

Has the pandemic changed public attitudes about science?

Drawing on survey evidence from several western countries, Eric Allen Jensen, Aaron M. Jensen, Axel Pflieger, Eric B. Kennedy and Ethan Greenwood find that COVID-19 has coincided with a general rise in public trust in science and scientists. Based on this re-affirmed public trust, they suggest there is a new window of opportunity to accelerate ongoing reforms to reinforce trust in science.

Never before has science been so consistently on the minds and lips of politicians around the world, eager to wrap themselves in the popular mantle of being 'led by the science'. But, how has the public's opinion about science and scientists changed, as they have been thrust to centre stage during the pandemic? Has the spike in science's visibility come with greater public skepticism or support? Let's look at the evidence from several countries with divergent pandemic journeys.

Changes to Science Attitudes in Europe

While [Pew Research results](#) signal public disapproval of the UK government's pandemic response, the expertise of the nation's scientists remain highly valued by the public (to an even greater extent than before the crisis). The UK's lacklustre pandemic response resulted in one of the highest COVID-19 death rates per capita in the world. As of summer 2020, just 46% of the UK public rated their country's handling of the coronavirus crisis as 'good', while 54% said it was 'bad'. This is the lowest approval rate in the survey conducted by Pew Research Centre, comparing 14 developed countries.

At the same time, there is a clear pattern of more positive attitudes towards science evident in recent research by the [Wellcome Trust](#). The findings reveal that the pandemic brought the public interest closer to science when results are compared for identical survey questions in 2015 and April 2020. Public interest in hearing directly from scientists about the research they were conducting jumped by nineteen percentage points (63% to 82%). Similarly, [research conducted by 3M](#) tracked science attitudes in their "State of Science Index" and compares annual results from before (2018-2020) and during the pandemic (July-August 2020). UK respondents' 'skepticism in science' dropped by 11% when compared before (40%; Aug-Oct 2019) and during (29%; Aug-Sep 2020) the pandemic. This research has indicated positive shifts during the pandemic in the UK public's attitude towards science.

In contrast, Germany's response to the pandemic was predominantly seen as 'good' (88%), while a minority has seen the response as 'bad' (12%), according to [Pew Research](#). The [German science barometer survey](#) has tracked trust in science and research before and during the year 2020. Trust in science has remained substantially higher during the pandemic than before. In 2019, less than half (46%) indicated they trusted science and research. During the pandemic, the survey found different levels of trust in science when administered in April 2020 (73%) compared to November 2020 (60%), which shows public trust is still substantially higher than before the pandemic. Showing similar patterns, the [Viral Communication project](#), a nationally representative survey administered in November and December 2020, measured trust using a different set of questions than that used for the German science barometer. Weighted results revealed that the majority of German residents found science trustworthy (76%) rather than untrustworthy (12%). In sum, the German public's trust in science is stronger now than before the pandemic.

The COVID-19 pandemic has put a sharp focus on the role of specific scientific institutions and high-profile experts directly involved in public discussions. In light of the pandemic specifically, scientific institutions and individual experts enjoy a generally high level of trust in Germany. More than three quarters (78%) of German residents expressed high trust in the [Robert Koch Institute](#), which ranked first among all scientific and political actors the study tested for. In comparison, around two thirds (67%) of German residents indicated trust in a prominent virologist [Christian Drosten](#), an individual scientist. This was a consistent pattern where science as an institution, outperformed scientists as individuals, in levels of public trust.



Similarly in Ireland, Science Foundation Ireland's SFI Science in Ireland Barometer 2020 found that Irish residents indicated a higher level of trust in science (89%) than scientists (81%). Regarding the public's trust in science within Ireland, a comparison of [Wellcome Global Monitor survey data from 2018](#) and the 2020 SFI Barometer survey data collected during the pandemic reveals a small difference in levels of trust (89% to 96%) and distrust (11% to 4%). However, scientists as a profession in Ireland retained one of the highest levels of trust (84%), alongside public health experts (80%) and medical health professionals (87%). This shows that the Irish public hold a strong positive regard for the role of science, in society and during the pandemic. Indeed, a majority (81%) of Irish residents felt that scientific evidence should be a leading factor in how the COVID-19 outbreak should be handled by the government.

Changes to Science Attitudes in North America

Shifts in the public's attitude towards science are also evident in North America. [Research conducted by 3M on science attitudes](#) compared survey results from before (Aug-Oct 2019) and during the pandemic (Aug-Sep 2020). Results gathered during the pandemic show an overall decline for the first time in three years in the 'skepticism in science' (agreement with statement 'I am skeptical of science') in the US and Canada (-8%) specifically. Prior to the pandemic, 29% of Canadians indicated 'skepticism in science' but that [number had dropped](#) to 21% by the summer. This was a similar decrease in the United States, as 40% indicated 'skepticism' before and 32% during the pandemic.

Pandemic-driven demand for scientific input in decision-making processes may play a role here. For instance, when [polled early in the pandemic](#), a majority of Canadians indicated that "scientific evidence" (82%) and "advice from medical doctors" (78%) were among their top three priorities for the government to consider in the pandemic response. This compares very favourably to the next highest factors, including "economic considerations" (48%) and "international influences" (20%).

In sum, as in the UK and Europe, the research so far has indicated positive shifts in the public's attitude towards science during the pandemic in the US and Canada.

A long-term success story for public trust in science?

These results show clear evidence that scientific and medical experts are enjoying a surge in public support on top of their already high levels of public trust. With some variation from country to country and among different groups within countries, the overall picture of pandemic-era public opinion is a success story for science's status amidst this crisis.

The impacts from COVID-19 will be with us for years to come. However, questions remain as to how this re-affirmed trust might be built on. How can the increased levels of trust in science be maintained? What proactive steps can scientific institutions take to ensure that they continue earning this trust? How might support for science be used to focus further public engagement on other global challenges such as climate change? Framed in these terms, moves such as the UK government's decision to invest in a new research agency ([ARIA](#)), may indicate more widespread changes in the direction of science policy.

At a structural level, the public faith in science's trustworthiness and value can also be 'future proofed' through ongoing initiatives to make scientific research open and transparent, enhanced efforts to ensure a more diverse and inclusive scientific workforce and other [efforts to improve science from within](#). Initiatives working in this direction include increased adoption of open science policies by research funders and [global public policy that promotes more socially responsible research and innovation](#). Indeed, this moment of strong public support may be the perfect opportunity for long-needed structural reforms to make research more socially responsible and sustainable. In other words, it's time to fix the roof while the sun is shining!

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