The social crisis of the climate crisis
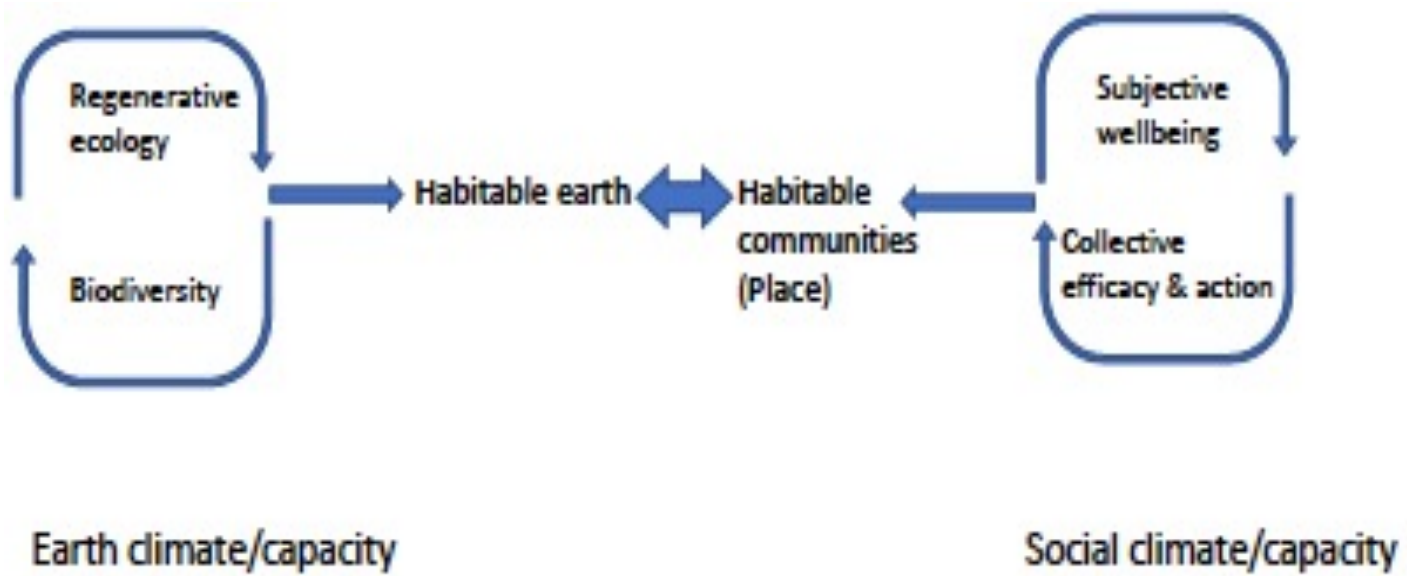
Gary Belkin
g@abillion.org
Glasgow Centre for Population Health
November 10, 2021

Regenerative ecology

Biodiversity

Habitable earth

Habitable communities (Place)

Subjective wellbeing

Collective efficacy & action

Earth climate/capacity

Social climate/capacity

Climate Change and Society

Thomas Dietz,[1,*] Rachael L. Shwom,[2,*]
and Cameron T. Whitley[3,*]

Planned relocation: Pluralistic and integrated science and governance

Knowledge for just and effective planned relocation will emerge from entangled action, learning, and capacity building

By R. H. Moss[1,2], P. M. Reed[3],
A. Hadjimichael[3], J. Rozenberg[4]

need to evolve to make planned relocation a strategic option that leaves people, communities, and the environment better off. The

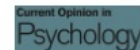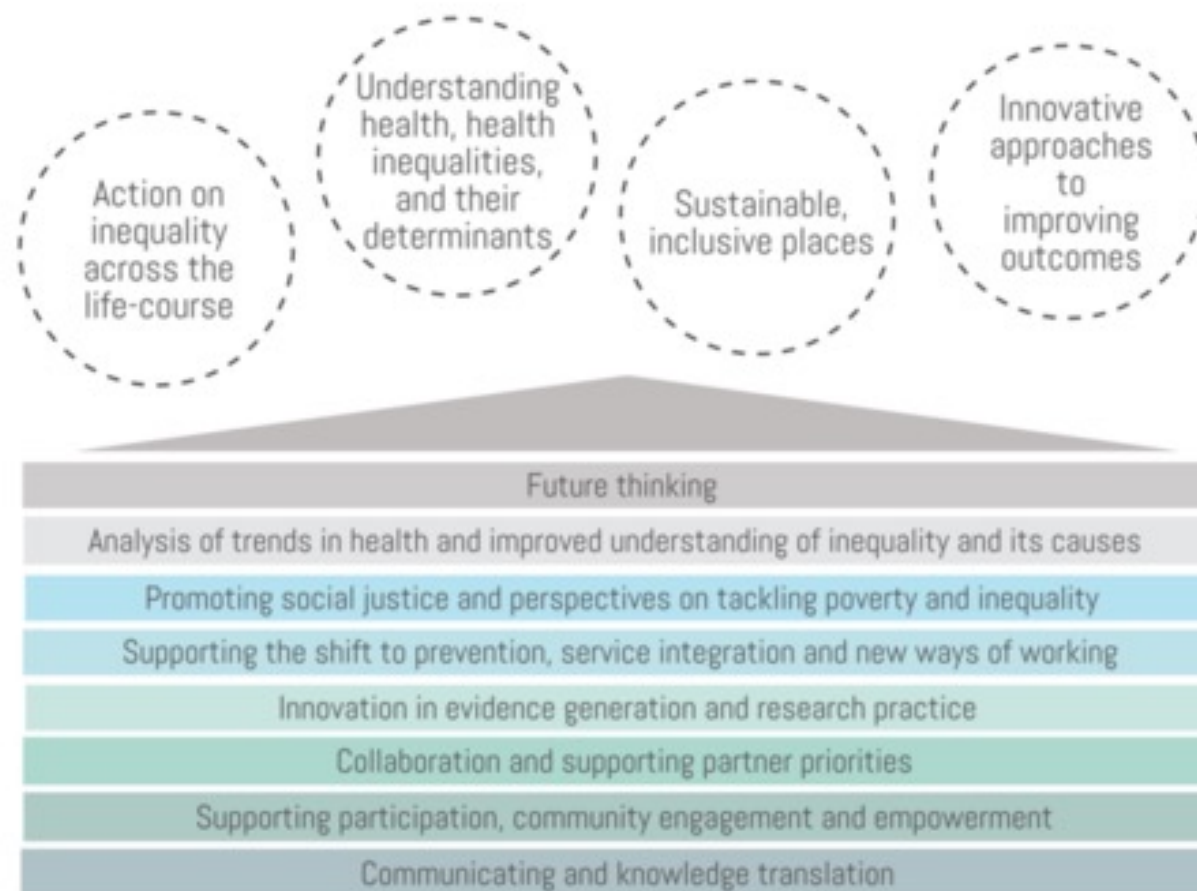ada
tra
kn

Current Opinion in
Environmental
Sustainability

Active citizenship for urban green infrastructure: fostering the diversity and dynamics of citizen contributions through mosaic governance

Arjen E Buijs[1,2], Thomas JM Mattijssen[1],
Alexander PN Van der Jagt[3], Bianca Ambrose-Oji[4],
Erik Andersson[6], Birgit HM Elands[1] and Maja Steen Møller[5]
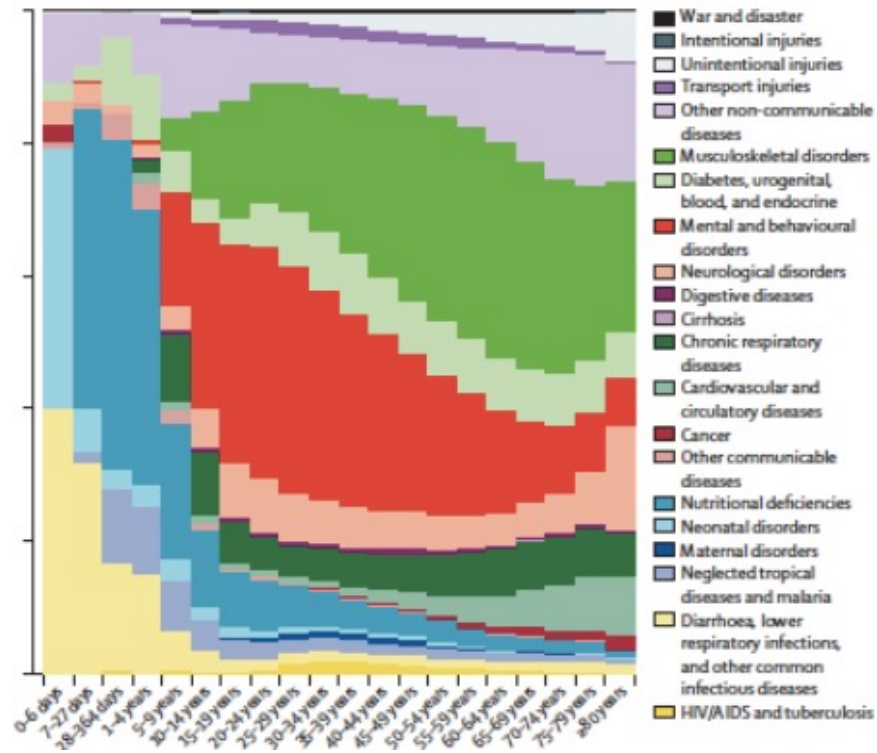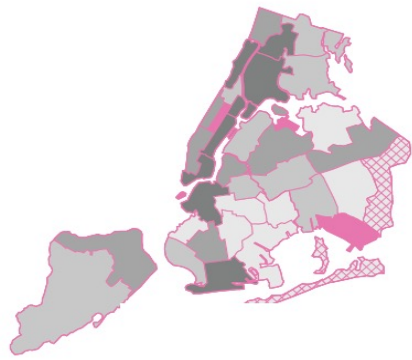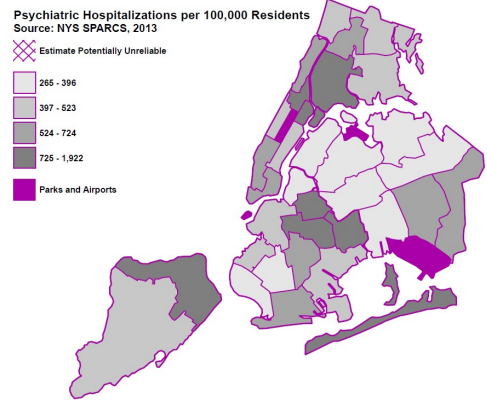
CrossMark

Current Opinion in
Psychology

Collective climate action: When do people turn into collective environmental agents?

Immo Fritsche and Torsten Masson

Glasgow Centre for Population Health

Action on inequality across the life-course

Understanding health, health inequalities, and their determinants

Sustainable, inclusive places

Innovative approaches to improving outcomes

Future thinking

Analysis of trends in health and improved understanding of inequality and its causes

Promoting social justice and perspectives on tackling poverty and inequality

Supporting the shift to prevention, service integration and new ways of working

Innovation in evidence generation and research practice

Collaboration and supporting partner priorities

Supporting participation, community engagement and empowerment

Communicating and knowledge translation

Population Mental Health?

Psychiatric Hospitalizations per 100,000 Residents
Source: NYS SPARCS, 2013

Estimate Potentially Unreliable

265 - 396
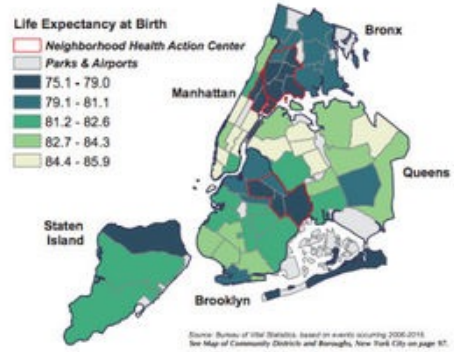
397 - 523

524 - 724

725 - 1,922

Parks and Airports

Lifetime Depression

Source: NYC Community Health Survey, 2013

5.7% — 11.3%

11.4% — 14.5%

14.6% — 17.9%

18.0% — 22.1%

Estimate Potentially Unreliable

Parks and Airports

LIFE EXPECTANCY

Figure 4. Life Expectancy at Birth by Community District, New York City, 2006-2015

Life Expectancy at Birth

Neighborhood Health Action Center

Parks & Airports

75.1 - 79.0

79.1 - 81.1

81.2 - 82.6

82.7 - 84.3

84.4 - 85.9

Bronx

Manhattan

Queens

Staten Island

Brooklyn

Source: Bureau of Vital Statistics, based on events occurring 2006-2015.
See Map of Community Districts and Boroughs, New York City on page 97.

Community Districts

Prison Adm per 1000 (Males 16-59)

15.01 - 250.00

10.01 - 15.00

5.01 - 10.00

2.51 - 5.00

0.26 - 2.50

0

Scaling Up for the "Bottom Billion": "5×5" Implementation of Community Mental Health Care in Low-Income Regions

Gary S. Belkin, M.D., Ph.D.
Jürgen Unützer, M.D., M.P.H.
Ronald C. Kessler, Ph.D.
Helen Verdeli, Ph.D., M.Sc.
Giuseppe J. Raviola, M.D.
Katherine Sachs, B.A.
Catherine Oswald, M.P.H.
Eddy Eustache, M.A.

Skill Packages for Mental Health Pathways – Mapping skill areas to roles

	Community leaders	Community health workers	Social workers' assistants	Social workers	Psychologists	Nurses – Health Center level	Nurses – District Hospital level	General physicians	Specialist clinicians
MH in context of stigma, culture, religion									
MH and human rights									
Familiarity with MH care pathways									
Familiarity with main symptom groups and major disorders									
Screening tool									
Mental status exam									
Triage of priority mental disorders									
Rationale for accepted treatment approaches									
Active and empathic listening skills									
Behavioral activation									
Relaxation techniques									
Manualized psychotherapies (i.e., IPT)									
TOT – psychotherapies									
Recognition of side effects of medication									
Medication adherence support									
Main medication types, side effects									
Medical management of priority mental disorders									
Responding to MH crises									
Managing MH crises + physical restraint									
Familiarity with epilepsy									
Specialized knowledge of epilepsy/neurologic disorders									
Specialized knowledge of child/adolescent development and MH									
Management of quality indicator and improvement work									

Psychological Treatments for the World: Lessons from Low- and Middle-Income Countries

Daisy R. Singla,[1,2] Brandon A. Kohrt,[3]
Laura K. Murray,[4] Arpita Anand,[5]
Bruce F. Chorpita,[6] and Vikram Patel[5,7,8]

Table 2. Effect of the Friendship Bench Intervention on Scores for Common Mental Disorders, Depression Symptoms, Anxiety Symptoms, Disability, and Quality of Life at 6 Months

Outcome	Mean (95% CI)		Analysis			
	Intervention (n = 260)	Control (n = 261)	Unadjusted Mean Difference (95% CI)	P Value	Adjusted Mean Difference (95% CI)[a]	P Value
Continuous						
Primary						
SSQ-14 score	3.81 (3.28 to 4.34)	8.90 (8.33 to 9.47)	−5.09 (−5.86 to −4.31)	<.001	−4.86 (−5.63 to −4.10)	<.001
Nonprespecified secondary						
PHQ-9 score	4.50 (3.95 to 5.05)	11.01 (9.78 to 12.24)	−6.52 (−7.71 to −5.33)	<.001	−6.36 (−6.45 to −5.27)	<.001
Tertiary						
GAD-7 score	3.74 (3.27 to 4.21)	9.46 (8.68 to 10.24)	−5.71 (−6.71 to −4.71)	<.001	−5.73 (−6.61 to −4.85)	<.001
WHODAS 2.0 score	4.87 (4.32 to 5.42)	11.05 (9.56 to 12.54)	−6.18 (−7.70 to −4.67)	<.001	−6.08 (−7.46 to −4.71)	<.001
EQ-5D score	0.85 (0.83 to 0.87)	0.72 (0.68 to 0.76)	0.12 (0.08 to 0.17)	<.001	0.12 (0.08 to 0.17)	<.001

JAMA | Original Investigation

Effect of a Primary Care–Based Psychological Intervention on Symptoms of Common Mental Disorders in Zimbabwe
A Randomized Clinical Trial

Lancet 2017; 389: 176–85

JAMA December 27, 2016 Volume 316, Number 24

The Healthy Activity Program (HAP), a lay counsellor-delivered brief psychological treatment for severe depression, in primary care in India: a randomised controlled trial

Vikram Patel*, Benedict Weobong*, Helen A Weiss, Arpita Anand, Bhargav Bhat, Basavraj Katti, Sona Dimidjian, Ricardo Araya, Steve D Hollon, Michael King, Lakshmi Vijayakumar, A-La Park, David McDaid, Terry Wilson, Richard Velleman, Betty R Kirkwood†, Christopher G Fairburn†

Lancet 2017; 389: 176–85

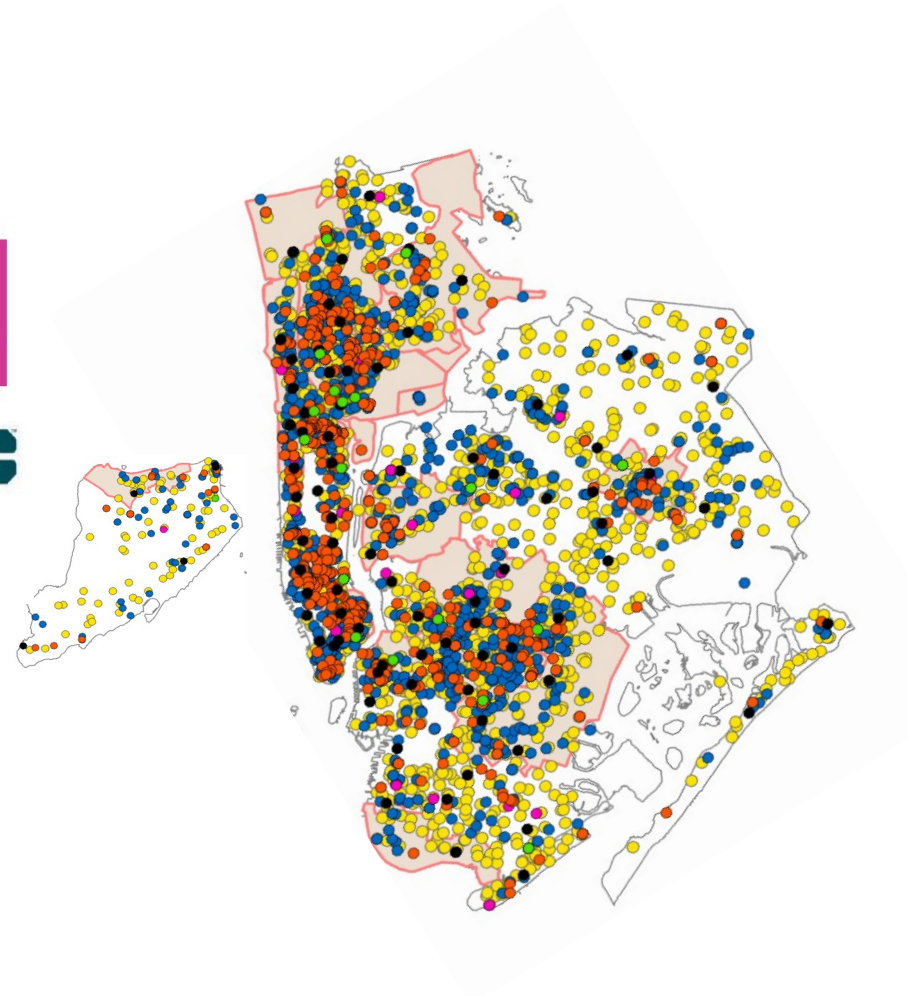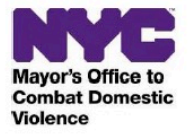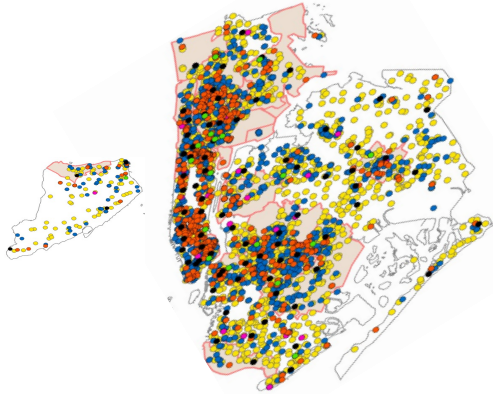|	EUC plus HAP (n=245)*	EUC alone (n=248)*	Adjusted mean difference (95% CI)†	p value
Primary outcomes				
BDI-II score at 3 months	19·99 (15·70)	27·52 (13·26)	−7·57 (−10·27 to −4·86)	<0·0001
Depression remission at 3 months	147/230 (64%)	91/236 (39%)	1·61 (1·34 to 1·93)	<0·0001

The effect of VISHRAM, a grass-roots community-based mental health programme, on the treatment gap for depression in rural communities in India: a population-based study

Rahul Shidhaye, Vaibhav Murhar, Siddharth Gangale, Luke Aldridge, Rahul Shastri, Rachana Parikh, Ritu Shrivastava, Suvarna Damle, Tasneem Raja, Abhijit Nadkarni, Vikram Patel

www.thelancet.com/psychiatry Vol 4 February 2017

"The prevalence of current depression fell from a baseline of 14.6% (95% CI 12.8–16.4) to 11.3% (9.9–12.8) at 18 months (p=0.005). The contact coverage for current depression was six-times higher in the 18-month survey population, from 4.3% (95% CI 1.5–7.1) in the baseline survey population to 27.2% (21.4–33.7) in the 18 month survey population (p<0.001)."

Individuals, Communities, Norms
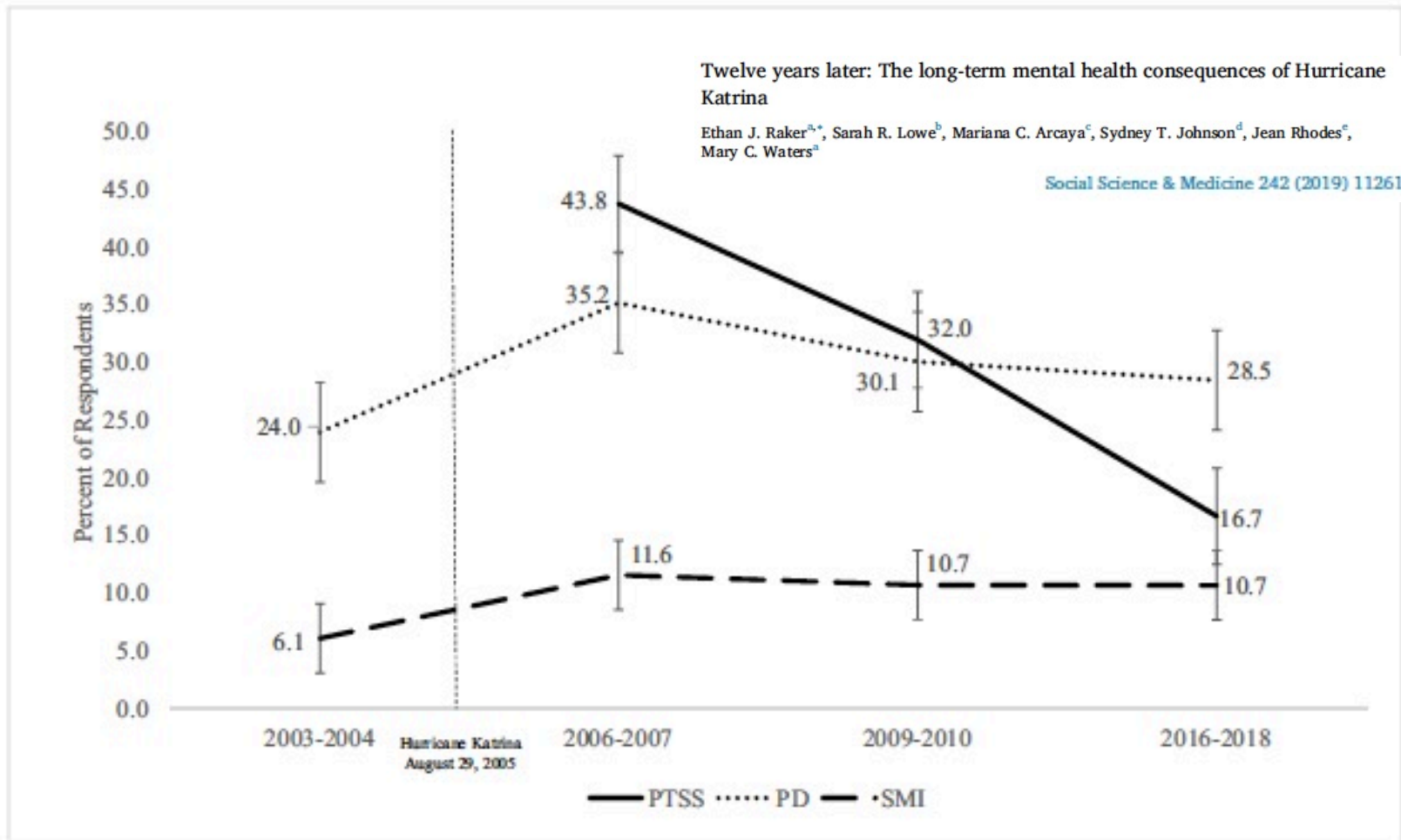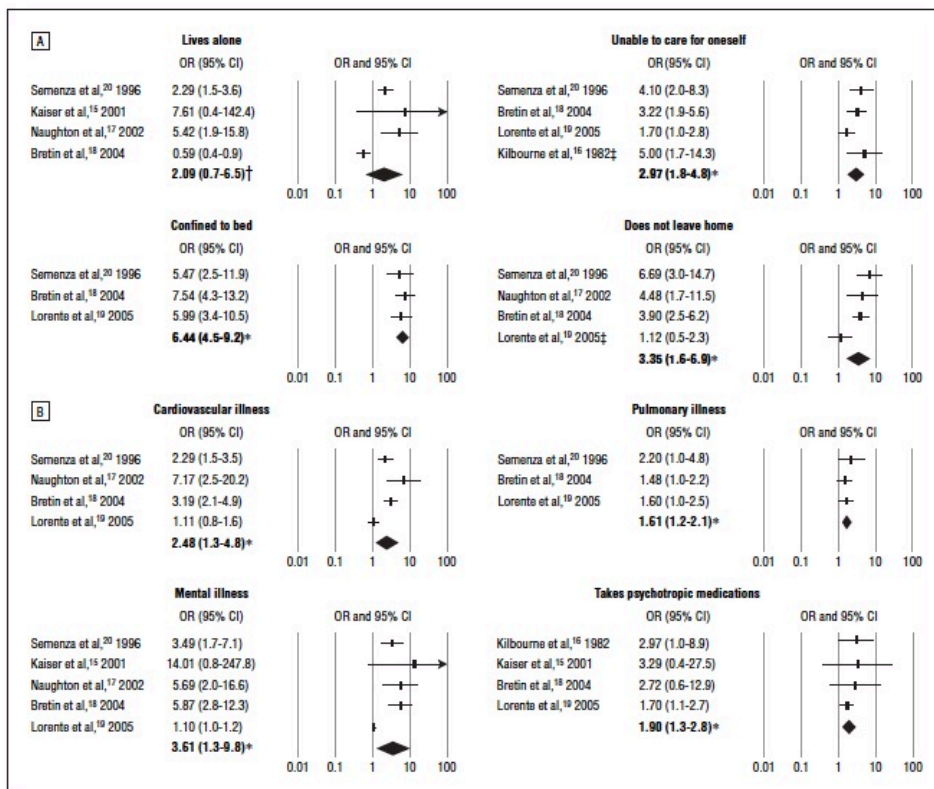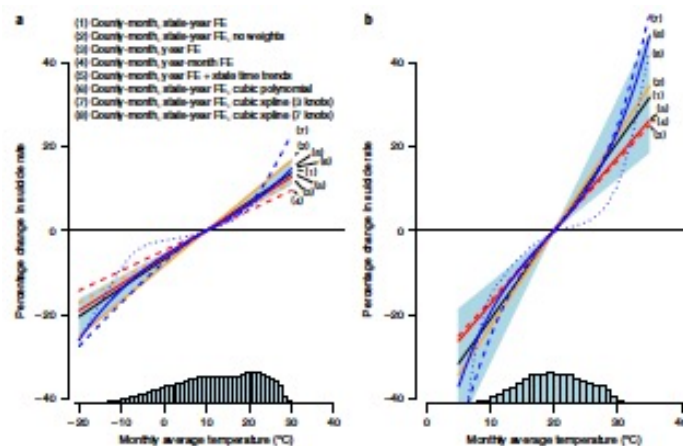
(Direct care, morbidity, illness)

Fig. 1. PTSS, PD, and SMI among Resilience in Survivors of Katrina (RISK) sample (n = 438) (Means and 95% CI).

Review

Possible Biological Mechanisms Linking Mental Health and Heat—A Contemplative Review

Mare Lõhmus [1,2]

DJF Mean Temperature   JJA Mean Temperature

1.5°C global warming

2°C global warming

4°C global warming

Results expanded in the Interactive Atlas (active links)

Interactive-atlas.ipcc.ch

0 1 2 3 4 5
change (°C)

a

Annual average temperature (°C)

23

22

21

1900   1925   1950   1975   2000

Year

— With anthropogenic climate change   — Without anthropogenic climate change

Opinion: It's not the heat. It's the existential dread.

The Coming Age of Climate Trauma

Three years after a devastating wildfire, a California community faces another crisis: PTSD. Is what's happening there a warning to the rest of us?

Climate anxiety

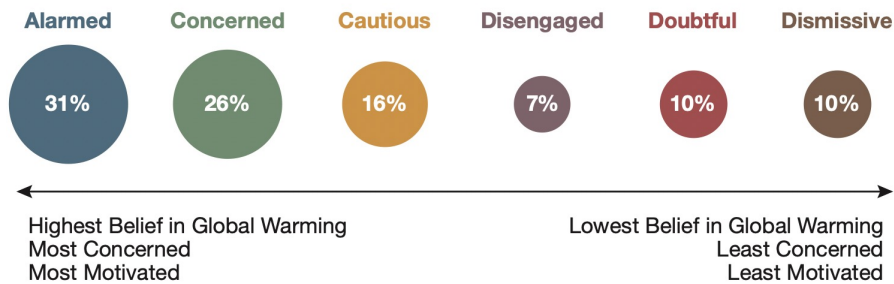**Alarmed** 31%   **Concerned** 26%   **Cautious** 16%   **Disengaged** 7%   **Doubtful** 10%   **Dismissive** 10%

Highest Belief in Global Warming
Most Concerned
Most Motivated

Lowest Belief in Global Warming
Least Concerned
Least Motivated

November 2019. Base: Americans 18+ (N = 1,303).

YALE PROGRAM ON Climate Change Communication

GEORGE MASON UNIVERSITY CENTER for CLIMATE CHANGE COMMUNICATION

Development and validation of a measure of climate change anxiety

Susan Clayton*, Bryan T. Karazsia
The College of Wooster, United States

~30% above midpoint on self-report impairment-interferes with potential; enjoying friends/family
~25% above midpoint on cognitive involvement-interferes with concentration; sleep

The Hogg Eco-Anxiety Scale: Development and Validation of a Multidimensional Scale

AUTHORS
Teaghan Hogg, Samantha Stanley, Léan O'Brien, Marc Wilson, Clare Watsford

Eco-anxiety and Climate Emergency
Research Group

Eco-anxiety: 75% of young people say 'the future is frightening'

Written by Robby Berman on September 28, 2021 —
Fact checked by Rita Ponce, Ph.D.

MENTAL HEALTH AND OUR
CHANGING CLIMATE

IMPACTS, INEQUITIES, RESPONSES

2021 Edition

Imperial College
London

INSTITUTE OF GLOBAL
HEALTH INNOVATION

Grantham Institute
Climate Change and the Environment
An institute of Imperial College London

Grantham Institute
Briefing paper No 36

May 2021

The impact of climate change on mental health
and emotional wellbeing: current evidence and
implications for policy and practice

DR EMMA LAWRANCE, RHIANNON THOMPSON, GIANLUCA FONTANA, DR NEIL JENNINGS

Global Climate Change and Trauma

ISTSS
International Society
for Traumatic Stress Studies

Communities

(Other's outcomes, wellbeing, collective action/efficacy)

Decreased community resources, services and support systems (12)
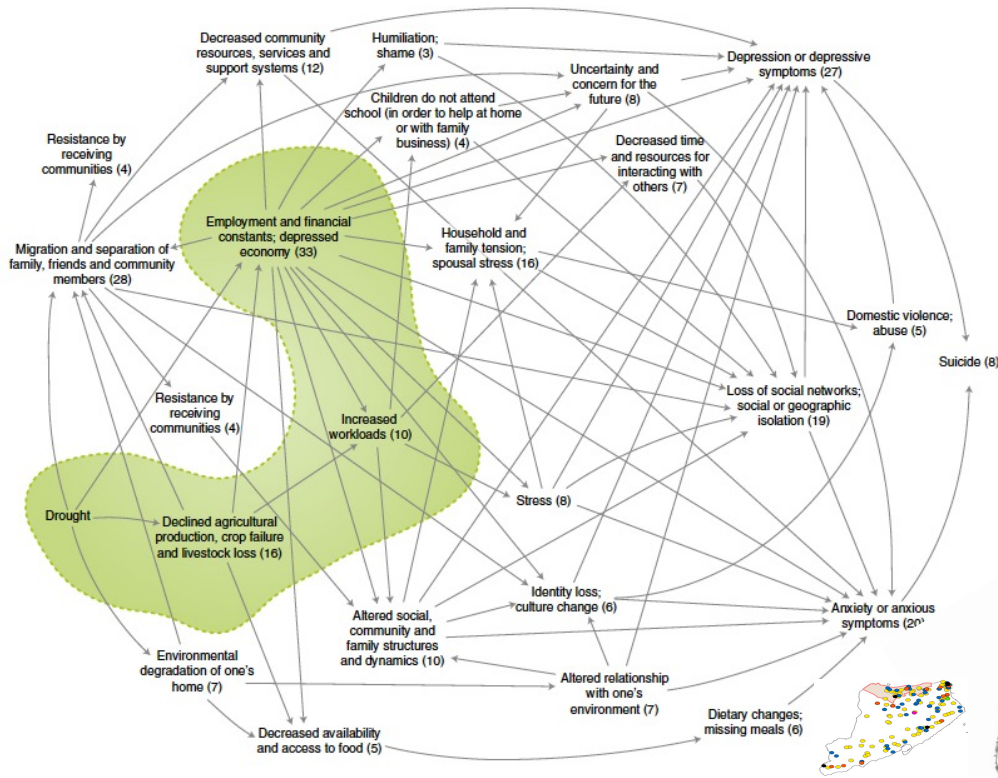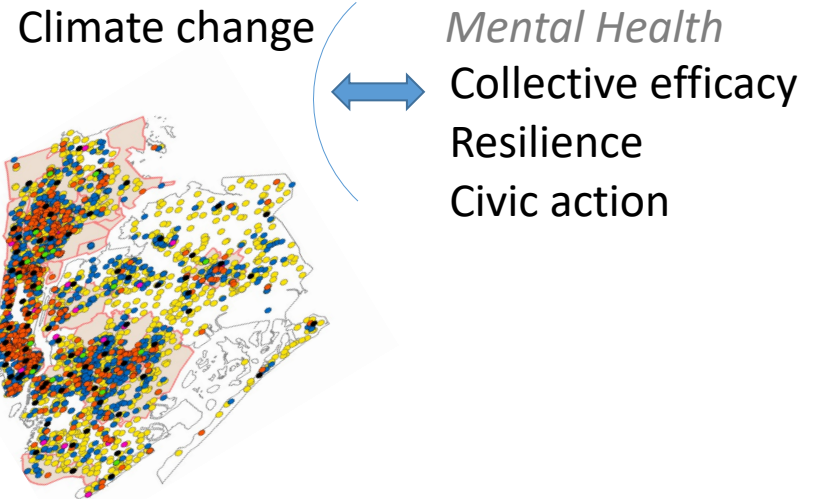
Humiliation; shame (3)

Uncertainty and concern for the future (8)

Depression or depressive symptoms (27)

Resistance by receiving communities (4)

Children do not attend school (in order to help at home or with family business) (4)

Decreased time and resources for interacting with others (7)

Migration and separation of family, friends and community members (28)

Employment and financial constants; depressed economy (33)

Household and family tension; spousal stress (16)

Domestic violence; abuse (5)

Resistance by receiving communities (4)

Increased workloads (10)

Loss of social networks; social or geographic isolation (19)

Suicide (8)

Drought

Declined agricultural production, crop failure and livestock loss (16)

Stress (8)

Identity loss; culture change (6)

Anxiety or anxious symptoms (20)

Environmental degradation of one's home (7)

Altered social, community and family structures and dynamics (10)

Altered relationship with one's environment (7)

Decreased availability and access to food (5)

Dietary changes; missing meals (6)

H Berry et al 2018

Climate change ⟶ Mental Health

Climate change ⟵ Mental Health

Climate change | *Mental Health*
⟷ Collective efficacy
Resilience
Civic action

Social determinants of mental health
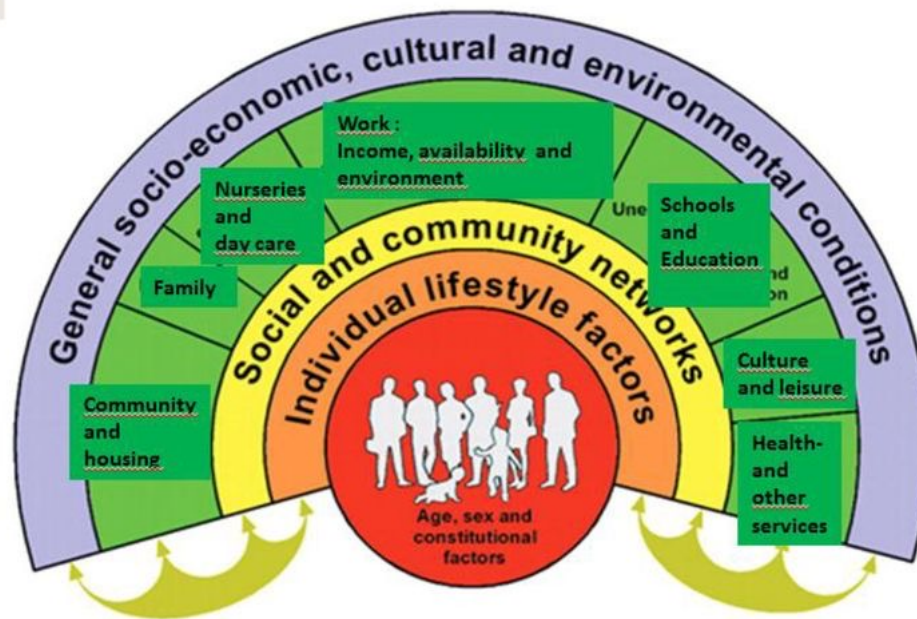

Norwegian Institute of Public Health

Environmental:
- social support
- social integration
- perceived control
- social capital
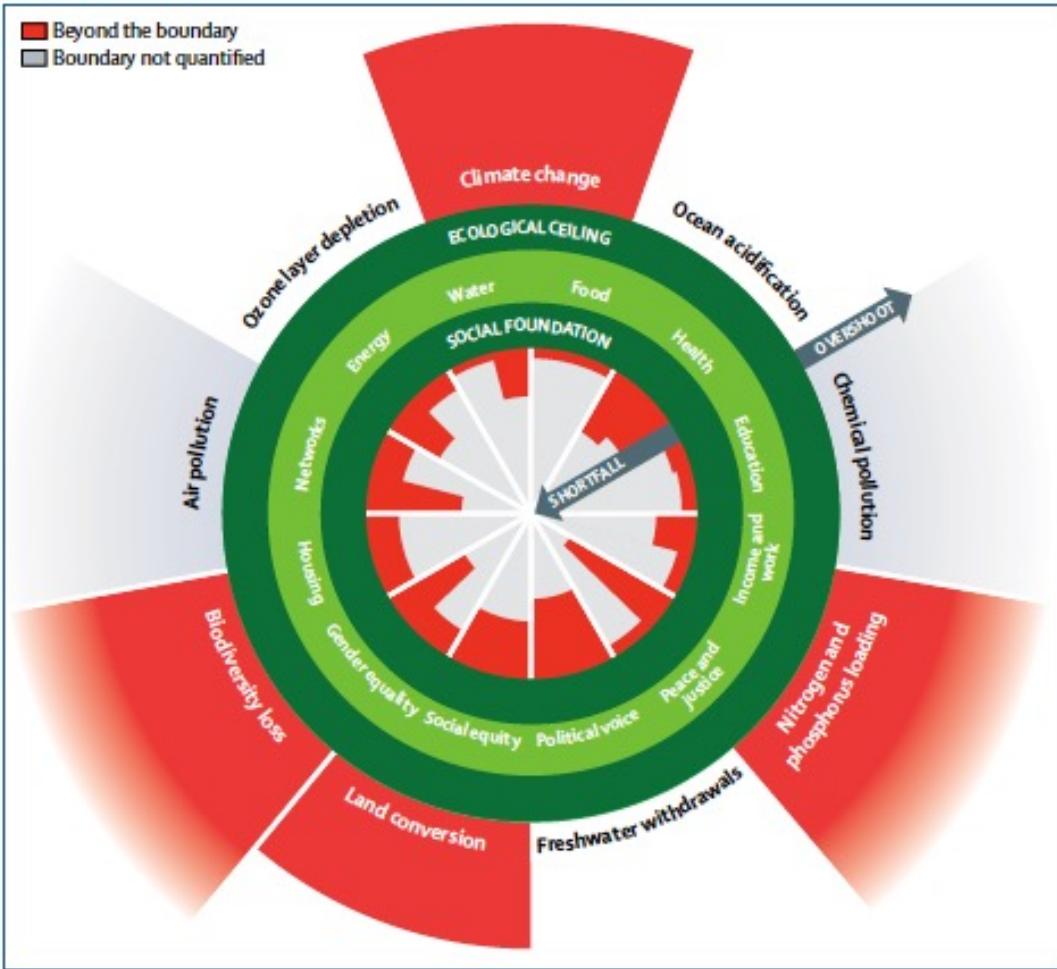- being active/ overall participation (work, school, democratic etc)

+ environmental factors in kindergartens schools , workplaces and communities

Individual:
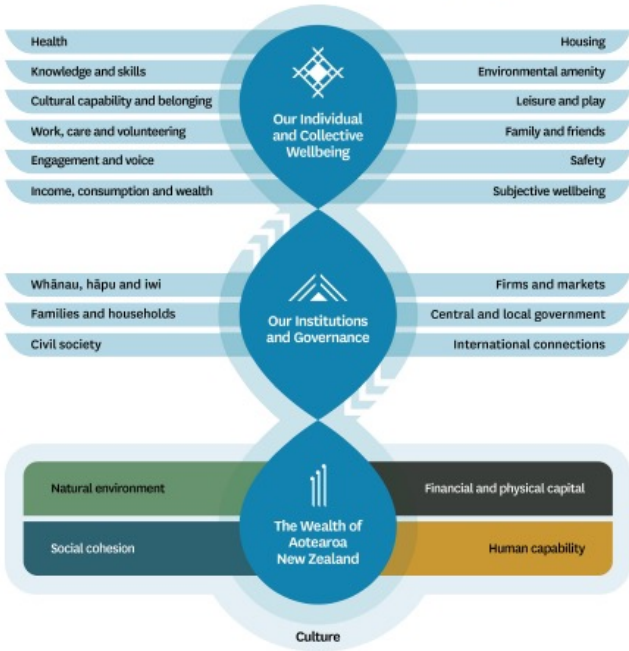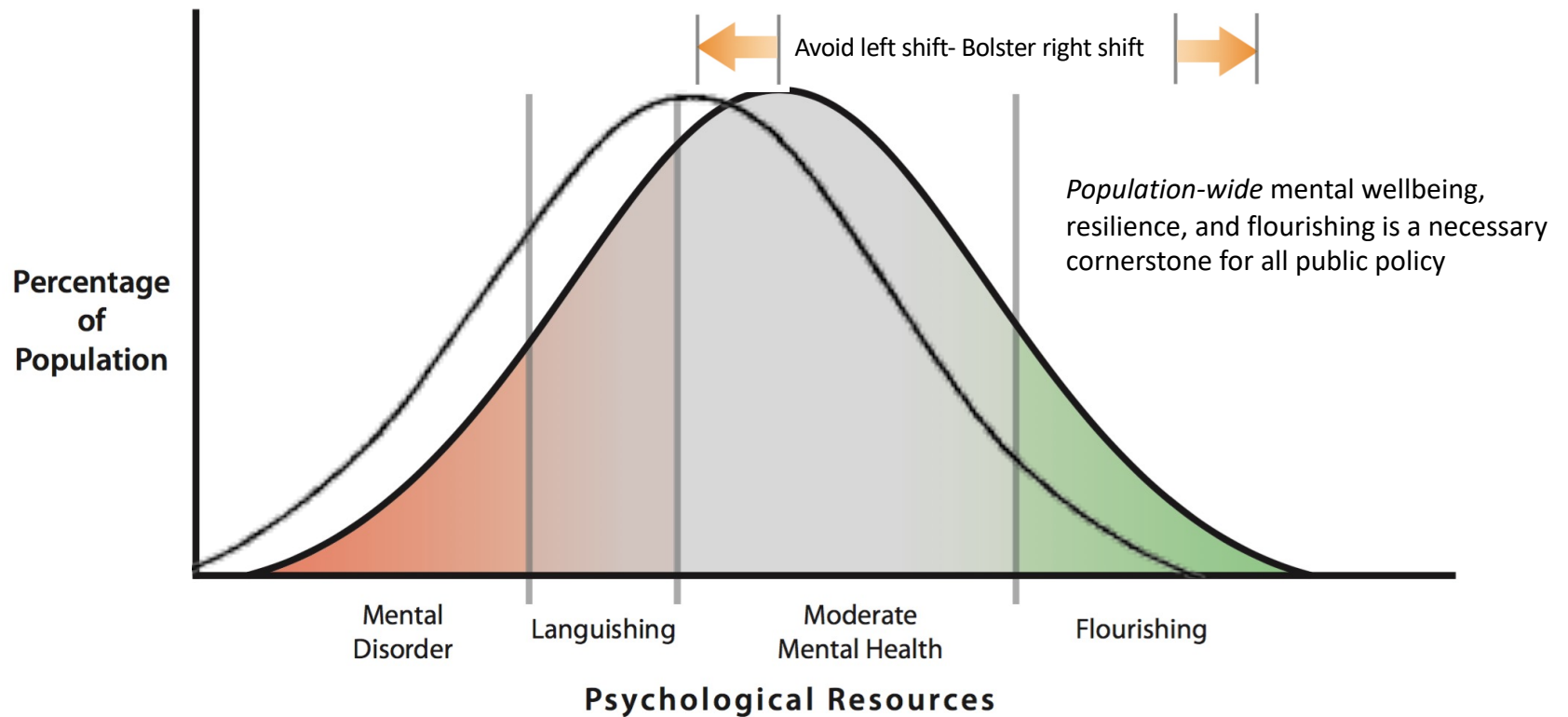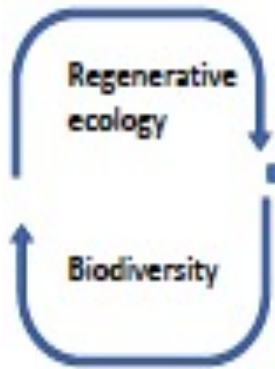- experience of mastery and control
- temperament

Lancet Psychiatry 2018; 5: 357–69

Climate change

Ozone layer depletion

Ocean acidification

ECOLOGICAL CEILING

Water   Food

Energy   SOCIAL FOUNDATION   Health

OVERSHOOT

Air pollution

Networks

Education

Chemical pollution

SHORTFALL

Housing

Income and work

Gender equality   Social equity   Political voice   Peace and justice

Biodiversity loss

Nitrogen and phosphorus loading

Land conversion

Freshwater withdrawals

Overview of the 2021 LSF

The new version of the LSF is introduced in the following diagram.

Our Individual and Collective Wellbeing	
Health	Housing
Knowledge and skills	Environmental amenity
Cultural capability and belonging	Leisure and play
Work, care and volunteering	Family and friends
Engagement and voice	Safety
Income, consumption and wealth	Subjective wellbeing

Our Institutions and Governance	
Whānau, hāpu and iwi	Firms and markets
Families and households	Central and local government
Civil society	International connections

The Wealth of Aotearoa New Zealand

Natural environment

Financial and physical capital

Social cohesion

Human capability

Culture

People need *psychological* resources to endure & take on these challenges

Based on a figures in Huppert et al. (Eds). The Science of Well-being
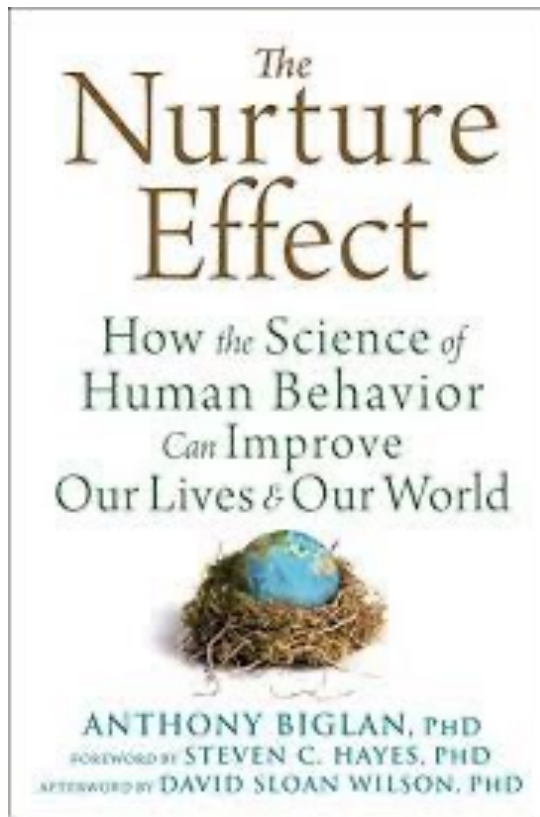
Norms

(Culture, society, power)

In addition to reforming public policies, addressing the social determinants of mental health requires changing social norms; the two are intimately related but require different approaches.

-- Ruth Shim, Michael T Compton, *Psychiatric Services*, June, 2018

New Harbinger Publications, 2015

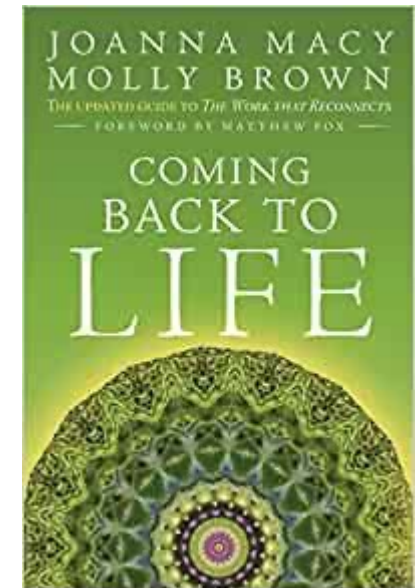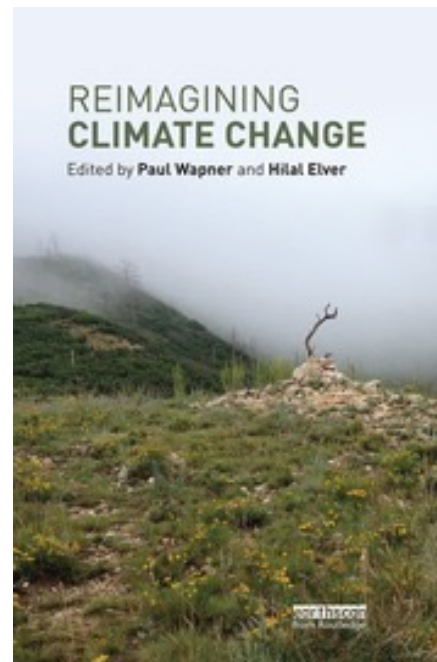Scaling up and scaling out: Consilience and the evolution of more nurturing societies
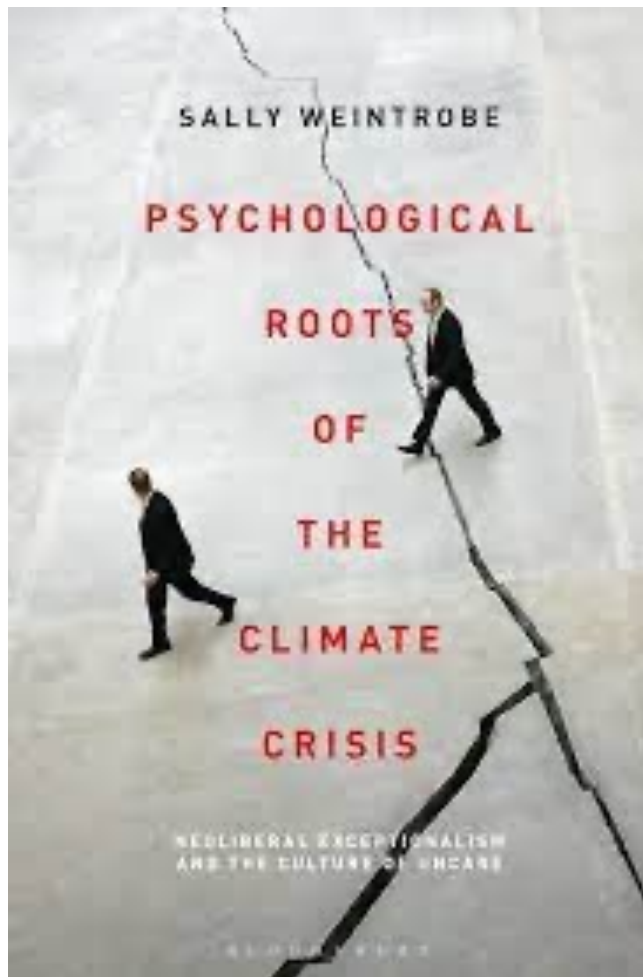
Anthony Biglan[a,*], Magnus Johansson[b], Mark Van Ryzin[a], Dennis Embry[c]

[a] Oregon Research Institute, United States of America
[b] Oslo Metropolitan University, Norway
[c] PAXIS Institute, United States of America

SALLY WEINTROBE

PSYCHOLOGICAL

ROOTS

OF

THE

CLIMATE

CRISIS

NEOLIBERAL EXCEPTIONALISM
AND THE CULTURE OF UNCARE

REIMAGINING
CLIMATE CHANGE

Edited by **Paul Wapner** and **Hilal Elver**

JOANNA MACY
MOLLY BROWN
THE UPDATED GUIDE TO *The Work that Reconnects*
FOREWORD BY MATTHEW FOX

COMING
BACK TO
LIFE

Imagining the post-fossil city: why is it so difficult to think of new possible worlds?

Maarten Hajer[a] and Wytske Versteeg[b]

FINDING THE
MOTHER TREE
Discovering the
Wisdom of the Forest
SUZANNE SIMARD

It's time to
ask nature.

"We live in a world which others imagined. Most of the constructs that oppress us feel like fact, are taught to us as fact – but they are actually evidence of historical imagination. These ideas were imagined before being practiced into solidity, authority, tradition, assumption...

These are not the most beautiful things imagined in human history, but the most violently upheld. So. We are in .... an imagination battle."

St Louis Racial Equity Summit 2021 Keynote
https://adriennemareebrown.net/