

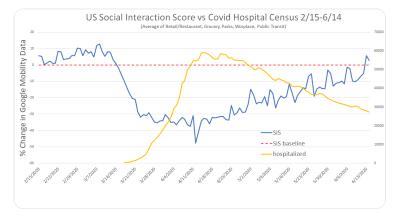
much has been made of how "re-opening" is causing US hospitals to fill with COV cases

we can check this with empirical data

i used google mobility data to track american behavior

i used the hospital census from the covid tracking project

## the results do not support this claim

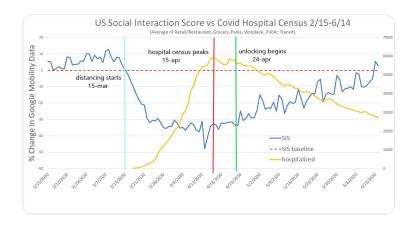


these are the most recent data for which both datasets exist.

we can see clearly that from the end of lockdown on 4/24 we have 51 days of steadfastly opposite slopes.

we keep opening, hospital census keeps dropping.

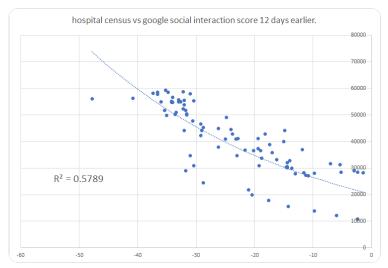
the two, in fact, seem inverse.



we can see this clearly if we regress hospitalizations vs SIS from 12 days prior

r2 is strongly inverse to the opening = more hospitalized claim

this inverse correlation does not prove that opening reduces hospitalization, but it makes claims that it increased it unsupportable



correlation does not prove causality, but a lack of correlation makes material causality impossible.

how do you cause something and not correlate to it?

so this thesis looks to be in trouble

lest i be accused of cherry picking, i tested this for various date offsets.

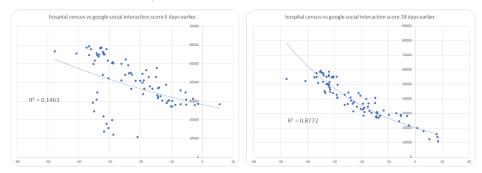


at 6 days, as one would expect, the r2 falls apart. it's too short an interval for behavior to drive hospitalization

at 18 days r2 becomes nearly perfect in its inverse r2

there's no wiggle room here for the "opening drives hospitalization" claims

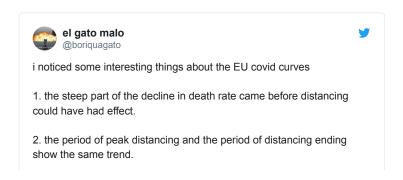
no correlation, no causality

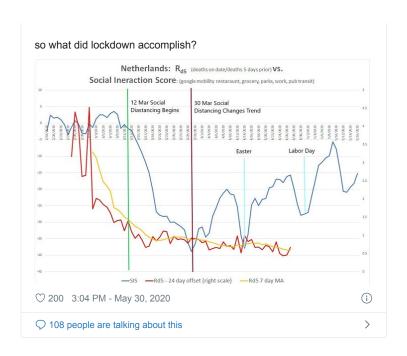


given all the work on lockdowns and deaths that shows these same patterns, it's not at all surprising to see this.

lockdowns never really affected spread.

it was a misguided panic response that seems to have responded TO deaths, not affected them.

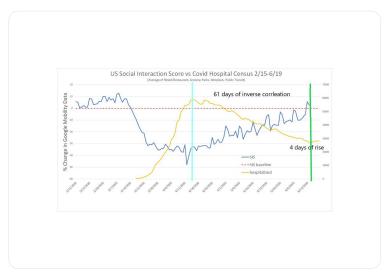




to be fully open and clear, we do have hospital census data thru 6/19 but lack the google data.

hospital census is up over the last 4 days (back to the level of 6/12, 1 week ago)

many reasons for this have been posited but i just want to look at "re-opening" as a cause to start



if we are to believe that, then we are to believe that something that had no effect over 61 days is suddenly driving the data in the last 4.

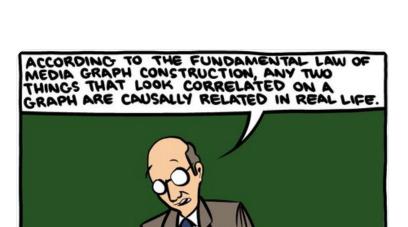
what's the case there?

why, if opening is suddenly causing hospitalizations, did it not do so before despite 2 months of doing so?

this is just what i call the "penguins" fallacy wrapped up in a massive cherry pick in the data.

if something changes in series A and you posit that series B caused it, but nothing changes in series B, you're a bit at sea.

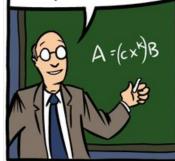
this has risen to the level of assumptive fallacy.



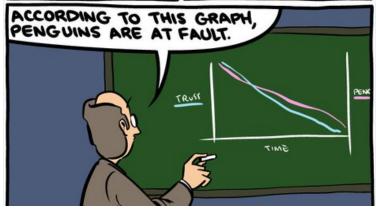
IT FOLLOWS THAT ANY TWO THINGS CAN BE MADE TO HAVE A CAUSAL RELATION BY HAVING TWO FUNCTIONS ON ONE GRAPH WITH TWO Y-AXES AND SCALING THE Y-AXES UNTIL THEY KINDA LOOK LIKE EACH OTHER.



BY THIS MEANS,
ANY TWO TRENDS
CAN BE FORCED
INTO CAUSAL
RELATION FOR
THE PURPOSES
OF AN ARTICLE,
BOOK, OR SPEECH.







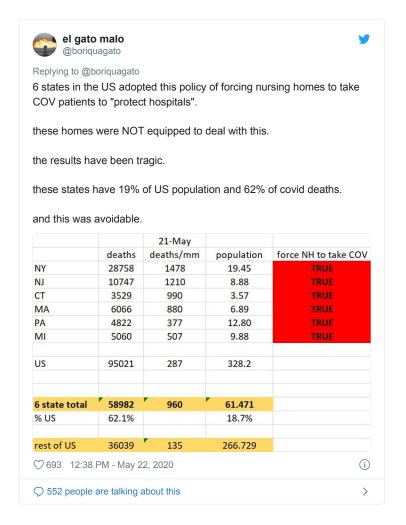
something changed w/ hospitalization and it was not the trend in social interaction score/distancing behavior

this could be A LOT of things. we've seen US expats from mexico coming back

it could be more permissive stances on procedures or more aggressive early hospitalizaiton

it's also worth remembering that  $\sim$ 1000 hospitalizations in the US is a tiny number, current census is 52% below peak, and that almost no US hospital systems outside NY were stressed even at peak levels.

and no one is gonna do THIS again...



## but let's be honest:

if behavior  $\sim$ 12-18 days ago leads to hospitalization today and there was a sudden change, why, for example, would one not look at what happened 12-18 days ago?

i seem to remember some large mass gatherings. how is that not the more likely culprit?



early june shows no material change in SIS trend, but we all know those protests happened.

so why is so much media suddenly blaming opening for an effect that has been uncorrelated to it for months and ignoring this giant elephant in the room that DOES correlate?

it's bizarre.



i'm not saying these protests caused a spike in covid hospitalizations. i'm not sure that we know.

but as an explanation, they sure seem to fit the facts better than the idea that it was some 65 day lag on re-opening that suddenly hit right after the protests.

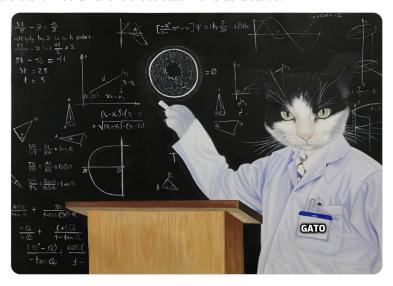
my goal here is to be honest and assess the facts as they are, not the fantasy as my

political party would like it.

honest, open inquiry is the basis of real science and understanding.

and it's simply not being done.

our leaders and media have left it to cats with blackboards.



if you wanna get in a political food fight, you'll find many willing partners elsewhere on twitter. have fun.

but if you have data to add, ideas to consider, and can move this search for facts along, please jump in

lots of you have been really helpful in recent months.

## thanks



• • •