

Title: Supplementary stimuli information appendix for “Conservatives are less accurate than liberals at recognizing false climate statements, and disinformation makes conservatives less discerning: Evidence from 12 countries”

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Note: The material contained herein is supplementary to the article named in the title and published in the Harvard Kennedy School (HKS) Misinformation Review.

Appendix A: Supplementary stimuli information

Table A1. Fact checks for each false statement in the climate truth discernment task.

	Statement	Fact check
Supporting climate action	Climate change will cause the extinction of up to 75% of all species on Earth.	As of 2023, the projections with very high greenhouse-gases emissions and a degree of warming above 4°C predict an extinction rate of 50% (<i>medium confidence</i> , IPCC AR6 WG2, 2023, p. 13, Statement B.4.1.).
	Global temperatures may rise by up to 20°C by the end of the century, potentially resulting in widespread drought and famine due to climate change.	As of 2023, the projected very high greenhouse-gases emission scenario in the IPCC report estimates a warming of 4.4°C (3.3°C–5.7°C) by 2100 (IPCC AR6 Synthesis Report, 2023, p. 33).
	The Earth may enter a period of 'runaway warming' that cannot be stopped, which could lead to the collapse of civilization due to climate change.	According to the IPCC Expert Meeting on the Science to Address UNFCCC Article 2 including Key Vulnerabilities in 2004, “a “runaway greenhouse effect”—analogous to Venus—appears to have virtually no chance of being induced by anthropogenic activities.” (IPCC, 2004, Annex C ; see also Hansen et al., 2013 ; Goldblatt et al., 2013). The only mention of runaway warming in the 2021 IPCC report affirms that there is evidence that in no scenario does permafrost thawing lead to runaway warming through increasing concentration of greenhouse gases (e.g., carbon dioxide, methane, water vapor) in the atmosphere (IPCC AR6 WG1, p. 773).
	Germany leads the way in renewable energy, with nearly 65% of electricity generated from renewables.	As of 2022, 21.26% of electricity is generated from renewables in Germany (Our World in Data, 2024).
	Climate catastrophe: Entire cities to be submerged by rising seas within decades.	As of 2023, global mean sea level is projected to rise about 2 m by 2100—cities will, therefore, not be submerged within decades (IPCC AR6 Synthesis Report, 2023, p. 43).
Delaying climate action	Extreme weather: Natural variability, not human activity, is the main driver of extreme weather events.	According to multiple IPCC reports, human activities have unequivocally caused global warming. Furthermore, “ <i>Human-caused climate change is already affecting many weather and climate extremes in every region across the globe.</i> ” (IPCC AR6 Synthesis Report, 2023, p. 6).
	The climate challenge can be addressed through innovation and technology advancements in fossil fuels.	Fossil fuel use and expansion is at odds with the warming targets defined in the Paris Agreement (Green et al., 2024). In this regard, fossil fuels are net causes and never solutions to the climate crisis. The current technological advancements in curtailing greenhouse gasses emissions (such as carbon capture and storage and/or carbon dioxide removal) are by definition curtailment measures to the pollution of fossil fuels.

Carbon dioxide is not a pollutant, but a benefit to the environment.	“Although it has some very important and beneficial effects, CO ₂ meets the legal and encyclopedic definitions of a ‘pollutant’, and human CO ₂ emissions pose a threat to public health and welfare” (Skeptical Science). The USA Environmental Protection Agency defined CO ₂ and related greenhouse gases as having the possibility to “endanger public health and endanger public welfare” (EPA, 2009 ; see also NOAA, 2022 ; NIH, 2024); the Supreme Court of the USA ruled that CO ₂ is an air pollutant (Massachusetts v. EPA, 549 U.S. 497, 2007) and the British National Atmospheric Emissions Inventory defines CO ₂ as a greenhouse gas pollutant (National Atmospheric Emissions Inventory).
Catastrophic consequences of global warming are inevitable and unavoidable.	As of 2024, there are multiple climate change mitigation pathways with increasing levels of climate ambition that will maintain Earth under different critical thresholds of degrees of warming (Rogelj et al., in press).
Renewable energy is costly and inefficient, and should not be subsidized.	Costs of energy production by renewable energy sources has been steadily falling in the past decades (Our World in Data, 2024) and are now cheaper than fossil fuel production (IRENA, 2021 ; Roser, 2020).

Table A2. The twenty climate disinformation statements.

Coding	Disinformation tweet
Disinformation about climate science	As more wind and solar are added they raise electricity prices and destabilize electric grids. Because they are part-time unreliable weather dependent sources. We want full-time electricity. Not part-time like third world countries. All for silly expensive net zero. CA pays more.
	The current exceptional warming and cooling your seeing is due to the location of the Jet Stream. It's become very wavy due to the lack of Solar Energy going into the Oceans and nothing to do with Man Made CO2.
	Today's 'global warming' is estimated to be an otherwise unmeasurable 0.4°C (0.72°F) over the 1979-2000 average... despite 50% of all manmade emissions. No 2022 weather event was unprecedented or can be blamed on CO2 emissions.
	This is a portrait of climate fraud, posturing as the saviours of the world. They are a breed of crooks, getting rich by ripping off gullible western nations. The UN led climate hoax has been running since 1988. They want us to believe a pack of lies about earth's climate.
	Too often, academic reports on climate use highly skewed data that seem to have been carefully selected to support aggressive environmental regulations. One recent and much-cited Lancet report appears deliberately deceptive.
	The climate hoax devised by the UN, supported by rich elitists is endorsed by our treacherous leaders is an attack on freedoms & rights. Climate cultism is a form of global self hatred. It aims to punish western nations by transferring huge reparations to the developing world.
	Top NASA Climate Modeler Admits Predictions Are “Mathematically Impossible.”
	Lots of links of studies of the Medieval Warm Period that climate science deniers (alarmists) want to pretend did not exist. Because there is no explanation for natural warming during this time. Studies point out temp was warmer back then, than now.

	<p>According to global warming theory the poles should warm significantly if carbon dioxide is driving temperatures Just the opposite is occurring in the southern hemisphere.</p> <p>The evidence for manmade climate change is so thin they cannot debate it. They hide behind the lie of consensus. There is no room for consensus in science. The basis is a provable hypothesis. There is not a single peer reviewed study that proves manmade CO2 is causing warming.</p>
Disinformation about climate action	<p>At Climate Summit, Elites Chow Down on Gourmet Meats While Telling Us to Eat Bugs.</p>
	<p>FACT CHECK Results of the Biden administration's extreme climate agenda cutting emissions by 44% by 2030. Annual Jobs Lost: 1.2 MILLION. Lost Economic Growth: \$7.7 TRILLION. Increase in Electric Bills: 23% Increase in Gas Prices: 2\$ PER YEAR.</p>
	<p>The war on 'fossil fuels' is absurd considering the vast fields of coal/oil/gas everywhere on earth. The mantle is brimming over with it. A United Nations bid for control, cash & power has led to an energy crisis that looms as the biggest self-inflicted disaster in human history.</p>
	<p>Death and privation caused by the lack of affordable energy caused by Green Energy policies will not affect the Elites at all. They want us to eat bugs, do a lot less as they carry on with their lives just as they are doing now. Climate scamsters. They should lead by example.</p>
	<p>You are lying. Fossil fuels gave us cheap energy for decades so billions live longer healthier happier lives. Many technologies like carbon capture, filters fuel additives etc reduces emissions. Banning fossil fuels is creating fuel poverty and harming people.</p>
	<p>Energy literacy starts with the knowledge that renewable energy is only intermittent electricity generated from unreliable breezes and sunshine, as wind turbines and solar panels cannot manufacture anything for the 8 billion on this planet.</p>
	<p>Imagine sacrificing 500 high-paying coal jobs, ranging up to \$60,000/yr, for the climate hoax. Even if you believe in the hoax, global emissions are up 5% from pre-pandemic levels -- 90% because of China. Emissions from a single mine are insignificant.</p>
	<p>Europe's transition to renewable energy and net zero carbon is not working, except to make life hard on average European citizens.</p>
	<p>Willfully-blind ignorance about the consequences of [the rush to green policies – deep recessions, broken societies and millions more going hungry – doesn't make them any less immoral. The road to hell is paved with good intentions. Bingo.</p>
	<p>Solar and wind are far more expensive than established reliable stable secure electricity from pure hydro coal gas nuclear. That's why your shift to unreliable, unstable, expensive solar and wind; is devastating families; and exporting manufacturing jobs.</p>

Note: In order to avoid climate change countermovement actors from understanding the net persuasive appeal of each disinformation statement, identifying numbers of each statement will differ from the identifying numbers in the data once collected. Correct matching will only be known to authors.

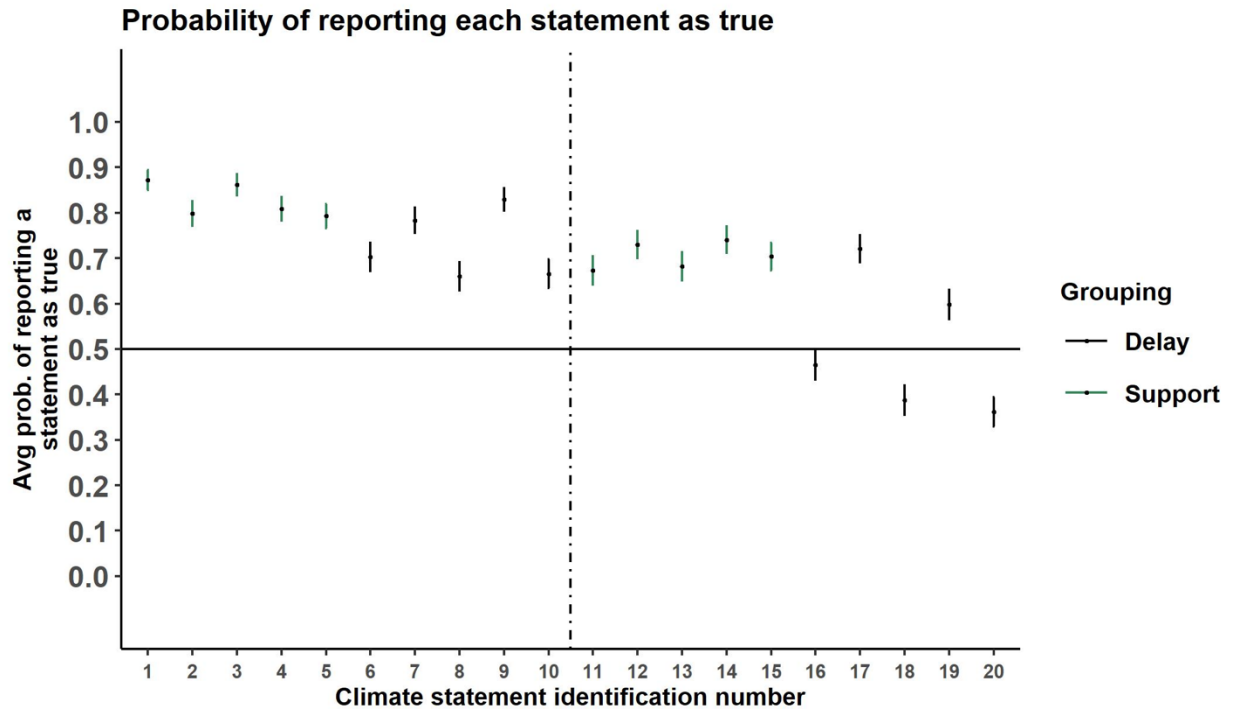


Figure A1. Mean probability of each statement of the truth discernment task to be reported as true. The vertical line is a visual aid to distinguish true and false statements: The first ten statements are true information about climate action; the last ten statements are false information about climate action.