

**ScienceDirect** 



Review

# The most difficult thing in the world: a sociocultural perspective on putting pro-environmental thoughts into action



Heejung S Kim<sup>1,2</sup> and David K Sherman<sup>1</sup>

Although there is now a broad consensus that climate change is happening and a risk to society as we know it, these beliefs have not been commensurate with behaviors that are needed to address the climate crisis. This review discusses why this dissociation exists, focusing on sociocultural differences in the strength of the link between environmental beliefs and environmental action. Certain social contexts (i.e. collectivistic, lower socioeconomic status, and religious) foster a stronger sense of personal control compared to their counterparts, and this explains variation in the link between climate change beliefs and pro-environmental behaviors. In sociocultural contexts where a sense of personal control is lower, alternative motives, such as social norms and trust in government, play more central roles in shaping pro-environmental support. A novel sociocultural perspective is provided to understand why increased climate change beliefs do not necessarily increase support for pro-environmental actions.

#### Addresses

<sup>1</sup> University of California, Santa Barbara, USA

<sup>2</sup> Ewha Womans University, Republic of Korea

Corresponding author: Kim, Heejung S (h\_kim@ucsb.edu)

#### Current Opinion in Behavioral Sciences 2025, 61:101465

This review comes from a themed issue on **Behavioral Science for Climate Change** 

Edited by Dr. Madalina Oana Vlasceanu and Dr. Grace Lindsay

Available online xxxx

Received: 24 September 2024; Revised: 13 November 2024; Accepted: 19 November 2024

https://doi.org/10.1016/j.cobeha.2024.101465

2352–1546/© 2024 Elsevier Ltd. All rights are reserved, including those for text and data mining, Al training, and similar technologies.

'Thinking is easy, acting is difficult, and to put one's thoughts into action is the most difficult thing in the world (Quote Attributed to Goethe; [45]).'

Whether it is because of the efforts of educators, activists, or the media or due to the increasing experience people are having with catastrophic climate events, there is now a broad consensus that climate change is happening and a risk to society. Americans who think global warming is happening now vastly outnumber those who deny it is happening (74% vs 15%), and a majority of Americans (61%) think that climate change is human caused [21]. These views are in line with the consensus of climate scientists [15] as well as the beliefs of people around the world. A Pew poll taken in 26 countries found that most people in most countries see climate change as a major threat [34].

And while significant changes in policies and individuals' behaviors are occurring, they have not been commensurate with what is needed to address the climate crisis [14]. This suggests that changes in environmental beliefs are not leading to sufficient changes in behavior. Indeed, research indicates that climate change beliefs are weakly related to actions to reduce greenhouse gases. For example, in a UK survey, 74% of respondents were fairly certain or extremely certain that climate change was happening, but only 32% were willing to make a behavioral commitment and pay higher taxes to combat climate change [25]. In some studies (e.g. [31]), pro-environmental attitudes (such as concern about environmental impact) have a positive (albeit weak) relationship to behaviors that lead to a greater carbon footprint.

A great deal of psychological research has explored different factors that promote or attenuate attitude-behavior consistency, focusing on both individual differences (e.g. self-monitoring) and situational determinants (e.g. attitude accessibility; [11]). Beyond these person-level factors that impact attitude-behavior consistency, larger shared social contexts can foster weak or strong relationships between attitudes and behaviors, including the association between climate change beliefs and proenvironmental action.

## How do attitudes-behavior associations differ across sociocultural contexts?

In the last decade, there has been meaningful progress in documenting how the association between climate change attitudes, or climate change beliefs as it is more commonly referred (i.e. believing climate change is happening and feeling concerned about it) and support for pro-environmental actions varies among people who live in different social, structural, and cultural contexts (see Ref. [7] for a review). Studies show that certain sociocultural factors (i.e. national culture and socioeconomic status [SES]) can influence the strength of the association. We have identified these patterns across diverse forms of pro-environmental support, such as selfreported actions, political support, and actual consumer purchases. The national cultural orientation of individualism that prioritizes individual agency over collective agency [46], for example, strengthens the association, such that people from more individualistic countries have a tighter link between their climate change beliefs and their support for pro-environmental action compared to people from more collectivistic countries ([33,4,44]; see also Ref. [27]). Within a country (the United States), those from higher SES backgrounds that foster a greater sense of control [18] show a stronger link between their climate change beliefs and their climate change actions than those from lower SES backgrounds [16,37,4,5]. A similar pattern of results was found with national-level economic prosperity. Selftranscendence value with an emphasis on the welfare of the natural environment [2] predicts pro-environmental behaviors more strongly in more economically prosperous countries than their counterparts. Climate anxiety [33] is also a stronger predictor of proenvironmental action in more, compared to less, affluent countries. Religion, which has 'ego-dampening' effects [36], exerts theorized impacts such that pro-environmental support is less strongly linked to environmental beliefs among people who are more religious than those who are less religious [8].

Notably, while nationality, SES, and religiosity are clearly distinctive facets of people's lives, these sociocultural factors play similar roles in terms of strengthening or weakening the association between individuals' climate change beliefs and their pro-environmental support. Although each of these sociocultural differences is likely to have its own set of psychological explanations, we aim to identify a common psychological mechanism. These sociocultural factors are all human experiences that socialize individuals to assign greater importance to either their internal states, such as their beliefs and feelings, or their social surroundings, such as others and deities, that may constrain their own goals and wishes [17]. That is, certain social contexts (i.e. individualistic, higher SES, less religious) foster a stronger sense of personal control compared to other social contexts (i.e. collectivistic, lower SES, more religious; Figure 1).

Recent studies that tested this idea provide correlational and experimental empirical support. For example, higher

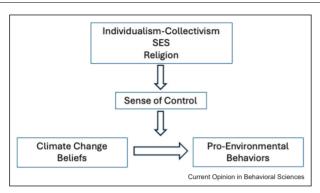
SES individuals tend to have a general outlook of a greater sense of control relative to lower SES individuals, and this sense of control, in turn, compels them to act on their own climate change beliefs [5]. Similarly, more religious people, because of their belief in divine control over the world, act on their own climate change concerns less than people who are less religious [8]. We also found direct empirical evidence for a sense of control as a shared psychological mechanism. One study [37] featuring a large panel chosen to be demographically representative of the U.S. examined the joint role of individuals' endorsement of collectivistic values and their SES background. Results show that collectivistic values and SES operate interactively, such that those who are less collectivistic *and* are from higher SES backgrounds show particularly strong associations between their climate change beliefs and pro-environmental action, and this difference is mediated by a sense of personal control. The examination of joint influences of sociocultural factors is still rare in the behavioral sciences. Further investigation of how different aspects of one's sociocultural experiences impact the attitude-behavior association and other psychological processes will advance a more nuanced understanding of the process of cultural influence.

Taken together, these studies underscore the idea that climate change beliefs and concerns are only a part of the psychology that motivates pro-environmental actions and, moreover, that there are systematic variations in how much they matter across different shared experiences. We next turn our examination of what drives environmental actions to factors other than individual attitudes.

# If not belief, what drives pro-environmental actions?

In assuming personal beliefs and feelings as the primary basis of human actions, one implicitly assumes that individuals have a high degree of personal control to act in accordance with their internal states. While such an assumption is prevalent in mainstream social psychology and related fields, researchers have identified other reasons for human actions and decisionmaking. For example, normative influence is one of the most powerful ways to motivate pro-environmental behaviors [3,39]. Also, perceived institutional (e.g. utility company or government) environmental responsibility positively predicts individuals' proenvironmental support ([47]; see Ref. [41] for a review). What these alternate predictors have in common is that both processes involve people tailoring their pro-environmental support to be consistent with what they perceive to be the goals of their group. Given that, in the sociocultural contexts that foster a greater emphasis on social surroundings (vs a sense of personal control), these alternative motives may play more central roles in shaping pro-environmental support.

#### Figure 1



Theoretical model for sociocultural moderation and the role of sense of control.

Research shows that individuals who sense low control seek group-based control [19] and, thus, conform to social norms more compared to those who sense high control [42], in particular, when the norm is about changes (vs status quo) [43]. Consistently, social norms, relative to climate change beliefs, appear to be a more important predictor for pro-environmental support among people who are more collectivistic or from a lower SES background. What participants perceive as the social norm of pro-environmental behaviors predicts their own pro-environmental behaviors more strongly in more collectivistic cultures than in more individualistic cultures [24,35,4] and among more collectivistic people than among less collectivistic people [37]. Lower SES individuals also show a similar pattern of results [5], although these results seem to hold only when the reference group of the norm is the ingroup, which is consistent with the group-based control model ([42]; see also Ref. [37] for the discussion).

One important aspect of social groups with shared goals is their institutions, as institutions enable and direct the group to achieve its goals. Governments help nations (ideally) to achieve collective goals such as national defense or pro-environmental infrastructure. For example, a study shows that good governance is positively associated with the acceptance of higher carbon tax, but only among citizens who have high trust in their government [23], suggesting the importance of individuals' willingness to put trust in their institutions. Compensatory control theory ([19]) posits that when people experience lowered personal control, they rely on external agents, such as government or supernatural agents, to regain a sense of control. Moreover, those who are from sociocultural contexts that foster prioritization of social goals over personal goals tend to rely on external agents [10]. While religious people do not seem strongly motivated by their own climate change beliefs [8], their pro-environmental support is strongly motivated by religious stewardship, beliefs that humans have a responsibility to take care of the world that a god created ([30,38,9]; see Ref. [6] for review). That is, religious people align their pro-environmental support with what they perceive to be god's commandment rather than their own personal beliefs about climate change.

In the case of collectivism, the value itself is a reliable predictor of compliance behaviors. People from more collectivistic cultures and people who hold more collectivistic values were more likely to wear masks during the COVID-19 pandemic crisis [22,28]. Collectivism, both at the country level and individual level, also predicts greater support for environmental protection [14,26,32]. Notably, one of the reasons for collectivistic people to engage in proenvironmental policy support (e.g. willingness to pay higher taxes for pro-environmental purposes) may be their trust in government (i.e. their perceptions that governments are competent and benevolent) [22]. Taken together, whereas sociocultural factors that modulate individuals' sense of control (i.e. collectivism, lower SES, and religion) decrease the importance of their personal climate change beliefs, these factors increase the relative importance of external influence in individuals' pro-environmental decision-making and behaviors.

## What are the implications and future directions?

The present review provides a novel sociocultural perspective to understand why increased climate change beliefs do not necessarily increase support for proenvironmental actions. This body of work is a reminder that climate change beliefs are not the only important predictor of pro-environmental support. Although we fully recognize the importance of education to increase the correct understanding of climate change, increasing climate change beliefs alone will fall short of increasing necessary actions. The reality is that the vast majority of humans are collectivistic, religious, and/or low SES [13] and that different interventions are likely to be differentially effective for people who vary across these dimensions (see Ref. [48]). Thus, the assumption of the primacy of personal belief rooted in the Western conception of the self and psychology [29] needs to be questioned.

It is important to note that people from contexts that foster a lower sense of control are similarly as, and sometimes even more, pro-environmental than people from contexts that foster a higher sense of control. As described above, collectivism is a reliable predictor of greater pro-environmental support. High-SES individuals produce more greenhouse gas emissions than lower SES individuals [31]. Religiosity, too, positively predicts some pro-environmental support across the world [49] and in the United States [8]. Clearly, the weak association between climate change beliefs and pro-environmental support within these sociocultural contexts is not a hindrance to pro-environmental support. We argue that it is time to develop diverse strategies that befit sociocultural diversity. Our research suggests a few specific approaches. First, there should be more attention given to a sense of control and empowerment. Given that climate change beliefs are widely shared at this point in time, one way to translate these beliefs into pro-environmental support is to increase the sense of personal control as a general outlook in life. When lower SES individuals are experimentally reminded of times when they had control over an event (unrelated to environmental issues), they are more likely to act on their own climate change beliefs [5]. Thus, personal empowerment may be one key ingredient in connecting increased climate change beliefs with greater pro-environmental support.

At the same time, it is important to recognize that there are other reasons than personal attitudes that motivate people to act in societally beneficial manners. In particular, collectivistic or religious people are generally more pro-environmental, and this is probably not due to their personal convictions but due to their sense of civic or religious duty. Given that coping with climate change inherently requires collective and organized efforts and curtailing individuals' consumptions and lifestyles, fostering a sense of belonging and social connection is necessary. In fact, some climate researchers have recently noted that the 'focus on climate change denial is counterproductive' [1]. The focus on climate change denial overstates the proportion and importance of climate deniers (see also [40]), and it polarizes society when constructive engagement across society is needed. Although it is a daunting task in the current fractured societies, efforts should be made to highlight common goals and identities, or at least to utilize a group identity-based sense of duty that is consistent with the environment (e.g. stewardship belief in religion) as a lever to increase pro-environmental actions [12].

Beyond psychologists' theoretical understanding of the process, the issue of climate change requires a pragmatic approach. That is, ultimately, what the world needs is action (see Ref. [20] for a related discussion), not belief. The present review offers some alternative perspectives to better appeal to the diverse world population. According to Goethe, acting is difficult but not as difficult as putting thoughts into action. Perhaps, it is time to make the task easier by moving beyond thoughts and focusing on action.

## **Data Availability**

No data were used for the research described in the article.

### **Declaration of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### References and recommended reading

Papers of particular interest, published within the period of review, have been highlighted as:

- of special interest
- •• of outstanding interest
- Bretter C, Schulz F: Why focusing on "climate change denial" is counterproductive. Proc Natl Acad Sci 2023, 120:e2217716120, https://doi.org/10.1073/pnas.221771612
- Chan HW: When do values promote pro-environmental behaviors? Multilevel evidence on the self-expression hypothesis. J Environ Psychol 2020, 71:101361, https://doi.org/10. 1016/j.jenvp.2019.101361
- Cialdini RB, Jacobson RP: Influences of social norms on climate change-related behaviors. Curr Opin Behav Sci 2021, 42:1-8, https://doi.org/10.1016/j.cobeha.2021.01.005
- Eom K, Kim HS, Sherman DK, Ishii K: Cultural variability in the link between environmental concern and support for environmental action. *Psychol Sci* 2016, 27:1331-1339, https:// doi.org/10.1177/0956797616660078
- Eom K, Kim HS, Sherman DK: Social class, control, and action: socioeconomic status differences in antecedents of support for pro-environmental action. J Exp Soc Psychol 2018, 77:60-75, https://doi.org/10.1016/j.jesp.2018.03.009
- Eom K, Ng ST: The potential of religion for promoting
   sustainability: the role of stewardship. *Top Cogn Sci* 2023, 15:480-499, https://doi.org/10.1111/tops.12641.

This article discusses how religious, theistic stewardship promotes proenvironmental support among religious individuals, addressing how religious stewardship belief may shape cognitions and emotions that lead to motivation to engage in pro-environmental action. The article also discusses potential ways of leveraging religious stewardship in messaging and communications for behavioral change toward sustainability.

- Eom K, Papadakis V, Sherman DK, Kim HS: The psychology of proenvironmental support: in search of global solutions for a global problem. *Curr Dir Psychol Sci* 2019, 28:490-495, https:// doi.org/10.1177/0963721419854099
- Eom K, Saad CS, Kim HS: Religiosity moderates the link between environmental beliefs and pro-environmental support: the role of belief in a controlling god. *Personal Soc Psychol Bull* 2021, 47:891-905, https://doi.org/10.1177/0146167220948712
- Eom K, Tok TQH, Saad CS, Kim HS: Religion, environmental guilt, and pro-environmental support: the opposing pathways of stewardship belief and belief in a controlling god. J Environ Psychol 2021, 78:101717, https://doi.org/10.1016/j.jenvp.2021.101717
- Gibbs WC, Kim HS, Kay AC, Sherman DK: Who's in control? A cultural perspective on the process of compensatory control. Soc Personal Psychol Compass 2023, 17:e12722, https://doi.org/ 10.1111/spc3.12722
- 11. Glasman LR, Albarracín D: Forming attitudes that predict future behavior: a meta-analysis of the attitude-behavior relation. *Psychol Bul* 2006, **132**:778, https://doi.org/10.1037/0033-2909. 132.5.778
- 12. Hayhoe K: Saving Us: A Climate Scientist's Case for Hope and Healing in a Divided World. Simon and Schuster; 2021.
- Henrich J, Heine SJ, Norenzayan A: The weirdest people in the world? Behav Brain Sci 2010, 33:61-83, https://doi.org/10.1017/ S0140525×0999152X
- 14. Hornsey MJ, Harris EA, Bain PG, Fielding KS: Meta-analyses of the determinants and outcomes of belief in climate change. Nat

Clim Change 2016, 6:622-626, https://doi.org/10.1038/ nclimate2943

- Intergovernmental Panel on Climate Change (IPCC): Climate Change in Data; 2021. (https://www.ipcc.ch/report/ar6/wg1/ resources/climate-change-in-data/).
- 16. Kim HS, Eom K, Panzone L, Sherman DK: Why do I act for
   environment? SES moderates the relationship between climate change beliefs and sustainable actions. *Motiv Sci* 2024, https:// doi.org/10.1037/mot0000343.

This research shows that SES influences how strongly individuals' climate change beliefs are associated with their actual pro-environmental behaviors. Looking at online fundraising and consumer behaviors, the studies found that participants' education level strengthens the association.

- Kim HS, Lawrie SI: Culture and motivation. In Handbook of Cultural Psychology. Edited by Cohen D, Kitayama S. 2nd edition.,, Guilford; 2019:268-291.
- Kraus MW, Stephens NM: A road map for an emerging psychology of social class. Soc Personal Psychol Compass 2012, 6:642-656, https://doi.org/10.1111/j.1751-9004.2012.00453.x
- Landau MJ, Kay AC, Whitson JA: Compensatory control and the appeal of a structured world. *Psychol Bull* 2015, 141:694-722, https://doi.org/10.1037/a0038703
- Lange F, Berger S, Byrka K, Brügger A, Henn L, Sparks AC, ... Urban J: Beyond self-reports: a call for more behavior in environmental psychology. J Environ Psychol 2023, 86:101965, https://doi.org/10.1016/j.jenvp.2023.101965
- Leiserowitz A, Maibach E, Rosenthal S, Kotcher J, Lee S, Verner M, Ballew M, Carman J, Myers T, Goldberg M, Badullovich N, Marlon J: Climate Change in the American Mind: Beliefs & Attitudes, Spring 2023. Yale University and George Mason University; 2023 (: Yale Program on Climate Change Communication).
- Leong S, Eom K, Ishii K, Aichberger MC, Fetz K, Müller TS, Kim HS,
   Sherman DK: Individual costs and community benefits: collectivism and individuals' compliance with public health interventions. *PLoS One* 2022, 17:e0275388, https://doi.org/10. 1371/journal.pone.0275388.

This research examines the relationship between collectivism and adherence to public health recommendations. Beyond finding a positive association between collectivism and willingness to comply with public health recommendations, the study identifies trust in government as a psychological explanation for why collectivism predicts actions to benefit the public.

- 23. Levi S: Why hate carbon taxes? Machine learning evidence on the roles of personal responsibility, trust, revenue recycling, and other factors across 23 European countries. *Energy Res* Soc Sci 2021, **73**:101883, https://doi.org/10.1016/j.erss.2020. 101883
- Liu RW, Lapinski MK: Cultural influences on the effects of social norm appeals. *Philos Trans R Soc B* 2024, 379:20230036, https:// doi.org/10.1098/rstb.2023.0036
- London School of Economics and Political Science. The Public's Climate Change Views: Strong Beliefs but Low Salience; https://blogs.lse.ac.uk/politicsandpolicy/uk-climate-changeviews/.
- Lou X, Li MWL: The mediating role of self-enhancement value on the relationship of power distance and individualism with pro-environmental attitudes: evidence from multilevel mediation analysis with 52 societies. Soc Cross-Cult Res 2022, 56:445-466, https://doi.org/10.1177/10693971221093122
- 27. Lou X, Li LMW: The relationship of environmental concern with
   public and private pro-environmental behaviours: a preregistered meta-analysis. *Eur J Soc Psychol* 2023, 53:1-14, https://doi.org/10.1002/ejsp.2879.

This is a preregistered meta-analysis that evaluated the magnitudes of the correlations of environmental concern with public and private proenvironmental behaviors in different sociocultural contexts. They report that national individualism and internal control strengthen the correlation between environmental concern and public behaviors.

- Lu JG, Jin P, English AS: Collectivism predicts mask use during COVID-19. Proc Natl Acad Sci 2021, 118:e2021793118, https:// doi.org/10.1073/pnas.2021793118
- Markus HR, Kitayama S: Culture and the self: implications for cognition, emotion, and motivation. *Psychol Rev* 1991, 98:224-253, https://doi.org/10.1037/0033-295X.98.2.224
- Ng ST, Eom K: Religious stewardship and pro-environmental action: the mediating roles of environmental guilt and anger. *Psychol Relig Spiritual* 2024, 16:263-271, https://doi.org/10.1037/ rel0000499
- Nielsen KS, Nicholas KA, Creutzig F, et al.: The role of highsocioeconomic-status people in locking in or rapidly reducing energy-driven greenhouse gas emissions. Nat Energy 2021, 6:1011-1016, https://doi.org/10.1038/s41560-021-00900-y
- Noll B, Filatova T, Need A: How does private adaptation motivation to climate change vary across cultures? Evidence from a meta-analysis. Int J Disaster Risk Reduct 2020, 46:101615, https://doi.org/10.1016/j.ijdrr.2020.101615
- Ogunbode CA, Doran R, Hanss D, Ojala M, Salmela-Aro K, van den Broek KL, ... Karasu M: Climate anxiety, wellbeing and proenvironmental action: correlates of negative emotional responses to climate change in 32 countries. *J Environ Psychol* 2022, 84:101887, https://doi.org/10.1016/j.jenvp.2022. 101887
- Poushter J, Fagan M, Gubbala S: Climate change remains top global threat across 19-country survey. *Pew Res Cent* 2022,, (https://www.pewresearch.org/global/2022/08/31/climate-changeremains-top-global-threat-across-19-country-survey/).
- Saracevic S, Schlegelmilch BB, Wu T: How normative appeals influence pro-environmental behavior: the role of individualism and collectivism. J Clean Prod 2022, 344:131086, https://doi.org/ 10.1016/j.jclepro.2022.131086
- Sasaki JY, Kim HS: The ego dampening influence of religion: evidence from behavioral genetics and psychology. Curr Opin Psychol 2021, 40:24-28, https://doi.org/10.1016/j.copsyc.2020.08.007
- 37. Sherman DK, Updegraff JA, Handy MS, \*Eom K, Kim HS: Beliefs
   and social norms as precursors of environmental support: the joint influence of collectivism and socioeconomic status. *Personal Soc Psychol Bull* (3) 2022, 48:463-477, https://doi.org/10. 1177/01461672211007252.

This research shows that collectivism and SES jointly moderate the strength of beliefs about climate change in predicting environmental support and that this interaction was explained by sense of control. Descriptive norms predicted environmental support most strongly for those high in collectivism and high in SES. These findings demonstrate the importance of examining multiple sociocultural characteristics together to understand the factors that drive action.

- Shin F, Preston JL: Green as the gospel: the power of stewardship messages to improve climate change attitudes (http:// doi:), Psychol Relig Spiritual 2021, 13:437-447, https://doi. org/10.1037/rel0000249ISSN1941-102
- Sparkman G, Howe L, Walton G: How social norms are often a barrier to addressing climate change but can be part of the solution. Behav Public Policy 2021, 5:528-555, https://doi.org/10. 1017/bpp.2020.42
- Sparkman G, Geiger N, Weber EU: Americans experience a false social reality by underestimating popular climate policy support by nearly half. Nat Commun 2022, 13:4779, https://doi. org/10.1038/s41467-022-32412-y
- Steg L: Psychology of climate change. Annu Rev Psychol 2023, 74:391-421, https://doi.org/10.1146/annurev-psych-032720-042905
- 42. Stollberg J, Fritsche I, Jonas E: The groupy shift: conformity to liberal in-group norms as a group-based response to threatened personal control. Soc Cogn 2017, 35:374-394, https://doi.org/10.1521/soco.2017.35.4.374
- 43. Stollberg J, Fritsche I, Jonas E: To change, but not to preserve! Norm conformity following control threat only emerges for

change norms but not for status quo norms. *Self Identity* 2024, **23**:484-504, https://doi.org/10.1080/15298868.2024.2399869

- Tam K-P, Chan H-W: Environmental concern has a weaker association with pro-environmental behavior in some societies than others: a cross-cultural psychology perspective. J Environ Psychol 2017, 53:213-223, https://doi.org/10.1016/j.jenvp.2017.09.001
- The Hannah Arendt Center for Politics and Humanities, Bard College (2012, April 10): Johann Wolfgang von Goethe on Thinking; <a href="https://hac.bard.edu/amor-mundi/johann-wolfgang-von-goethe-on-thinking-2012-04-10">https://hac.bard.edu/amor-mundi/johann-wolfgang-von-goetheon-thinking-2012-04-10</a>.
- Triandis HC: The self and social behavior in differing cultural contexts. Psychol Rev 1989, 96:506-520, https://doi.org/10.1037/ 0033-295X.96.3.506
- 47. van der Werff E, Steg L, Ruepert A: My company is green, so am I: the relationship between perceived environmental responsibility of organisations and government, environmental self-identity, and pro-environmental behaviours. Energy Effic 2021, 14:50, https://doi.org/10.1007/s12053-021-09958-9
- Vlasceanu M, Doell KC, Bak-Coleman JB, Todorova B, Berkebile-Weinberg MM, Grayson SJ, Lutz AE: Addressing climate change with behavioral science: a global intervention tournament in 63 countries. *Sci Adv* 2024, 10:eadj5778, https://doi.org/10.1126/ sciady.adj5778
- Zemo KH, Nigus HY: Does religion promote pro-environmental behaviour? A cross-country investigation. J Environ Econ Policy 2021, 10:90-113, https://doi.org/10.1080/21606544.2020.1796820