

Sunday Review

Why Facts Don't Unify Us

Gray Matter

By TALI SHAROT and CASS R. SUNSTEIN SEPT. 2, 2016

According to the Pew Research Center, the nation is more polarized than at any time in recent history. While some of the issues dividing us boil down to ideology and preference, there is at least one on which hard science should have a strong say — climate change. But do numbers and figures change people's opinions?

Apparently, they do — they result in a deeper divide.

In a recent experiment, described in a paper released on Friday on the Social Science Research Network, we and our colleagues Sebastian Bobadilla-Suarez and Stephanie Lazzaro asked more than 300 Americans several climate-related questions, such as whether they believed that man-made climate change was occurring and whether the United States was right to support the recent Paris agreement to reduce greenhouse gas emissions. On the basis of their answers, we divided participants into three groups: strong believers in man-made climate change, moderate believers and weak believers.

Next we informed participants that many scientists have said that by the year 2100, the average temperature in the United States will rise at least 6 degrees Fahrenheit, and asked them for their own estimates of likely temperature rise by 2100.

The overall average was 5.6 degrees Fahrenheit. As expected, there were significant differences among the three groups: 6.3 degrees for strong believers in man-made climate change, 5.9 degrees for moderate believers and 3.6 degrees for weak believers.

Then came the important part of the experiment. Participants were randomly assigned to one of two conditions. Half of them received information that was more encouraging than what they originally received (good news for the planet and humanity); half of them received information that was less encouraging (bad news for the planet and humanity). In the good news condition, they were told to assume that in recent weeks, prominent scientists had reassessed the science and concluded the situation was far better than previously thought, suggesting a likely temperature increase of only 1 to 5 degrees.

In the bad news condition, participants were told to assume that in recent weeks, prominent scientists had reassessed the science and concluded the situation was far worse than previously thought, suggesting a likely temperature increase of 7 to 11 degrees. All participants were then asked to provide their personal estimates.

Weak believers in man-made climate change were moved by the good news (their average estimate fell by about 1 degree), but their belief was unchanged by the bad news (their average estimate stayed essentially constant).

By contrast, strong believers in man-made climate change were far more moved by the bad news (their average estimate jumped by nearly 2 degrees), whereas with good news, it fell by less than half of that (.9 degrees). Moderate climate change believers were equally moved in both cases (they changed their estimates by approximately 1.5 degrees in each case).

The clear implication is that for weak believers in man-made climate change, comforting news will have a big impact, and alarming news won't. Strong believers will show the opposite pattern. And because Americans are frequently exposed to competing claims about the latest scientific evidence, these opposing tendencies will predictably create political polarization — and it will grow over time.

In the case of information about ourselves — about how attractive others perceive us to be, or how likely we are to succeed — people normally alter their

beliefs more in response to good news. In certain circumstances, that will also be true for political issues — as in the case of weak climate change believers. But at times, good political news can threaten our deepest commitments, and we will give it less weight.

These findings help explain polarization on many issues. With respect to the Affordable Care Act, for example, people encounter good news, to the effect that it has helped millions of people obtain health insurance, and also bad news, to the effect that health care costs and insurance premiums continue to increase. For the act's supporters, the good news will have far more impact than the bad; for the opponents, the opposite is true. As the sheer volume of information increases, polarization will be heightened as well.

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Essentially the same tale can be told with respect to immigration, terrorism, increases in the minimum wage — and candidates for the highest office in the land. Voters are now receiving a steady stream of both positive and negative information about Hillary Clinton and Donald J. Trump. Which kind of news will have a large impact will depend partly on people's motivations and initial convictions.

But there's an important qualification. In our experiment, a strong majority showed movement; few people were impervious to new information. Most people were willing to change their views, at least to some extent.

For those who believe in learning, and the possibility of democratic self-government, that's very good news.

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