

# The Social Dynamics of Environmentalism

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In September 2019, millions of protesters across the globe walked out of their classrooms and workplaces and took to the streets to demand that governments take concrete action to avert catastrophic climate change. Participants in the global climate strike demanded that international leaders step up environmental regulations, end government subsidies for the fossil fuel industry, and invest in the infrastructure necessary to rapidly transition to 100% renewable energy. Months later, citizens continue to take to the streets in support of environmental sustainability worldwide.

Global warming and pollution are often portrayed as issues that fall squarely on the backs of individual consumers. But proenvironmental protesters argue that it's difficult, if not impossible, to go green when renewable energy options, reliable public transportation, and environmentally friendly product alternatives can be difficult to find — and often difficult to afford even when they are available.

On the surface, protesting in support of systemic change and altering your personal consumption habits by choosing to take the bus or investing in a reusable shopping bag may all appear to fall under the umbrella of “environmentalism.” In the realm of psychological science, however, the factors that motivate people to engage in proenvironmental consumption in their personal lives and to take political action in society at large have been found to differ significantly.

Research suggests that our willingness to engage in these activities reflects not only how we identify as a part of our social and political ecosystems, but also how we envision our relationship with nature itself — and that the relative importance of each of these relationships can vary widely between cultures.

## **The Psychology of the Commons**

Climate protesters' emphasis on government intervention, and regulation in particular, represents one solution to the oft-cited "Tragedy of the Commons." In a 1968 essay that remains one of the most cited works in the social sciences literature, evolutionary biologist Garrett Hardin framed this concept in terms of herdsmen managing a communal pasture, according to Mark Van Vugt, a professor of psychology at Vrije Universiteit Amsterdam in the Netherlands, in *Current Directions in Psychological Science*.

In Hardin's model of the social dynamics surrounding common resources, individual herdsmen benefit economically by adding additional cattle to the shared field. This incentive to overgraze can lead to ecological disaster for everyone, including those who choose to herd responsibly. Hardin's model suggests that mutually agreed upon coercion — that is, top-down regulation — is required to prevent opportunists from taking advantage of these kinds of common resources. This could take the form of enforcing a cattle limit, regulating pollution, or even legislating a nationwide transition to wind, solar, and other forms of renewable energy.

In certain contexts, individuals do seem to demonstrate the self-interest Hardin warned against. In a field study published in *Evolution and Human Behavior*, Jeffrey Winking and Nicholas Mizer, anthropologists at Texas A&M University, put individuals' prosociality to the test by having a confederate approach 60 unwitting participants at a casino bus stop in Las Vegas. In the first condition, the confederate, who claimed he was late for his ride to the airport and so had been unable to cash in his chips, gave each participant \$20 worth of casino chips; in the second condition, the confederate suggested that the participant could split the chips with another confederate, who was speaking on the phone nearby.

In a third condition, the researchers openly approached participants and asked them to divide the \$20 in casino chips between two envelopes: one that would go to the participant and another that would go to a randomly selected individual at some point in the future.

Participants in the third condition, who were aware of the experiment, gave an average of \$5.43, or 27% of their chips, to the unknown individual, but not one person in either of the first two conditions chose to share their chips. In fact, some participants couldn't even be debriefed on the experiment because they ran off as soon as they had the money in their grasp.

But it's rare for individuals to be so purely driven by the economics of a situation — a trope some psychological scientists refer to as the "myth of self-interest," noted APS Fellow Paul A. M. Van Lange (Vrije Universiteit Amsterdam) and colleagues in *Current Directions in Psychological Science*. There are numerous examples of communities successfully self-regulating the sustainable use of agricultural lands and fisheries, Van Vugt wrote, and some individuals are more likely to consider the future consequences of their actions on the environment than others. This is particularly true when individuals' social identities are closely tied to the community — whether that "community" be around the corner or on the other side of the world.

Consider this study involving 1,195 participants ages 18 to 75 from urban and rural areas in the United States, Italy, Russia, Argentina, South Africa, and Iran. In an article in *Psychological Science*, researchers Nancy R. Buchan (University of South Carolina), APS Past President Marilynn B. Brewer (University of New South Wales), and colleagues gave each individual 10 tokens. They could either keep all of the tokens, guaranteeing a modest payout, or distribute some of them to a local or world account. There, the tokens would increase in value and be split with either three players from the individual's local community or 11 players from around the globe. If the other players in the group gave at similar or higher rates, the participant would benefit from contributing to these accounts; but if the other players didn't behave as generously, they would end up with even less than they started with.

After making their contributions, participants estimated how many tokens they expected each individual in their local and global groups would contribute to each account. They also reported how concerned they were with global issues such as climate change and income inequality, and completed measures of social identity designed to determine how strongly they defined themselves as members of their local communities and the world as a whole.

In line with previous findings on the reciprocal nature of cooperation, participants' expectations about group members' contributions significantly influenced how much they gave. The contributions of individuals with more global social identities, however, were systematically higher than what would be predicted from expectations alone.

"Participants who described themselves as identified with the world community literally 'put their money where their mouth was' in making decisions to contribute significant resources despite the potential cost to personal wealth," Buchan and colleagues reported.

Global social identity may help individuals generalize in-group behavior across national boundaries, the researchers continued. This could serve as a powerful tool for combating international social dilemmas such as climate change that require individuals and nations alike to commit to change without any guarantee of cooperation, the authors continued.

### **One With Nature, One Within Society**

In contrast to these social dilemmas, research suggests that the factors that spur environmentally friendly living may be influenced not only by our relationship with others, but also by how we identify with the natural world itself.

In a survey of 351 online participants, Michael T. Schmitt, Caroline M. L. Mackay, and Daphne Payne, of Simon Fraser University, Canada, and Lisa M. Droogendyk of Sheridan College, Canada, found that participants who reported identifying more strongly as a part of nature were also more likely to self-report proenvironmental behaviors such as driving less and eating a vegetarian diet.

This "sense of oneness" with the natural world was found to have a weaker relationship with participants' reported likelihood of engaging in proenvironmental activism, however, Schmitt and colleagues noted in the *Journal of Environmental Psychology*.

Instead, individuals' likelihood of engaging in activism was predicted by the strength of their politicized

environmental identity — that is, how strongly they socially identified with the collective of environmental activists, organizations, and other groups advocating for systemic change in the way societies regulate industry, resources, and energy use. In a longitudinal study of 62 students in Schmitt's Psychology and Environmental Sustainability class, the researchers similarly found that politicized identification, rather than personal identification with nature, predicted participants' self-reported activist work over the course of a 3-month semester.

“Social change behaviour is much more strongly predicted by identification with a politicized group — one that defines itself in terms of a collective resistance or social movement within a wider context of social conflict and competing interests,” Schmitt and colleagues wrote.

Environmental campaigns often emphasize humanity's place in the natural world, attempting to leverage our relationship with the plants, animals, and ecosystems that support life on Earth into a call for proenvironmental action. But emphasizing individuals' connections with the activists and organizations fighting for institutional change to mitigate climate change may more effectively move people to take political action, the researchers wrote.

“Identification with nature is less likely to lead to politicized environmental identification if it is not also accompanied by the perception of conflict between groups with competing interests (e.g., environmentalists vs. fossil fuel companies) within the context of a larger social system,” the researchers concluded.

Promoting awareness of environmental threats and a sense of moral obligation toward nature can also encourage activism — but not everyone responds to the same set of moral values, found Matthew Feinberg (Stanford University) and Robb Willer (University of California, Berkeley) in an article published in *Psychological Science*.

Environmental issues tend to be framed in terms of harm, care, and fairness, and proenvironmental campaigns commonly emphasize humanity's obligation to protect nature, Feinberg and Willer explained.

On the surface, liberal-leaning individuals may seem to respond more strongly to this argument because they are more likely to view environmentalism as a moral issue, the researchers continued. In a survey of 187 participants, for example, Feinberg and Willer found that self-identified liberals were more likely than self-described conservatives to describe a hypothetical man who chose not to recycle his plastic water bottle as immoral.

This may not result from an inherent conflict between conservatism and environmentalism, however. Part of the problem, Feinberg and Willer wrote, is that proenvironmental messages often neglect the moral domains such as loyalty, authority, and purity that tend to appeal to conservatives.

Feinberg and Willer investigated this relationship through a survey of 388 participants from 15 US cities. Participants were split into three conditions: a neutral condition, in which they read about neckties; a harm/care condition, in which they read a message about the importance of protecting the environment from destruction caused by humanity; and a purity/sanctity condition, in which they read about the importance of eliminating pollution and contamination. Participants in the harm/care condition

then viewed images of environmental degradation, including a barren coral reef, while those in the purity/sanctity condition were shown images of pollution clouds, a person drinking dirty water, and a garbage-strewn forest.

Finally, participants completed measures of attitudes about the environment and legislation designed to protect it. They also reported their feelings of disgust, an emotion that has been found to play an important role in conservative moral judgments.

Overall, Feinberg and Willer found that appeals to ecological purity, but not care, triggered conservative participants' self-reported disgust, causing them to be just as supportive of pro-environmental attitudes and policy as more liberal participants in any of the three conditions.

Believers and deniers of climate change often frame the issue so differently that the two sides talk past each other, the researchers wrote. Discussing environmental issues in the moral terms suited to different political audiences can help improve communication.

“Political polarization around environmental issues is not inevitable but can be reduced by crafting proenvironmental arguments that resonate with the values of American conservatives,” Feinberg and Willer wrote.

## **Global Solutions**

Informational strategies such as those outlined above can powerfully motivate proenvironmental actions, wrote Kimin Eom (Singapore Management University), Heejung S. Kim and David K. Sherman (University of California, Santa Barbara), and Keiko Ishii (Nagoya University, Japan) in *Psychological Science*. Cultivating sustainable societies globally, however, requires an understanding of the significant cultural variability in what drives support for policy and behaviors worldwide.

Through a study of 57,268 participants from 47 countries, Eom and colleagues found that individuals' personal beliefs about environmental issues predicted proenvironmental support significantly more strongly in individualistic cultural contexts such as those in the United States, Australia, and Canada. Participants from these idiocentric societies who rated environmental issues such as global warming, loss of biodiversity, and pollution as high in seriousness were more likely to report a willingness to give up part of their income through a donation or tax if it was used to prevent pollution.

This link between environmental concern and action was much weaker for individuals in more collectivist societies such as Indonesia, Ghana, and Chile. Given that social conformity is highly valued in collectivistic societies, Eom and colleagues focused on another factor at play: social norms.

The researchers presented 149 European American and 102 Japanese undergraduate students with a series of 10 purchasing decisions. In each case, they could choose either a cheaper option or a slightly more expensive one with environmental benefits, such as a shampoo with biodegradable ingredients. Participants also completed a measure of environmental concern and reported what percentage of people they believed engaged in environmentally friendly behaviors such as recycling, carpooling, and energy saving in their own society.

As expected, the researchers found no relationship between Japanese students' self-reported levels of environmental concern and their willingness to pay more for a green product. Instead, this choice was reflective of how common they perceived proenvironmental behavior to be in their society.

Being a good group member is often prioritized over pursuing personal goals in collectivist societies, wrote Eom and colleagues. In these contexts, highlighting the social desirability and frequency of existing proenvironmental behavior may be more effective than focusing on informing the public about the urgency of environmental problems.

“Solving environmental challenges requires leveraging psychological diversity to motivate people across the globe,” they added. “To design effective sustainability strategies and proenvironmental campaigns, it is important to identify and understand cultural variation in the factors driving proenvironmental action.”

That's not to say that campaigns should go all in on one strategy or the other, noted Eom, Sherman, Kim, and Viki Papadakis (University of California, Santa Barbara) in another article in *Current Directions in Psychological Science*. Informational and social factors dynamically influence behavior across a range of sociocultural contexts, and socioeconomic status (SES) and religiosity play a role as well. Social norms may play a greater role in the behavior of individuals in low-SES contexts, in which economic limits on individual autonomy can foster a heightened sense of interdependence, the researchers explained. Many religions, meanwhile, emphasize some version of environmental stewardship, often because of a sense of social responsibility to a higher power.

“Policymakers and activists are advised to use both informational and social-norm approaches in conjunction, perhaps with differential balances depending on the characteristics of communities,” Eom and colleagues concluded.

In the United States, for example, awareness of the shifting social norms around behaviors such as water conservation and meat consumption can encourage individuals to embrace green living, too.

Gregg Sparkman and Gregory M. Walton (Stanford University) investigated the role of dynamic social norms in environmentally friendly behavior through a study of approximately 1,200 residents living in graduate-student couples housing in three nearly identical on-campus high-rises during a summer drought. In the static norm facility, the researchers placed signs that read “Most Stanford Residents Use Full Loads!” on the dorms' washing machines, while students in the dynamic norm condition operated washing machines labeled “Stanford Residents Are Changing: Now Most Use Full Loads!” Washing machines in the control facility remained unlabeled.

Over a period of 3 weeks, students who saw the static norms messaged reduced their water use by 9%, while those in dynamic norms message used 28% less water, conserving significantly more than those in the control and static norm conditions, Sparkman and Walton reported in *Psychological Science*.

“We often see norms as something that stands in the way of change, but it's possible that they can also be leveraged to facilitate change in the world too,” Sparkman said. “People probably have lay intuition that change isn't easy. If you start seeing other people change, it can give you a reason to question psychological barriers to change.”

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## Proenvironmental Personalities

An article in a forthcoming edition of *Perspectives on Psychological Science* further explores why individuals do (and do not) adopt proenvironmental attitudes and behaviors. Mounting evidence suggests that individuals who are open, honest, and conscientious – among other personality traits – are more likely to view issues such as climate change as important, and to take actions to improve the environment themselves. Accounting for individual differences in how we approach environmentalism can help advocates build more effective policies and outreach efforts, write Alistair Soutter, Timothy Bates, and Rene Mottus of the University of Edinburgh.

Access *Perspectives on Psychological Science* at [psychologicalscience.org/publications/perspectives](https://psychologicalscience.org/publications/perspectives).

## References

- Buchan, N. R., Brewer, M. B., Grimalda, G., Wilson, R. K., Fatas, E., & Foddy, M. (2011). Global social identity and global cooperation. *Psychological Science*, 22, 821–828. <https://doi.org/10.1177/0956797611409590>
- Eom, K., Kim, H. S., Sherman, D. K., & Ishii, K. (2016). Cultural variability in the link between environmental concern and support for environmental action. *Psychological Science*, 27, 1331–1339. <https://doi.org/10.1177/0956797616660078>
- Eom, K., Papadakis, V., Sherman, D. K., & Kim, H. S. (2019). The psychology of proenvironmental support: In search of global solutions for a global problem. *Current Directions in Psychological Science*, 28, 490–495. <https://doi.org/10.1177/0963721419854099>
- Feinberg, M., & Willer, R. (2013). The moral roots of environmental attitudes. *Psychological Science*, 24, 56–62. <https://doi.org/10.1177/0956797612449177>
- Schmitt, M. T., Mackay, C. M., Droogendyk, L. M., & Payne, D. (2019). What predicts environmental activism? The roles of identification with nature and politicized environmental identity. *Journal of Environmental Psychology*, 61, 20–29. <https://doi.org/10.1016/j.jenvp.2018.11.003>
- Sparkman, G., & Walton, G. M. (2017). Dynamic norms promote sustainable behavior, even if it is counternormative. *Psychological Science*, 28, 1663–1674. <https://doi.org/10.1177/0956797617719950>
- Van Lange, P. A. M., Joireman, J., & Milinski, M. (2018). Climate change: What psychology can offer in terms of insights and solutions. *Current Directions in Psychological Science*, 27, 269–274. <https://doi.org/10.1177/0963721417753945>
- Van Vugt, M. (2009). Averting the tragedy of the commons: Using social psychological science to protect the environment. *Current Directions in Psychological Science*, 18, 169–173. <https://doi.org/10.1111/j.1467-8721.2009.01630.x>
- Winking, J., & Mizer, N. (2013). Natural-field dictator game shows no altruistic giving. *Evolution and*

*Human Behavior*, 34, 288–293. <https://doi.org/10.1016/j.evolhumbehav.2013.04.002>