HOW PEOPLE'S POLITICAL PASSIONS DISTORT THEIR SENSE OF REALITY

Though people might disagree on how to solve a problem, they can at least agree that the problem exists. Or can they? A new study finds that deeply held beliefs can undermine rationality: When confronted with solutions that challenge deeply held values, people may be inclined to disbelieve the problem.

Psychologists tested hundreds of American adults on their beliefs about climate change and violent crime after proposing solutions involving, respectively, government regulations and gun ownership. Spooked by legally mandated fossil fuel restrictions, conservatives were less likely to accept the best scientific estimates on global temperature changes. Conversely, after being told that looser gun control laws reduced violent crime, liberals were less likely to believe that crime is a problem.

Solution aversion, as the researchers call it, seems to know no partisan bounds. "In any issue where people's cherished beliefs and identities are in play, you're probably going to see some amount of solution aversion," said Troy Campbell, a consumer behavior researcher at Duke University's business school. "We alter our view of reality to be as flattering as possible."

Campbell's new study, co-authored by Duke psychologist Aaron Kay and published in the November issue of the *Journal of Personality and Social Psychology,* belongs to a body of research on what's known as motivated reasoning: how psychological influences, from emotion to basic physiological traits, influence ostensibly rational thought.

The field's origins lay not in political thinking, but personal—for example, the tendency of people to accept or challenge medical diagnoses. But the political implications are seductive, particularly regarding the conundrum of human-caused climate change, an issue on which the essential details are uncontested among scientists but remain a matter of partisan divide among the public.

Previous motivated reasoning research has highlighted the role social factors may play, positing climate change rejection as a sort of tribal identifier among Republicans, one that might touch on a reflexive antipathy to negative information or perhaps a partisan distrust of science. Whereas that research focused on the science and communication of climate change itself, Kay and Campbell were more interested in how proposed solutions affected people's thinking.

In the first of several experiments, they asked 72 men and 117 women, equally split between self-identified Democrats and Republicans, whether they agreed with the Intergovernmental Panel on Climate Change's assessment that human-induced climate change would raise Earth's temperature by 3.2 degrees Fahrenheit during the 21st

century. As expected, there was a strong party-line divide; and among Republicans, the strength of disbelief tracked with expectations that fixing the problem would cause economic harm.

Republicans who thought preventing climate change would be an inconvenience were more likely to accept that warming would occur, but just by a couple degrees. If they expected the solution to result in economic catastrophe, they'd be more likely to say Earth wouldn't warm at all.

In the next of their experiments, Kay and Campbell asked a different group of 121 adults to read one of two passages describing possible responses to climate change: one a free-market approach that emphasized the economic boon of green technologies, the other a regulatory proscription of energy cuts.

Democrats were slightly less likely to accept climate change after reading about the free-market solution. Among Republicans, however, the aversion was much more pronounced: whereas after reading about regulations just 22 percent said Earth's temperatures would rise by at least 3 degrees, that number leaped to 55 percent after reading about free markets.

The findings support the idea "that Republicans' skepticism toward climate change science is linked to beliefs about the policy solutions," wrote Kay and Campbell. But conservatives don't have a monopoly on solution aversion. In their next experiment, the researchers changed topics, to gun control and crime. When test participants who favored tight gun control laws, a politically liberal stance, read that expanded gun access reduced violent home invasions, they suddenly became less likely to think invasions were a widespread problem.

"This is a general phenomenon, and liberals do it, too," said psychologist Peter Ditto of University of California, Irvine, an expert in motivated reasoning who was not involved in the new study. "What we've got is this contest of moral visions that has become a factual fight because of this tendency of people to change their factual beliefs to fit their moral inclinations," said Ditto of America's political landscape. One of Ditto's own studies involved capital punishment: reading about its inherent morality or immorality affected what people thought about its costs.

Campbell and Kay say solution aversion complements two existing, non-exclusive explanations of motivated reasoning. The first, called system justification theory, describes how people want to believe, and subconsciously try to convince themselves, that existing social systems are essentially good. The other, moral coherence, is a subset of what's known as cognitive coherence theory: we want our beliefs to fit nicely together.

"If you feel really negatively about the solution, if you don't want the solution to happen, then you deny that the problem exists," said Campbell. "Then there will be coherence in your belief systems."

Caveats do apply. The new findings involve just one set of experiments, as yet unreplicated, involving people answering online questionnaires rather than questions in real-life situations. And Campbell stressed that, even if solution aversion does exist, it's not going to provide an all-encompassing explanation for factual disagreements.

Neither is solution aversion deterministic, Campbell says. Rather, it's one influence among many, a gentle—or maybe not-so-gentle when an issue bears directly on foundational beliefs and identities—push on the gears of cognition.

If the findings seem pessimistic, predicting that facts are often dictated by belief and reason clouded in self-serving ways, they also suggest ways of mitigating solution aversion, said Campbell. Problems might be framed with aversion in mind: regarding climate change, a liberal might emphasize those free-market solutions. Of course, if people feel they're being manipulated, that could backfire; a more durable strategy, if also a more difficult one, involves making open-mindedness a personal and social virtue.

"It's important to some people to second-guess themselves. It's important to who they are," Campbell said. New York Times columnist David Brooks made the same point when he wrote about what he called the "mental virtues" of a willingness to challenge oneself, humility about one's own understanding and openness to the knowledge of others.

If that's not always easy, and if we can't always avoid solution aversion, said Ditto, we can at least be more self-aware. "People can recognize the bias and try to work with it," he said. "What you see in politics now is this massive lack of self-awareness."