When are gender differences important?

Two papers following from a query placed on the Radstats Jiscmail list by John Bibby, to which Danny Dorling replied.

When are gender differences important? – A question John Bibby

We know that gender differences are important.

In education, earnings, care-giving, cancer, domestic abuse, domestic responsibilities, pensions and a wide range of other areas, females are disadvantaged. The gaps are assumed to be social, not biological, and continued research urges us to do something about it. Fortunately, as a result of equality struggles, there is considerable research in this area, something *is* now often done about it, and gender disadvantages are less now than they used to be, although more should be done.

Gender research is a thriving industry, and this is as it should be. The bulk of gender researchers are female, and nearly all the research focusses upon situations where females are disadvantaged compared with males. I have no problem with this.

But I have long felt that the well-known higher mortality rate of males should be subject to investigation too. The right to life is after all a human right, and men get less of it than women. In the UK, male life expectancy is 79 years, female is 83 years. So women get 5% more life than men. (I am rounding crudely). If we look at years after retirement, until recently men retiring at 65 would have got 14 years of retirement life, and women retiring at 60 would have got 23 years – so women got 70% more than men.

The male-female mortality phenomenon is repeated in every country in the world. And it is repeated in COVID-19 ((Crimmins *et al.* 2019:135; Campbell and Caul 2020). Age-standardised male mortality from Covid is twice that for women (100 against 50 per 100,000 population). Ethnic and occupational variations are also important and have received a considerable amount of analysis, but the gender difference tends to be written off as "just reflecting overall patterns of mortality". But why is this brush-off accepted? It certainly would not be if the differential was the other way round.

Campbell, Dr Annie, and Sarah Caul. 2020. "Deaths Involving COVID-19, England and Wales - Office for National Statistics." Office for National Statistics. April 16, 2020. <u>https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeath</u> <u>sandmarriages/deaths/bulletins/deathsinvolvingcovid19englandandw</u> ales/deathsoccurringinmarch2020.

Crimmins, Eileen M., Hyunju Shim, Yuan S. Zhang, and Jung Ki Kim. 2019. "Differences between Men and Women in Mortality and the Health Dimensions of the Morbidity Process." *Clinical Chemistry* 65 (1): 135–45.

The following are possible reasons why higher male mortality is not regarded as problematic:

1. The cause is assumed to be biological or genetic. Women have two X chromosomes; men have only one. So women are more resistant. End of story. Or is it?

2. Women may just be inherently "the stronger sex". Or the fact that men actually *are* stronger in physical terms may lead to premature male ageing. (But that does not explain why infant male mortality is so high ;- often brushed off as "nature's way" of dealing with the fact that more boys are born than girls.)

3. The male political struggle has developed different modes of genderisation. Genderisation has itself become gendered. Male struggles have tended to be more in terms of *class* than of gender, while female struggles are often in terms of gender rather than class. As far back as the suffragettes, female activists have tended to come from the upper class, and this pattern may be reflected in female action today. It would be interesting to look at the professoriat, and enquire about professors' social backgrounds. How does this vary by gender and by speciality? As Marxists, surely we must believe that it all comes back to class.

Age-specific mortality rates from Campbell & Caul Figure 5, Age-specific mortality rates by gender due to COVID-19, per 100,000, England and Walws, in March 2020 Figure 5: Across all age groups, males had a higher rate of COVID-19 deaths compared with females Age-specific mortality rates due to COVID-19, per 100,000 people, England and Wales, occurring in March 2020 Figure 5: Across all age groups, males had a higher rate of COVID-19 deaths compared with females Age-specific mortality rates due to COVID-19, per 100,000 people, England and Wales, occurring in March 2020 Age-standardised mortality rate per 100,000 people 2,000 1,000 05-09 15-19 55-59 65-69 25-29 35-39 45-49 75-79 Persons Male Female

When are gender differences important? – A reply

Danny Dorling

Gender differences are more important than sex differences. My recent book (called '*Slowdown*': Dorling 2020) shows how things are slowing down. Among the things that are slowing down is the increase in global life expectancy. The figure below is based on the latest UN estimates and projections. We see that as years go by, life expectancy increases (vertical axis), but the year-on-year change is decreasing (horizontal axis), at least from 1965.

2020

Dorling, Danny. 2020. Slowdown: The End of the Great Acceleration--And Why It's Good for the Planet, the Economy, and Our Lives. Yale University Press.



Source: Source: 2019 World Population Prospects (annually interpolated demographic indicators), United Nations, https://population.un.org/wpp/Download/Standard/Interpolated/; June 17th 2019

This graph shows the combined life expectancy of all people worldwide, males and females. Up to 2019 it uses estimated actual deaths; from 2020 to 2099 it uses projections. Possible reasons why the trajectory of ever-rising global life-expectancy wiggles back and forth are given in the text surrounding the timeline within the figure. Future study will determine the extent to which these observations (which are often merely informed guesses) turn out to be true. However, when you compare the pattern before 2020 with that suggested for after it, the trend afterward looks a little too optimistic. Why is there such a break in slope immediately after 2019? One reason is that the UN are projecting that male and female life expectancy will very soon begin to converge.

Just how legitimate is it to combine male and female life expectancies as the graph above does? Fewer women die in childbirth now just as fewer men die in wars and in other violent ways— in most years, at least— so two obvious causes for the difference between the sexes are diminishing over time. Men and women may become more similar than many of us currently think possible, which could be yet another aspect of human life waiting to be fully revealed in future as we slowdown economically and as current trends become more obvious.

If you don't believe that men and women are becoming more similar, and the impact this could have on how long each sex will live, please consider monks and nuns. Marc Luy's (2003) work (reference below) compares differences in life expectancy between men and women who live in single-sex, faith-based communities-and whose environments and behaviors are very similar to each other-and those of men and women in society as a whole. This research led Luy to estimate that around 80% of the sex difference in life expectancy is really a gender difference, with men's earlier mortality of men being related to how maleness is performed in most societies. Compared to the general population, monks and nuns have a longer life expectancy, with significantly less of a gap between the sexes. There is also less difference in how often monks and nuns are ill. With so much current focus in the social sciences on performing masculinities (playing the man) and the social construction of so much that we recently considered to be biological, it is surprising that Luy's work isn't better known and discussed

So let's return to the global trends. The graph below shows the life expectancy gap between men and women widening after 1952 and then being projected to narrow a lifetime later, after 2022



Source: Source: 2019 World Population Prospects (annually interpolated demographic indicators), United Nations, https://population.un.org/wpp/Download/Standard/Interpolated/; June 17th 2019

Why do more men die than women? More men are born, and very likely even more are conceived. A male fetus is more likely to be miscarried than a female fetus. Men are the weaker sex biologically, which might be why men have more chance of being made in the first place. Almost all mammals have uneven ratios of male/female births. These ratios often vary over time, with more females being born in more stressful times. This also appears to be true for humans. In the most equitable years in recent decades in the UK far more boys were born then had been usual. This was between 1945 and 1980 – between World War II and Thatcher [see Figure 2.2 referenced at end of article]. 2020 is a year of stress: expect more females!

Men have traditionally been favoured in patriarchal societies, although this is diminishing to some extent now and we should expect it to rapidly diminish further soon. As women do better and better at education (and very much better than young men) it is hard to see pay gaps remaining as they are. But there are always anomalies and unexpected twists and turns. In the austerity years in the UK, which began in 2010 with the election of a coalition government, it was women that lost out to men the most and this has been documented (not least by the women's budgeting group). There was a small rise in elderly female mortality in 2012 across the UK. One reason posited was that elderly women were more likely to live alone than elderly men (because men die earlier); but women's resources and pensions were much lower than men's.

After 2014 there was an overall fall in UK life expectancy. This was led by a large increase in the deaths of elderly women - significantly larger than that of elderly men. Less notice was paid to this rise in deaths as compared to the rise with Covid-19, perhaps partly because when elderly women die a little earlier it is not seen as news.

Elderly women are more likely than men to live alone - in effect in isolation. Under Covid-19, this reduced the chance of women becoming infected. This could be a part explanation of why more men have died under Covid. However younger men also die a little more often if they catch the disease, so there is clearly some biological difference here and not just a social or demographic confounder at play.

In the rich world before 1900 (and in the poorest parts of the world still today) women did and still do worse than men because so many women died in childbirth. According to UN estimates, in 2020 there are 65 million more men in the world than women (3.929b men and 3.864b women, an excess of 1.7%). That gap is predicted to fall to 40 million by 2060, 20 million by 2096 and then rapidly close thereafter. One reason why the gap has not already closed is sex-selective abortions and infanticide which Amartya Sen blamed for "100 million missing women" (Sen 1990).

Finally – will Covid-19 narrow the gap? We will not know the true effect of the pandemic until it is over - and even for a few years after that due to what is commonly called the "harvesting" (or displacement) effect. This is deaths being brought forward in time by a sudden event that mostly harms the old and frail: the old English saying "A green winter makes for a fat churchyard in spring" explains this well. Worldwide, by 2020, 60 million people were dying each year. Given that in the UK, the number of confirmed "Covid-19-related" deaths of men (as I wrote in the first draft of this paper on May 1st 2020) was 13,220 and the number for women was 9,131 then, even if that ratio were to apply internationally and even if the global number of COVID-19 related deaths were to reach 10 million, there would not be enough pandemic related deaths worldwide to alter the global ratio of men to women alive. As I revised this paper in early October 2020 that ratio in England and Wales has reduced to 29,200 men dying to 23,800 women. In other words the ratio of mortality by sex had narrowed.

For the first time in the history of our species the number of men and women on the planet will become equal, possibly within the lifetime of a baby born today; but this will not be because more men are dying this year nor because more baby girls will be born due to the stress of the pandemic. It will be because we have collectively made child-birth safer and sex-selective abortions have become a thing of the past - not only abhorrent but also illogical, in a world in which young women do increasingly better than young men at school – you may be better off if you have a daughter.

References:

Luy, Marc. 2003. "Causes of Male Excess Mortality: Insights from Cloistered Populations." *Population and Development Review* 29 (4): 647–76.

Marc Luy, "Causes of Male Excess Mortality: Insights from Cloistered Populations," Population and Development Review, 20 April 2004, 647– 76, https://onlinelibrary.wiley.com/doi/ abs/10.1111/j.1728-4457.2003.00647.x.

Office of National Statistics (2020) Deaths involving COVID-19, England and Wales (July release)

Sen, Amartya. 1990. "More than 100 Million Women Are Missing." *The New* York Review of Books 37 (20): 61–66. https://www.nybooks.com/articles/1990/12/20/more-than-100million-women-are-missing/

Figure 2.2 (illegible at A5 size) is here: http://www.dannydorling.org/books/ukpopulation/Maps_%26_Figure s/Pages/Chapter_2.html#1]