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Local is not always better: the impact of climate information on values, behavior and policy support

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Abstract In the current research, we experimentally examined the effect of providing local or global information about the impacts of climate change on individuals' perceived importance of climate change and on their willingness to take action to address it, including policy support. We examined these relationships in the context of individuals' general value orientations. Our findings, from 99 US residents, suggest that different kinds of climate information (local, global, or none) interact with values vis-à-vis our dependent variables. Specifically, while self-transcendent values predict perceived importance and pro-environmental behavior across all three information conditions, the effect on policy support is less clear. Furthermore, we detected a "reactance effect" where individuals with self-enhancing values who read local information thought that climate change was *less* important and were *less* willing to engage in pro-environmental behavior and support policy than self-enhancing individuals in the other information conditions. These results suggest that policy makers and public communicators may want to be cognizant of their audience's general value orientation. Local information may not only be ineffective but may also prove counterproductive with individuals whose value orientations are more self-enhancing than self-transcendent.

Keywords Climate change · Local/global climate information · Values · Pro-environmental behavior · Climate policy · Policy support

Introduction

Many researchers have assumed that presenting citizens with information about local climate impacts will persuade them, and their policy-makers, to act. In 2003, Rajendra Pachauri—then the Chairman of the Intergovernmental Panel on Climate Change (IPCC)—stressed that "I am aware that there is an opportunity for much political debate when you start to predict the impact of climate change on specific regions. But if you want action you must provide this information" (Schiermeier 2003, p. 879). Indeed, when surveyed, most US citizens indicate that they believe that any effects of climate change will be felt far in the future by people in other parts of the world (Leiserowitz et al. 2011). This supports the concern that a distal view of the consequences of climate change leads people to discount the need for action. Thus, researchers have called for communication strategies that anchor the discussion by highlighting local climate change impacts (e.g., Leiserowitz 2007; Moser 2010). Putting such general recommendations to empirical test, our data suggest that the effectiveness of providing local climate information to elicit pro-environmental behavior and policy support may well depend on people's underlying value orientations. In other words, while describing the local consequences of climate change may increase perceived importance, and actions for some, a local focus will not be useful for all populations. Specifically,

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we propose that individual differences in value orientation (in particular whether one leans more towards self-transcendence or self-enhancing values) will relate to the extent to which local or global information is particularly effective in motivating environmental behavioral change and policy support. Further, our data hints at the possibility that the local frame may prove threatening to a predictable segment of the population. This insight may prove beneficial for governments, environmental groups, journalists, and scientists working to share the findings and implications of climate science. In the sections that follow, we review literatures on attitudes, self-interest, values, and pro-environmental behavior that informed the design of our study. We follow this with a discussion of our specific hypotheses, the setup of our experimental study, our findings and discussion.

The loose connection between climate change attitudes and behavior

The reality that even those who harbor pro-environmental attitudes rarely walk their talk has puzzled scholars for decades. High environmental concern in political polls (e.g., European Commission 2014; Leiserowitz et al. 2014) is often met with negligible pro-environmental actions (e.g., Dunlap and Scarce 1991). In a meta-analysis, Bamberg and Möser (2007) found a correlation of r=.35 between environmental attitudes and behavior. Some of this disconnect may be due to a lack of "measurement correspondence" between general attitudes and specific behaviors. As Ajzen et al. (2011) highlight, we would expect more general attitudes to correlate less with specific environmental behaviors than when compared to more specific attitudes on specific behaviors (e.g., attitudes about recycling will be more highly correlated with recycling behavior compared to overall support for general environmental policy). Whitmarsh et al. (2011) similarly find a disconnect between behavior and both attitudes and knowledge. Thus, people say they care, and to a certain extent, they understand which actions would be most likely to reduce carbon dioxide emissions (e.g., travel choices), yet they are unwilling or unable to make these changes to their routines. Whitmarsh et al. (2011) suggest that this disconnect is partially due to people's lack of *carbon capability*, a construct that considers both individual and societal constraints. The weak link between attitudes (or knowledge) and behavior is especially problematic for policy makers who often rely on large-scale surveys to gauge the public's willingness to take action and support climate policy.

However, one recurring key finding is that the attitude-behavior gap narrows for attitudes that are perceived to be important (e.g., see Boninger et al. 1995; Krosnick and Petty 1995). Important attitudes are more deeply ingrained—for example, Holbrook et al. (2005) found that individuals who believed climate change was important, compared to those who did not, reported thinking more about the issue. Higher levels of personal importance, in turn, predicted taking action on climate change, such as writing letters and donating money to organizations concerned with climate change (Visser et al. 2003). If we accept that importance predicts action, we need to understand the precursors to personal importance.

One promising precursor to importance is self-interest. Boninger et al. (1995) found that 63 % of survey respondents cited self-interest as the reason they considered a number of issues important. Other researchers have confirmed this link (e.g., Eaton and Visser 2008; Eaton et al. 2008). If these scholars are correct, then manipulating self-interest by providing people with local climate information should result in changes in personal importance of the issue, behavior, and policy support. This logic is supported by Construal Level Theory, which suggests that a local informational focus (cf., a global focus) should reduce the psychological distance between climate change consequences and personal action (Trope and Liberman 2010).

Multiple self-report studies of self-identified environmentalists support this view. For example, active members of the Sierra Club, an environmental organization, are significantly more likely to have experienced personal harm from a negative environmental event (e.g., local chemical incident) compared to less active members (Manzo and Weinstein 1987). Similarly, the extent to which one feels personally threatened by pollution predicts pro-environmental behaviors, such as driving less, recycling, and water conservation (Baldassare and Katz 1992; see also Axelrod and Lehman 1993). Similar relationships appear to exist at the policy level such that cities that experienced climate change related events (e.g., extreme weather) were more likely to participate in the Cities for Climate Protection campaign than cities that have been spared climate-related events (Zahran et al. 2008).

Personal threat of climate change has also been linked to support for a range of policies to address the issue (e.g., Brody et al. 2008; Zahran et al. 2006). In addition to the correlational research in support of this view, a recent experimental study by Scannell and Gifford (2013) found that providing individuals with local climate information—and thus highlighting personal threat—increased their engagement with the issue. Therefore, there are empirically based reasons to believe that providing a local focus on climate change will shift perceptions and behaviors. Not all researchers, however, find support for the link between importance and environmental behavior. For example, Spence and Pidgeon (2010) detected no such relation in an experimental study conducted the UK. Similarly, Shwom et al. (2008) found no value of local climate information to sway households to support climate-related policies in their US-based experimental study (for another skeptical view, see Evans et al. 2012). Thus, it remains unclear whether simply providing local information about the impact of climate change will engage people's self-interest and

thereby elicit behavioral change and policy support or whether there might be other factors at play.

Values

We believe that there are other factors involved in the link between personal importance and action. Specifically, we support Boninger et al.'s (1995) view that it is necessary to take into account individuals' values when considering this link. Values, which are deep-seated normative core beliefs (e.g., on equality or justice), transcend situations and fit within a system of other values (Rokeach 1973). Schwartz (1992, 1994) created a theoretical framework to explain how different values relate to each other. In doing so, Schwartz groups values along two continua with opposite poles, namely *conservation* versus *openness to change* values and *self-enhancing* versus *self-transcendent* values (Schwartz 1992, 1994; Schwartz et al. 2001). We focused on the latter axis, the tension between *self-enhancement* values (the importance of social power, status, recognition, material achievements, etc.) and *self-transcendence* (values or concern for the broader community and beliefs about justice). Prior research indicates that individuals who value the well-being of larger communities—i.e., those high in self-transcendence—are more likely to harbor pro-environmental attitudes and take pro-environmental action than individuals who value personal gain and status—i.e., self-enhancement (e.g., Gagnon Thompson and Barton 1994; Karp 1996). Thus, people with strong self-transcendent value orientations tend to be more concerned about the environment and more likely to act compared to those who prize self enhancement (e.g., Nordlund and Garvill 2002, 2003; Schultz et al. 2005; Schultz and Zelezny 1999; Slimak and Dietz 2006; Steg and de Groot 2012; Stern et al. 1995; see de Groot and Steg 2008 for a review).

Of particular importance for this paper is the recurrent finding that individuals with self-transcendent values engage more in climate-friendly behavior and policy support than people with self-enhancing values (Corner et al. 2014; Nilsson et al. 2004; Nilsson and Biel 2007, 2008; Poortinga et al. 2004; Steg et al. 2011; see also Leiserowitz 2006). Furthermore, research suggests that existing value orientations may interact with environmental information. For example, Bolderdijk et al. (2013) found that an informational campaign (i.e., having participants view a movie about the environmental consequence of bottled water) was motivational for those who held strong biospheric values but not for those lacking these values. Given the strong relation between self-transcendent values and environmental action, we explored the extent to which values might interact with the level of information (local versus global) to influence individuals' environmental decisions.

Current study

Specifically, we sought to assess the influence of information relevant to self-interest as a function of one's value orientation. To do so, we measured participants' core personal values and then assigned them randomly to read information about climate change impacts, which were presented through either a local or global lens (the control group did not read about the impacts at all). We subsequently measured participants' self-reported climate change importance, their pro-environmental behavioral intentions, and their willingness to support climate policy. Based on our theoretical review, we hypothesized the following:

> Hypothesis 1: Participants who read local climate information would report greater importance of climate change, more pro-environmental behavioral intentions, and greater climate policy support compared to those who received global or no information (control group).
> Hypothesis 2: Participants with self-transcendent value orientations would report greater importance of climate change, more behavioral intentions, and greater climate policy support than those with self-enhancing value orientations.
>
> Hypothesis 2a: Participants with strong self-transcendent values, who received either local or global climate information, would report greater importance, behavioral intentions, and climate policy support than those in the control condition (no information).
> Hypothesis 2b: Within participants with self-enhancing values, individuals who received local information would report greater importance, behavioral intentions, and climate policy support than those who received either global or no information (control).

Methods

Participants

Ninety-nine[1] Vermont (USA) residents completed an online survey (64 % female,[2] $M=36$ years, range 16–75). Participants were recruited through emails, advertisements, social networking sites, and community organizations. All participants were treated in accordance with the ethical guidelines of the American Psychological Association (APA 2010).

[1] Three participants could not be assigned to an experimental group and were removed from subsequent analyses on experimental conditions. Our experimental groups were thus local, 30, global, 27, and control, 39.
[2] One participant did not indicate their sex.

Materials

Values

General value orientations were measured with the Schwartz Value Survey (SVS—Schwartz 1992; 1994). The scale consists of 56 value items such as "EQUALITY (equal opportunity for all)." Participants completed the full scale, ranking each value item on a Likert scale where −1 = *opposed to my values*, 0 = *not important*, 3 = *important*, and 7 = *extremely important*. To evaluate self-enhancing and self-transcendent values, we used two subscales of the SVS in our analyses: power (four items) and universalism (eight items).

Climate change information

Information about local (Vermont/New England area) and global future climate change impacts came from the *Global Climate Change Impacts in the United States* report (Karl et al. 2009). Additional information about global impacts was based on the IPCC Fourth Assessment Report (IPCC 2007). Prior to reading information about climate change, participants received information about the authorship of the reports, as well as the fact that carbon dioxide emissions from human activities will likely increase average temperatures by 2.5–4.0 °F by the end of the century. Examples, such as a devastating 2008 flash flood in Ripton, Vermont (local information), or the 2010 flooding in Pakistan (global information), were added to make climate impacts more understandable and tangible. Each item about local information was matched with an equivalent item reporting global impacts. Pilot testing indicated that both the understandability, as well as the level of detail, did not differ for local and global information.

Importance

Personal importance of climate change was measured with three items, one from Boninger et al. (1995) "How important is the issue of climate change to you personally?" and two from Schoenefeld and Hofer (2010) "How much do you personally care about climate change?" and "How important is climate change to you in relationship to other issues?" Items were rated on a 5-point Likert scale with anchors 1 = *not at all important*, 5 = *very important*). We averaged these to create a measure of personal importance of climate change (Cronbach's α=.92).

Climate change mitigation intentions

We asked participants how willing they were to engage in 48 pro-environmental behaviors to reduce their personal climate impact. Forty-five of these items were selected from existing scales (Kaiser and Schultz 2009; Kaiser and Wilson 2000; Kaiser et al. 1999; Schoenefeld and Hofer 2010; Sinatra et al. 2012; Stern et al. 1999; Thapa 1999), while four were created for this study. When necessary we modified the response option so that participants rated their willingness to perform each behavior across the 48 items on a 4-point scale where 0 = *not willing at all*; 3 = *totally willing (or, I'm already doing this)*. In addition, participants had the opportunity to indicate that "This does not apply to me." For analyses, an average of all behavioral items was calculated (Cronbach's α=.97).[3]

Climate change policy support

General climate change policy support was evaluated with a modified version of an eight-item measure used by Shwom et al. (2008). The original instrument asked about support for eight US-federal climate change policy options. We adjusted the items used by Shwom et al. (2008) to reflect contemporary US policy options, taking out the word "tax" whenever possible (see Lizza 2010 for our rationale) and added an item about a cap-and-dividend system. Individuals rated their support for each policy option on a five-point scale (1 = *definitely do not support the policy*; 5 = *definitely support the policy*). We expanded Shwom's four-point response options to include a midpoint (3 = *undecided*) to avoid forcing individuals to take a position. Responses were averaged to create a composite policy support score (Cronbach's α=.87).[4]

Procedure

Data were collected online. Participants first completed the full Schwartz Value Survey and then were assigned randomly to one of three conditions: They either read a local narrative regarding climate change, a global narrative, or no information (i.e., our control condition). Specifically, participants who read about local or global information both started with reading a paragraph from the *Global Climate Change Impacts in the United States* report (Karl et al. 2009), followed by a paragraph about the causes of climate change. After this introduction, they read either local or global information.

[3] Seventy-one individuals left a few items blank (on average 0.38 responses per item). These items were replaced with the average for that particular individual. "Not applicable" items were not included in calculating individual averages (on average 5.5 responses per item).

[4] Ten individuals skipped an item or two (on average 1.33 responses per item), and in this case, we used their average on the other policy questions to replace the missing data. Two individuals were excluded from analyses on this measure because they failed to rate at least 75 % of the policy support items.

Following this, all participants answered items assessing their perceptions of the importance of climate change, pro-environmental behavioral intentions, and support for climate policy. Finally, participants answered demographic questions.

Results

Climate change importance

Contrary to hypothesis 1, one-way analyses of variance (ANOVA) revealed no main effect of information conditions on ratings of climate importance ($F(2, 93)=.22$, *ns*), behavior ($F(2, 93)=.52$, *ns*) or policy support ($F(2, 92)=.12$, *ns*). In order to test hypotheses 2, 2a and 2b, we used ordinary least-square regressions (OLS) to analyze the extent to which values and type of information predict our outcome variables. Per our hypotheses, we also included interaction terms in the model. In each case, we used two predictors from the SVS, namely universalism and power[5] and the information conditions (dummy coded with control as the reference category), and we analyzed each of the three dependent variables (importance, policy support, and behavioral intentions) in separate regressions. As detailed in Table 1, universalism, but not power, significantly predicted climate change importance. In addition, there is an interaction between values and information, such that harboring self-enhancing values *and* receiving local climate information significantly and negatively predicts importance. Indeed, adding this interaction into the model increases results in the model predicting approximately 10 % more of the variance ($R^2=.41$). Taken together, regarding importance, we thus supported hypothesis 2 insofar as people who held stronger, compared with weaker, self-transcendent values thought that climate change was more important. We found no support for hypothesis 2a and found the inverse of what we predicted for hypothesis 2b such that those individuals with strong self-enhancing values who read local information about climate impacts were less likely to believe that climate change was important compared with their peers who read about global impacts or no information (control).

Findings from a parallel regression on our second dependent variable, behavioral intentions, closely resemble this pattern (Table 2). While self-transcendent values predict pro-environmental behavior across conditions, an interaction again revealed a "reactance effect", such that those embracing self-enhancing values and receiving local information negatively predict willingness to engage in pro-environmental behavior. Adding the interaction term again increased the amount of explained variance by about 10 %. These trends were less clear on policy support, our third outcome variable (Table 3). Self-transcendent values did not significantly predict policy support when the interaction terms were included in the model. But again, we found a significant and negative relationship between favoring self-enhancing values and receiving local climate information on policy support. In addition, a trend revealed a possible interaction between self-transcendent values and global information.

[5] We started using universalism, power, achievement, and benevolence in our analyses, but given that the latter two had no significant predictive power, we dropped them from our models.

Discussion and Conclusions

The current study examined the influence of personal values and the level of information about climate change impact, local or global, on individuals' perceptions of the importance of climate change, their willingness to take action, and their climate policy support. In line with earlier findings, we found support for the view that individuals who embrace self-transcendent values are more likely to think that climate change is important and intend to engage in more pro-environmental behaviors than individuals who report lower self-transcendent values. This trend was less clear on policy support. However, there is no general impact of presenting climate change impacts through either a local or a global lens. Indeed, we found that the connection between level of information and outcome variables differed as a function of individuals' value orientations. Self-transcendent values still predicted importance and pro-environmental behavior irrespective of information condition. In contrast to our predictions, we detected what might be termed a "reactance effect" in which presenting self-enhancing individuals with local climate information appears to have lowered their perceived importance of climate change, their willingness to engage in pro-environmental behaviors, and their support for climate policy. Thus, our findings point toward a more nuanced understanding of how to approach climate change communication and policy discussions. We discuss our main findings in detail below.

Values

Value orientations relate significantly to climate change importance and behavior. As predicted, we found a positive relationship between scoring high on self-transcendent values on the Schwartz Value Survey (Schwartz 1992, 1994) and perceived importance of climate change, as well as greater willingness to take action. However, we found no such relationship for self-enhancing values. Individual differences in value orientations, particularly for environmental issues, might therefore explain some of the attitudes-behavior gap (Bamberg and Möser 2007). That said, we found that for some individuals, values interacted with information.

Table 1 The impact of climate information and values on perceived climate change importance (N=99)

Variable	Model 1			Model 2			Model 3		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Universalism	.62	.12	.51**	.62	.13	.51**	.55	.20	.45**
Power	−.07	.08	−.09	−.10	.09	−.12	.13	.15	.15
Local info				.16	.20	.08	.10	.20	.05
Global info				.25	.21	.12	.15	.21	.07
Univ × local							.17	.30	.07
Univ × global							.20	.31	.10
Power × local							−.53	.21	−.33*
Power × global							−.12	.22	−.09
R^2		.32			.33			.41	
F		22.32**			11.27**			7.50**	

Values were mean centered in the interactions to avoid colinearity

*p<.05; **p<.01

Values and climate impact information

Although our data failed to show an overall effect of communicating local versus global climate impacts on people's engagement with the issue, we did find that value orientations mattered and that for some people, this interacted with the level of information. Similar to others, we found that self-transcendent values predicted climate chance importance and pro-environmental behavior. Interestingly, it did not significantly predict policy support, but a trend points towards a possible interaction between global information and self-transcendent values for this variable. In addition, we had assumed that for those who hold stronger self-enhancing values, hearing about local effects of climate would increase the relevancy of the information and thus their support for our outcome variables. This was not what we found. In contrast to our hypotheses, we found that holding self-enhancing values and receiving local information reduced all three outcome variables (importance, a willingness to engage in behaviors to mitigate climate change, and policy support). It may be that for individuals who value power and control, hearing about actual local harm caused by climate change was simply too threatening. These individuals may have experienced reactance to this threat and, thus, discounted the importance, their willingness to engage in behavior to mitigate the threat, and their policy support.

It is relevant to note that information on local and global climate change impacts was illustrated with examples of actual events that had already occurred, as opposed to hypothetical local or global effects. Perhaps, this approach contravened power-based values, inducing a sense of helplessness and subsequent denial or discounting of this information as a way to uphold self-enhancing values. If future research supports this finding, it would caution against highlighting the local threat to individuals with self-enhancing value orientations. Further, this suggests that researchers should carefully assess whether it is possible to mitigate or short circuit this type of response from those self-enhancing individuals. For example Sheldon

Table 2 The impact of climate information and values on behavioral intentions (N=99)

Variable	Model 1			Model 2			Model 3		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*B*
Universalism	.30	.06	.49**	.30	.06	.49**	.22	.10	.36*
Power	−.07	.04	−.17***	−.08	.04	−.20†	.07	.07	.16
Local info				−.02	.10	−.02	−.07	.10	−.07
Global info				.03	.10	.03	.00	.10	.00
Univ × local							.07	.14	.06
Univ × global							.23	.15	.23
Power × local							−.28	.10	−.34**
Power × global							−.13	.10	−.20
R^2		.36			.37			.48	
F		26.80**			13.60**			9.90**	

Values were mean centered in the interactions to avoid colinearity

*p<.05; **p<.01; ***p=.09; †p=.07

Table 3 The impact of climate information and values on policy support (N=97)

Variable	Model 1			Model 2			Model 3		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*B*
Universalism	.22	.12	.23***	.25	.12	.26*	.07	.18	.07
Power	−.08	.08	−.13	−.06	.08	−.09	.18	.13	.27
Local info				−.07	.19	−.04	−.15	.18	−.09
Global info				.09	.19	.06	.04	.19	.02
Univ × local							.24	.27	.13
Univ × global							.47	.28	.29††
Power × local							−.45	.19	−.36*
Power × global							−.20	.20	−.18
R^2	.10				.10			.23	
F	5.02**				2.43†			3.29**	

Values were mean centered in the interactions to avoid colinearity

*p<.05; **p<.01; ***p=.058; †p=.05; ††p=.09

et al. (2011) found that conservatives, who may be more likely to hold self-enhancing value orientations, were more supportive of environmental behavior when first asked to consider traditional US-American values. Feinberg and Willer (2013) found that conservatives were more environmentally concerned when the issue was framed around purity and sanctity instead of the harm/care moral framing typically used when discussing environmental issues. Perhaps, when debating real, local consequences of climate change, it will be necessary to include reminders of traditional conservative values or moral pleas framed to appeal to strong self-enhancing values. The "reactance effect" for individuals with self-enhancing value orientation, who received local climate information regarding perceived importance and behavior, warrants further investigation. Theoretically, our findings question the usefulness of engaging self-interest to elicit pro-environmental behavior and policy support. However, more research needs to be conducted with a much broader group of participants to verify that that local information may be problematic for those with strong self-enhancing values and also explore and test mechanisms to reduce this reactance. Overall, our study thus contributes to an ongoing discussion on how values and information interact (see Bolderdijk et al. 2013), particularly by highlighting that, depending on people's value orientations, information may be beneficial for some groups but potentially detrimental for others.

Limitations

Given our geographically restricted sample, it is not possible to generalize to wider populations. Furthermore, we recognize that behavioral intentions do not necessarily translate into actual behavior. However, our results highlight how values and climate change information interact, a relationship that should be tested and refined in other populations. We used the SVS in our study because it provides a very general measure of value orientations, thus avoiding prompting individuals in any particular direction. If prompting effects occurred, using the full SVS furthermore spread the effect across all value types. However, researchers have recently developed additional value scales, which should also be used to test interactions with climate change information. Furthermore, although we endeavored to provide local and global climate information, local climate information may still have been perceived as too distal, given that it was presented on a 50-year time horizon.

Policy implications

Although preliminary, findings from the current study indicate that policy makers and public communicators may want to be cognizant of their audience's general value orientation. In targeted information campaigns to highlight the importance of climate change, local information may lead to a "reactance effect" among individuals who prioritize self-enhancing values.

Similarly, if a climate policy is to be implemented at various locations, it might make sense to start in places where general value orientations are more self-transcendent than self-enhancing. Further, social marketing campaigns aimed at communicating climate change may benefit from our insights to segment their audiences more effectively (see Bostrom et al. 2013). In line with other contributions (e.g., Evans et al. 2012), our evidence suggests that building climate change communication campaigns around self-interest may be less effective in general than hoped or even counterproductive. Crucially, if our findings draw wider support, general recommendations about using local climate information (e.g., Leiserowitz 2007; Moser 2010) may have to be reviewed.

Future research

This study contributes to emerging work on people's value orientations and their engagement with climate change (see Corner et al. 2014; O'Brien and Wolf 2010). Clearly, follow-up research is needed to shed more light on the relationship between climate information and value orientations in order to better understand to what extent the expression of values depends on information provision and under which conditions such information may be counterproductive. Given the importance of underlying value orientations in environmental decisions and policy support, further inquiries in the origins, durability, and effect of such values—and different ways of measuring them—seem particularly important. When communicating climate change, it would also be useful to assess the impact of information interventions over time, as well as on observed behaviors and across larger samples in multiple locations. Furthermore, future research could also consider communication of other aspects of climate change including adaptation.

Conclusion

We started this project with an educated hunch that the effectiveness of local climate information to elicit pro-environmental behavior and policy support would depend on people's underlying value orientations as defined by Schwartz. And indeed, we found that providing regional specific information (local or global) was not useful for all populations. While privileging self-transcending values predicts importance and pro-environmental behavior, we also found that using local information led to a reactance against the information among self-enhancing individuals—thus, opening new theoretical and practical questions about the extent to which self-interest can drive pro-environmental behavior.

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