achievement. There are now examples from both high- and low-resource settings that interventions promoting a positive school social climate and reducing bullying can substantially reduce symptoms of common mental disorder[8]. Other promising platforms include those based in local communities (e.g., girls clubs) and the new social environments created by digital media.

Interventions well beyond those traditionally regarded as the focus for prevention of mental disorders will also be important. Cash transfers have been widely adopted by governments in other areas of health and social policy, and seem to bring reductions in symptoms of mental disorder and promotion of well-being in low-resource settings where psychological interventions based on cognitive behaviour therapy have little or no effect[9]. Such findings suggest the value of inclusion of mental health into trials of non-mental health interventions.

The dramatic deterioration in community mental health during the COVID-19 pandemic heightens the imperative for psychiatry to shift beyond its comfort zone of the individual patient, and engage with the social, structural and political determinants of mental health.

George C. Patton[1,2], Monika Raniti[1,2], Nicola Reavley[3]
[1]Centre for Adolescent Health, Murdoch Children's Research Institute, Parkville, VIC, Australia; [2]Department of Paediatrics, Melbourne Medical School, University of Melbourne, Melbourne, VIC, Australia; [3]Melbourne School of Population and Global Health, University of Melbourne, Melbourne, VIC, Australia

1. Rose G. The strategy of preventive medicine. Oxford: Oxford University Press, 1992.
2. Priebe S, Burns T, Craig TK. Br J Psychiatry 2013;202:319-20.
3. Jorm AF, Patten SB, Brugha TS et al. World Psychiatry 2017;16:90-9.
4. Fusar-Poli P, Correll CU, Arango C et al. World Psychiatry 2021;20:200-21.
5. Rose G. In: Williams P, Wilkinson G, Rawnsley K (eds). The scope of epidemiological psychiatry. London: Routledge, 1989:77-85.
6. Erskine HE, Baxter AJ, Patton G et al. Epidemiol Psychiatr Sci 2017;26:395-402.
7. Patton G, Olsson C, Skirbekk V et al. Nature 2018;554:458-66.
8. Shinde S, Weiss HA, Varghese B et al. Lancet 2018;392:2465-77.
9. McGuire J, Kaiser C, Bach-Mortensen A. https://doi.org/10.31235/osf.io/ydr54.

Enabling a youth- and mental health-sensitive greener post-pandemic recovery

International bodies such as the United Nations (UN), the World Health Organization (WHO), the International Labour Organization (ILO) and the Organization for Economic Co-operation and Development (OECD) have warned that the COVID-19 pandemic has made the world a yet more difficult place to be young.

The ILO report *Youth & COVID-19: Impacts on Jobs, Education, Rights and Mental Well-Being*[1] found that nearly three-quarters of people aged 18-29 years reported pandemic-related educational disruptions, one-half described themselves as depressed, and one-in-six of those who were employed before the outbreak had stopped working. The effects have been worst among youth in low- and middle-income countries (LMICs) and among young women everywhere, exacerbating pre-existing inequalities.

Perversely, pandemic-related hardship has pushed some young people prematurely into work, particularly in Asia and the Pacific region. In India and Indonesia, for instance, the UN Children's Fund (UNICEF), the Asian Development Bank and the ILO have jointly reported that poor households are increasingly likely to take underage children out of school to work in the home or away in cities, or to marry them off early to boost family income.

In this issue of the journal, Fusar-Poli et al[2] emphasize that "universal public health approaches targeting the social determinants of mental disorders hold the greatest potential for reducing the risk profile of the whole population". We can extend the focus on inequalities in the socioeconomic environment to incorporate the role that physical environments, built and natural, play in shaping youth mental health, and what can be done in this respect.

By May 2020, governments globally had invested over 10 trillion USD in responses to the pandemic, mostly for crisis initiatives such as furlough schemes, financial support for businesses, and the acquisition of medical supplies. The world is now talking about recovery. Scientists and major international bodies – e.g., the International Monetary Fund, the ILO, the International Energy Agency (IEA), the European Union, and the InterAcademy Partnership – have proposed a green approach to rebuilding economies.

Statista's survey of 28,000 individuals from fifteen nations, *Global Green Economic Recovery Support After COVID-19 2020*[3], found that two-thirds want a green recovery, especially young people. The ILO has hosted a meeting of ministers from thirty countries to discuss how to "build back better", and the UN Secretary-General went so far as to suggest that a green recovery approach in LMICs could help post-pandemic economic development switch from "grey to green". The message is clear: post-pandemic rebuilding cannot continue the over-exploitation of the resources of the planet and its peoples – especially young people – without regard for the costs to either.

Substantial steps have been made in the right direction. The IEA's *Global Energy Review 2020* found that COVID-19 restrictions on travel reduced global carbon emissions by 8%, the kind of fall needed to keep the world within the so-called 1.5°C guardrail beyond which global warming becomes dangerous. However, emissions have started to rise again with the relaxation of restrictions. A commitment to a green recovery, which could avoid 0.3°C warming by 2050[4], is urgently needed.

Leading economists have identified five recovery strategies with particularly strong potential for retaining and even accelerating the emission reductions that the pandemic achieved[5].

The strategies embrace building clean physical infrastructure, retrofitting buildings, and investing in education, training, clean research and development, and natural capital. These are consistent with the WHO's six "prescriptions" for simultaneously promoting planetary and human health outlined in their *Manifesto for a Healthy Recovery from COVID-19*[6]: protecting and preserving nature; investing in essential services for health (e.g., clean water, health care facilities); moving quickly to green energy; healthy and sustainable food systems; stopping subsidizing polluters; and building healthy cities. The UN and the World Bank note that cities are an important focus for a green recovery; the latest UN-HABITAT report has estimated that 60% of the world's population will live in cities by 2030, and 60% of these will be children.

All of these prescriptions and strategies could support universal approaches to promoting young people's future health and prosperity, but it may seem hard to sell some of these ideas politically. However, as the *WHO Manifesto* points out[6], the pandemic has shown that people can accept difficult policies where these are evidently necessary. Further, though politicians may not always listen to scientists and health experts, they listen to public opinion. The large majority of the world's adults wants action on climate change and, as the School Strike for Climate led by Greta Thunberg has shown, those under voting age can be influential.

Clinicians, researchers and their representative bodies have a role to play in persuading opinion leaders of the mental health benefits of a green recovery, especially for young people. This is challenging because its greatest benefits are not immediately obvious. Climate change and mental health are both complex phenomena and their relationship is complicated. It begins high up the causal chain, where climate change aggravates the root causes of mental illness, and ultimately involves multiple reciprocal direct and indirect linkages between a host of proximal, intervening and distal factors that lie on interacting paths of influence[7].

Taking a systems approach to elucidating these relationships can help simplify the complexity meaningfully and shift thinking from the narrow perspective of treating illness to the bigger picture that also incorporates promoting well-being and preventing illness. Systems thinking in this case involves mapping the factors linking climate change to mental health outcomes, from direct, proximate causes to distal root causes, and specifying their interactions. For example, one effect of climate change is to increase the frequency, intensity, unpredictability and duration of extreme events, such as the wildfires that ravaged South-Eastern Australia and California in 2020. Destruction on this scale inevitably has mental health implications that go beyond the immediately obvious, incorporating risks as diverse as significant injury or death, and losses to education and employment, cultural practices, outdoor recreation, access to fresh foods and Internet connectivity. Every one of these cascading factors, separately and interactively, is a potential threat to mental health[7].

Young people can be highly motivated to help in health crises and can mobilize whole communities when needed. Indeed, the ILO report[1] found that, by August 2020, nearly one-third of young people globally was engaged in pandemic-related volunteering. They are also leading a research initiative established by the UN Educational, Scientific and Cultural Organization (UNESCO), *Youth As Researchers*[8], investigating how the pandemic has affected young people.

Developing a youth- and mental health-sensitive approach to COVID-19 recovery would harness the interest, optimism, confidence and energy of young people. It would also address their yearning for a greener future. The Tony Blair Institute for Global Change's report, *Listening to Covid-19's "Lost Generation": Insights From Our Global Youth Survey*[9], has pointed out that young people should help design pandemic recovery pathways.

Members of older generations may feel uneasy about a climate crisis that is their collective bequest to younger cohorts, and may want to help. One thing they can do is to come together more effectively to apply the resources, capabilities and wisdom they have acquired in life to helping young people contribute to the pandemic recovery. Young people are ready to meet the challenge – *their* way, a green way.

Helen L. Berry
Australian Institute of Health Innovation, Faculty of Medicine, Health and Human Sciences, Macquarie University, Sydney, NSW, Australia

1. International Labour Organization. Youth & COVID-19: impacts on jobs, education, rights and mental well-being. www.ilo.org.
2. Fusar-Poli P, Correll CU, Arango C et al. World Psychiatry 2021;20:200-21.
3. Statista. Global green economic recovery support after COVID-19 2020. www.statista.com.
4. Forster PM, Forster HI, Evans MJ et al. Nat Clim Chang 2020;10:913-9.
5. Hepburn C, O'Callaghan B, Stern N et al. Oxford Review of Economic Policy (in press).
6. World Health Organization. Manifesto for a healthy recovery from COVID-19. www.who.int.
7. Berry HL, Waite TD, Dear KBG et al. Nat Clim Chang 2018;8:282-90.
8. UNESCO. Youth As Researchers: exploring the impact of COVID-19. en.unesco.org.
9. Tony Blair Institute for Global Change. Listening to Covid-19's "lost generation": insights from our global youth survey. institute.global.