

YOUNG PEOPLE OF AUSTRALIA AND CLIMATE CHANGE: PERCEPTIONS AND CONCERNS

A Brief Report

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Abstract

This study investigates the perceptions of young people in the Australian community of climate change, and explores the impact of this issue on their psychosocial wellbeing.

We employed a closed-form on-line questionnaire to examine the participants' personal thoughts about climate change, as well as their perception of the beliefs held by family, friends, and other sectors of the community.

The questionnaire was publicly accessible via Facebook and through an email database sent to parents and community organisations working with youth. A total of 102 responses were received, which were filtered to leave 74 responses from Australian participants aged 7 – 25 years.

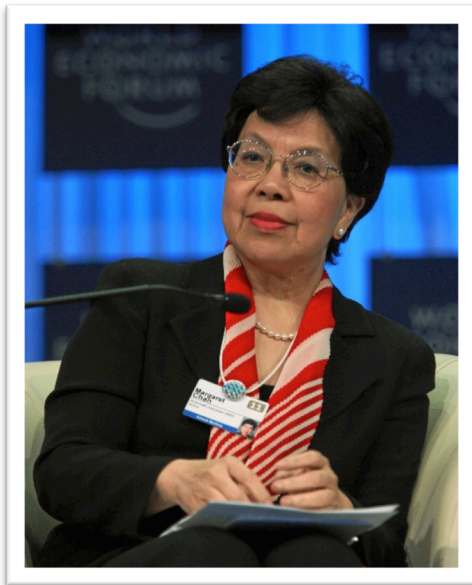
Our survey data conclusively shows a link between climate change and young people feeling anxious, depressed and disempowered.

Approximately 96% of the participants consider climate change to be a serious problem; with 89% of them saying that they are worried about the effects of climate change.

Feelings of disempowerment were significant, with more than 70% of the participants concerned that people do not, or will not take their opinions on climate change seriously. While many respondents were taking action in their own life to mitigate the effects of climate change, they expressed concern that their actions were inadequate.

Furthermore, about 60% of the respondents think that the Australian government does not adequately acknowledge climate change as a serious problem, and is not committed to tackling this issue.

This preliminary study highlights the urgent need for more comprehensive research. The discussion looks at the implications for how we teach and discuss climate change, and the messages we deliver through community engagement.



“A ruined planet cannot sustain human lives in good health. A healthy planet and healthy people are two sides of the same coin.”

Dr. Margaret Chan, Executive Director of the World Health Organization

DAVOS/SWITZERLAND, 28JAN11 - Margaret Chan, Director-General, World Health Organization (WHO), Geneva, is captured during the session 'Raising Healthy Children' at the Annual Meeting 2011 of the World Economic Forum in Davos, Switzerland, January 28, 2011. Copyright by World Economic Forum swiss-image.ch/Photo by Remy Steininger

Introduction

Climate change refers to any alteration in the climate over a period of time, including that which occurs naturally as well as the change due to human activity.¹ Although the depth of their knowledge may vary, most people today have at least heard of climate change, and most associate it with the recent and accelerating response to human activity.

When climate change is mentioned we often think of physical manifestations such as increasing temperatures, melting polar ice caps and rising sea levels.² However, the impacts of climate change encompass more than these primary environmental changes. There are downstream effects, some of which impact on health and healthcare.³ The World Health Organisation has acknowledged the correlation between the changing climate and health, and while new

measures are responding to threats to peoples physical wellbeing⁴, there appears to be less emphasis on the mental aspect of this problem.⁵⁻⁷ Just as the mainstream model of health has evolved beyond purely physical aspects to include psychological and social elements, we need to ensure that the same approach is applied to the potential health implications of climate change. Our literature review showed scant research pertaining to the impact on the human psyche, compared to the studies observing physical health consequences. The American Psychological Association noted this disparity in their recently released report on the connection between climate change and mental health, which linked the global phenomenon to stress, depression and anxiety, alongside signs of disempowerment through psychological responses such as fear,

helplessness and resignation.² There is still a stigma associated with mental health, exacerbated by the common misconception that the topic exclusively revolves around mental illness, mental problems and mental disorders. The term “mental health” however, includes states of mental wellness and emotional resilience.⁸

Data from a survey funded by the Australian Department of Health estimated that as of 2014 over half a million Australian children and adolescents experienced a mental disorder.^{9,10} This represents approximately 14% of the Australian population.^{9,11} In another report, the number of children and young people

obtaining primary mental health care funded by Medicare tripled from 2006-07 to 2011-12.¹²

While traumatic events, including sudden onset natural disasters, such as floods or fires can induce elevated stress levels, there is evidence that slow gradual changes in the environment can also invoke psychological distress, which may compound over time.² This condition is referred to by several names, including but not limited to solasthalgia, and ecoanxiety.^{5,13} In this context, we constructed a survey to explore how young people in Australia perceive climate change, and how big an impact this perception is on their lives.

For several years now I have experienced a growing sense of worry regarding climate change and global warming.”

– J, 17 years old, MK member

Context

Millennium Kids Inc. (MK) is a non-government environmental youth organisation aimed at empowering youth by promoting action and advocacy. The MK agendas are determined by its youth membership, with project design and delivery supported by adults.

Since MK's inception in 1996, young people have had an opportunity to raise their concerns about the environment through an annual “ Kids Challenges on the Environment “ process. The young participants, 10 – 25 years, have an opportunity to determine the environmental issues they believe are most pressing. Climate change and global warming have been on the MK youth agenda every year since 1996.

Membership of MK implies that the young people in this group have an interest in understanding the current state of the environment, and as part of that, an awareness of the progression of climate change. They also tend to have a less-than-positive outlook for their future. They expressed frustration over the dismissal of their concerns and opinions on matters they considered important. This perception of disregard by people in power, including

but not limited to policy makers, can become disempowering. Millennium Kids has observed this as a recurrent theme - a perceived bleak future, coupled with a lack of a voice.

Hi, my name is Javier and I am seventeen years old.

I am speaking on behalf of Millennium Kids, an organisation that seeks to empower young people to create positive change in the world.

For several years now I have experienced a growing sense of worry regarding climate change and global warming. Its effects are becoming increasingly prevalent throughout the world: rising temperatures, melting polar ice caps and resultant high sea levels, prolonged periods of drought, ocean acidification and progressively more violent and unpredictable storms such as hurricane Irma. I believe that serious action has to be taken if we want our planet to still be life supporting in one hundred years time.

Climate change is something that most people are aware of but which is rarely

discussed in our daily lives. Often we are distracted by personal, short term goals and don't consider the impact our actions are having on the environment. In Western Australia particularly we seem to be far more focused on squeezing money out of mining and coal production than finding more sustainable means of energy production for the future. I strongly believe that we as a state need to start taking more responsibility for the environment and our future generations. We need to take action to prevent climate change before too much damage is done.

Hi, I am Hannah and I am seventeen years old. I am worried about climate change, too.

The UN says it is the poorest people on the planet who will be the most vulnerable to climate change. These people are not the only ones who will face the consequences of climate change. We should take responsibility for our actions.

As Mahatma Ghandi said, "The earth provides enough to satisfy man's need but not every man's greed." Because we are being greedy with resources, the poorest people are the ones who feel the most effects.

Hi, I am Kaiden. I am a Millennium Kid.

I am anxious about climate change. With temperatures heating up and sea level rises I think we should take action now and reduce greenhouse gases that seem to be

causing some of our problems. I went to the Millennium Kids Pitch for the Planet event in July 2017 and pitched my idea for a Festival of Fun. I put together a whole lot of ideas that kids could do to help the planet.

We think a lot of kids like us are worried about climate change. It keeps them awake at night. At the Pitch event, we met with Aaron and Hong and talked to them about climate change. Aaron showed the MK Council their survey and got feedback. They are helping us find out how other young people feel about climate change.

This study results from Millennium Kids deciding to investigate how widespread this perception is within its target demographic of young people under the age of 25 years. The objective of this survey was to generate significant empirical data on the prevalence of eco-anxiety in the population of interest, including that beyond the MK membership. We aimed to provide a more objective assessment, beyond the previous reliance on anecdotal evidence. The link between young people's perception of climate change with their mental wellbeing is not well understood and, while it may be ambitious to want to provide definite answers, the goal is to start the conversation on the topic of eco-anxiety. We anticipate that the survey will provide a framework for improved future programmes through better insight into the situation.

i. Study design

This study employed a closed-form questionnaire, with three main areas of focus chosen to evaluate perception of climate change and the degree of empowerment/disempowerment.

The first section contained ten questions to assess the individual participant's personal thoughts (Table 1). This section included questions about how worried they are about the state of the environment, how much they think they know about the topic of climate change, how environmentally-friendly they think they are, whether they are able to freely converse about climate change and whether they thought people took their opinions seriously.

The second section had eight questions probing the participants' understanding and/or perception of family and friends' knowledge and opinions on climate change (Table 2).

The third section comprised five questions to extend the inquiry to the participants perception of knowledge and views held by the wider community e.g. schools, workplace, government (Table 3).

Each question presented participants with a statement, with which they could agree, disagree, or neither on a 5-point scale (i.e. Strongly Agree, Agree, Neither

Agree nor Disagree, Disagree, Strongly Disagree).

A supplementary field at the end of each question gave participants the option to elaborate on their answer.

To develop the questionnaire we conducted focus groups during various Millennium Kids workshops to identify the concerns of the prospective participants.

The survey parameters were also discussed with the Millennium Kids Youth Board.

The language used in the survey was adjusted to be age-appropriate, and to ensure that participants who did not have English as a first language were able to readily comprehend the statements and questions. A full trial was conducted with a group of 19 participants before finalising and launching the survey.

ii. Participant selection

The questionnaire was open to the public and there are no eligibility restrictions to participation. Parents were required to sign the on line survey if students were under 18 years. All surveys were anonymous.

However, for the purpose of this report, the demographic of interest are the participants from Australia aged between 7 to 25 years.

iii. Data collection

The questionnaire was publicly accessible via Facebook and through an email database sent to parents and community environmental organisations working with youth.

The survey was conducted with the use of Google Forms. Participants were asked to provide their age, gender, nationality and highest level of education. They were invited to provide a mode of contact if they wished to receive a report on the survey. All responses are otherwise anonymous, and contact details were not linked to the survey data. The response data are held in password-protected storage, with data access only granted to the primary investigators.

iv. *Data analysis*

The responses were filtered on age and location to generate a subset from Australia aged 25 years or less.

Responses for each question were analysed for trends.

For the optional portion of the survey, key words were identified and characterised as positive, negative or neutral.

Data analyses were conducted exclusively by the primary investigators.

v. *Ethical consideration*

Approval for the conduct of this study was gained from Human Research Ethics Committee of the University of Western Australia prior to the commencement of the data collection.

Table 1: Ten questions assessing participants' personal thoughts

Questions	Available responses
I feel that I know a lot about climate change.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
I feel that climate change is a serious problem.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
I think about issues relating to climate change all the time.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
I am worried about the effects of climate change.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
I feel that I am environmentally-friendly.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
I feel that my actions are making a difference.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
I feel that I can freely express my thoughts on climate change.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
I feel that my opinions on climate change matter.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
I feel that other people will take my opinions on climate change seriously.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
I feel that climate change will be an issue in the future.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree

Table 2: Assessing understanding and/or perception of family and friends of climate change.

Questions	Available responses
My family knows a lot about climate change.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
My family feels that climate change is a serious problem.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
My family is concerned about climate change.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
My family is environmentally-friendly.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
Most of my friends know a lot about climate change.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
Most of my friends feel that climate change is a serious problem.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
Most of my friends are concerned about climate change.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
Most of my friends are environmentally-friendly.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree

Table 3: Assessing their thoughts at a community level e.g. schools, workplace, government.

Questions	Available responses
I believe that Australian government thinks of climate change as a serious issue.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
I believe the Australian government is doing a good job to save Earth.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
I think schools should teach more about climate change.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
I feel that my school is environmentally-friendly.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree
I talk to other people about my concern towards climate change.	Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree

Results

The survey was open for response from November 2017 to April 2018. A total of 102 responses were received during this period, 90 of which were from Australians. Of these, 74 were aged 25 or younger. The other 12 respondents were from China, France, Germany, India, Malaysia, Romania, South Africa and Sri Lanka.

Where cited below, verbatim data provided by participants is indicated as (P).

Which part of Australia are you from?

90 responses

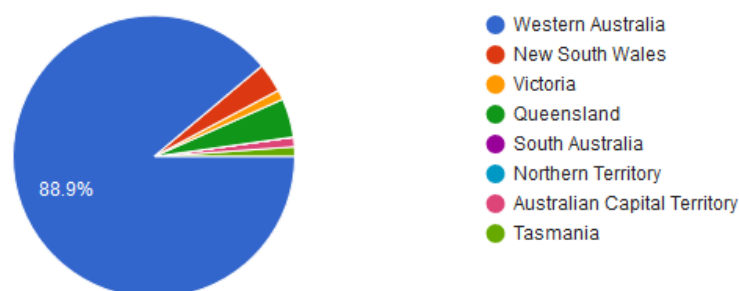


Fig. 1: Breakdown of Australian participants by state.

Eighty (80) individuals were from Western Australia, four (4) from Queensland, three (3) from New South Wales, one (1) from Australian Capital Territory, one (1) from Victoria and one (1) from Tasmania.

How old are you this year? (what range does your age fall into?)

90 responses

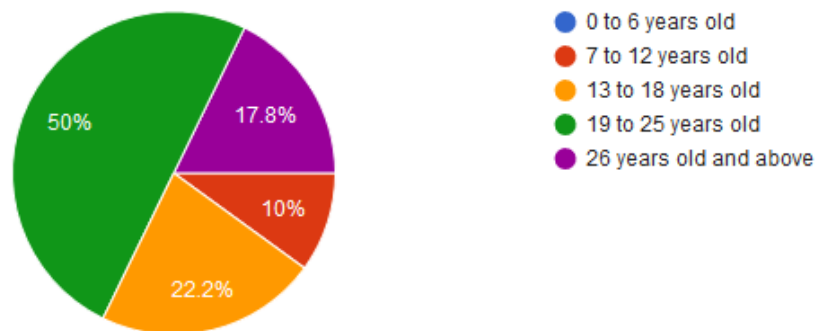


Fig 2: Breakdown of the Australian participants by age groups.

Nine were between 7 to 12 years,

Twenty were between 13 to 18 years

Forty five were between 19 to 25 years

Sixteen were over the age of 26 years.

Part 1: About the individual

1. I feel that I know a lot about climate change.

74 responses

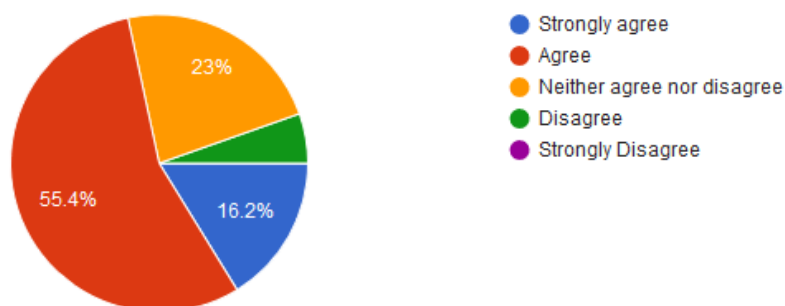


Fig 3: Self-assessment of Australian participants under 26 years of age on their knowledge of climate change.

From comments provided, there was one instance of knowing in depth, and five instances of knowing some but not a lot.

Data were similar for Australians over 26 years, with 18.8% strongly agreed, 50% agreed while the remaining 5 respondents neither agreed nor disagreed.

2. I feel that climate change is a serious problem.

74 responses

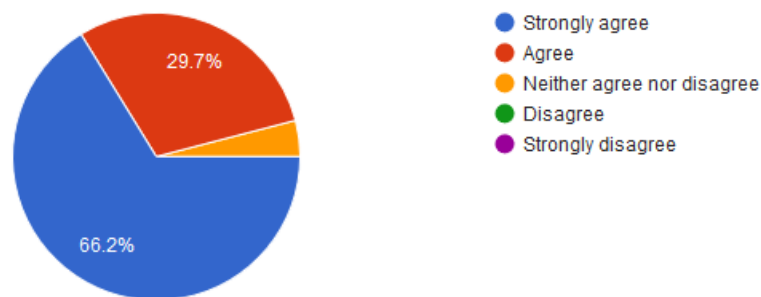


Fig 4: Perception that climate change is a problem in Australians under 26 years.

There were 10 additional comments relating to the link between human activity and a changing environment. One comment (P1) stated that “[n]o empirical evidence exists that shows direct correlation between human activity and climate change”. The remaining comments took a different view, such as (P2): “It affect the world and we aren’t putting enough emphasis on it.” and (P3): “The huge changes of weather in WA recently had brought my attention to the issue and feeling that it is going to be the most serious problem in the future.”

3. I think about issues relating to climate change all the time.

74 responses

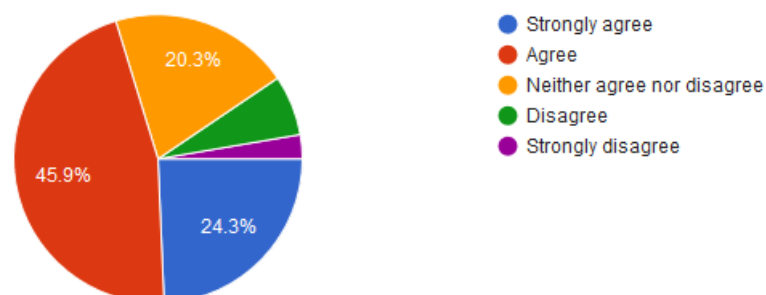


Fig 5: Frequency of Australians under 26 years thinking about climate change issues

The comments section had six counts of “not all the time” or “with prompting”. There were two counts of the word “worry” being used, with one of the comments (P4) saying: *“I’m quite worried about my future being destroyed due to climate change. Sometimes, I couldn’t sleep - keep thinking of it. I haven’t told anyone about it, ‘cause I reckon everyone doesn’t seem to care.”* Three comments were about human activity resulting in climate change. Two comments were about futility of action.

4. I am worried about the effects of climate change.

74 responses

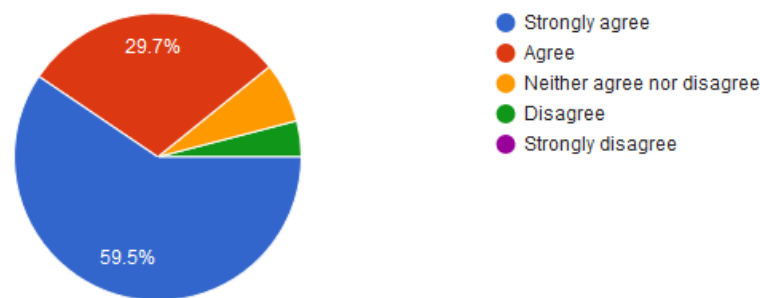


Fig 6: Proportion of Australian youth worrying about climate change effects.

Six individuals talked about how they were worried because they will personally be affected. Comment such as (P5): *“Because it’s going to negatively impact me, my friends, and my family. Hotter weather, rising sea levels, bushfires, etc.”* and (P6): *“Like with every other issue that affects the future, any children I were to have alongside myself will be affected drastically as it continues to worsen.”* Four were about how it would affect other people and living things. Two comments touched on inaction and lack of concern by the public. Comment such as (P7): *“No one takes this topic seriously and no one is doing anything.”* One participant was unsure of the implications and another one was sceptical.

5. I feel that I am environmentally-friendly.

74 responses

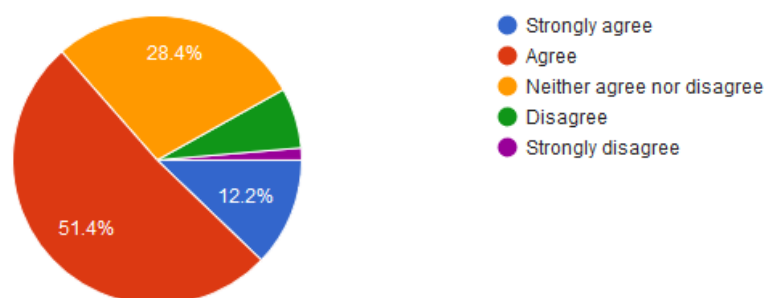


Fig 7: Self-assessment of environmental-friendliness for Australian youth.

Seven comments were regarding recycling. Four were about reducing plastic use, such as comment (P8): *“I avoid single-use plastics, try to limit any waste, vegan, am conscious about where I put my dollar ie towards a ethical company ..”*. There were three participants who talked about public transport and one about changing to a more fuel-efficient vehicle.

6. I feel that my actions are making a difference.

74 responses

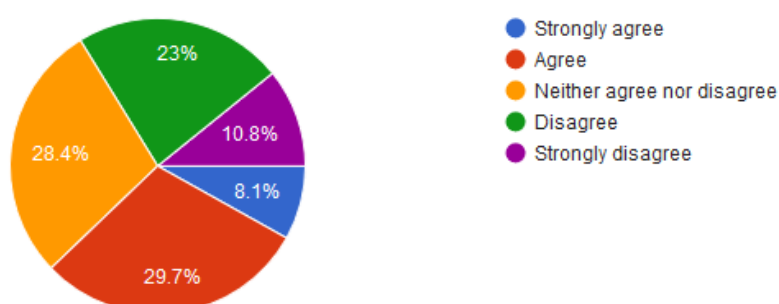


Fig 8: Proportion of Australian youth feeling that their actions make a difference.

Sixteen responses out of the eighteen related to small scale individual action. Half of these comments stated that individual action can bring change if more people are involved, such as (P9): *“I do believe that we need to do more but if everyone did a little something than it would make a bigger difference than everyone doing nothing”*, and (P10): *“It doesn't feel like enough. I can't stop climate change on my own so if more people and businesses put in an effort to reduce their footprint, I might feel*

better.” One stated that he/she agreed with the statement because the alternative would dishearten him/her. One felt that it does not make a difference to the public but is willing to continue for individual benefit and satisfaction, saying (P11): “Not much of a difference, but I’m doing my best. Currently a few friends and I are working on making our canteen more environmentally friendly by cutting back the amount of plastic it uses.”

For comparison, while only 37.8% in the target group either agree or strongly agree that their actions make a difference, the figure jumps to 56.3% for Australian respondents over 26 years.

7. I feel that I can freely express my thoughts on climate change.

74 responses

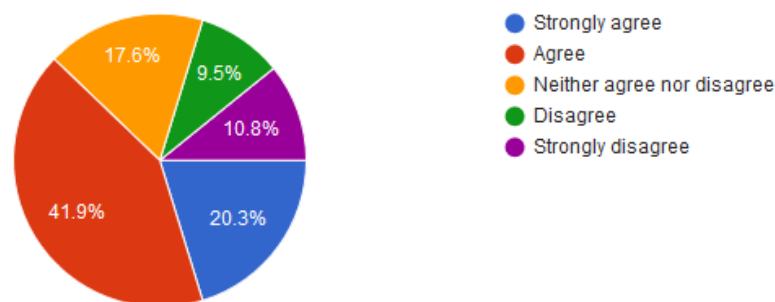


Fig 9: *Freedom to express opinions regarding climate change in Australian youth* Twelve respondents felt that they were able to freely express their opinions on climate change, with four feeling that their opinions are being dismissed. Two participants were not comfortable, fearing persecution or being labelled.

In the over 26 year old group, there was one comment citing that climate change was a “con” and that the public was “brainwashed” which made it difficult to air his/her views on the matter.

8. I feel that my opinions on climate change matter.

74 responses

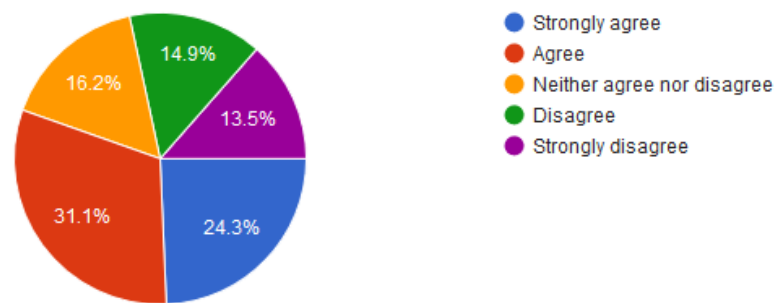


Fig 10: How much Australian youth feels their opinion matters.

Twelve individuals feel that their opinions matter, such as (P12): *“My opinion matters because I am of the younger population who is currently and will have to deal with this huge problem in the near future. Climate change and ageing population are going to be the bane of my generation's existence.”*, Three of these respondents said they had the right to voice their thoughts because climate change affects them.

One over 26 years, non-Australian respondent mentioned that action was preferable to words and that people should not “harp on about things”.

9. I feel that other people will take my opinions on climate change seriously.

74 responses

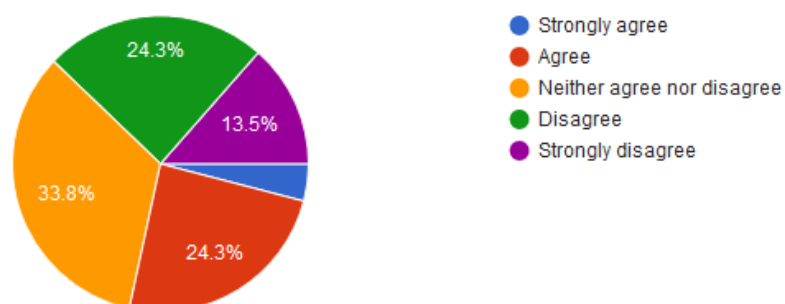


Fig 11: Australian youth opinion on being taken seriously on the topic of climate change

Thirteen of the comments state that there is a “lack of concern”. One felt that the older generation is more likely be “dismissive”. Two people felt that they were not taken seriously because their beliefs were contrary to “mainstream” public opinion (which they saw as recognising the effects of climate change and climate action). Comments such as (P13): *“I am young no one ever takes us seriously because we don't necessarily think of money first and foremost, unlike some of our political representatives.”*

10. I feel that climate change will be an issue in the future.

74 responses

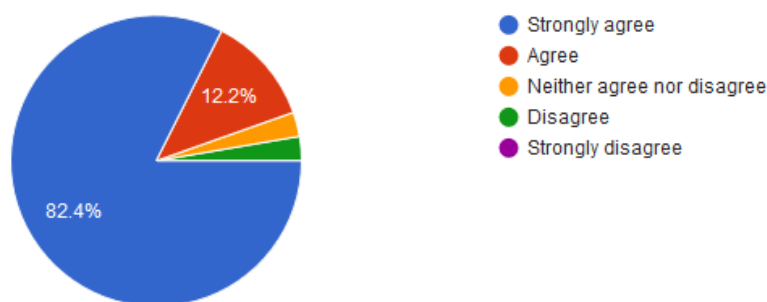


Fig 12: Proportion of young Australians feeling that climate change will be a problem in the future.

Eleven comments are about it being a pre-existing problem which will continue to the future. One comment stated that it will be “solved in two decades”. One comment expressed uncertainty for the future.

Part 2: Family and friends

11. My family knows a lot about climate change.

74 responses

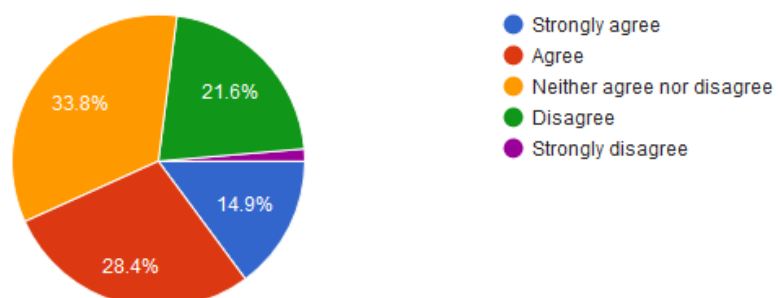


Fig 13: Perception of Australian youth regarding climate knowledge of family members.

12. My family feels that climate change is a serious problem.

74 responses

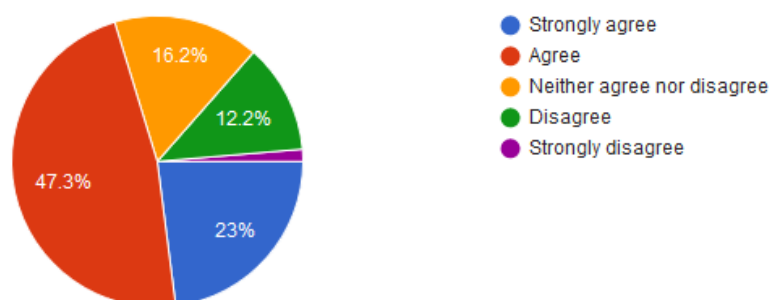


Fig 14: Perception of Australian youth regarding whether their family feels climate change is a serious issue

13. My family is concerned about climate change.

74 responses

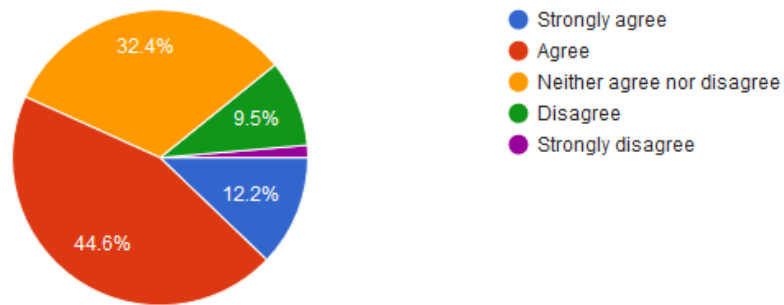


Fig 15: Perception of Australian youth with respect to whether their family is concerned about climate change.

14. My family is environmentally-friendly.

74 responses

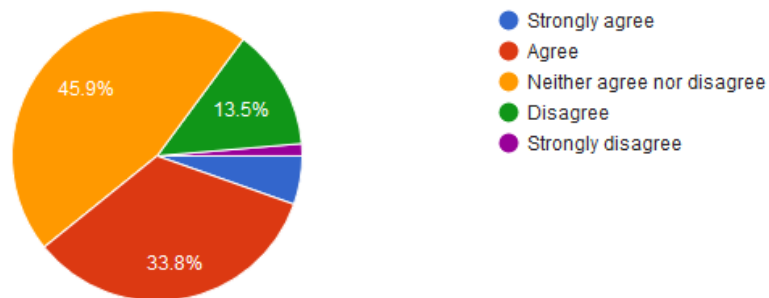


Fig 16: Perception of Australian youth on whether their family is environmentally-friendly.

15. Most of my friends know a lot about climate change.

74 responses

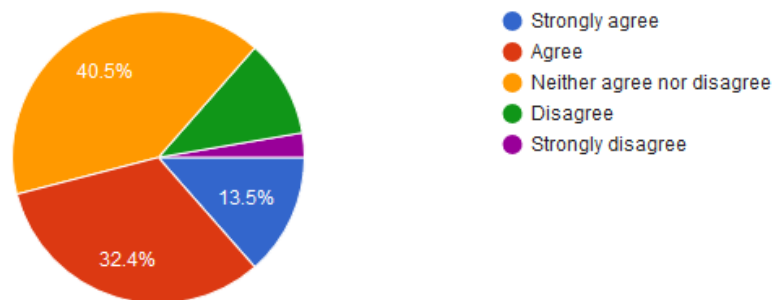


Fig 17: Perception of Australian youth regarding climate knowledge of friends.

16. Most of my friends feel that climate change is a serious problem.

74 responses

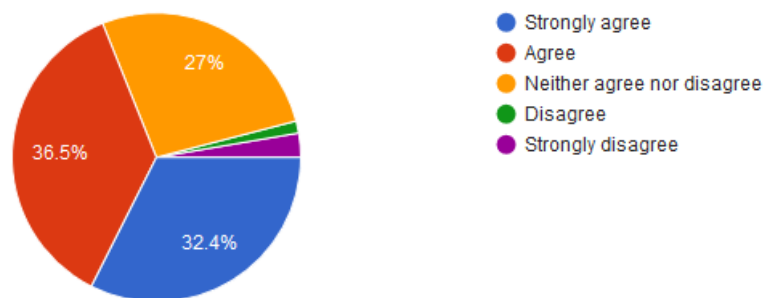


Fig 18: Perception of Australian youth regarding whether their friends feel climate change is a serious issue

17. Most of my friends are concerned about climate change.

74 responses

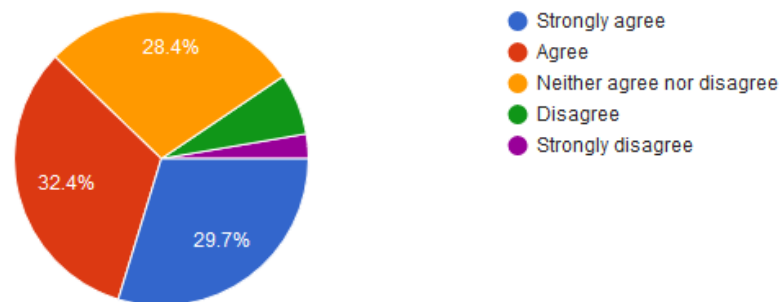


Fig 19: Perception of Australian youth with respect to whether their friends are concerned about climate change.

18. Most of my friends are environmentally-friendly.

74 responses

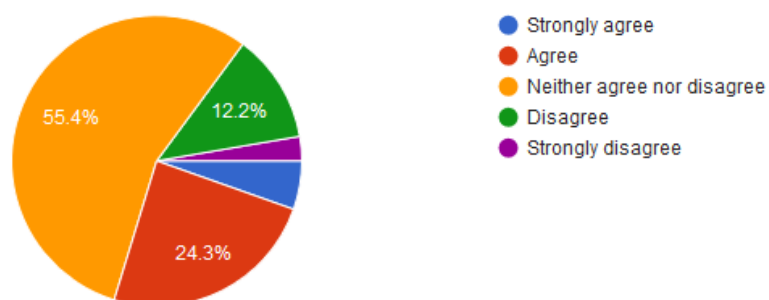


Fig 20: Perception of Australian youth on whether their friends are environmentally-friendly.

Part 3: Community

19. I believe that the Australian government thinks of climate change as a serious issue.

74 responses

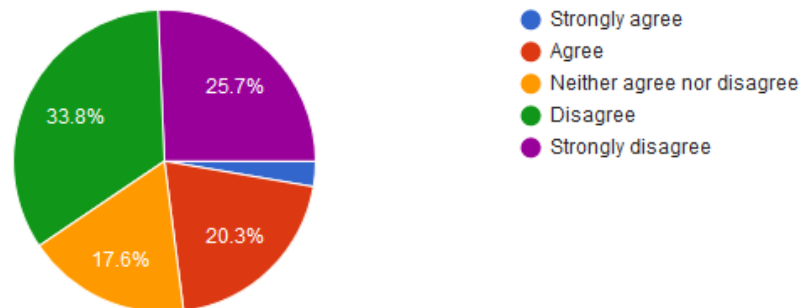


Fig 21: Australian youth perception on the Australian government regarding climate change as a serious issue.

Approximately 59.5% of the Australian participants under 26 years of age feel that the Australian government in general does not acknowledge climate change to be a serious problem. Comments such as (P14): *“They are not doing anything about it”* and (P15): *“I never hear about it on the news or from anyone that they are doing much about it.”* There is a similar distribution observed in the over 26 years old group with 62.6% of the group sharing the same opinion. Comments from the target demographic included: Australia’s obligations under the Paris Agreement (two comments), the role of coal (two comments), and lack of action to protect the Great Barrier Reef (two comments). One of the comments (P16) said: *“The current government, in my opinion, does not have a clear cut policy on climate change. They seem almost indifferent. Action, or lack thereof, to protect the Great Barrier Reef has been atrocious”*.

20. I believe the Australian government is doing a good job to save Earth.

74 responses

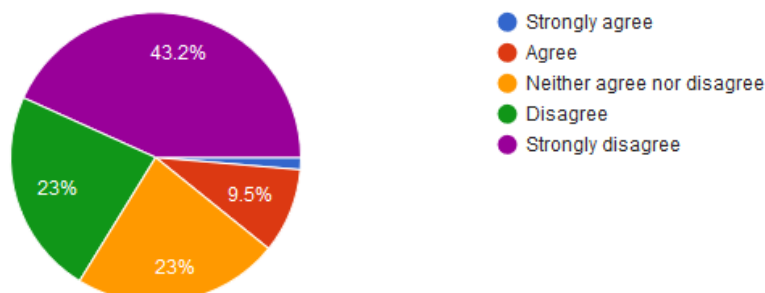


Fig 22: Perception of Australian youth on Australian government efforts in tackling climate change.

The comments were split between those supporting efforts put in by the Australian government and those who feel that Australian government is not committed in the issue of climate change. However, there is a consensus that the Australian government is achieving suboptimal results and/or that more can be done. One comment stated that efforts by Australia “will have no effect on the global environment” on the grounds that “Australia’s emissions are negligible compared to China and India”. One participant (P17) said: “*Climate change is really awful and the Australian government isn’t doing nearly enough to fix the problem*”, while another comment (P18) mentioned: “*Climate policies enforced by governments often have little or no impact on combating climate change and these policies deindustrialise Australia.*”

21. I think schools should teach more about climate change.

74 responses

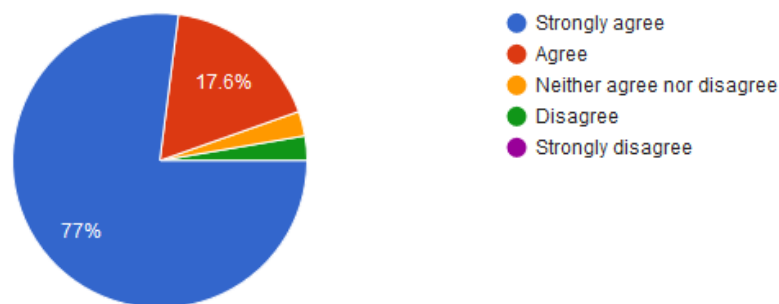


Fig 23: Australian youth perception on increased exposure to climate change theory through education.

Twelve out of the fourteen comments were in favour of teaching more about climate change. (P19) said: *"I think it is important to teach youth about climate change. I wish I were told about it. Perhaps they could do a creative research task exploring ways in which their life could be affected by climate change."* and (P20): *"I don't think fearmongering is a good idea but students need to be made aware that this will affect their future. If people adopt habits that will improve the environment now they will likely stay."* One individual felt that students already have an adequate. One also raised a point that education on climate change should be politically neutral.

22. I feel that my school is environmentally-friendly.

74 responses

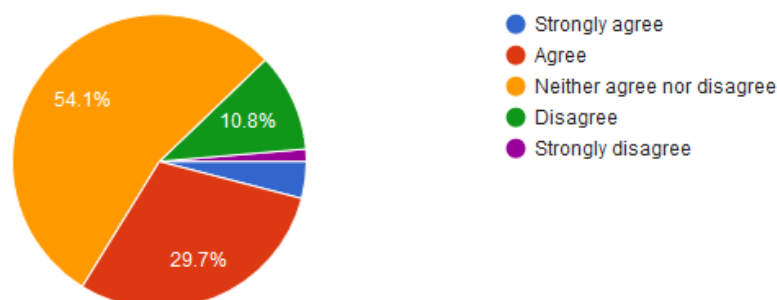


Fig 24: Perception of Australian youth on whether their school is environmentally-friendly.

23. I talk to other people about my concern towards climate change.

74 responses

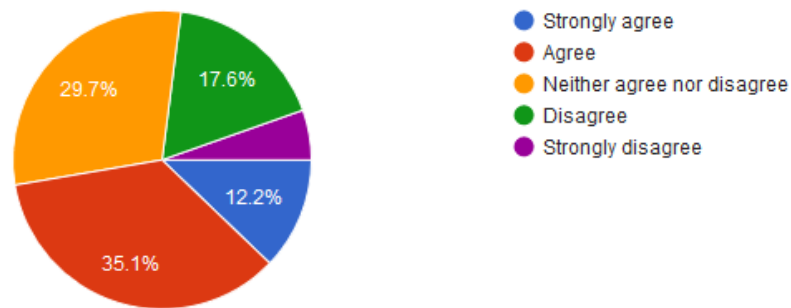


Fig 25: Australian youth on ability to discuss about climate change with other people.

24. I know how to find more information about climate change.

74 responses

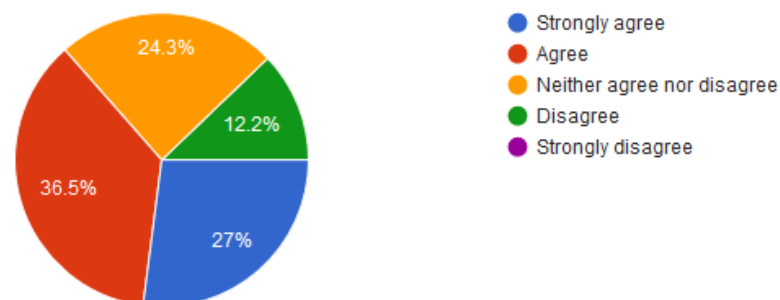


Fig 26: Australian youth on their ability to find information on climate change.

Eight comments suggested “the Internet” and/or “Google” as their go to source, while three preferred journal articles.

Discussion

Based on the data collected from the target population, over half of the participants are aware of climate change, have expressed concerns about it, and are actively taking some form of action they believe will alleviate the issue. However, when asked about how effective their actions are, far fewer were confident that their actions were being significant. Similarly, while a majority of respondents felt that their opinions were important and mattered, many felt their concerns were not heard or validated.

A majority of the target demographic (94.6%) felt that climate change will be a problem in the future. The comments in general indicate that participants believe that climate change is already a problem, and will persist into the future in the absence of any intervention.

The survey shows a deep lack of confidence in the government in handling climate change related problems. There appears to be a consensus that climate action is not on the forefront of the agenda. The Australian government received a scathingly low approval for their performance at policy level and for the efficacy of their actions. Respondents' feelings of disempowerment extended to a national level, with several comments stating that any amount of action was futile as the root cause lies in other countries.

Integration of climate change education into the education system had strong support from the respondents. One comment said we need to ensure that teaching about climate change and climate action is depoliticised.

[1]

According to a report by Doctors for the Environment Australia¹⁴, a study has shown that approximately 90% of the participants were either “concerned” or “very concerned” about climate change. The same study also recorded a high dissatisfaction rate with government bodies in terms of climate action. Both of these results are mirrored in the findings of our survey.

Based on the results of this survey, we conclude that young people are worried about their future because of climate change effects and they do not feel like adequate measures are being taken by adults including the governing powers. They also feel that their concerns are not being taken into consideration.

Survey limitations and Future Direction

The survey was completed as a University undergraduate project, which imposed some constraints of time and format. The small sample size, coupled with reliance on word of mouth and social media platforms to source respondents may skew the study population. The use of a cloud based survey format imposes additional limitations on the collection of the data. We would like to see this survey continue, but suggest an alternative approach, such as liaising with schools to allow

this survey to be conducted on site would ensure both an increased, and more normally distributed population sample. Conducting the survey annually would have the dual advantages of seeing if there is any change over time, and also provide some insight as to whether the programmes provided by Millennium Kids Inc. bring about any positive change. The aim would be to create a tool to help MK develop their activities to best serve the needs of the members, both current and future.

This survey has barely scratched the surface of a significant and poorly examined area. We hope this preliminary work will encourage others to follow up, and give more voice to the young people, so that their needs and those of the greater community are better met. There are implications for public health, public policy development, education curriculum and delivery, and more.

“Together we can build a world we want, a world we’re proud to leave our children and grandchildren.”

– Ban Ki-moon, United Nations Secretary-General

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References

1. United Nations Framework Convention on Climate Change. Fact sheet: Climate change science - the status of climate change science today [Internet]. 2011 [cited 2018 May 12]. Available from: https://unfccc.int/files/press/backgrounders/application/pdf/press_factsh_science.pdf
2. Clayton S, Manning C, Krygsman K, Spelser M. MENTAL HEALTH AND OUR CHANGING CLIMATE: IMPACTS, IMPLICATIONS, AND GUIDANCE 2017 [cited 2018 April 22].
3. Fritze JG, Blashki GA, Burke S, Wiseman J. Hope, despair and transformation: Climate change and the promotion of mental health and wellbeing. *Int J Ment Health Syst*. 2008 Sep 17;2(1):13.
4. World Health Organisation. Climate change and health [Internet]. 2018 [cited 2018 May 27]. Available from: <http://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>
5. The Lancet Planetary H. Climate change - the wider threat. *The Lancet Planetary Health*. 2017 [cited 2018/06/18];1(3):e82.
6. Helm SV, Pollitt A, Barnett MA, Curran MA, Craig ZR. Differentiating environmental concern in the context of psychological adaption to climate change. *Global Environmental Change*. 2018;48:158-167.
7. Majeed H, Lee J. The impact of climate change on youth depression and mental health. *The Lancet Planetary Health*. 2017 [cited 2018/06/18];1(3):e94-e95.
8. Hayes K, Blashki G, Wiseman J, Burke S, Reifels L. Climate change and mental health: risks, impacts and priority actions. *International Journal of Mental Health Systems*. 2018 2018/06/01;12(1):28.
9. Lawrence D, Johnson S, Hafekost J, Boterhoven de Haan K, Sawyer M, Ainley J, et al. The Mental Health of Children and Adolescents: Report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing [Internet]. Department of Health; 2015 [updated 2015 August; cited 2016 August 26]. Available from: [https://www.health.gov.au/internet/main/publishing.nsf/Content/9DA8CA21306FE6EDCA257E2700016945/\\$File/child2.pdf](https://www.health.gov.au/internet/main/publishing.nsf/Content/9DA8CA21306FE6EDCA257E2700016945/$File/child2.pdf)
10. Australian Institute of Health and Welfare. Overview of Mental Health Services in Australia: Prevalence, Impact and Burden [Internet]. 2012 [cited 2015 August 31]. Available from: <http://mhsa.aihw.gov.au/background/prevalance/>

11. Australian Bureau of Statistics. Health of Children in Australia: A Snapshot, 2004-05 [Internet]. 2007 [updated 2008 March 7; cited 2016 August 27]; 4829.0.55.001. Available from: <http://www.abs.gov.au>
12. Department of Health and Aging. National Mental Health Report 2013: Tracking progress of mental health reform in Australia, 1993-2011 [Internet]. Australian Government; 2013 [cited 2016 August 26]. Available from: [https://www.health.gov.au/internet/main/publishing.nsf/content/B090F03865A7FAB9CA257C1B0079E198/\\$File/rep13.pdf](https://www.health.gov.au/internet/main/publishing.nsf/content/B090F03865A7FAB9CA257C1B0079E198/$File/rep13.pdf)
13. Albrecht G, Sartore GM, Connor L, Higginbotham N, Freeman S, Kelly B, et al. Solastalgia: the distress caused by environmental change. *Australas Psychiatry*. 2007;15 Suppl 1:S95-8.
14. Doctors for the Environment Australia. No Time for Games: Children's Health and Climate Change 2017 [cited 2018 June 13]: Available from: https://www.dea.org.au/wp-content/uploads/Children_and_climate_change_report-No_Time_for_Games_web.pdf.