

Dear Grey House team members and beloved quaran-teammates, we are now 325 excruciating days into our endlessly amusing team-building adventure!!!

18 January 2021 theme: sent by Aaron, an arty new meme for quarantine:



Created by Studio GLD
from Noun Project

UPDATE:

About this entry from Samuel Pepys diary -

“The Year of Our Lorde 1665 hath been such a terrible one for ye plague. I cannot wait for 1666, for which I have especial excitement to trye the newe bakery that hath opened on Pudding Lane.” Our colleagues in London reminded me that the bakery in Pudding lane is where the Great Fire of London started, a conflagration that devastated the entire city. Hmmm...

Like everything else, COVID fits the 80%/20% Pareto rule!

A key point that Dr. Tufekci makes in her [Atlantic](#) piece is that small numbers of people may be responsible for tremendous spread of this disease: “There are COVID-19 incidents in which a single person likely infected 80 percent or more of the people in the room in just a few hours. But, at other times, COVID-19 can be surprisingly much less contagious. Overdispersion and super-spreading of this virus are found in research across the globe. A recent paper found that in Hong Kong, which had extensive testing and contact tracing, **about 19 percent of cases were responsible for 80 percent of transmission**, while 69 percent of cases probably did not infect another person. This finding is not rare: Multiple studies from the beginning have suggested that as few as 10 to 20 percent of infected people may be responsible for as much as 80 to 90 percent of transmission, and that many people barely transmit it.”

THE HAPPY NEWS FIRST:

COVID-19 vaccines are now available at Duke for anyone over 65. You do not have to be a Duke patient to get one. Last week, over-65's were slated to be vaccinated in March, so this moves the schedule up. Not sure what this means for under-65s.

MORE HAPPY NEWS:

Antony Ambler discharged from hospital! Antony survived a serious bout of pancreatitis, but he is on the mend, congratulations Antony! (Let's wait at least a few weeks everyone, before asking him for help with data.)

NEXT, THE LESS-HAPPY NEWS:

Stephanie Langevin gets further away from joining us!!! She is now awaiting her visa so she can cross the border. The plan was to arrive in Durham the last week of January. However, given the chaos that is the American government between two presidential administrations, the US Embassy in Montreal is not giving out visas. Keep your fingers crossed for Stephanie. And if you have good ideas for where she can live in Durham, or even stay for a while, please come forward!!!!!! Meanwhile, she will keep enjoying the snow and ice!

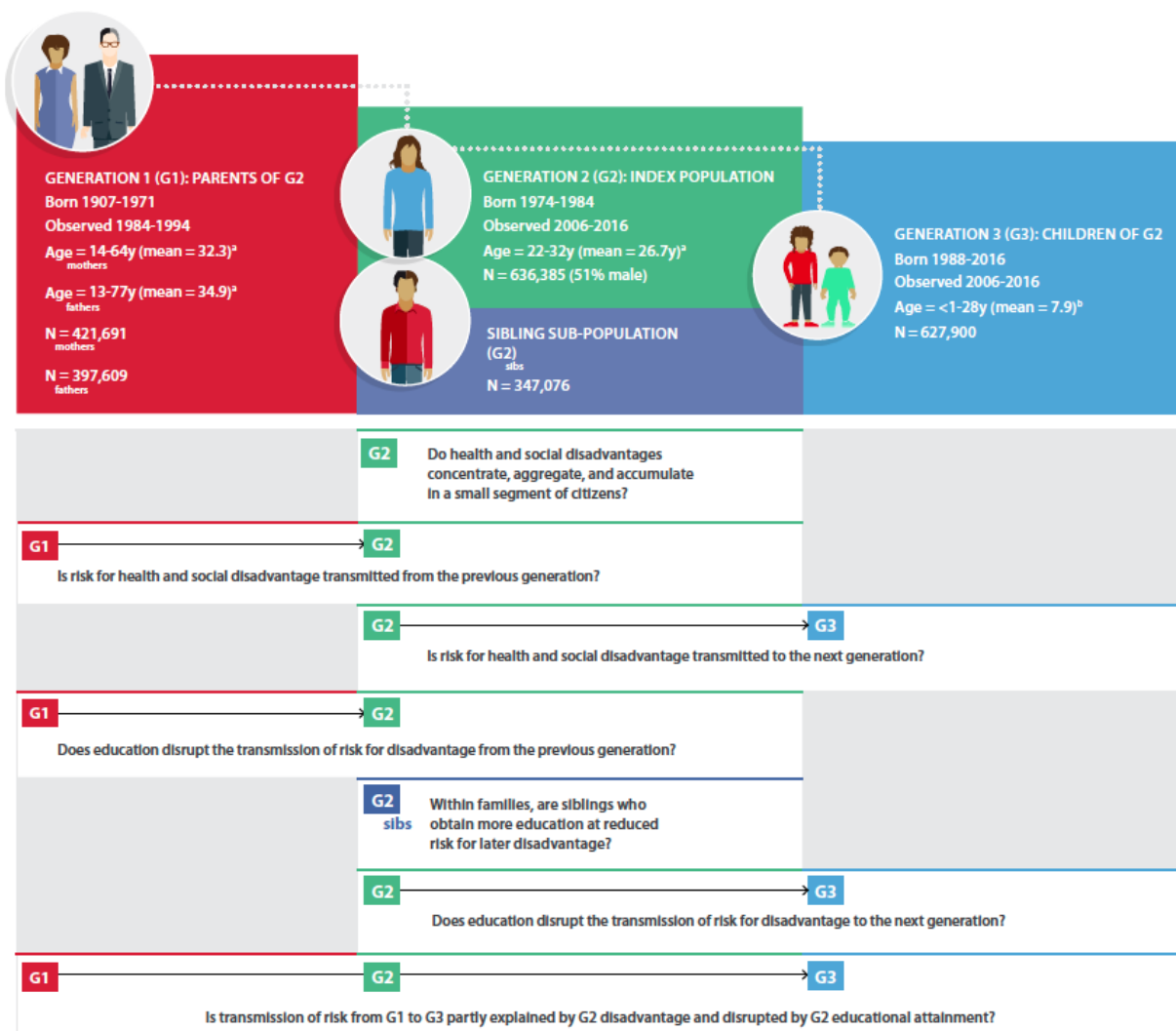


Potential unhappy COVID news. As some will know, I get daily morning briefings about the pandemic from the UK Science Media Centre, and because the extraordinary science in the UK is about 100 years ahead of the hardly-any-science in the USA, this allows readers of this newsletter to know what might be coming our way in the USA. You may recall that you first heard about the new variant in this newsletter, exactly 3 weeks before it was mentioned in the NY times. Anyway, the preview today is: South America had probably the worst first wave in the world, with clearly the highest death rates, particularly in Amazonia. Now, to many people's surprise, it is in the middle of a brutal second one too. This has led, especially since the emergence of a new variant there, to some frantic investigations — and, once again, to a busy week for mathematicians at the London School of Hygiene and Tropical Medicine. The epidemic is surging “in areas of high seroprevalence”, in areas that should have a lot of immunity. “These cities were thought to have reached herd immunity, which doesn't really square.”

THIS WEEK's Science visualization:

Graphical abstract from Signe and Leah and Pat Motsavage for our new manuscript using Danish national registers:

"Nationwide evidence that education disrupts multigenerational transmission of health & social disadvantage". If you like this graphical abstract, wait till you see the findings!.



New data-collection tech: Bloodsucker

Just a hunch, but this could become part of all our data-collection lives: a Taiwanese invention that pricks your finger [and then sucks](#). It's called the Haiim and collects up to 500 microlitres (half a millilitre) of blood in two minutes compared with about 10 microlitres for a standard prick. The blood's stored in a single-use cartridge and can be used for many biomarker tests, not just one. There's even a heartwarming personal story behind this: its inventor says he has bad memories of his mother's veins collapsing when having her blood taken the old-fashioned way. The Haiim is not quite new. It was approved for use in Taiwan two years ago and is now looking for "partners" at this year's all-online Consumer Electronics Show. **Perfect for E-Risk fieldwork!**



And from Jasmin: NO ACRONYMS!!



Aaron attended the “Effective Presentation Skills” workshop at Duke and shares this list of resources (below). The resources include a recording of the talk, which was very good, and some places to go for free images.

The talk had a number of the usual things (e.g., keep your slides free of clutter, work to use as few words as possible, etc.) but I did catch a few novel, Zoom-relevant notes, including:

Story telling

- Before designing the narrative of the talk and slides, pick the 1, 3, or 5 key messages you want the audience to take away. The number will depend on the length of the talk.
- Consider writing your slide topics out in Word as a bulleted list before starting to build your slides in powerpoint.
- Consider using a “mind mapping” tool for this step as well.
 - Such as: <https://www.mindmeister.com/>

Effective slides in the Zoom era

- Size
 - Slides show up much smaller now than they used to. Experts recommend 60-point font as a good default for your text to minimize cognitive processing demands on your audience across platforms (e.g., tablets, laptops, monitors). You can occasionally go smaller.
- Holding attention
 - Use “builds” - adding information onto the slide slowly to keep the audience following you (and not checking their email).
 - Don’t keep the same slide up for too long (people will read it and then go check their email)
 - If you want to stay on one slide for awhile, try swapping in a new figure occasionally or using transparency or colored boxes to direct attention to certain parts of the slide as your talk progresses.
- Imagery
 - Photos and icons matter more now as we may not see the speaker most of the time.
 - These are free sources of good photos:
 - <https://pixabay.com/>
 - <https://unsplash.com/>
 - This is a free source of good icons:
 - <https://thenounproject.com/>
 -
- Recording can be found [here](#) for those who are interested.

RESEARCH-PROJECT PROGRESS SINCE 11 January:

Kyle officially submitted his TL1 postdoc application this week. Fingers crossed for you Kyle!

Leah's paper was launched last Wednesday in *JAMA-Network Open*: "Longitudinal associations of mental disorders with physical diseases and mortality in 2.3 million New Zealand citizens" Leah S. Richmond-Rakerd, Stephanie D'Souza, Barry J. Milne, Avshalom Caspi, Terrie E. Moffitt.

Here is the link to the paper:

[http://jamanetwork.com/journals/jamanetworkopen/fullarticle/10.1001/jamanetworkopen.2020.33448?utm_source=For The Media&utm_medium=referral&utm_campaign=ftm_links&utm_term=011321](http://jamanetwork.com/journals/jamanetworkopen/fullarticle/10.1001/jamanetworkopen.2020.33448?utm_source=For%20The%20Media&utm_medium=referral&utm_campaign=ftm_links&utm_term=011321)

Altmetric is 158. Picked up by UNICEF, and the Anna Freud Center, London.

And covered in the Jerusalem Post, amongst other places:

<https://www.jpost.com/health-science/poor-mental-health-in-youth-can-cause-poor-physical-health-later-study-655632>

Appearing 25 January in *JAMA Pediatrics*!!!! Baldwin, Jessie R., Avshalom Caspi, Antony Ambler, Louise Arseneault, Helen L. Fisher, HonaLee Harrington, Timothy Matthews, Alan Meehan, Candice L. Odgers, Richie Poulton, Sandhya Ramrakha, Terrie E. Moffitt, & Andrea Danese (2021). Population versus individual prediction of poor health from Adverse Childhood Experiences (ACEs) screening. *JAMA Pediatrics*

Max and Annchen's response to a commentary on the fMRI reliability paper will appear soon in *Psychological Science*. as Elliott, Maxwell L., Annchen R. Knodt, Avshalom Caspi, Terrie E. Moffitt, Ahmad R. Hariri (2021) "Need for psychometric theory in neuroscience research and training"

Tracy's paper was submitted to *Frontiers in Aging Neuroscience*: d'Arbeloff, Tracy, Maxwell L. Elliott, Annchen R. Knodt, Maria Sison, Tracy R. Melzer, David Ireland, Sandhya Ramrakha, Richie Poulton, Avshalom Caspi, Terrie E. Moffitt, Ahmad R. Hariri. Midlife cardiovascular fitness is reflected in the brain's white matter: Potential implications for biomarker development in cognitive decline and dementia intervention research.

Christina Carlisi's paper was submitted to *Lancet Psychiatry*: Association of subcortical grey-matter volumes with life-course-persistent antisocial behavior in a population-representative longitudinal birth cohort by Dr. Christina Owen Carlisi The Lancet Psychiatry Christina Owen Carlisi, PhD; Terrie E. Moffitt, PhD; Annchen R. Knodt, MSc; HonaLee Harrington, BA; Stephanie Langevin, MSc; David Ireland, PhD; Tracy R. Melzer, PhD; Richie Poulton, PhD; Sandhya Ramrakha, PhD; Avshalom Caspi, PhD; Ahmad R. Hariri, PhD; Essi Viding, PhD

Kyle's and Line's new paper is out for mock review, due back 5 Feb. "Linking Stressful Life Events and Chronic Inflammation Using Soluble Urokinase Plasminogen Activator Receptor (suPAR)" Thanks to all who are doing mocks!

Kyle has been selected to attend the upcoming National Institute on Aging (NIA) Division of Behavioral and Social Research (BSR) virtual workshop on *Deeply Phenotyped Longitudinal Studies on Aging: Opportunities for Coordination and Collaborations*.

Grace Brennan, <https://psychology.yale.edu/people/grace-brennan>, has been accepted as a postdoctoral fellow in the Duke Aging Center Postdoctoral Research Training Program. Grace is a clinical psychologist from Yale, now on her internship in Pennsylvania. She is interested in problems of self-regulation, and proposes to join us to learn about aging. I know Grace has multiple postdoc offers, so now we keep fingers crossed she will choose our team. Thank you to all who have spoken with Grace.

The Mighty Amaryllis race, nose to nose at the winner's circle!

Kyle and Alli's, what a delicate beauty!



Ben's. Brilliant!



Leah and Curt's, looking stunning.



Temi's and Avshalom's.



Renate's. More to come!



Jasmin and Pete's, getting there, getting there!



Max and Emily's: Slow off the mark, but it will get there.



Oscar's, Line's, Jens's amaryllis. Looked like the early winner, but it now falters, stumbles in the homestretch.



Line writes: Emily seems like such a sweet person, but then you leave her with Oscar's amaryllis for a second - and look at the sabotage!! Who knew Max and Emily were so brutally competitive!

Le Chat peeks around the corner.



Le Chat checks.



Le Chat dines. Skittishly.

Story of the wild barn cat at the Macon Farm. Very high on neuroticism.