety, particularly if this anxiety reaches clinical levels.



Social outcomes

Climate change anxiety interventions may also involve collective action. For example, interventions such as joining activist or community groups, or faith-based practices, are likely to give people a sense of common purpose ¹⁰.

To that end, climate change anxiety interventions may address the social outcomes of increasing cohesion within groups and help them achieve their goals.

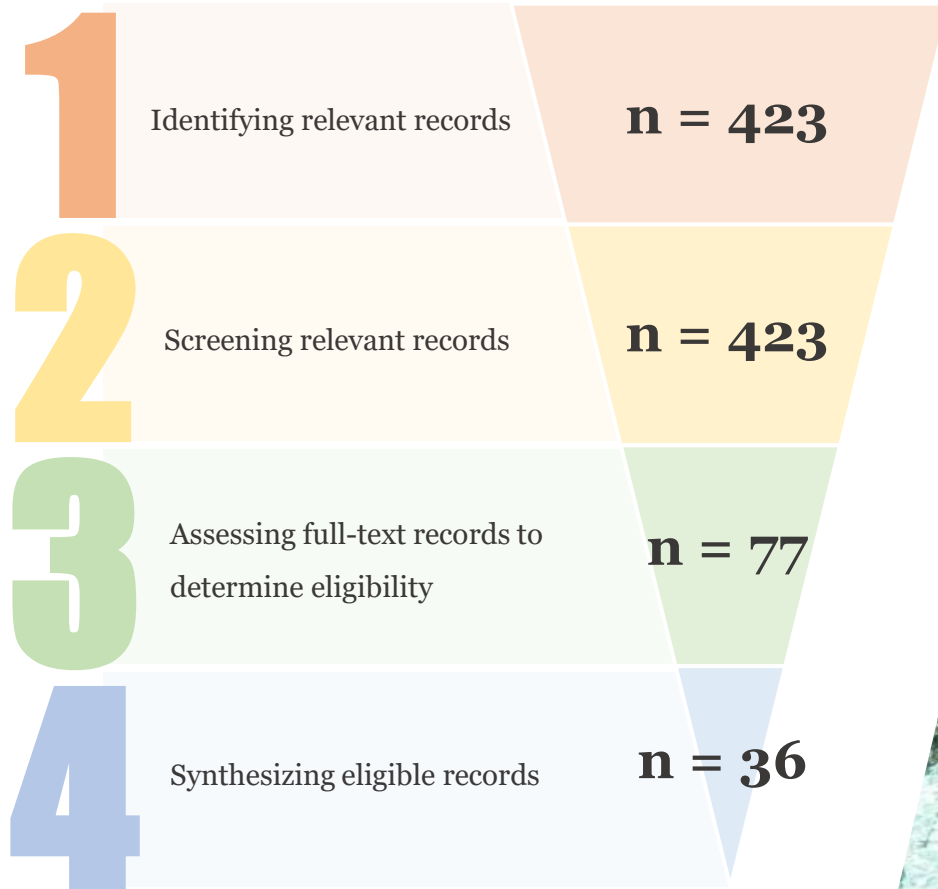


Environmental outcomes

By promoting a connection with nature, or with environmental activist causes, climate change anxiety interventions can increase pro-environmental behaviours in individuals^{11, 12, 13}. Active coping strategies to reduce climate change anxiety can also predict pro-environmental behaviours¹⁴. These behaviours in turn have downstream positive implications on climate change and environmental issues more broadly.



Review methodology







n denotes the number of records included in each step

Given the wide range of existing interventions, we need a way to evaluate an intervention in terms of its potential impact on individual, social, and environmental outcomes.

Stakeholders can then decide which intervention to implement, depending on which outcome they prioritise.

In the next section, we provide an overview of existing interventions, organised by potential outcomes. Beginning with 423 peer-reviewed articles, we have identified 70 interventions from 36 articles. For each intervention, we identify whether it is likely to strengthen, weaken, or have neutral impact on each outcome based on existing empirical evidence.






A visual guide to evaluating intervention outcomes




Type of intervention	Example interventions			
		Individual	Social	Environmental
				




Colour-coded evaluation of intervention impact on a particular group of outcomes

Outcomes that the group of interventions addresses




Colour codes

-  Strengthen outcome
-  Strengthen outcome (no direct evidence)
-  Weaken outcome
-  Mixed impact
-  No evidence

Type of intervention	Example interventions	 Individual	 Social	 Environmental
Problem-focused action	Activism Social engagement Prosocial action Pro-environmental behaviours Collective action Volunteering			
Emotions	Individual and group emotional expression Healthier processing of distress and trauma Engagement in and discussion of emotions Validation of emotions Emotion regulation			
Social connection	Building community Fostering relatedness and connectedness Social support provision Peer interaction			

Type of intervention	Example interventions	 Individual	 Social	 Environmental
Faith/religion/spirituality	Faith-based practices			
Interpersonal skills	Fostering interpersonal skills			






Type of intervention	Example interventions	 Individual	 Social	 Environmental
Nature	Active travel Environmental stewardship Eco-psychology Implementing eco-health principles Spending time in and connecting with nature			





Type of intervention	Example interventions	Individual	Social	Environmental
Resilience	Building individual resilience Psychological preparedness intervention	[Green]	[Grey]	[Grey]
Self-perception	Promoting feelings of mastery and self-efficacy Prompting reflection	[Green]	[Grey]	[Grey]
Reassurance	Reassuring children and young people that they are protected and cared fore	[Green]	[Grey]	[Grey]
Medication	Oral fluoxetine, clonazepam, olanzapine	[Green]	[Grey]	[Grey]
Clinical therapy	Individual and group therapy Cognitive behavioural therapy Stress inoculation training Danger ideation reduction therapy	[Green]	[Grey]	[Grey]
Role-modelling	Role-modelling on coping with climate change anxiety for children	[Green]	[Grey]	[Grey]
Counselling	Grief/loss counselling Crisis counselling	[Green]	[Grey]	[Grey]
Creative pursuits	Arts and creative writing	[Green]	[Grey]	[Grey]



Type of intervention	Example interventions	 Individual	 Social	 Environmental
Non-avoidant coping	Problem-focused coping Meaning-focused coping Developing active coping skills			
Adaptation	Promoting psychological adaptation			
Education	Climate literacy Risk communication Promoting mental health benefits of environmental conservation			



Evaluation of the grading system for climate change anxiety interventions

Strengths



1. The framework provides a quick overview and comparison of existing interventions.
2. It identifies gaps where more research is required to strengthen empirical support.
3. It can be adapted depending on which outcome its user prioritises.



Weakness

Where direct evidence is lacking, the framework is somewhat speculative.

What's next?

Climate change anxiety is a mounting problem for Australians. Researchers have proposed numerous psychological interventions, with varying degrees of empirical evidence for their effects. These interventions not only address climate change anxiety on an individual level, but they may also have social and environmental impacts.

In this report, we introduce a framework for climate change anxiety interventions. This is a necessary first step in helping stakeholders understand and evaluate the different existing interventions according to their outcomes. In the next stage, we aim to **transform this framework into an accessible, user-friendly tool** that can assist stakeholders in choosing the right intervention that best suits them. As purveyors of science, our hope is to collaborate across organisations to make this happen, in order to promote the wellbeing of individuals, community, and the environment, in the face of a global crisis.



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