

# CLIMATE RELATED MENTAL HEALTH AND YOUNG PEOPLE

Australian Health Promotion Association Victoria Tasmania

8<sup>th</sup> September 2022

R U OK? DAY

Recording this seminar

## ACKNOWLEDGMENT OF COUNTRY

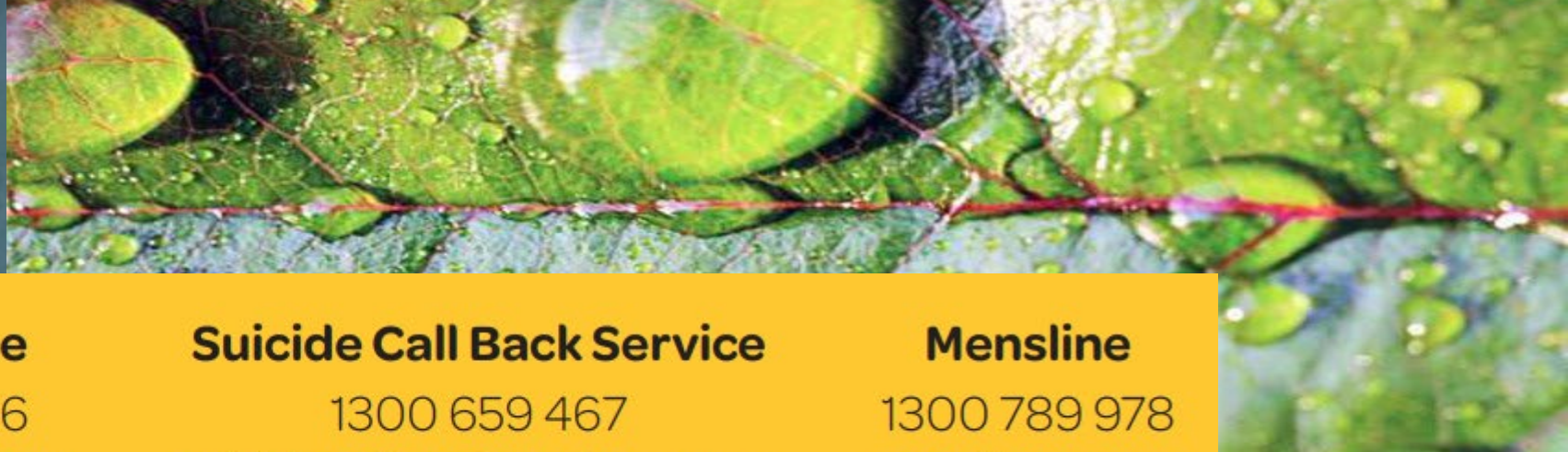
We acknowledge the unceded lands on which we work, play, live, love, learn, age and die. We acknowledge the First Nations people as custodians with enduring connections to culture, country and kin. We look to Indigenous ways of knowing for care of country and place. Which lands are you on today? Please add to CHAT.







A conversation could change a life.



### **Lifeline**

13 11 14

[lifeline.org.au](https://lifeline.org.au)

### **Beyond Blue**

1300 224 636

[beyondblue.org.au](https://beyondblue.org.au)

### **Suicide Call Back Service**

1300 659 467

[suicidecallbackservice.org.au](https://suicidecallbackservice.org.au)

### **Mensline**

1300 789 978

[mensline.org.au](https://mensline.org.au)

*R U OK? is a harm prevention charity that encourages people to stay connected and have conversations that can help others through difficult times in their lives. Our work focuses on building the motivation, confidence and skills of the help-giver – the person who can have a meaningful conversation with someone who is struggling with life. R U OK? contributes to suicide prevention efforts by encouraging people to invest more time in their personal relationships and building the capacity of informal support networks – friends, family and colleagues - to be alert to those around them, have a conversation if they identify signs of distress or difficulty and connect someone to appropriate support, long before they're in crisis.*

**[HTTPS://WWW.RUOK.ORG.AU/WHAT-WERE-ABOUT](https://www.ruok.org.au/what-were-about)**

## PANEL MEMBERS



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# OUTLINE

**HASINI  
GUNASIRI**

State of climate-related mental  
health in young people

**SUE NOY**

Keeping the Future in Mind –  
recent research on young  
people cc and mental health

**AILEEN  
THOMS**

Community action building  
resilience young people  
mental health promotion

**QUESTIONS**



# State of climate-related mental health in Australia

*R U OK Day panel on climate-related mental health for young people*

**Hasini Gunasiri**



# Acknowledgement of Country

*As we gather for this meeting  
physically dispersed and virtually constructed,  
let us take a moment to reflect on the  
meaning of place and in doing  
so recognise the traditional lands on which we  
do our business today.*

*We acknowledge the Elders, past, present and  
emerging of all the lands we work and live on  
and their ancestral spirits with gratitude and  
respect.*



**DEAKIN**  
UNIVERSITY



# Climate change and health

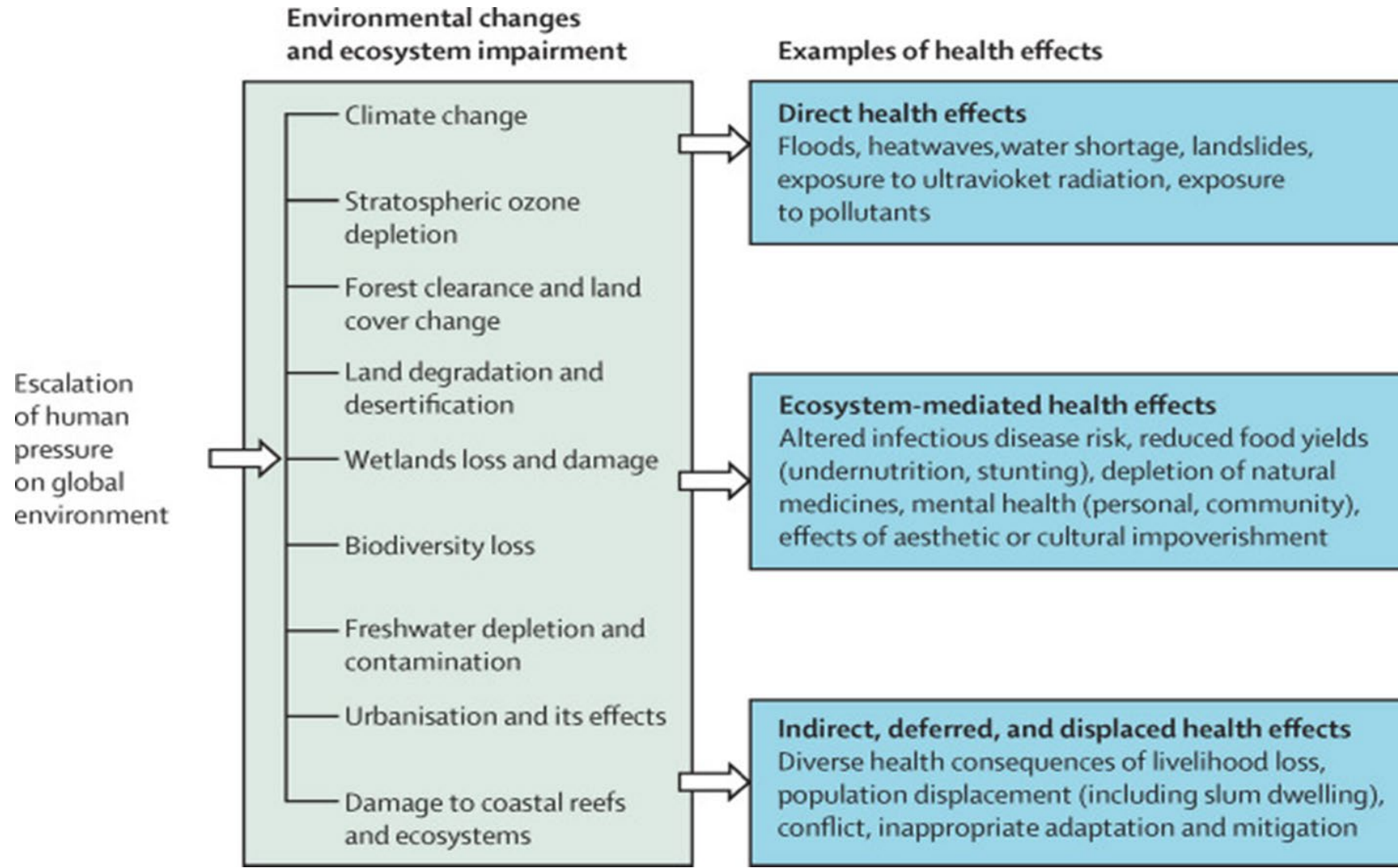
Climate change is a major global public health issue

In recent years, global climate change and related challenges have impacted human health and wellbeing

(Watts et al. 2019)







(Whitmee et al. 2015)

# Climate change and mental health

## Before

Anxiety/fear, pre-traumatic stress, anticipatory grief, anger

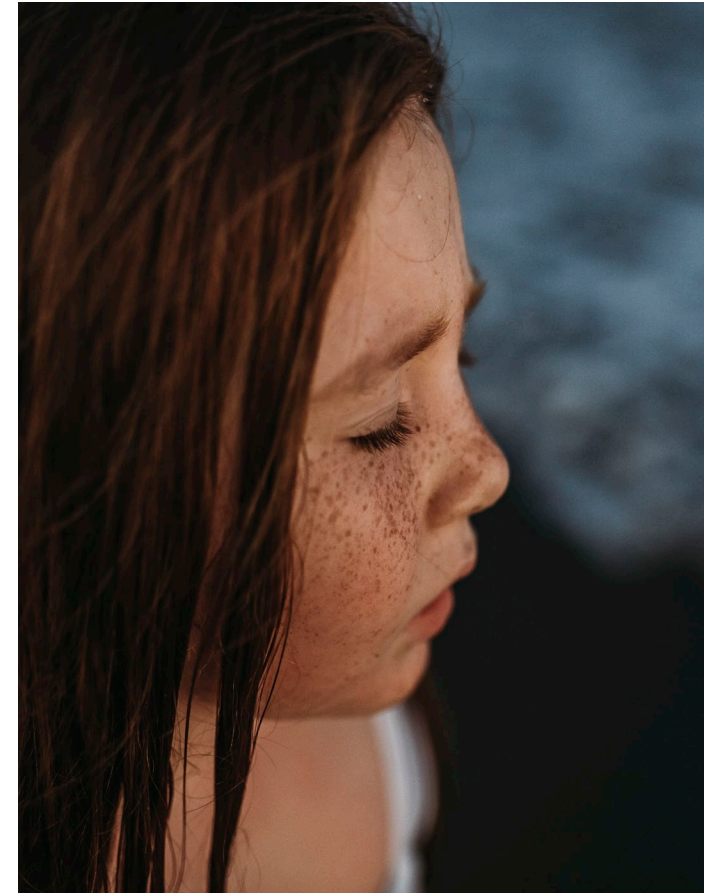
## During

Stress, fear, terror, solastalgia, overwhelmed

## After

Cultural displacement, post-traumatic stress, depression, grief, anger, addiction, domestic violence

(Gifford & Gifford 2016)

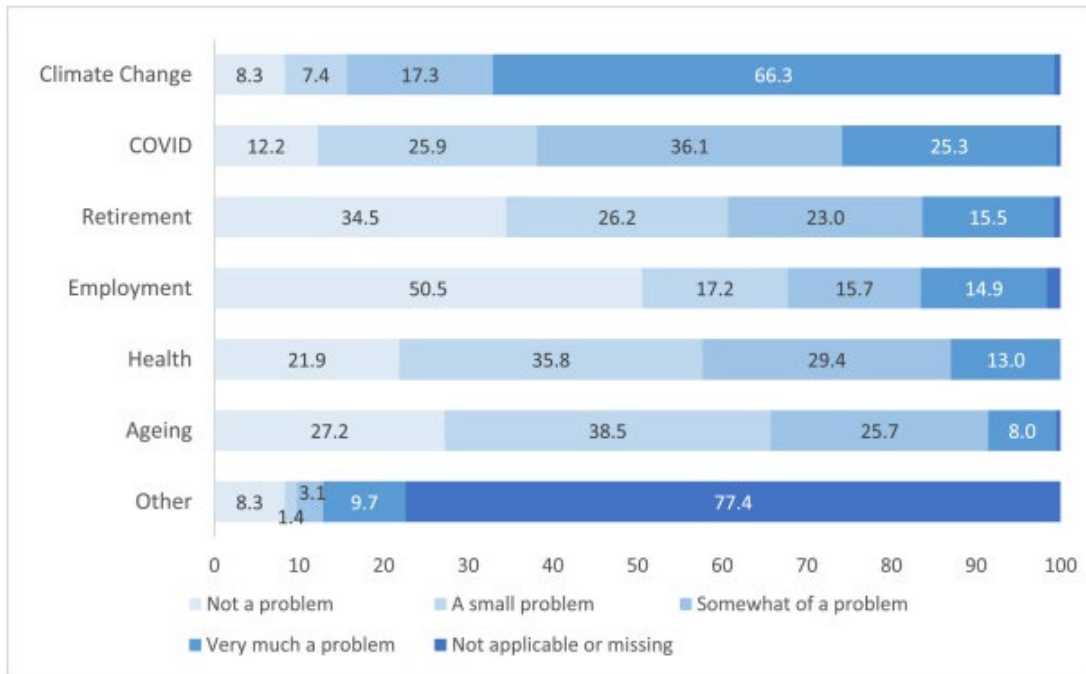


# In Australia...

- As climate change increases --> higher risk of mental health issues (Sustainability Victoria 2020; Bourque & Cunsolo Willox 2014; O'Brien et al. 2014; Berry, Bowen, & Kjellstrom 2010 )
- Psychosocial distress, depression, and increased rates of suicide in rural areas (Bourque & Cunsolo Willox 2014; O'Brien et al. 2014; Berry, Bowen, & Kjellstrom 2010 )
- 2/3 of the Australian public identified increased mental health issues related to natural disasters as the greatest health risk due to climate change (Research Australia 2020)
- Young people (18-24 years) had the highest identification rate of all health issues as risks related to climate change (Research Australia 2020)



# Australia Nation-wide survey on climate change and mental health



(Patrick et al. 2021)

- Relative personal concerns of Australians
- Cross sectional online survey – 2020
- N=5483
- Climate change as 'very much of a problem' – 66.3%  
(three times more than COVID-19)
- Very much a problem + somewhat of a problem
  - COVID-19 as a personal problem- 61.4%
  - Climate change as a personal problem- 83.6%



# Who is most vulnerable?

- Young people
- People from low SES backgrounds
- People with pre-existing mental illness
- Indigenous people



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- Indigenous people





# Young people's mental health issues related to climate change

Eco-anxiety

Eco-grief

Solastalgia

PTSD

Pre-trauma



# Climate change and young people's mental health



## Survey on climate anxiety (Marks et al. 2021)

- N=10,000
- Young people (aged 16-25 years)
- 10 countries (Australia, USA, India, Nigeria,...)
- Thoughts and feelings about climate change, and government response
- 59% felt very or extremely worried, 84% at least moderately worried about climate change
- Over 50% felt sad, anxious, angry, powerless, helpless, and guilty.
- Over 45% - feelings about climate change negatively affected their daily life and functioning



A decorative graphic in the top-left corner consisting of a teal circle and a pink triangle.

# Australia Nation-wide survey on climate change and mental health - Priority population groups

- N= 5483
- Young people (18-24 years) experiencing significant rates of eco-anxiety
- One in four people with direct experience of a climate change related event - post-traumatic stress disorder (PTSD) screening criteria
- Eco-anxiety, pre trauma and Post traumatic stress disorder
  - Young people
  - Women
  - People from low SES backgrounds

(Patrick et al. 2022)

## More studies...

### **Hope, Coping and Eco-Anxiety: Young People's Mental Health in a Climate-Impacted Australia** (Gunasiri et al. 2022)

- Exploratory mixed method study conducted in 2020
  - Semi-structured interviews (N=14)
  - Survey (N=46)
- Young people (18-24 years) in Australia
- Negative impacts of climate change - worry, eco-anxiety, stress, hopelessness/powerlessness and feelings of not having a voice
- Mediating factors – e.g. social media engagement
- Positive impacts of climate action - feeling optimistic and in control

### **Climate change-related worry among Australian adolescents: an eight-year longitudinal study** (Sciberras & Fernando 2021)

- Longitudinal Study
- At ages 10–11, 12–13, 16–17 and 18–19 years
- 18– 19 years
  - Thirteen per cent (n = 290) had high persistent worry
  - Adolescents with high persistent worry had higher depression symptoms compared to the moderate group

## In Victoria...



- Around half of Victorian young people recognized strong negative feelings related to climate change - fear, sadness, and anger (Sustainability Victoria 2020).
- Among the survey participants 15% felt that they could not mentally cope well with climate change (Sustainability Victoria 2020).

# My PhD research...

## Secondary data analysis

18-24 years

Total=  
5483 individuals (18-75+ years old)

281 (5.1%) young people aged 18-24 years

## Qualitative interviews

10 young people

18-24 years residing in Australia

60-90 minutes

Conducted online via zoom

Developing a systems map from the findings

## GMB workshops

Two GMB workshops of 2 hours

Online via zoom

Refining the systems map

Identifying strategies to promote young people's mental health



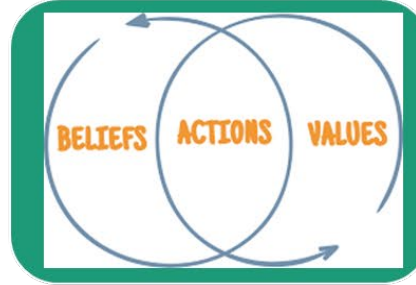
# Factors that influence young people's mental health in a climate change context



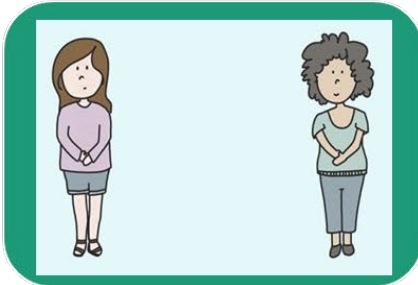
Knowledge and  
awareness



Media



Beliefs and  
values



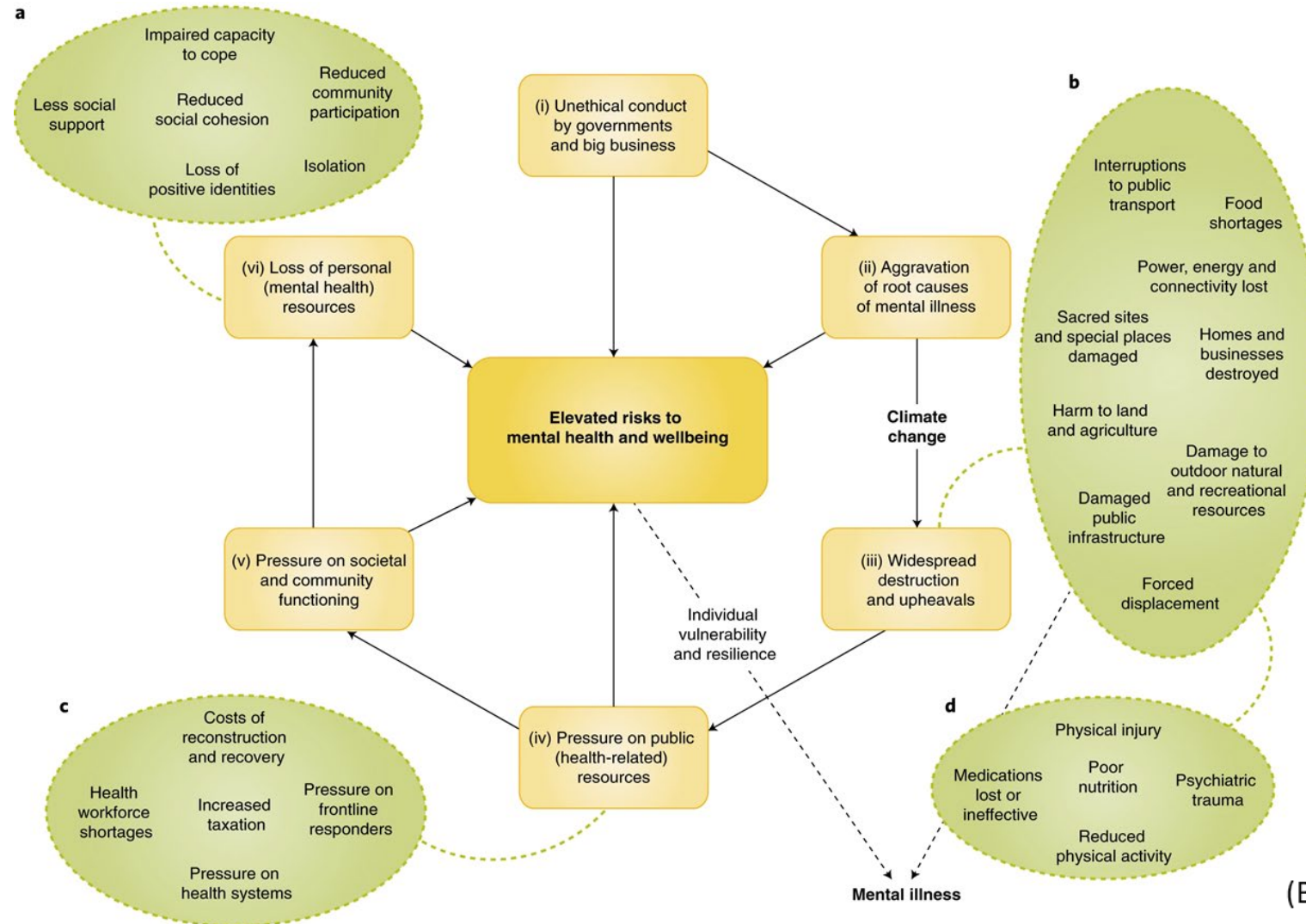
Intergenerational  
dissonance



Protective factors

Positive/  
negative  
mental health  
outcomes

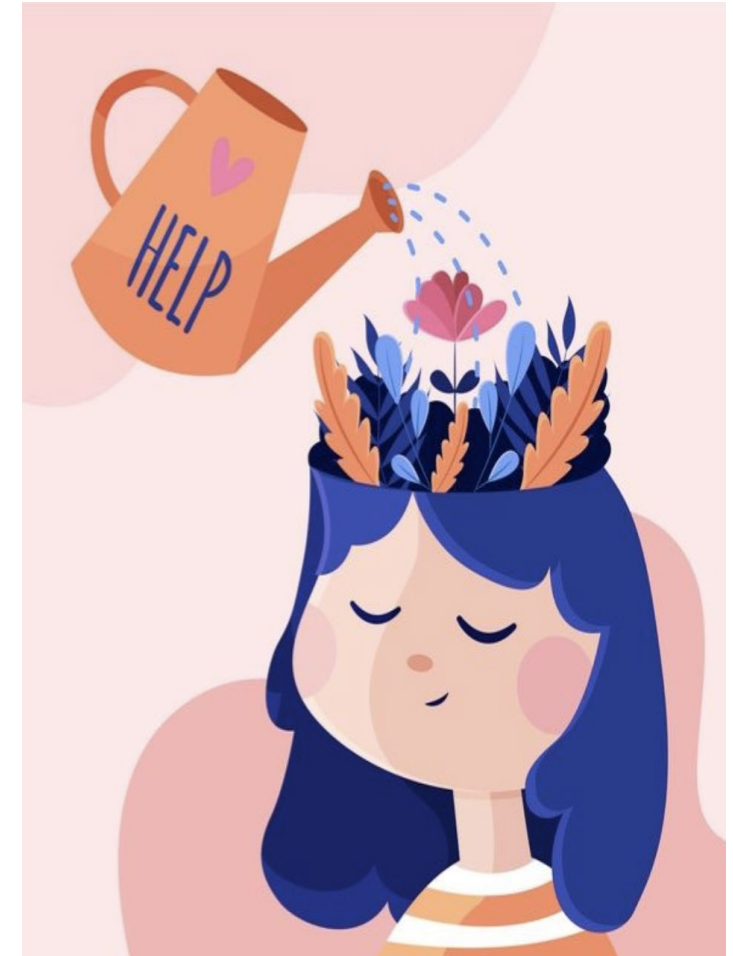
# Climate change and young people's mental health is a complex problem



(Berry et al. 2018)

# Critical knowledge gaps and opportunities

- The available mental health studies focus on the general population
- No studies that describe, conceptualise, and quantify the mental health impacts of climate change specifically on young people
- Limited studies that map the causal relationships between climate change and young people's mental health
- Lack of evidence on how climate change related mental health impacts vary among different categories (gender, location, and socioeconomic status (SES))
- Studies have focused largely on individual mental health effects rather than community-level effects (Hwong et al. 2022)
- To inform interventions that lessen the impacts
- A major tool for action and advocacy; e.g. inclusion of young people in the United Nations Sustainable Development Goals (Goal 13) (UN 2020)





# References



- Berry HL, Bowen K, Kjellstrom T (2010) 'Climate change and mental health: a causal pathways framework', *International journal of public health*, 55(2): 123–132, doi: 10.1007/s00038-009-0112-0
- Berry HL, Waite TD, Dear KBG, Capon AG and Murray V (2018) 'The case for systems thinking about climate change and mental health', *Nature Climate Change*, 8(4):282, doi: 10.1038/s41558-018-0102-4
- Bourque F, Cunsolo Willox A (2014) 'Climate change: the next great challenge for public mental health?', *International Review of Psychiatry*, 26: 415-422, doi:10.3109/09540261.2014.925851
- Gifford E and Gifford R (2016) 'The largely unacknowledged impact of climate change on mental health', *Bulletin of the Atomic Scientists*, 72(5):292–297, doi:10.1080/00963402.2016.1216505
- O'Brien LV, Berry HL, Coleman C, Hanigan IC (2014) 'Drought as a mental health exposure', *Environmental Research*, 131:181–187, doi: 10.1016/j.envres.2014.03.014
- Marks E, Hickman C, Pihkala P, Clayton S, Lewandowski ER, Mayall EE, Wray B, Mellor C, and van Susteren L, 'Young People's Voices on Climate Anxiety, Government Betrayal and Moral Injury: A Global Phenomenon', doi:10.2139/ssrn.3918955
- Research Australia (2020) *2020 Public opinion poll on health & medical research & innovation*, Public opinion polling, accessed 6 May 2021. <https://researchaustralia.org/reports/public-opinion-polling-2/>
- Sciberras E and Fernando JW (2021) 'Climate change-related worry among Australian adolescents: an eight-year longitudinal study', *Child and Adolescent Mental Health*, 27(1), 22, doi: 10.1111/camh.12521
- Sustainability Victoria (2020) *Social research exploring awareness among Victorians and our healthcare professionals of the health effects of climate change*, Linking Climate Change and Health Impacts.
- UN (United Nations) (2021) *Goal 13: Climate Action*, United Nations Development Programme, accessed 3 June 2021. <https://www.sdfinance.undp.org/content/sdfinance/en/home/sdg/goal-13--climate-action.html>
- Watts N, Costello A, Gong P, Campbell-Lendrum D and Robinson E (2019) 'Health and climate change – Authors' reply', *The Lancet*, 393(10187):2197–2198, doi:10.1016/S0140-6736(19)31134-1.
- Whitmee S, Haines A, Beyrer C, Boltz F, Capon AG, de Souza Dias BF, Ezeh A, Frumkin H, Gong P, Head P, Horton R, Mace GM, Marten R, Myers SS, Nishtar S, Osofsky SA, Pattanayak SK, Pongsiri MJ, Romanelli C, Soucat A, Vega J and Yach D (2015) 'Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health', *The Lancet*, 386(10007):1973–2028, doi: 10.1016/S0140-6736(15)60901-1



Dumez, A. 2018. Koala Loves Earth - Australian Surreal Climate Change Art Print, *Society6*, Retrieved 20 October 2021, <[https://www.google.com/url?sa=i&url=https%3A%2F%2Fsociety6.com%2Fproduct%2Fkoala-loves-earth-australian-surreal-climate-change\\_print&psig=AOvVaw2HpMPAsc2t7claNP9m5npG&ust=1634085761227000&source=images&cd=vfe&ved=0CAsQjRxqGAoTCIjYzIbSw\\_MCFQAAAAAdAAAAABDuAQ](https://www.google.com/url?sa=i&url=https%3A%2F%2Fsociety6.com%2Fproduct%2Fkoala-loves-earth-australian-surreal-climate-change_print&psig=AOvVaw2HpMPAsc2t7claNP9m5npG&ust=1634085761227000&source=images&cd=vfe&ved=0CAsQjRxqGAoTCIjYzIbSw_MCFQAAAAAdAAAAABDuAQ)>

ETBrandEquity 2019. Media and entertainment industry in India likely to reach Rs 3.07 trillion. *BrandEquity*. Retrieved 22 October 2021, <[https://www.google.com/url?sa=i&url=https%3A%2F%2Fbrandequity.economictimes.indiatimes.com%2Fnews%2Fmedia%2Fmedia-and-entertainment-industry-in-india-likely-to-reach-rs-3-07-trillion-by-fy24-kpmg-report%2F70751876&psig=AOvVaw0x\\_il7K4nav104qhGJi8vx&ust=1634189775636000&source=images&cd=vfe&ved=0CAsQjRxqFwoTCMJ7wbzVxvMCFQAAAdAAAAABAS](https://www.google.com/url?sa=i&url=https%3A%2F%2Fbrandequity.economictimes.indiatimes.com%2Fnews%2Fmedia%2Fmedia-and-entertainment-industry-in-india-likely-to-reach-rs-3-07-trillion-by-fy24-kpmg-report%2F70751876&psig=AOvVaw0x_il7K4nav104qhGJi8vx&ust=1634189775636000&source=images&cd=vfe&ved=0CAsQjRxqFwoTCMJ7wbzVxvMCFQAAAdAAAAABAS)>

Freepick 2021. Flat Design World Mental Health Day. *Pinterest*. Retrieved 23 October 2021, <[https://www.google.com/url?sa=i&url=https%3A%2F%2Fin.pinterest.com%2Fpin%2F41306521572268862%2F&psig=AOvVaw3eCQMN3kzG\\_WRWCWjr3awY&ust=1634192656373000&source=images&cd=vfe&ved=0CAsQjRxqFwoTCND9\\_ZngxvMCFQAAAAAdAAAAABAI](https://www.google.com/url?sa=i&url=https%3A%2F%2Fin.pinterest.com%2Fpin%2F41306521572268862%2F&psig=AOvVaw3eCQMN3kzG_WRWCWjr3awY&ust=1634192656373000&source=images&cd=vfe&ved=0CAsQjRxqFwoTCND9_ZngxvMCFQAAAAAdAAAAABAI)>

Hopkin, K. 2019. Unread Books at Home Still Spark Literacy Habits. *Scientific American*. Retrieved 22 October 2021, <[https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.scientificamerican.com%2Fpodcast%2Fepisode%2Funread-books-at-home-still-spark-literacy-habits%2F&psig=AOvVaw1FxnnyXxwfTAmSfw1Pru\\_N&ust=1634189728395000&source=images&cd=vfe&ved=0CAsQjRxqFwoTCLiLwaTVxvMCFQAAAAAdAAABAD](https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.scientificamerican.com%2Fpodcast%2Fepisode%2Funread-books-at-home-still-spark-literacy-habits%2F&psig=AOvVaw1FxnnyXxwfTAmSfw1Pru_N&ust=1634189728395000&source=images&cd=vfe&ved=0CAsQjRxqFwoTCLiLwaTVxvMCFQAAAAAdAAABAD)>

The New York Times 2020. How Climate Anxiety Is Shaping Family Planning, *Parenting*, Retrieved 20 October 2021, <<https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.nytimes.com%2F2020%2F04%2F15%2Fparenting%2Fclimate-change-having-kids.html&psig=AOvVaw2iBH33g7YJeirfDsUqhP5U&ust=1634191693075000&source=images&cd=vfe&ved=0CAsQjRxqFwoTCJjFkM3cxvMCFQAAAAAdAAAAABBK>>

# Thank you...

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AHPA 2022

Keeping the future in mind: Climate change and young people's mental health promotion – the research

Sue Noy, Deakin University

# Background

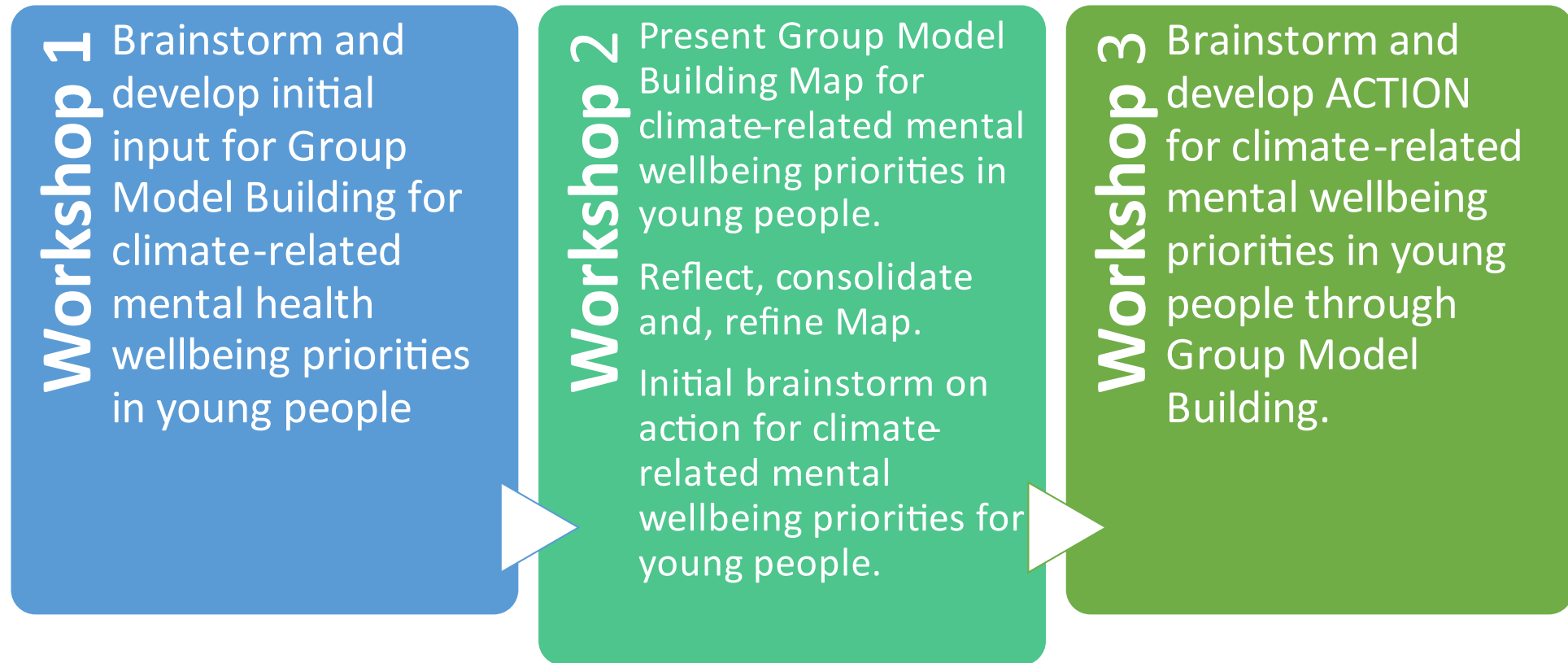
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The aim of this project was to develop a system map of the drivers of climate-related mental health, and to prioritise actions to improve mental wellbeing for young people aged 18-24 years.

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Health researchers from Deakin's *Health Nature and Sustainability Research Group* worked with the *Global Centre for Preventive Health and Nutrition*, which has expertise in systems research.

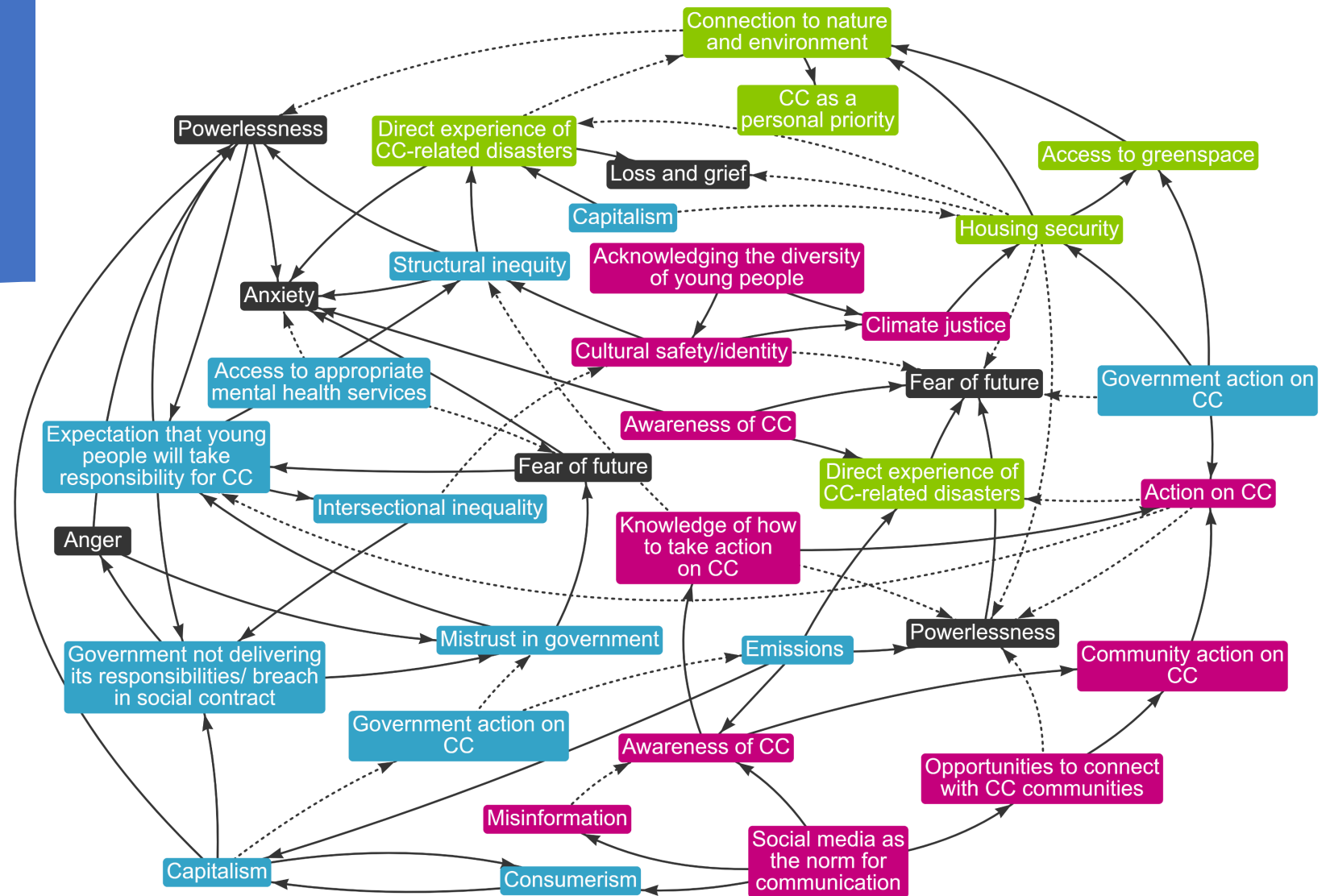
## Research Process Overview



Methods



# Findings - System Map



# Findings - Key Themes

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***Government, Services and Structures:***

**Capitalism, Intersectional inequality and structural inequity**

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***Social norms, communication and taking action:***

**Influence of social media and connecting with climate active communities**

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***Personal experience of environmental disasters:***

**Connection to nature impacts mental health and sense of power**

# Findings - Actions

<b>Government, Services and Structures</b>	National strategy on climate, health and wellbeing; organisational policies.
	Build a research base of climate change impacts to increase local government capacity to develop interventions targeting young people.
<b>Social Norms, Communication and Action</b>	Expand initiatives to support Indigenous people to implement traditional approaches to natural resources management and support local communities to care for country.
	Sustainability education focus on active citizenship based on ethic of care and support; climate resilience and media literacy embedded in education curriculum.
<b>Personal Experience of Environment and Disasters</b>	Provide opportunities for people to share distressing experiences including coping mechanisms and respite for eco-anxiety.
	Use community groups to grow resilience in the community while increasing literacy around climate and taking local and tangible action (e.g., tree planting).

# Conclusion

We identified a broad set of actions that impact on climate-related mental wellbeing in young people:

- multi-faceted approach, co-led with young people;
- drawing on Indigenous knowledge;
- change-focussed policy, education and advocacy;
- more flexible mental health services;
- community empowerment; and
- nature-based interventions.

# References

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- Allender, S., Brown, A., Bolton, K., Fraser, P., Lowe, J., & Hovmand, P. (2019). Translating systems thinking into practice for community action on childhood obesity. *Obesity Reviews*, 20(S2), 179-184. <https://onlinelibrary.wiley.com/doi/10.1111/obr.12865>
- Brown, J., Lowe, J., Rhook, E., & Brown, A. (2021). *Primary Care Partnerships for Community Resilience. A case study highlighting the role Victorian PCPs can play enhancing resilience.* <http://sggpcp.com/wp-content/uploads/2021/08/Primary-Care-Partnerships-for-Community-Resilience.pdf>
- Hovmand, P. (2014). Introduction to community-based system dynamics In *Community Based System Dynamics* (1st ed.). Springer-Verlag.
- Noy S., Capetola T., Henderson-Wilson C., Hayward J., Allender S., Gunasiri H., Bruges N., Patrick R. (2022). Keeping the Future in Mind: Climate-related mental wellbeing among young people in Australia, School of Health and Social Development/Institute for Health Transformation, Deakin University, Australia.





**Aileen Thoms**

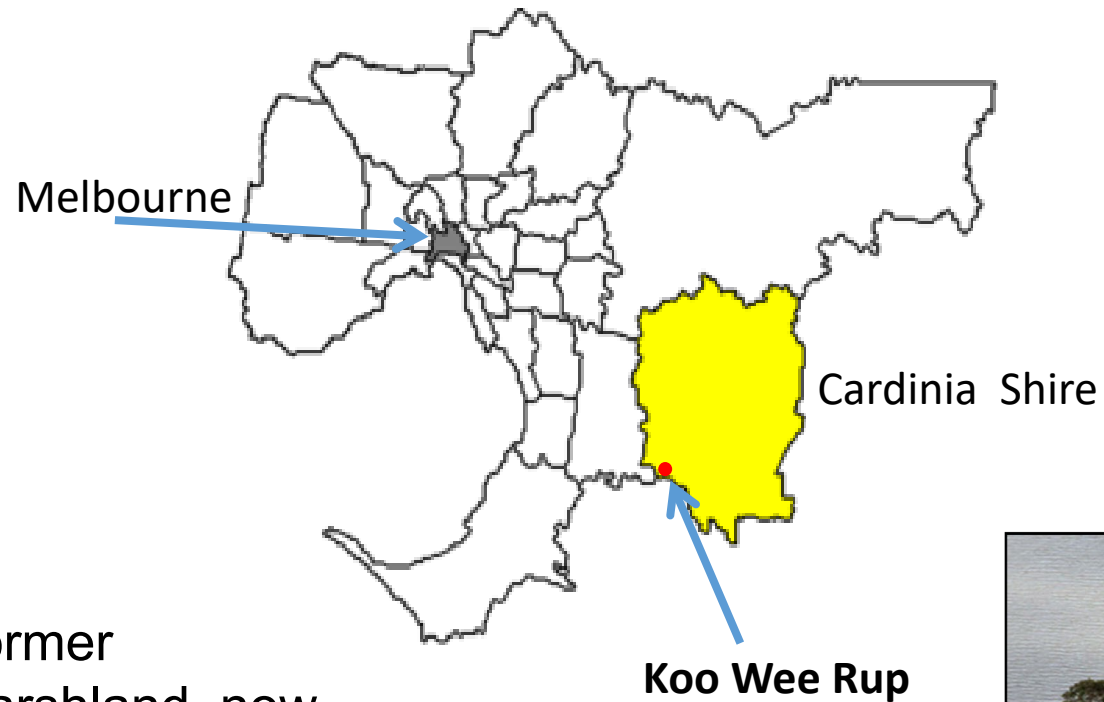
MHP, Grad Cert HP/H Ed Emergency Nursing,  
Dip LS/Nursing, RN,RPN

# Keeping the Future in Mind 2022



**Kooweerup**  
REGIONAL HEALTH SERVICE

# Koo Wee Rup, Victoria, Australia



Shocks and stresses challenge our health system

Former marshland, now asparagus and potato farms, market gardens and dairy

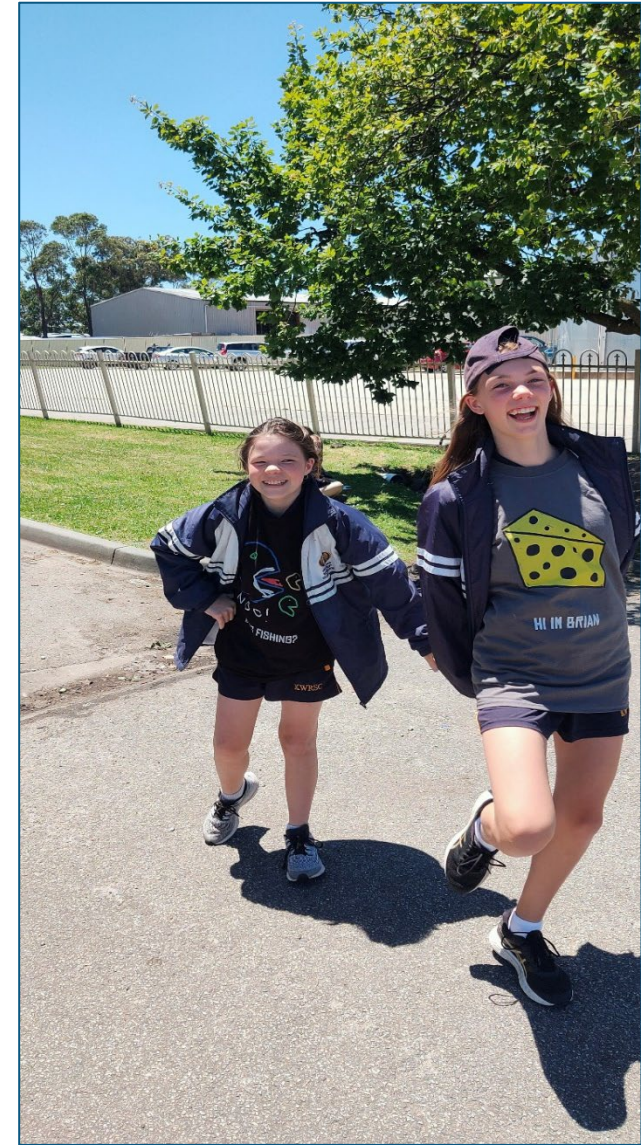


Koo Wee Rup Floods 2011



# Green Healthcare – Working Together

- Socio-ecological place based approach
- Interconnection between humans and their environment
- Build strong climate resilient communities
- Youth priority population





## Mutual Benefits for Health

## Spending time in nature = positive health benefits

Building resilience in our youth through meaningful participation in activities can enhance their social connections and belonging thus, impacting positively on their mental health and sense of wellbeing.





# Active Places

- Advocacy for climate action, open space and Nature related engagement
- Get Active Koowee
- Tree planting projects to reduce heat island effects and make spaces more habitable to be active in and supports habitat





# Environmental Awareness Survey

Please circle the one answer you feel is correct  
or best corresponds with your feelings about the statement.  
Make any notes next to the question that you want.

1. Our environment is:

1. in good shape
2. in some trouble but can be saved with a little effort
3. in bad shape but a lot of effort might save it
4. in such bad shape little can be done about it

2. Which of the following do you feel is the worst environmental problem facing the planet?

1. ozone depletion
2. toxic waste
3. global warming
4. water pollution
5. air pollution
6. deforestation

3. Who are the worst polluters?

1. industries
2. governments
3. individual people

4. Who should be responsible for making sure we have a healthy environment?

1. industry
2. government
3. environmental groups
4. individuals

5. Is the current concern over the state of the environment justified? (Do you think it is really as bad as some people say it is?)

1. yes
2. no
3. not sure

# Building Awareness





# Bandicoots and Bins





# RUOK



**1. Ask**



**2. Listen**



**3. Encourage  
action**



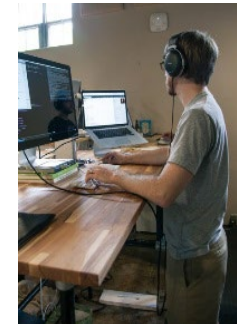
**4. Check in**

- Listen to the young person to understand their worries in relation to climate change and the impact it may be having on their mental health.
- Acknowledge their feelings
- Explore ideas of what they can do to make a difference



# Aileen Thoms

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A landscape photograph of a field with a path leading towards a distant horizon under a dramatic, cloudy sky. The path is a narrow, dark line that curves through the field, leading the eye towards the horizon. The field is a mix of green and yellow, suggesting a mix of crops or grass. The sky is a mix of grey and yellow, with a bright light source visible on the horizon. The overall mood is contemplative and mysterious.

# QUESTIONS



THANK YOU

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