

Background

What is the issue?

Climate change affects mental wellbeing through complex and interrelated pathways. Recent research (1) shows that globally the psychological burdens of climate change are affecting the lives and mental health of young people. Fear about the future and frustration with government inaction contribute to a sense of distress and powerlessness that negatively impacts mental health whereas acting on climate change can promote a sense of agency and hope (2).

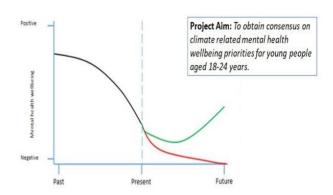
The aim of the Keeping the Future in Mind (KTFIM) project was to map the drivers of climate-related mental wellbeing, as well as actions and priorities to improve mental wellbeing of young people aged 18-24 years in Australia.

What did we do?

KTFIM used a systems thinking community engagement and research method called Group Model Building (GMB). GMB is ideal for situations where the aim is to build consensus between experts from different disciplines about how a complex problem works and what can be done about it. Facilitators guide a series of group discussion activities which they simultaneously translate into a visual "map" of the problem. The map is gradually built up into a Causal Loop Diagram (Figure 4) with a set of corresponding interventions which participants agree are feasible and will be impactful when implemented.

Participants with expertise and experience to contribute to the topic of climate-related mental wellbeing among young people included psychologists, health promoters, youth workers and young professionals engaged in climate activism. The starting point for the workshops was an evidence-based problem statement which participants agreed accurately represents the situation (See Figure 1). Over time climate change has negatively impacted mental wellbeing leading to declining mental wellbeing among young people (past through to present: black line). In the future and without intervention, the red line predicts the participants' concern, i.e., that mental wellbeing will continue to decline due to climate change. The green line represents participants' hope for the future, i.e., that mental wellbeing among young people will improve over time.

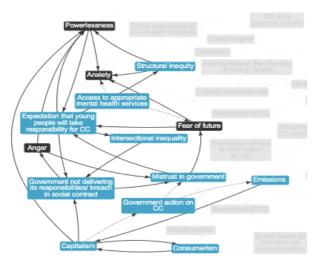
Figure 1: Young people's climate-related mental wellbeing over time: projected scenarios



In the first of the three workshops, participants identified the key factors (or drivers) affecting climaterelated mental wellbeing, and the ways in which these factors influence one another (See Figure 2 - solid line represents a mutually reinforcing relationship, dotted line inverse relationship), culminating in the development of an initial system map. For example, increasing sense of powerlessness relates to increased anxiety; increased climate change action relates to decreased powerlessness. In workshop 2 participants reviewed the map, confirming that the map and description of factors accurately reflected their previous discussions, adding factors they felt were missing from the discussion to date and confirming the logic of the three sub-topics (Blue = Government, Service and Structures; Pink = Social Norms, Communication & Action, Green = Personal **Experience of Environment and Disasters)** plus mental health outcomes (= Black). In the final workshop, participants spent time prioritising the various actions that could be taken to support climate-related mental wellbeing in relation to the three sub-themes and key areas within the system map. The final version of the map (See Figure 4) was produced at the end of the workshop series.

What did we find?

Figure 2: Government, Service and Structures



This sub-topic highlighted the deep, underlying structural issues impacting young people's climate related mental wellbeing. Participants spoke of the rupture of the 'social contract' (lower left) - In essence the disconnect between societal promises and reality due to growing inequality increased by climate change conflicting with what our society supposedly offers people (GMB1 Participant 2); leading to anger and mistrust in government. Mistrust in government feeds into fear of the future, creating a flow on effect where powerlessness increases anxiety. Capitalism and consumerism (bottom) reinforce one another and generate the conditions for government inaction and increasing emissions. Growing structural inequities (upper-right) and intersectional inequalities (mid-figure) and the expectation that young people have responsibility for climate change (middle-left) despite political powerlessness, interact & have negative impact.

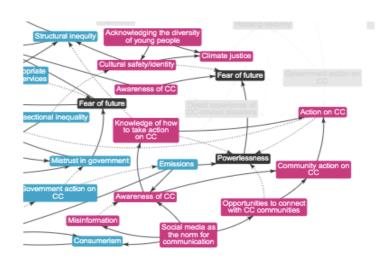
Proposed actions to address societal level drivers included: national policy on climate and health; youth advisory groups in NGOs, government and health services; emissions accountability schemes; taxation to fund a climate-resilient healthy society; regulation of manufacturing and media; and investment in secure employment and housing.

The problem is a lack of inclusion in a genuine way of young people in government and in decision making and all of the flow on effects of not having those voices there. And [we discussed] whether organisations like ones we're already members of have attended to that, whether doing it in our own organisations might be a kind of stepping-stone towards advocating for it happening in government. GMB3 Participant 9

The sub-topic of Social Norms, Communication and Taking Action (Figure 3) highlighted positive and negative aspects of social media for young people (bottom). Social media can lead to misinformation (lower left) and decreasing awareness of climate change. Conversely social media can provide opportunities to connect with climate-active communities (bottom right) and in turn promote community action on climate change (right). Awareness of climate change is linked to fear of the future and powerlessness but also can support community action on climate change. Participants highlighted the importance of acknowledging diversity among young people as part of promoting climate justice and cultural safety/identity. Proposed actions to intervene included: initiatives to support Indigenous peoples to implement traditional approaches to natural resources management and support local communities to Care for Country and sustainability education focusing on active citizenship and climate resilience. Upskilling of youth, frontline, health and peer support workers on climate-related mental wellbeing was underscored. Noting social media is a norm for climate communication, it was recommended that young people should be taught media literacy, including how to moderate its use and stay mentally healthy in the face of climate change information.

Social media ... has a role as a solution to help ... young people cope, help raise awareness, but it also has a role in generation of some fears and use of algorithms to reiterate misinformation; it should go up there as a possible problem and possible thing that can help as well. GMB1 Participant 4

Figure 3: Social Norms, Communication and Taking Action



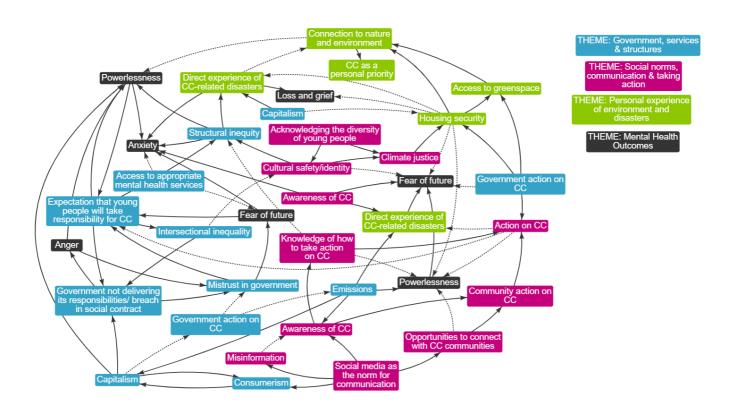
Findings

The sub-topic of Personal Experience of Environment and Disasters (Figure 4) highlighted that connection to nature and environment (top) is a result of increased access to green space (upper right) and has a positive impact on the mental wellbeing of young people. As people have better access to affordable and secure housing (top right) they are more likely to have reliable access to greenspace. When direct experience of climaterelated disasters (upper left) increases and connection to nature decreases, powerlessness can increase (upper left). Proposed actions included: provision of community support and re-engagement for disaster-impacted individuals; opportunities for sharing distressing experiences to promote coping and respite from ecoanxiety; building community resilience through community groups whilst promoting climate literacy and taking action, e.g., tree planting or advocacy.

Figure 4: Visual Map/Causal Loop Diagram (incorporating Theme 3 Personal Experience of Environment and Disasters)

Black items in the visual map represent Mental Health Outcomes including anger, fear, anxiety, grief and powerlessness. The repetition of the outcomes Fear of the future and Powerlessness highlight the multiple drivers/factors driving mental wellbeing. Figure 4 also highlights that factors are linked across sub-topics, reinforcing and interacting with these mental health outcomes. For example, fear of future (right) is driven by government action on climate change (blue), direct experience of climate change (green) and awareness of climate change (pink).

These two actions – greening cities and recognising and respecting Indigenous knowledges and communities could be integrated into one action, so the scale that we thought best suited was local government and community level, but also with support from state government; and research into the best ways to green specific locations, because different cities would require different things, based on their geography and the weather patterns in that area etc.; and how benefits might be measured from greening cities so that investment into those green cities is ongoing."GMB3 Participant 5



Recommendations

What does this mean?

Mental health support is about reconnecting young people in ways that are meaningful for them and that help them to rebuild their lives, including taking actions in their local areas. GMB 3 Padlet contribution

The rich tapestry of ideas that were generated from the workshops reflected the depth of experience of the participants as well as the synergy that results from the iteratively guided GMB approach. Participants vividly evoked the experience of young people; the sense of fear and powerlessness linked to not having a voice, not having their concerns acknowledged or acted upon, and feeling that the onus is on them to manage a climate-changed and uncertain future. However, they also identified positive drivers such as social media as a catalyst for promoting wellbeing by providing a connection to a community of shared values and climate action; connection to nature as well as having a voice and role in decision-making.

The GMB space enabled an interdisciplinary group to share their ideas and identify a set of actions they believe would have an impact on climate-related mental wellbeing among young people. Implicit to the conversation were the guiding principles of: prioritising Indigenous Knowledge Systems, supporting co-design and co-led initiatives with young people, enabling multifaceted approaches that operate at different scales, and promoting community empowerment, advocacy and education.

What is recommended?

Policy and Governance

- Ensure representation and inclusion of young people and Indigenous people in decision-making, e.g., advisory groups in NGOs, government and health services.
- Advocate for, endorse and implement organisational and national level *policy on climate and health*.
- Advocate for national guidelines on social media and misinformation which include reference to climate change misinformation
- Advocate for regulation and taxation schemes to incentivise emission reductions and promote green manufacturing, reduce the social and environmental harms of capitalism and consumerism, and promote youth employment and secure housing.

Practice and Programs

- Expand initiatives in key areas: nature-based interventions to reconnect young people with nature; Caring for Country approaches led by Indigenous people; and community-led resilience initiatives that promote climate literacy and tangible action on climate change mitigation and adaptation.
- Develop programs to support individual and community preparation for and recovery from disasters; build climate-resilient and healthy communities including providing opportunities for people to share distressing experiences, develop coping mechanisms and relief from eco-emotions.
- Invest in multi-faceted co-benefit initiatives, such as Green Cities, which are place-based, promote community empowerment and enable advocacy, education and change-focused policy,

Capacity and capability development

- Generate research and evidence to increase local government and NGO capacity to raise awareness of young people's climate-related wellbeing, and codesign interventions with young people.
- Ensure education curriculum at all levels includes a focus on active citizenship, climate resilience and media literacy.
- Training and upskilling of mental health, youth, frontline and peer support workers in the area of climate-related mental wellbeing including trauma and resilience.



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