

Human psychology is one of the biggest causes of climate change denial. Stress, the feeling of a lack of control and being detached from the direct effects of a distant danger have all been shown to encourage dismissive and conspiratorial thinking, which is one of the key factors that makes people reluctant to accept climate change. In addition, confirmation bias, or the tendency to trust information that confirms one's own views, makes challenging climate change deniers difficult. However, recent data shows that the majority of the world's population does believe in climate change^[7]. This has been conducive to significant improvements in climate policy. In fact, as climate change deniers have become less influential and policy progress is being made, the top concern may be whether or not we can slow warming fast enough.

While the share of people who don't believe in climate change has declined, understanding what causes these beliefs is important to addressing complex issues that may arise in the future. One major reason for climate change denial is distrust in governments and scientists, which can mean that conspiracy theories about climate change, which often involve corrupt scientists and lies by those in power, become much easier for people to accept. A literature review^[1] by the American Psychological Association found "ample evidence" (p.126) that citizens distrust risk messages from scientists or the government, causing them to react negatively to advice or policy that they perceive to impinge on their freedom. Moreover, a study^[19] by Goertzel (1994) also found that people who distrusted authority were more likely to believe in a number of conspiracy theories. Both of these factors can have worrying implications for the rise of climate change denial in countries with actually corrupt and manipulative governments, such as Russia, where only 43% of citizens consider climate change a serious threat^[20].

Another reason for denial is feeling helpless, which can often make people seek alternative narratives to regain their sense of control. For example, one study^[2] found that residents asked to recall a situation where they didn't have control were more likely to believe in corrupt or untrustworthy actions by their government: one of multiple^{[3][4]} studies linking belief in conspiracies and feelings of helplessness. Climate change is a complex issue and solving it is far beyond the control of any single individual, with serious and stressful consequences. This is exactly the type of problem that is ripe for conspiracy and denial.

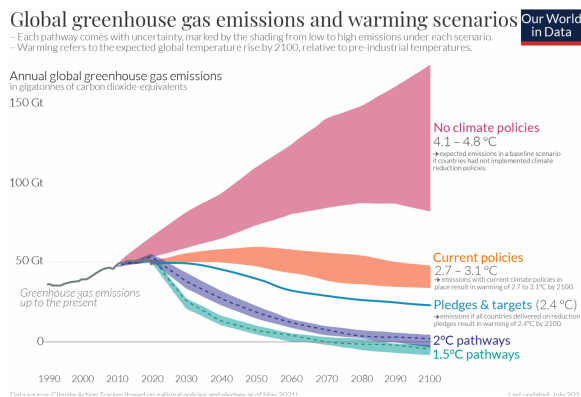
Climate change denial has also persisted due to confirmation bias. Deniers tend to question or dismiss information that goes against their beliefs and accept evidence that confirms them. One study^[5] by Lijian and Yanmengqian (2021) asked participants, who had answered whether they believed in climate change or not, to evaluate three videos expressing different views on climate change before reporting their final attitude on the topic. The researchers found that people would consider messages that challenged their pre-existing beliefs as less effective and their sources as less credible. This pattern of bias was more often present in deniers, according to the study. These results suggested that, once exposed to misinformation, the remaining deniers in particular will be very difficult to

persuade otherwise.

Despite these factors, the vast majority (94%_[7] according to the World Economic Forum) of the world population do believe that climate change exists. A study by the UNDP_[8] found that 64% of people consider climate change an emergency. This number also appears to be on an upwards trend; Pew research has found a general increase in concern about climate change among citizens of ‘advanced economies’ (except Japan)_[9] and Yale surveys showing an 8% increase in Americans believing in climate change, from 64% in 2014_[10] to 72% in 2020_[6], with a significant portion of the rest answering “Don’t know” (16% in 2020_[6]) rather than “No”.

Furthermore, world leaders are finally showing greater resolve to take meaningful action to stop climate change, as illustrated by the Kyoto Protocol (192 countries)_[11] and Paris Agreement (196 countries in 2015)_[12], with these and subsequent national and international climate policies nearly halving predictions for temperature rise (see

graph_[13] below). Recent COP conferences have also improved these predictions, with the outcome of COP26 leading to a reduction in global warming estimates from 2.7°C to 2.4°C, according to UCL_[14].



It may seem unusual to take an optimistic view on climate change, but trends in global public opinion and in policy seem to be positive. While there is still important debate going on about whether governments and companies are moving fast enough, the influence of

climate change deniers seems to be fading.

While this sounds cautiously optimistic, the climate situation overall is still worrying. Even current pledges and targets are unlikely to prevent a temperature rise of less than 2°C_[13], with actions needed to keep the rise below 1.5°C described as “very ambitious” by the IPCC_[17] if not entirely “implausible”_[18] by others, suggesting that the monumental efforts and spending required to achieve “net zero by 2050_[17]” might be greater than those needed to manage the effects of a 2-2.4°C temperature rise. Taking into account the IPCC prediction that a global temperature rise of 2°C instead of 1.5°C could result in around 420 million more people being frequently exposed to extreme heatwaves_[15] and, according to AMAP, “the probability of an ice-free Arctic summer is 10 times greater under a 2°C global warming scenario compared with a 1.5°C scenario_[16]”; one of the countless devastating effects such a change will likely have on ecosystems around the world.

Finding ways to minimise these impacts is urgently important, as a growing number of people recognise. While climate change conspiracies and denial rooted in human psychology will never completely disappear, the actual influence of this group of people is shrinking. While progress to limit climate change is accelerating, the situation remains very dangerous and the greatest priority should be working with politicians and businesses to lower emissions as quickly as possible, because every 0.5°C increase can have serious effects and our time to act is running out.

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