In a pandemic-driven world, trust in science is rising

Enlarge / Scientists doing what they do best.

reader comments

35 with 31 posters participating

Share this story

Last week, the Pew Research Center released the results of a series of polls that explored how the populations of 20 different countries view science. While the Pew has the advantage of over a decade of data in some countries and large survey populations, it suffered a bit in terms of timing. The arrival of the COVID-19 pandemic pushed science to the forefront of the news and policy discussions, and it gave everyone a personal interest in staying abreast of the latest medical advice.

If anything were likely to change the public's views of science, the pandemic would seem to be it. And the Pew polled a bit too early to find out.

But Pew isn't the only organization that does this sort of polling. Back in 2018, 3M (a company that hires lots of scientists and engineers) started started sharing the results of its own international surveys of public attitudes towards science. And by this year, the surveys had been running long enough to detect a general drop in trust toward science and scientists—at least prior to the pandemic. In response to COVID-19, however, 3M went back and did a second set of surveys and found that the trend was completely reversed, with

trust in science showing a sudden rise.

Before and after

The 3M surveys targeted a demographically representative group of over 1,000 participants in 14 countries: Brazil, Canada, China, Germany, India, Mexico, Japan, Poland, Singapore, South Africa, South Korea, Spain, the UK, and the US. The survey data planned for release this year was gathered late last year but had been completed prior to the first known cases of COVID-19. To track pandemic-driven changes in thinking, additional surveys were run in July and August, after most countries had gone through a first wave of pandemic cases. These surveys were completed in all the same countries except India and South Africa, and 3M plans to add Mexico and the United Arab Emirates.

Some of these countries—China and India spring to mind—have such high populations that a sample of 1,000 won't be fully representative, no matter how well the demographics reflect the country. For the most part, however, 3M has aggregated the answers across all countries. Detailed per-country analyses will have to wait.

There's bad news and good news. Over the course of three years of polling, the number of people who answered that they are "skeptical of science" had climbed slowly and steadily, from 29 to 35 percent. But those numbers dropped back to 28 percent following the spread of the COVID-19 pandemic.

Similar things happened in terms of trust, with post-pandemic answers showing the highest level of trust in science recorded since 3M started polling. The same is true for trust in scientists themselves. The actual rise was small (about 5 percent), but the numbers were high to begin with. When you start at about 80 to 85 percent, there isn't much room to grow.

(If you pay attention to these percentages, you'll notice some people say both that they're skeptical of science *and* that they trust science. That sort of thing isn't unusual in these sorts of polls and may represent people responding to the different contexts the questions are asked in.)

The surveys found a slight rise in how people rated the importance of science in their lives; those rating it as "very important" were up 10 points between the polls before and after the pandemic (44 to 54 percent). Those who rated it as very important for society in general rose by a similar amount, from 58 to 69 percent. Between 70 and 80 percent of people also felt that the pandemic had made them attach higher value to science funding and science's role in society and public health. Fully 92 percent felt that people's actions to respond to the pandemic should be supported by science.

Government's role

While many governments have been notable for their failure to effectively address the pandemic, people still placed high expectations on them to promote science. The top four responses for things that the government should be involved with were affordable healthcare, food safety, air quality, and plastic contamination of the oceans, and all of those polled at over 80 percent. Those numbers actually rose slightly post-pandemic, with about 85 percent of the public favoring government involvement. That's about the same percentage that favored government action to control the pandemic.

Of the 77 percent of people who wanted to see science get more funding, about 60 percent felt that should come from the government, a figure that was nearly double the number who felt that businesses or charities should be the funding source.

Not surprisingly, governments were expected to take the lead on issues they were already involved with. These included

providing equal access to science education, where 62 percent felt that the government bore most of the responsibility. Fifty-two percent said the same thing about climate change, while businesses came in at a distant second at 21 percent.

Beyond the pandemic

The pre-pandemic survey also got into a lot of scientific issues that had seemed important prior to COVID-19's arrival. When asked what issues aside from healthcare people felt science could help solve, all of the top-five answers focused on environmental issues, with climate change being the top-rated concern. In fact, even after the pandemic, environmental and health concerns were in a statistical dead heat when people were asked to choose a topic where ignoring science will produce negative consequences.

While there were plenty of ways people felt science could contribute to environmental challenges, there weren't any dramatic differences in how people prioritized them.

Given the importance people have generally assigned to science, there are obvious questions about why more people aren't involved in science—and why the population of people who are isn't more diverse. So in the pre-pandemic surveys, 3M asked about some of the structural barriers that keep people from being more fully engaged with science. The researchers found that about a third of the people under the age of 40 felt they had been discouraged from pursuing science, while that was true of only 10-15 percent of the older participants.

Over a third of those noted that a lack of classes in their schools had been a barrier, an issue that was more prominent in developing countries. About a third said they'd been told they weren't smart enough, and another 25 percent had been told that science was just for geeks. And a quarter mentioned that they'd been discouraged because of their ethnicity or gender—but that figure reached 50 percent in the United

States. Income inequalities also played a role, with under half of low-income parents reporting that their kids participated in science-related activities, while for high-income parents the figure was nearly 70 percent.

Disturbing

Overall, any result other than what these polls show would be rather disturbing. We're in the middle of a pandemic that will only be less of a threat once scientists have developed either a vaccine or a highly effective therapy. In the meantime, epidemiologists have helped determine which public health measures are most effective at limiting the spread of the virus. And while all this has been going on, destructive storms and record wildfires have reminded us that some of the pre-pandemic crises like climate change haven't gone away.

Given all that, it would be extremely disturbing if populations weren't looking to the only people who are able to bail us out. As it is, I'm somewhat less disturbed that I wasn't convinced in advance that the survey would generate these results.

https://arstechnica.com/?p=1712268