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INTEGRITY

**GLOBALLY ENCOURAGING PRO-ENVIRONMENTAL
VALUES AND BEHAVIOR**

GLOBALLY ENCOURAGING PRO-ENVIRONMENTAL VALUES AND BEHAVIOR

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To mitigate global environmental crises, we recommend the development of targeted values-based programs designed to motivate all individuals to act in an environmentally responsible manner. It is important to recognize not only that values motivate behaviour, but also that individuals differ widely in their value priorities. Thus, it is essential that values-based pro-environmental messages and educational programmes are implemented. more resilient societies able to face future crises.

Global challenge

This year's G20 presidency recognises the urgent need to act to mitigate global environmental crises and find a pathway to sustainable growth to ensure our long-term survival. The response must be on a global scale to address climate change and protect the natural environment from further degradation. The G20 aims to (1) provide leadership in addressing issues from climate change to land degradation and biodiversity loss and (2) develop concrete and practical solutions for sustainable urbanization and energy efficiency, including a transition toward renewable energies and modern mobility options. However, it is not just policy that needs to be formed; careful implementation will be imperative to motivate mass action.

To succeed in stabilizing the environment and ensuring the sustainability of our presence on earth, the G20 will need to develop and implement strategies that motivate all individuals to act. Values are key drivers of an individual's behaviour. However, individuals differ widely in the values they prioritise and not all values directly motivate pro-environmental behaviour. While values of kindness to all, which promote the welfare of people and the natural environment, are clearly aligned with protecting nature, other values, such as self-enhancement values, which promote self-interest, are not. People who prioritise self-enhancement values tend not to behave in a pro-environmental way and motivating them will require a very different approach.

Global solution

Policy toward addressing environmental crises varies widely around the world. In addition to differences in approaches between nations and regions, efforts to promote pro-environmental behaviours are also targeted at different levels of society. Some policies focus on economic strategies, such as carbon pricing (e.g., the European Emissions Trading Scheme), whereas others focus on targeted efforts, such as recycling schemes (e.g., the German Einwegpfand and Mehrpfand systems) that impact businesses and their consumers within specific sectors. There are also policies that directly target individuals, such as government subsidies for private electric vehicles (e.g., the United Kingdom's Plug-in Car Grant). Hence, much is already being done, and people who naturally value the environment are likely to engage in such actions without further motivating efforts, because people tend to act according to values that are highly important to them (Lee et al 2021). People who hold values of being kind towards all people and nature have been found to perform pro-environmental behaviours such as waste reduction and the reuse of goods (Barr, Gilg, and Ford 2005), and composting and recycling (Thøgersen and Ölander 2002). Empirical research (Wolтин,

GLOBALLY ENCOURAGING PRO-ENVIRONMENTAL VALUES AND BEHAVIOR

Sneddon, and Bardi 2021) shows that people who hold pro-environmental values act in an environmentally responsible way with little incentive and may not need to be the focus of policy initiatives. But not all people value the environment, and so not everyone is motivated to engage in pro-environmental behaviour. Thus, top-down policies are clearly insufficient to mitigate global environmental crises. We therefore propose three levels of motivation in policy making, all based on insights derived from empirical systematic research on human values: (1) Mandating pro-environmental behaviour – this is likely to result in strengthening pro-environmental values later on, which, in turn will naturally motivate future pro-environmental behaviour; (2) Values-based mass media campaigns that motivate pro-environmental actions based on different values; and (3), long-term educational programs to strengthen pro-environmental values in the next generation.

Mandated pro-environmental behaviours to strengthen pro-environmental values. An avenue to promote long-term pro-environmental action is to mandate behaviour, as it has been found that the more people behave according to a certain value, the more important that value becomes for them later on (Vecchione et al 2016). Thus, performing pro-environmental behaviours is likely to precede the strengthening of pro-environmental values. As such, policies aimed at changing behaviour in the short term can also strengthen pro-environmental values in the longer term. This is important, because research shows that the values individuals consider to be highly important influence their behaviour to a greater extent (Lee et al 2021). Thus, policy that aims to increase pro-environmental behaviours and therefore prioritization of pro-environmental values may have significant long-term knock-on effects. This strategy is already implemented to some extent, for example in countries like Germany where recycling is mandated, but implementation can expand to more countries and more pro-environmental behaviours. A limitation of this strategy is the potential for negative responses by citizens and the need for monitoring the behaviour. The next two strategies are needed to off-set these limitations.

Values-based messaging campaigns that motivate pro-environmental behaviours based on different values. People are more likely to support government policies and initiatives that they perceive to reflect their important value priorities and resist those that may thwart the attainment of these values (Bardi and Goodwin 2011). There is strong empirical evidence that values can be effectively used to motivate action (Maio 2010). Indeed, governments sometimes use values-based messages for pro-environmental behaviour but they tend to emphasise selfish values (e.g., savings from the use of energy efficient bulbs). Given that people prioritise very different values (Schwartz 1992), it is important to focus on different values for different populations. While some values are naturally aligned with caring for the welfare of the environment, other values can inform less obvious triggers to promote pro-environmental behaviour. If we are to mobilize everyone to act to mitigate climate change and protect the natural environment, we need to understand the full range of values that are important to people in society.

Pro-environmental behaviours are likely to have multiple consequences for different values (Moisander 2007). It is therefore important to target people whose underlying motivational goals do not align with pro-environmental behaviour. For instance, cycling rather than driving has benefits for the environment, a positive consequence for those who prioritize kindness values). It is also less costly for individuals, a positive consequence for those who prioritize self-enhancing values. However, it may be less comfortable and pleasurable, a negative consequence for those who prioritize hedonistic values.

People who prioritize self-enhancing values do not tend to perform pro-environmental behaviours (Jacobs et al 2018). When they do perform pro-environmental behaviours (Şener and Hazer 2008), they are more likely to be motivated by negative personal consequences (like penalties) or because they perceive the personal benefits to outweigh personal costs.

GLOBALLY ENCOURAGING PRO-ENVIRONMENTAL VALUES AND BEHAVIOR

Thus, aligning pro-environmental behaviours with personal gains may motivate people who prioritize self-enhancing values. There is also evidence that products with pro-environmental features, such as cars (Steg 2005) and organic food (Honkanen and Verplanken 2004), are purchased primarily for their hedonic value. For people who prioritise hedonic self-interested values, focusing on the pleasurable or comfortable elements of pro-environmental behaviours is likely to be motivating. However, they are likely to avoid pro-environmental behaviours if they perceive that they threaten pleasure and comfort-seeking. Since pro-environmental behaviours can be associated with financial savings (e.g., cycling instead of driving a car), pleasure (e.g., purchasing a luxury electric car) or comfort (e.g., insulation), there are clear opportunities to encourage those with stronger self-enhancing and hedonistic values to support and adopt these pro-environmental behaviours.

There are also potential consequences of not acting in a sustainable manner that may matter to people who prioritize the values of conformity, especially if the behaviour is normative in society. In accordance with this value, people who place high importance on conformity may undertake pro-environmental behaviour to comply with the rules of society and avoid upsetting others. In contrast, those who prioritize self-direction and stimulation may be more likely to act when they are offered a variety of potential options to solve the problem.

It is clear that messages or appeals that are congruent with nature values motivate pro-environmental action (van den Broek, Bolderdijk, and Steg 2017). There is promising evidence that self-enhancing values-based appeals, those promoting personal benefit, can also promote pro-environmental behaviours (Herziger, Berkessel, and Steinnes 2020; Chang 2014). Carefully designed values-based messaging should frame the consequences of pro-environmental behaviour in a way that motivates people with very different values to act pro-environmentally. For example, recent

messaging around infection-prevention behaviour during the Coronavirus Pandemic (Lake et al 2021) can be adapted for pro-environmental messaging. Thus, policy makers should design mass media campaigns that strengthen pro-environmental behaviour through different values.

A potential limitation of this approach is that it requires identifying and targeting people with different messages based on their values. Communicating personal gain to those with altruistic motives can reduce their altruistic actions. For example, in one case mixing self-enhancing (egoistic) and kindness (altruistic) values-based appeals for donations reduced the likelihood of giving (Feiler, Tost, and Grant 2012). The combination of messages based on different values increased awareness of persuasive intent, which in turn elicited psychological resistance. Therefore systematic values differences between populations should be used, such as that young people tend to prioritise stimulation and hedonistic values, whereas older people tend to prioritise conservative values (Robinson 2013). Cultures also vary systematically in their values (Schwartz 1999).

Educational programs in schools. School-based educational programs should be implemented to strengthen pro-environmental values in the long term. Schools influence values (Berson and Oreg, 2016), and simple programs to strengthen pro-environmental values, such as those established in research (Döring & Hillbrink 2015) could be employed and developed further. Some schools already engage in pro-environmental projects, and these could become part of government mandated curricula. A limitation of this strategy is that it would take time for these children to become adults, so this is a more long-term solution.

Values hold great potential to change individuals' pro-environmental behaviour on a global scale and should be used more frequently.

GLOBALLY ENCOURAGING PRO-ENVIRONMENTAL VALUES AND BEHAVIOR

Policy recommendations

Given the need to mitigate global environmental crises, G20 policy should focus on motivating everyone to help protect the environment. Research shows that personal values motivate behaviour (Lee et al 2021), with values of kindness to all a major driver of pro-environmental behaviour. However, people differ widely in the value priorities that are important to them and other values can also be motivators of pro-environmental action.

There are three levels at which policy makers can take action:

1. Policies that directly influence behaviour through rewards or penalties, such as mandating recycling, are likely to strengthen pro-environmental values.
2. Values-based messaging campaigns to accompany these policies. Such messages should be phrased in terms of values as motivators (Lake et al 2021). For example, those who prioritize kindness will likely be motivated by outcomes to society, whereas those who prioritize self-interested values will likely be motivated by outcomes to themselves. Since cultural, social and demographic groups tend to differ in their value priorities, messages can be targeted based on known characteristics. For example, self-enhancement values are endorsed more by people in English-speaking cultures, young people, males, and managers (Knafo and Sagiv 2004; Robinson 2013; Schwartz 1999; Schwartz and Rubel-Lifschitz 2009). Therefore, we suggest that they would be more motivated by appeals to their personal interests (like saving). The same research shows that values of kindness to all are endorsed more by people in continental European cultures, females, and helping professions such as social-workers and nurses. They would be better motivated by appeals to protect nature.
3. Longer-term educational programs should be designed to develop and strengthen pro-environmental values and behaviour in schools (Döring and Hillbrink 2015). Values are largely stable in adults and are easier to change in younger populations.

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GLOBALLY ENCOURAGING PRO-ENVIRONMENTAL VALUES AND BEHAVIOR

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GLOBALLY ENCOURAGING PRO-ENVIRONMENTAL VALUES AND BEHAVIOR

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