



UvA-DARE (Digital Academic Repository)

Core social motives explain responses to collective action issues

Geiger, N.; Brick, C.

DOI

[10.1111/spc3.12732](https://doi.org/10.1111/spc3.12732)

Publication date

2023

Document Version

Final published version

Published in

Social and Personality Psychology Compass

License

CC BY-NC

[Link to publication](#)

Citation for published version (APA):

Geiger, N., & Brick, C. (2023). Core social motives explain responses to collective action issues. *Social and Personality Psychology Compass*, 17(3), Article e12732. <https://doi.org/10.1111/spc3.12732>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Core social motives explain responses to collective action issues

Nathaniel Geiger¹  | Cameron Brick²

¹Indiana University, Bloomington, Indiana, USA

²University of Amsterdam, Amsterdam, Netherlands

Correspondence

Nathaniel Geiger, Indiana University, Bloomington, IN, USA.
Email: nathgeig@indiana.edu

Abstract

Managing collective action issues such as pandemics and climate change requires major social and behavioral change. Dominant approaches to addressing these issues center around information provision and financial incentives to shift behavior, yet, these approaches are rarely effective without integrating insights from psychological research on motivation. By accurately characterizing human motives, social scientists can identify when and why individuals engage, and facilitate behavior change and public engagement. Here, we use the core social motives model to sort social psychological theories into five fundamental social motives: to Belong, Understand, Control, self-Enhance, and Trust. We explain how each motive can improve or worsen collective action issues, and how this framework can be further developed towards a comprehensive social psychological perspective to collective action issues.

KEYWORDS

climate change, collective action, cooperation, core social motives, COVID-19, motivation

1 | INTRODUCTION

Addressing global collective action issues such as pandemics (e.g., COVID-19) and climate change requires public support, cooperation, and active engagement towards both individual and structural changes. Advocates are often perplexed by public disengagement and active resistance to expert recommendations such as vaccination and masking for pandemics and decarbonization for climate change. Many interventions are less effective than hoped, such

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial](https://creativecommons.org/licenses/by-nc/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2023 The Authors. Social and Personality Psychology Compass published by John Wiley & Sons Ltd.

as widely publicized vaccine lotteries promoting COVID-19 vaccine uptake among the hesitant (Gandhi et al., 2021; Walkey et al., 2021). We agree with Fielding et al. (2014) that interventions and advocacy are most effective when grounded in social psychological theory (also see Walton & Wilson, 2018). In particular, collective action problems are characterized by tradeoffs between short-term individual satisfaction and long-term group goals (Harring et al., 2021; Ostrom, 2010). Therefore, these problems are best addressed when individuals act as members of broader social groups. In this piece, we consider commonly used intervention strategies and how *core social motives theory* (Fiske, 2004), which examines individuals' motives in social situations, can inform psychological theory and effective interventions.

2 | DRAWBACKS OF COMMONLY USED INTERVENTION STRATEGIES

One dominant approach to addressing collective action issues involves providing information to the public to increase public awareness of problems (Jahng & Lee, 2018; Walter et al., 2019). This approach is based on the *information deficit model*, which is grounded in the assumption that lack of public awareness of a problem is the key barrier to public engagement, thus, just increasing public knowledge will catalyze public engagement (Bauer et al., 2007). Even in cases where knowledge-based interventions are effective, this effectiveness is heightened when interventions address specific psychological barriers that individuals face such as low efficacy (Geiger et al., 2017), or when correcting key misunderstandings that prevent accurate threat construal (Ranney & Clark, 2016). In contrast, in other cases, information provision can be ineffective at promoting engagement or even backfire with certain audiences (e.g., Hart & Nisbet, 2012).

A second dominant approach uses financial (dis)incentives to promote behavior change (Goode, 1997; Hirschman & Berman, 2014). These interventions attempt to shift the calculus in favor of pro-social and long-term action by increasing the relative financial desirability of taking such actions. These strategies are effective in certain situations: for example, implementing carbon taxes – which make climate change-causing goods and services more expensive – reduce carbon emissions in those countries and regions (Murray & Rivers, 2015; O'Gorman & Jotzo, 2014). However, in many cases, financial (dis)incentives are ineffective. For example, small-to-medium financial incentives do not motivate nonvoters to vote (Panagopoulos, 2013). Similarly, a meta-review of research on vaccination prior to COVID-19 (Dubé et al., 2015) suggested the ineffectiveness of financial incentives to motivate vaccination, and later attempts to promote COVID-19 vaccinations through direct payments or a prize lottery largely concur with this finding (Acharya & Dhakal, 2021; Gandhi et al., 2021; Mallow et al., 2021; Walkey et al., 2021). Further, even when financial incentives are effective at promoting immediate behavior change, individuals often revert to their earlier behavior after the incentive is discontinued, suggesting the need to continue costly incentive programs indefinitely (Schultz, 2014).

In summary, neither information nor financial consequences are alone effective enough to fully engage people to address collective action issues. We argue that co-designing collective action interventions based on psychological theories of social motivation will increase effectiveness, for example, by using the core social motives model (Fiske, 2004; Stevens & Fiske, 1995).

3 | CORE SOCIAL MOTIVES

Core social motives is a macro-level theory that consolidates social psychological accounts of motivation (Fiske, 2004; Stevens & Fiske, 1995). This theory lays out interrelated fundamental human motivations operating across a wide variety of social situations: Belonging, Understanding, Controlling, self-Enhancing, and Trusting others: BUC(k)ET. The motives are theoretically grounded in several psychological subdisciplines, including evolutionary psychology, humanistic psychology, and most centrally, social psychology. The motives reflect broad, interrelated categories of drivers of human behaviors in social settings that are derived from basic psychological human needs (e.g., needs for

affiliation and competence; Prentice et al., 2014; also see Dweck, 2017). Core social motives theory was recently applied to climate change engagement in a short review (Brick, Bosshard, & Whitmarsh, 2021). Here, we expand this perspective to collective action problems in general.

4 | BELONGING

The motive to belong reflects individuals' drive to be accepted by others and maintain positive, stable interpersonal relationships. This motive is fundamental to core social motives theory (Stevens & Fiske, 1995) and a variety of other psychological theories (Baumeister & Leary, 1995; Maslow, 2013; Pittman & Zeigler, 2007). This motive fosters ingroup processes such as conformity and cooperation, which are particularly relevant to engagement with collective action issues.

4.1 | When individuals are not strongly motivated by other factors, conformity is least socially risky

When choosing appropriate responses in novel situations regarding diffuse, uncertain, and collective risks, people often conform to *descriptive social norms*: perceptions of what others would say and do in that situation (Cialdini et al., 1990; Fritsche et al., 2018; Schultz et al., 2007). Though multiple motives can promote conformity, a key driver is the motive to belong and fit in (i.e., normative social influence; Deutsch & Gerard, 1955). For example, individuals refrain from engaging in environmental activism in part because they worry that they will be perceived negatively (Bashir et al., 2013; Geiger & Swim, 2018). Individuals conform most prominently to their perceived opinions and behaviors of local reference groups and valued in-groups. For example, political conservatives might avoid pro-environmental behavior to match perceptions of other conservatives (Geiger et al., 2020; Van Boven et al., 2018). This conformity can occur even when individuals misperceive others. For example, although most Americans are concerned about climate change, the widely-held misperception that few others are concerned can lead individuals to avoid discussing the topic (Geiger & Swim, 2016; Sparkman et al., 2022). The motive to belong discourages expressing nontraditional opinions and behaviors that violate social norms or in-group values (Cialdini & Trost, 1998). Individuals will sometimes conform even at substantial personal cost (Gabriel et al., 2010).

Belongingness can promote conformity that either inhibits or promote addressing collective action issues (Nolan, 2013; Sparkman et al., 2020). Inhibiting constructive action, a person might choose not to get vaccinated against COVID-19, or drive a larger vehicle than they need (Sexton & Sexton, 2014), to conform to perceived community norms. Supporting constructive action, the robust social norm of mask-wearing during portions of the COVID-19 outbreak and other pandemics (e.g., SARS; Lau et al., 2004) helped to mitigate the spread of disease. Overall, if individuals learn that others are concerned about collective action issues and support personal and policy actions, some will adjust their attitudes and behaviors accordingly to fit in with updated norms (Goldberg et al., 2020). Similarly, interventions or events that dispel perceptions of those engaged with collective action issues as "deviant" (Bashir et al., 2013; Swim et al., 2019) can reduce belonging-related barriers to engagement.

4.2 | People cooperate within groups whose norms support cooperation

The motive to belong can also foster interpersonal cooperation, but especially in situations where individuals believe that cooperation will help them belong. Whitehouse et al. (2014) demonstrated that during the 2011 Libya conflict, many frontline Libyan revolutionaries reported visceral, family-like bonds with fellow soldiers, which seemingly predisposed them to self-sacrifice in the service of cooperation toward group goals. Similarly, during World War

II, Americans, Soviets, and many others collectively mobilized to defeat the perceived existential threat of fascism. Belonging-motivated cooperation also occurs in everyday modern situations like donating money to needy in-group members (Swann et al., 2010). Conversely, situations in which many avoid cooperation are also commonplace, such as the recent Covid-19 pandemic where many individuals did not properly wear masks or take other precautions to protect their community from a deadly disease.

People look to social cues to gauge whether and when cooperation is socially appropriate. Liberman (2004) illustrates provides direct evidence for this phenomenon: study participants playing a prisoners dilemma game presented to them with the name "The Wall Street Game" (implying a norm of competition) were unlikely to cooperate, but other participants playing the same game presented as "The Community Game" (implying a norm of cooperation) were likely to cooperate (Liberman, 2004). Similarly, messaging that suggests *working together norms* - cooperation with others toward a shared goal - can promote cooperative action (Howe et al., 2021; Sparkman et al., 2020). Underestimating others' cooperative tendencies may decrease individuals' own cooperative behavior. In the United States and United Kingdom, people overestimated the influence of self-interest on others' choices: people overestimated the effect of financial incentives on others' willingness to donate blood, and others' smoking status on smoking ban support (Brick et al., 2021; Ratner & Miller, 2001).

The effect of cooperation on collective action issues depends on goals and behaviors of those cooperating. In some cases, cooperative responses can be maladaptive for social issues, such as when individuals successfully organize against renewable energy (Van Lange & Joireman, 2008), increasing housing density (Whittemore & BenDor, 2019), or vaccine mandates (Johnson et al., 2020). Similarly, individuals might avoid masking during a pandemic either because they are not motivated to cooperate, or because an organized refusal to wear masks is a form of cooperation with a specific in-group. The latter phenomenon was arguably evidenced by some U.S. Republicans' hesitation to wear a mask following signals from a trusted in-group leader, Donald Trump, such as that wearing a mask would "send the wrong message" (Associated Press, 2020; also see Trusting below). In this case, a speculation is that following this messaging, Republicans might intentionally avoid masking, despite increased health risks for themselves and others, to cooperate with their in-group goals (Kahane, 2021). Thus, context determines whether norms of cooperation will help or harm solving collective action problems.

5 | UNDERSTANDING

Individuals must make meaning of incoming information to make sense of the world and anticipate the future (Fiske, 2004; Stevens & Fiske, 1995). Human brains are not trivia-memorizing machines that store bits of information in isolated contexts. Rather, individuals engage in meaning-making to meet psychological needs. In particular, individuals are motivated to selectively seek and process new information to (a) build shared meaning with valued others, (b) support parsimonious mental models about the world, and (c) reduce existential anxiety (Geiger, Swim, & Gruszczynski, 2022; Hennes et al., 2012; Walton & Wilson, 2018). These styles of information processing often lead to an accurate understanding of the world, but not always.

5.1 | Meaning is socially shared

Individuals are motivated to develop similar understandings of phenomena to other in-group members (Hennes et al., 2012). Thus, individuals may avoid acknowledging solutions that address collective action issues when those solutions seem to contradict important in-group worldviews (Campbell & Kay, 2014). This motivated reasoning process can have psychological benefits and enhance group bonding, but it can also cause harms, particularly when group values and norms conflict with acknowledging objective risks. Numerous theoretical perspectives including the *social amplification of risk framework* (Kasperson et al., 1988) and *cultural cognition thesis* (Kahan, 2012) acknowledge

the importance of shared understanding in collective action issues. Interventions would benefit from working with patterns of information spread within groups (e.g., using social network analysis; Geiger et al., 2019) and how individuals reject or accept information based on the perceived beliefs of other in-group members. For example, interventions aimed at changing public conservation behavior would benefit from working with community leaders or other opinion leaders (Abrahamse & Steg, 2013), perhaps in part because these individuals are better able to foster shifts in shared community understandings than individualized, top-down messaging (also see the Trust section below).

5.2 | Individuals prefer parsimonious mental models

Individuals often interpret novel information based on their existing narratives and mental models (Constantino & Weber, 2021; McLaughlin et al., 2019). These mental models and narratives typically balance needs for accuracy and parsimony, and avoid anxiety-causing uncertainty (Hennes et al., 2012; Jost, 2017). In general, individuals tend to seek out information and experiences that support (rather than contradict) existing mental models, and selectively interpret ambiguous information as supporting those models. Collective action problems are often complex, abstract issues (Atwater et al., 1985; Geiger, Swim, & Gruszczynski, 2022), making them particularly prone to this phenomenon. For example, regarding climate change, even farmers, who are at particular risk from a changing climate, were less likely to notice unusually warm weather if they did not already acknowledge the existence of climate change (Fosu-Mensah et al., 2012) – presumably because it is easy to fit some climatic changes into “natural variability in weather” if one is motivated to do so.

Informational messages are more impactful when framed to connect with the audiences' existing mental models. Research demonstrates that using metaphors and analogies to connect climate systems with systems that individuals already understand can enhance climate change knowledge and action intentions (Geiger, Swim, & Fraser, 2017; Ranney & Clark, 2016; Swim et al., 2018). For example, because most have at least a basic understanding of the human circulatory system, describing the oceans as the “climate's heart” (i.e., moving weather systems around the planet in the way the heart moves blood around the body) can help individuals to understand how the oceans play a role in the climate system. Conversely, individuals may reject information or narratives that contradict their existing narratives or convey collective action issues as uncertain or complex. Similarly, some may resist social change and social movements (Hennes et al., 2012) because the change is associated with uncertainty. Thus, advocates may benefit from understanding the epistemic anxieties related to collective action issues and craft simple messages highlighting certainties and how proposed solutions have been successfully implemented in past dilemmas. For example, future research could examine whether informative messaging about mask requirements in the 1918 “Spanish Flu” pandemic would reduce resistance to contemporary masking policies.

5.3 | Individuals prefer to avoid existential anxiety

Individuals are also motivated to understand the world in a way that feels safe and reduces anxiety about their own mortality (Hennes et al., 2012; Jost et al., 2017). Because many collective action issues such as pandemics and climate change represent existential threats, (mis)information and narratives that downplay the severity of such threats can be psychologically appealing. Thus, although framing such crises as existential threats can motivate people to act, it can also conversely foster denial and inaction amongst those strongly motivated to reduce perceived existential threats (Hennes et al., 2016; Stollberg & Jonas, 2021). Interestingly, some respond to existentially threatening information not with denial but by increasing their perceived control over the issue (i.e., efficacy; Hornsey et al., 2021). Both denial and increased efficacy, though seemingly illogical responses to learning about a threatening situation, are coping mechanisms to reduce anxiety. As Hornsey and colleagues point out, more work is needed to understand how communication about possible existential threats can be tailored to boost efficacy rather than promoting denial (e.g., Morton et al., 2011).

6 | CONTROLLING

Individuals are motivated to perceive that they are competent and effective – that they can exert influence on their world (Deci & Ryan, 2000; Fiske, 2004; Fiske et al., 1996; Stevens & Fiske, 1995). The motive to have control can manifest in the desire for power and efficacy.

6.1 | People want to feel powerful

Power reflects one's ability to influence others, the surrounding world, and one's own outcomes (Fiske, 2004; Leary et al., 1995; Teel & Manfredi, 2010). Power contrasts with status, which reflects others' perceptions of one's self-worth (Blader & Chen, 2012) and is more relevant to the self-enhancement motive (described below). Individuals' desire to increase power works against addressing collective action issues in several ways. Seeking power is one method to improve the predictability of one's social and natural environment. Promoting power-seeking can foster domination orientations toward other people (Altemeyer, 1998) and nature (Bloodhart & Swim, 2010; Teel & Manfredi, 2010), which can act against constructive action on threats. For example, a choice to drive an automobile rather than bicycling or taking the bus could in part reflect a motive for power. When power-seeking is promoted, individuals may preferentially drive to enhance the perceived controllability of the situation, allowing them to avoid undesirable social interactions or weather. Choosing to socialize during the pandemic despite the health threats might reflect a desire to retain control. Conversely, however, the desire to feel powerful could also motivate individuals to try to influence others toward action on a particular issue (e.g., see Geiger, 2022a). Therefore, when communicating policy options or designing interventions to promote public engagement and behavior change, it is valuable to consider perceptions of control and boost them before a potential threat.

6.2 | People want to feel efficacious

Individuals also seek control through gaining efficacy - seeing oneself as capable in a certain domain. Conceptually, efficacy is divided into three components: response efficacy, self-efficacy, and collective efficacy (Doherty & Webler, 2016; Maddux & Rogers, 1983; Witte, 1992). Response efficacy reflects individuals' perceived ability to influence outcomes through a specific behavior, self-efficacy refers to individuals' perceived ability to engage in the target behavior, and collective efficacy refers to individuals' perceived ability to work with others to influence a given situation. All three are important predictors of whether individuals engage in domain-relevant behavior: individuals avoid engaging in domains where they do not feel efficacy (Ozer & Bandura, 1990).

Currently, many feel low efficacy toward addressing many collective action issues. For example, climate change is often perceived as so vast that many feel powerless (Norgaard, 2011; Swim et al., 2014). Similarly, early in the COVID-19 pandemic, many solutions, like a possible future vaccine, felt out of outside of individuals' personal capacity to influence (Geiger et al., 2021). In turn, low efficacy toward one's ability to address these threats (Cohen-Chen & Van Zomeren, 2018; Heath & Gifford, 2006) or to engage in specific actions such as discussion (Geiger & Swim, 2016) may motivate individuals to focus on other goals for which they have higher efficacy.

In other cases, efficacy could also promote action toward mitigating collective action issues given appropriate contexts and interventions (De Young, 1996). In particular, experiences that enhance efficacy toward specific collective action issues or behaviors could promote engagement on these issues (Doherty & Webler, 2016; Geiger, Swim, & Fraser, 2017; Hornsey et al., 2021; Swim et al., 2014). For example, experimental work suggests that encouraging people to complete a relatively easy pro-environmental behavior can build efficacy toward working on more challenging behaviors, thereby promoting "behavioral spillover" from easy to challenging behaviors (Lauren et al., 2016). Future work is needed to assess boundary conditions of when and how efficacy motivates individuals to work on collective action problems.

7 | SELF-ENHANCEMENT

Self-enhancement is the motive to believe that one is a valuable individual and fundamentally good (Fiske, 2004). Though some work defines self-enhancement as the desire to advance one's personal interests (e.g., Schwartz, 1992), we adopt a broader conceptualization: self-enhancement reflects the desire to meet societal and personal values. This conceptualization is consistent with core social motives theory and also reflects work suggested that the desire for status is a fundamental human motive (Anderson et al., 2015). *Sociometer theory* (Leary et al., 1995) suggests that self-esteem serves to monitor individuals' societal value: perceived decreases in societal value trigger decreased self-esteem, which feels unpleasant, while perceived increases in societal value have the opposite effect. Thus, increases and decreases in self-esteem are signals indicating whether one should maintain or adjust their behaviors to maximize their value to society.

Based on the above, it might appear that the motive for self-enhancement would consistently motivate people to self-improve, thereby increasing their societal worth. In practice however, individuals can also trick their sociometer by rejecting potential threats to their self-esteem and thereby avoiding the negative affective consequences of self-esteem reduction. Below, we describe how self-improvement and rejecting self-esteem threats might explain action and inaction on collective issues.

7.1 | People can self-enhance by improving the self

The most direct way for individuals to self-enhance is by striving toward self-improvement (Fiske, 2004). This striving can either facilitate or hinder action toward collective action issues, depending on whether societal values promote or hinder addressing such threats. Conflicting societal values can reduce constructive actions, for example, in the case of car culture. In the United States, private automobile ownership is associated with freedom, maturity, and status, especially compared to public transportation users (Huber, 2013; Sadalla & Krull, 1995). Thus, in the United States, the drive toward self-improvement likely discourages environmentally responsible transportation behavior or support for policies promoting such transportation. Similarly, U.S. values encourage a focus on achievement and power over helping others (Schwartz, 1994), which may conflict with the cooperation and social humility that is beneficial toward addressing collective action issues (see the Belonging section above).

The motive to self-enhance can promote action toward collective issues when it is valued by society or when such values are made salient (i.e., *injunctive social norms*; Cialdini et al., 1990; Schultz & Zelezny, 2003). Injunctive norms differ from descriptive norms (discussed in the Belonging section) in that descriptive norms reflect perceptions of what others do (and thus relate to conformity) while injunctive norms reflect perceptions of what is socially desirable (and thus relate to the desire to self-improve). For example, reframing the timespan of self-improvement by highlighting the desire to be remembered positively after one's death (i.e., legacy motives) can promote socially constructive pro-environmental action (Zaval et al., 2015), and fostering a *culture of conservation* where pro-environmental behavior is socially valued can have a similar effect (Nolan, 2013). Admonishment for negative behaviors also increases willingness to engage in constructive behaviors (Swim & Bloodhart, 2013), potentially because the admonishment triggers a desire for self-improvement. Thus, interventions should focus on setting pro-social injunctive norms to harness individuals' desire to self-improvement toward positive collective action.

7.2 | People can self-enhance by rejecting self-esteem threats

Individuals can also boost self-esteem through rejecting threatening information (Greenberg et al., 1993). This may inhibit openness to addressing collective action issues, perhaps especially when individuals receive threatening information about the value of their group. For example, informing U.S. residents that climate change was mostly due to

their own excessive energy consumption (vs. excessive Chinese energy consumption) led to participants being less likely to accept the scientific consensus view that climate change is human-caused, presumably because acknowledging this would threaten the value of their U.S. group identity (Jang, 2013). Conversely, receiving an affirmation of a valued group can heighten the tendency to engage in collective action with that group (Badea et al., 2021). Thus, threats to one's self-esteem might be mitigated by highlighting the value of an ingroup supportive of collective action.

8 | TRUSTING

The motive to trust reflects the drive to perceive the world as a fundamentally benevolent, non-threatening place (Dweck, 2017; Fiske et al., 1996; Stevens & Fiske, 1995). It relates to other social motives, including understanding and belonging; however, understanding involves meaning-making and belonging is about fitting in, while trusting involves a judgement about the goodness of others and a corresponding "willingness to accept vulnerability" (Rousseau et al., 1998, p. 355). Trust facilitates interactions and provides information on how to move forward most effectively in unfamiliar situations (Cialdini & Trost, 1998).

Problems can arise when others are misinformed, seek to mislead us, or have goals and preferences inconsistent with ours. Thus, individuals are motivated to determine when others can be trusted. We tend to perceive ingroup members as better informed, trustworthy, and having similar goals (Fiske et al., 2007). Therefore, determining if a person is part of the ingroup is critical for determining trust. Individuals have multiple group identities, so trust toward particular targets is influenced in part by the relative salience of different group identities. For example, when one's political identity is highly salient, one may be likely to trust elites and peers from the same political party or movement. When other identities such as class, nationality, gender, religion, or ethnicity are salient, individuals may trust elites and peers from that social group. Advocates and policymakers can thus promote valid information and promote constructive action by making certain identities more salient.

8.1 | Individuals trust ingroup elites

Trusted leaders are valued sources of information about appropriate responses to collective action issues (Cologna & Siegrist, 2020). For example, in the United States, trust in government officials is associated with rejecting conspiracy theories about climate change, and this may partially explain why those politically left-of-center or moderate are more supportive of climate action and more likely to engage in climate actions than right-of-center individuals (Cologna & Siegrist, 2020; van der Linden et al., 2021). Similarly, trusting institutions associated with the COVID-19 vaccine predicts greater rates of vaccination (Uslu et al., 2021). Conversely, when trusted leaders convey misinformation or downplay collective action issues, this can foster maladaptive responses such as disengagement (Carmichael & Brulle, 2017; Van Boven & Sherman, 2021).

For those with low institutional trust or associated with a political party that downplays a collective action issue (e.g., the U.S. Republican party and climate change), pro-social behavior could be promoted via trusted messengers. Messages from conservative political leaders could encourage political conservatives to act on climate change (Wolsko et al., 2016), support climate policies (Ehret et al., 2018), and get vaccinated against infectious diseases (Pink et al., 2021). Effective messengers might also come from other social identities. For example, for the Christian right, effective messengers might include religious leaders such as the Pope (promoting action on climate change; Maibach, 2015) or religious medical experts (promoting vaccination; Chu et al., 2021). Advocates would benefit from assessing how to build trust with target populations. For example, when advocating for policy, neutral experts are trusted more than politicians (especially politicians of the opposite party; Flores et al., 2022), but not more than "the average Joe" (Geiger, 2022b). Overall, climate experts are more trusted and persuasive in policy advocacy when they show that they are adjusting their own behavior to reduce carbon emissions (Attari et al., 2019; Sparkman & Attari, 2020) and when they attempt to connect with their audiences' values (Geiger, Sarge, & Comfort, 2022).

TABLE 1 Core social motives and collective action problems (also see Fiske, 2004)

Motive	Summary	Example interventions
Belong	Be accepted and maintain relationships	Promote normative behavior by making high consumption visible to others
Understand	Integrate information and construct shared meaning	Communicate comprehensible threats, not overly complicated ones
Control	Feel competitive and effective	Communicate manageable threats, not existential ones
Self-Enhance	See self as valuable and good	Highlight the desire to be remembered positively after one's lifetime (e.g., Zaval et al., 2015)
Trust	See others as benevolent	Adopt techniques from relational organizing (e.g., Divakaran & Nerbonne, 2017)

8.2 | Individuals trust average ingroup members

Individuals also look to trusted prototypical people to gauge appropriate responses to collective action issues. Meta-analyses suggest that the most effective category of pro-environmental interventions include block leaders (i.e., trusted neighbors; Abrahamse & Steg, 2013), and social network analysis on a local religious community similarly shows that having stronger connections to green leaders within an "advice" social network predicts greater engagement in pro-environmental behavior (Geiger et al., 2019). Conversely, peer cues can also foster maladaptive responses, for example, individuals may be more likely to endorse conspiracy theories when the theories are spread by those claiming to be from a trusted in-group (Goertzel, 1994). Thus, social psychologists and advocates may benefit from considering which peers individuals trust, and consider adopting techniques from relational organizing, such as empowering local community leaders to promote engagement in their peers via one-on-one interactions, to promote constructive action through individuals' social networks (Divakaran & Nerbonne, 2017; Van Zomeren, 2015). Many of these techniques may also relate to key ideas discussed in the Belonging section.

See Table 1 for a summary of the five motives.

9 | IMPLICATIONS FOR FUTURE WORK AND INTERVENTIONS

This paper applies core social motives to individuals' responses to collective action issues as part of a comprehensive alternative to the assumptions that collective action issues are best addressed by information provision or financial incentives in isolation. Considering how the five core social motives influence individuals' tendencies to engage in collective action issues could advance social psychological theory and inform more effective interventions.

Researchers and advocates could consider when motives interact to predict when addressing one motive alone may not be effective. For example, when individuals are informed that they use less energy than their neighbors, individuals who are more motivated to fit in (i.e., belonging) than to conserve (i.e., self-enhancement and viewing conservation as a personal or societal goal) may increase their energy usage (see Schultz et al., 2007). Similarly, there may be a tradeoff between the motives to belong and to control, such as when group norms against discussing climate change inhibit the potential for individuals to engage in climate change discussions to learn skills for action and foster a sense of group solidarity and collective efficacy (Norgaard, 2006).

Future work could also validate the utility of our overall framework by comparing key social motives described here to those in other frameworks. For example, Kenrick et al. (2010) model argues for a greater role of parenting, mate acquisition, and mate retention, and less emphasis on processes of understanding and control than in the core social motives model. Kenrick and colleagues' model might lead to the hypothesis that parents (vs. nonparents) are more likely to prioritize collective action problems affecting future generations such as climate change. In contrast, the current model would predict that parenthood status would encourage or inhibit collective action only when

parents perceive core motives differently than nonparents. For example, the needs for control and understanding over their children's safety might either help or hinder a parent's ability to recognize the climate emergency.

10 | CONCLUSION

The five core social motives laid out here – to belong, understand, control, trust, and self-enhance – all capture how people engage (or fail to engage) with important social issues including climate change and pandemics. In this paper, we challenge the notion that people respond inadequately to some social challenges because of fundamental human nature (see Atkinson & Jacquet, 2021 for a broader critique). Rather, we argue that the way advocates and policymakers have approached these problems has not yet led to widespread public cooperation and engagement. We suggest further investigation of how collective action could be facilitated through appealing to core social motives.

AUTHOR CONTRIBUTIONS

Nathaniel Geiger wrote the first draft and Nathaniel Geiger and Cameron Brick edited.

ACKNOWLEDGEMENTS

Thanks to Janet Swim, Jonathan Cook, Mel Mark, and Lee Ahern for feedback on an early draft of this manuscript.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

ORCID

Nathaniel Geiger  <https://orcid.org/0000-0003-1724-1081>

REFERENCES

- Abrahamse, W., & Steg, L. (2013). Social influence approaches to encourage resource conservation: A meta-analysis. *Global Environmental Change*, 23(6), 1773–1785. <https://doi.org/10.1016/j.gloenvcha.2013.07.029>
- Acharya, B., & Dhakal, C. (2021). Implementation of state vaccine incentive lottery programs and uptake of COVID-19 vaccinations in the United States. *JAMA Network Open*, 4(12), e2138238. <https://doi.org/10.1001/jamanetworkopen.2021.38238>
- Altemeyer, B. (1998). The other “authoritarian personality”. *Advances in Experimental Social Psychology*, 30, 47–92. [https://doi.org/10.1016/S0065-2601\(08\)60382-2](https://doi.org/10.1016/S0065-2601(08)60382-2)
- Anderson, C., Hildreth, J. A. D., & Howland, L. (2015). Is the desire for status a fundamental human motive? A review of the empirical literature. *Psychological Bulletin*, 141(3), 574–601. <https://doi.org/10.1037/a0038781>
- Associated Press. (2020). *Face masks becoming latest culture-war front as Trump says his wearing one would 'send the wrong message'*. Market Watch. <https://www.marketwatch.com/story/face-masks-becoming-a-culture-war-front-as-trump-says-his-wearing-one-would-send-the-wrong-message-2020-05-07>
- Atkinson, Q. D., & Jacquet, J. (2021). Challenging the idea that humans are not designed to solve climate change. *Perspectives on Psychological Science*, 17(3), 619–630. <https://doi.org/10.1177/17456916211018454>
- Attari, S. Z., Krantz, D. H., & Weber, E. U. (2019). Climate change communicators' carbon footprints affect their audience's policy support. *Climatic Change*, 154(3–4), 529–545. <https://doi.org/10.1007/s10584-019-02463-0>
- Atwater, T., Salwen, M. B., & Anderson, R. B. (1985). Media agenda-setting with environmental issues. *Journalism Quarterly*, 62(2), 393–397. <https://doi.org/10.1177/107769908506200227>
- Badea, C., Binning, K. R., Sherman, D. K., Boza, M., & Kende, A. (2021). Conformity to group norms: How group-affirmation shapes collective action. *Journal of Experimental Social Psychology*, 95, 104153. <https://doi.org/10.1016/j.jesp.2021.104153>
- Bashir, N. Y., Lockwood, P., Chasteen, A. L., Nadolny, D., & Noyes, I. (2013). The ironic impact of activists: Negative stereotypes reduce social change influence. *European Journal of Social Psychology*, 43(7), 614–626. <https://doi.org/10.1002/ejsp.1983>
- Bauer, M. W., Allum, N., & Miller, S. (2007). What can we learn from 25 years of PUS survey research? Liberating and expanding the agenda. *Public Understanding of Science*, 16(1), 79–95. <https://doi.org/10.1177/0963662506071287>

- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529. <https://doi.org/10.1037/0033-2909.117.3.497>
- Blader, S. L., & Chen, Y.-R. (2012). Differentiating the effects of status and power: A justice perspective. *Journal of Personality and Social Psychology*, 102(5), 994–1014. <https://doi.org/10.1037/a0026651>
- Bloodhart, B., & Swim, J. K. (2010). Equality, harmony, and the environment: An ecofeminist approach to understanding the role of cultural values on the treatment of women and nature. *Ecopsychology*, 2(3), 187–194. <https://doi.org/10.1089/eco.2010.0057>
- Brick, C., Bosshard, A., & Whitmarsh, L. (2021). Motivation and climate change: A review. *Current Opinion in Psychology*, 42, 82–88. <https://doi.org/10.1016/j.copsyc.2021.04.001>
- Brick, C., Fillon, A., Yeung, S. K., Wang, M., Lyu, H., Ho, J. Y. J., Wong, S. C., & Feldman, G. (2021). Self-interest is overestimated: Two successful pre-registered replications and extensions of Miller and Ratner (1998). *Collabra: Psychology*, 7(1), 23443. <https://doi.org/10.1525/collabra.23443>
- Campbell, T. H., & Kay, A. C. (2014). Solution aversion: On the relation between ideology and motivated disbelief. *Journal of Personality and Social Psychology*, 107(5), 809–824. <https://doi.org/10.1037/a0037963>
- Carmichael, J. T., & Brulle, R. J. (2017). Elite cues, media coverage, and public concern: An integrated path analysis of public opinion on climate change, 2001–2013. *Environmental Politics*, 26(2), 232–252. <https://doi.org/10.1080/09644016.2016.1263433>
- Chu, J., Pink, S., & Willer, R. (2021). Religious identity cues increase vaccination intentions and trust in medical experts among American Christians. *SocArXiv*. <https://doi.org/10.31235/osf.io/7hrf2>
- Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity and compliance. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vols. 1 and 2, pp. 151–192). McGraw-Hill.
- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58(6), 1015–1026. <https://doi.org/10.1037/0022-3514.58.6.1015>
- Cohen-Chen, S., & Van Zomeren, M. (2018). Yes we can? Group efficacy beliefs predict collective action, but only when hope is high. *Journal of Experimental Social Psychology*, 77, 50–59. <https://doi.org/10.1016/j.jesp.2018.03.016>
- Cologna, V., & Siegrist, M. (2020). The role of trust for climate change mitigation and adaptation behaviour: A meta-analysis. *Journal of Environmental Psychology*, 69, 101428. <https://doi.org/10.1016/j.jenvp.2020.101428>
- Constantino, S. M., & Weber, E. U. (2021). Decision-making under the deep uncertainty of climate change: The psychological and political agency of narratives. *Current Opinion in Psychology*, 42, 151–159. <https://doi.org/10.1016/j.copsyc.2021.11.001>
- De Young, R. (1996). Some psychological aspects of reduced consumption behavior the role of intrinsic satisfaction and competence motivation. *Environment and Behavior*, 28(3), 358–409. <https://doi.org/10.1177/0013916596283005>
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Deutsch, M., & Gerard, H. B. (1955). A study of normative and informational social influences upon individual judgment. *Journal of Abnormal and Social Psychology*, 51(3), 629–636. <https://doi.org/10.1037/h0046408>
- Divakaran, B. M., & Nerbonne, J. (2017). Building a climate movement through relational organizing. *Interdisciplinary Journal of Partnership Studies*, 4(2). <https://doi.org/10.24926/ijps.v4i2.165>
- Doherty, K. L., & Webler, T. N. (2016). Social norms and efficacy beliefs drive the Alarmed segment's public-sphere climate actions. *Nature Climate Change*, 6(9), 879–884. <https://doi.org/10.1038/nclimate3025>
- Dubé, E., Gagnon, D., MacDonald, N. E., & SAGE Working Group on Vaccine Hesitancy. (2015). Strategies intended to address vaccine hesitancy: Review of published reviews. *Vaccine*, 33(34), 4191–4203. <https://doi.org/10.1016/j.vaccine.2015.04.041>
- Dweck, C. S. (2017). From needs to goals and representations: Foundations for a unified theory of motivation, personality, and development. *Psychological Review*, 124(6), 689–719. <https://doi.org/10.1037/rev0000082>
- Ehret, P. J., Van Boven, L., & Sherman, D. K. (2018). Partisan barriers to bipartisanship: Understanding climate policy polarization. *Social Psychological and Personality Science*, 9(3), 308–318. <https://doi.org/10.1177/1948550618758709>
- Fielding, K. S., Hornsey, M. J., & Swim, J. K. (2014). Developing a social psychology of climate change: Editorial. *European Journal of Social Psychology*, 44(5), 413–420. <https://doi.org/10.1002/ejsp.2058>
- Fiske, S. T. (2004). *Social beings: A core motives approach to social psychology*. John Wiley.
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Sciences*, 11(2), 77–83. <https://doi.org/10.1016/j.tics.2006.11.005>
- Fiske, S. T., Morling, B., & Stevens, L. E. (1996). Controlling self and others: A theory of anxiety, mental control, and social control. *Personality and Social Psychology Bulletin*, 22(2), 115–123. <https://doi.org/10.1177/0146167296222001>
- Flores, A., Cole, J. C., Dickert, S., Eom, K., Jiga-Boy, G. M., Kogut, T., Loria, R., Mayorga, M., Pedersen, E. J., Pereira, B., Rubaltelli, E., Sherman, D. K., Slovic, P., Västfjäll, D., & Van Boven, L. (2022). Politicians polarize and experts depolarize public

- support for COVID-19 management policies across countries. *Proceedings of the National Academy of Sciences*, 119(3), e2117543119. <https://doi.org/10.1073/pnas.2117543119>
- Fosu-Mensah, B. Y., Vlek, P. L., & MacCarthy, D. S. (2012). Farmers' perception and adaptation to climate change: A case study of Sekyedumase district in Ghana. *Environment, Development and Sustainability*, 14(4), 495–505. <https://doi.org/10.1007/s10668-012-9339-7>
- Fritsche, I., Barth, M., Jugert, P., Masson, T., & Reese, G. (2018). A social identity model of pro-environmental action (SIMPEA). *Psychological Review*, 125(2), 245–269. PsycARTICLES. <https://doi.org/10.1037/rev0000090>
- Gabriel, S., Kawakami, K., Bartak, C., Kang, S.-J., & Mann, N. (2010). Negative self-synchronization: Will I change to be like you when it is bad for me? *Journal of Personality and Social Psychology*, 98(6), 857–871. <https://doi.org/10.1037/a0019272>
- Gandhi, L., Milkman, K. L., Ellis, S., Graci, H., Gromet, D., Mobarak, R., Buttenheim, A., Duckworth, A., Pope, D. G., Stanford, A., Thaler, R. H., & Volpp, K. (2021). *An experiment evaluating the impact of large-scale, high-payoff vaccine regret lotteries* (SSRN Scholarly Paper ID 3904365). Social Science Research Network. <https://doi.org/10.2139/ssrn.3904365>
- Geiger, N. (2022a). Perceptions of self-motives and environmental activists' motives for pro-environmental behavior. *Sustainability*, 14(17), 10656. <https://doi.org/10.3390/su141710656>
- Geiger, N. (2022b). Do people actually “Listen to the experts”? A cautionary note on assuming expert credibility and persuasiveness on public health policy advocacy. *Health Communication*, 37(6), 677–684. <https://doi.org/10.1080/10410236.2020.1862449>
- Geiger, N., & Swim, J. K. (2016). Climate of silence: Pluralistic ignorance as a barrier to climate change discussion. *Journal of Environmental Psychology*, 47, 79–90. <https://doi.org/10.1016/j.jenvp.2016.05.002>
- Geiger, N., & Swim, J. K. (2018). Gendered impressions of issue publics as predictors of climate activism. *Frontiers in Communication*, 3(54), 54. <https://doi.org/10.3389/fcomm.2018.00054>
- Geiger, N., Gore, A., Squire, C. V., & Attari, S. Z. (2021). Investigating similarities and differences in individual reactions to the Covid-19 pandemic and the climate crisis. *Climatic Change*, 161(1), 1. <https://doi.org/10.1007/s10584-021-03143-8>
- Geiger, N., Pasek, M. H., Gruszczynski, M., Ratcliff, N. J., & Weaver, K. S. (2020). Political ingroup conformity and pro-environmental behavior: Evaluating the evidence from a survey and mousetracking experiments. *Journal of Environmental Psychology*, 72, 101524. <https://doi.org/10.1016/j.jenvp.2020.101524>
- Geiger, N., Sarge, M. A., & Comfort, R. N. (2022). An examination of expertise, caring, and salient value similarity as source factors that garner support for advocated climate policies. *Environmental Communication*. <https://doi.org/10.1080/17524032.2022.2080242>
- Geiger, N., Swim, J. K., & Fraser, J. (2017). Creating a climate for change: Interventions, efficacy and public discussion about climate change. *Journal of Environmental Psychology*, 51, 104–116. <https://doi.org/10.1016/j.jenvp.2017.03.010>
- Geiger, N., Swim, J. K., & Glenna, L. L. (2019). Spread the green word: A social community perspective into environmentally sustainable behavior. *Environment and Behavior*, 51(5), 561–589. <https://doi.org/10.1177/0013916518812925>
- Geiger, N., Swim, J. K., Fraser, J., & Flinner, K. (2017). Catalyzing public engagement with climate change through informal science learning centers. *Science Communication*, 39(2), 221–249. <https://doi.org/10.1177/1075547017697980>
- Geiger, N., Swim, J., & Gruszczynski, M. W. (2022). Political psychology and the climate crisis. In D. Osborne, & C. G. Sibley (Eds.), *The Cambridge handbook of political psychology*. Cambridge University Press.
- Goertzel, T. (1994). Belief in conspiracy theories. *Political Psychology*, 15(4), 731–742. <https://doi.org/10.2307/3791630>
- Goldberg, M. H., van der Linden, S., Leiserowitz, A., & Maibach, E. (2020). Perceived social consensus can reduce ideological biases on climate change. *Environment and Behavior*, 52(5), 495–517. <https://doi.org/10.1177/00139165198533>
- Goode, W. J. (1997). Rational choice theory. *The American Sociologist*, 28(2), 22–41. <https://doi.org/10.1007/s12108-997-1004-5>
- Greenberg, J., Pyszczynski, T., Solomon, S., Pinel, E., Simon, L., & Jordan, K. (1993). Effects of self-esteem on vulnerability-denying defensive distortions: Further evidence of an anxiety-buffering function of self-esteem. *Journal of Experimental Social Psychology*, 29(3), 229–251. <https://doi.org/10.1006/jesp.1993.1010>
- Harring, N., Jagers, S. C., & Löfgren, Å. (2021). COVID-19: Large-scale collective action, government intervention, and the importance of trust. *World Development*, 138, 105236. <https://doi.org/10.1016/j.worlddev.2020.105236>
- Hart, P. S., & Nisbet, E. C. (2012). Boomerang effects in science communication: How motivated reasoning and identity cues amplify opinion polarization about climate mitigation policies. *Communication Research*, 39(6), 701–723. <https://doi.org/10.1177/0093650211416646>
- Heath, Y., & Gifford, R. (2006). Free-market ideology and environmental degradation: The case of belief in global climate change. *Environment and Behavior*, 38(1), 48–71. <https://doi.org/10.1177/0013916505277998>
- Hennes, E. P., Nam, H. H., Stern, C., & Jost, J. T. (2012). Not all ideologies are created equal: Epistemic, existential, and relational needs predict system-justifying attitudes. *Social Cognition*, 30(6), 669–688. <https://doi.org/10.1521/soco.2012.30.6.669>
- Hennes, E. P., Ruisch, B. C., Feygina, I., Monteiro, C. A., & Jost, J. T. (2016). Motivated recall in the service of the economic system: The case of anthropogenic climate change. *Journal of Experimental Psychology: General*, 145(6), 755–771. <https://doi.org/10.1037/xge0000148>

- Hirschman, D., & Berman, E. P. (2014). Do economists make policies? On the political effects of economics. *Socio-Economic Review*, 12(4), 779–811. <https://doi.org/10.1093/ser/mwu017>
- Hornsey, M. J., Chapman, C. M., & Oelrichs, D. M. (2021). Why it is so hard to teach people they can make a difference: Climate change efficacy as a non-analytic form of reasoning. *Thinking & Reasoning*, 28(3), 1–19. <https://doi.org/10.1080/13546783.2021.1893222>
- Howe, L. C., Carr, P. B., & Walton, G. M. (2021). Normative appeals motivate people to contribute to collective action problems more when they invite people to work together toward a common goal. *Journal of Personality and Social Psychology*, 121(2), 215–238. <https://doi.org/10.1037/pspa0000278>
- Huber, M. T. (2013). *Lifeblood: Oil, freedom, and the forces of capital*. University of Minnesota Press.
- Jahng, M. R., & Lee, N. (2018). When scientists Tweet for social changes: Dialogic communication and collective mobilization strategies by Flint water study scientists on Twitter. *Science Communication*, 40(1), 89–108. <https://doi.org/10.1177/1075547017751948>
- Jang, S. M. (2013). Framing responsibility in climate change discourse: Ethnocentric attribution bias, perceived causes, and policy attitudes. *Journal of Environmental Psychology*, 36, 27–36. <https://doi.org/10.1016/j.jenvp.2013.07.003>
- Johnson, N. F., Velásquez, N., Restrepo, N. J., Leahy, R., Gabriel, N., El Oud, S., Zheng, M., Manrique, P., Wuchty, S., & Lupu, Y. (2020). The online competition between pro- and anti-vaccination views. *Nature*, 582(7811), 230–233. Article 7811. <https://doi.org/10.1038/s41586-020-2281-1>
- Jost, J. T. (2017). Ideological asymmetries and the essence of political psychology. *Political Psychology*, 38(2), 167–208. <https://doi.org/10.1111/pops.12407>
- Jost, J. T., Becker, J., Osborne, D., & Badaan, V. (2017). Missing in (collective) action: Ideology, system justification, and the motivational antecedents of two types of protest behavior. *Current Directions in Psychological Science*, 26(2), 99–108. <https://doi.org/10.1177/0963721417690633>
- Kahan, D. M. (2012). Cultural cognition as a conception of the cultural theory of risk. In S. Roeser (Ed.), *Handbook of risk theory* (pp. 725–759). Springer. http://link.springer.com/10.1007/978-94-007-1433-5_28
- Kahane, L. H. (2021). Politicizing the mask: Political, economic and demographic factors affecting mask wearing behavior in the USA. *Eastern Economic Journal*, 47(2), 163–183. <https://doi.org/10.1057/s41302-020-00186-0>
- Kasperson, R. E., Renn, O., Slovic, P., Brown, H. S., Emel, J., Goble, R., Kasperson, J. X., & Ratick, S. (1988). The social amplification of risk: A conceptual framework. <https://doi.org/10.1111/j.1539-6924.1988.tb01168.x>
- Kenrick, D. T., Griskevicius, V., Neuberg, S. L., & Schaller, M. (2010). Renovating the pyramid of needs: Contemporary extensions built upon ancient foundations. *Perspectives on Psychological Science*, 5(3), 292–314. <https://doi.org/10.1177/1745691610369469>
- Lau, J. T., Yang, X., Tsui, H., Pang, E., & Kim, J. H. (2004). SARS preventive and risk behaviours of Hong Kong air travellers. *Epidemiology and Infection*, 132(4), 727–736. <https://doi.org/10.1017/s0950268804002225>
- Lauren, N., Fielding, K. S., Smith, L., & Louis, W. R. (2016). You did, so you can and you will: Self-efficacy as a mediator of spillover from easy to more difficult pro-environmental behaviour. *Journal of Environmental Psychology*, 48, 191–199. <https://doi.org/10.1016/j.jenvp.2016.10.004>
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68(3), 518–530. <https://doi.org/10.1037/0022-3514.68.3.518>
- Lieberman, V., Samuels, S. M., & Ross, L. (2004). The name of the game: Predictive power of reputations versus situational labels in determining prisoner's dilemma game moves. *Personality and Social Psychology Bulletin*, 30(9), 1175–1185. <https://doi.org/10.1177/0146167204264004>
- Maddux, J. E., & Rogers, R. W. (1983). Protection motivation and self-efficacy: A revised theory of fear appeals and attitude change. *Journal of Experimental Social Psychology*, 19(5), 469–479. [https://doi.org/10.1016/0022-1031\(83\)90023-9](https://doi.org/10.1016/0022-1031(83)90023-9)
- Maibach, E. W. (2015). The Francis effect: How Pope Francis changed the conversation about global warming. Available at SSRN 2695199. <https://doi.org/10.2139/ssrn.2695199>
- Mallow, P. J., Enis, A., Wackler, M., & Hooker, E. A. (2021). COVID-19 financial lottery effect on vaccine hesitant areas: Results from Ohio's Vax-a-million program. *The American Journal of Emergency Medicine*, 56, 316–317. <https://doi.org/10.1016/j.ajem.2021.08.053>
- Maslow, A. H. (2013). *A theory of human motivation*. Start Publishing LLC.
- McLaughlin, B., Velez, J. A., & Dunn, J. A. (2019). The political world within: How citizens process and experience political narratives. *Annals of the International Communication Association*, 43(2), 156–172. <https://doi.org/10.1080/23808985.2019.1597635>
- Morton, T. A., Rabinovich, A., Marshall, D., & Bretschneider, P. (2011). The future that may (or may not) come: How framing changes responses to uncertainty in climate change communications. *Global Environmental Change*, 21(1), 103–109. <https://doi.org/10.1016/j.gloenvcha.2010.09.013>
- Murray, B., & Rivers, N. (2015). British Columbia's revenue-neutral carbon tax: A review of the latest “grand experiment” in environmental policy. *Energy Policy*, 86, 674–683. <https://doi.org/10.1016/j.enpol.2015.08.011>

- Nolan, J. M. (2013). Creating a culture of conservation: Willingness to confront environmental transgressors. *Ecopsychology*, 5(1), 3–8. <https://doi.org/10.1089/eco.2012.0064>
- Norgaard, K. M. (2006). "We don't really want to know" environmental justice and socially organized denial of global warming in Norway. *Organization & Environment*, 19(3), 347–370. <https://doi.org/10.1177/10860266060292571>
- Norgaard, K. M. (2011). *Living in denial: Climate change, emotions, and everyday life*. MIT Press.
- Ostrom, E. (2010). Analyzing collective action. *Agricultural Economics*, 41(s1), 155–166. <https://doi.org/10.1111/j.1574-0862.2010.00497.x>
- Ozer, E. M., & Bandura, A. (1990). Mechanisms governing empowerment effects: A self-efficacy analysis. *Journal of Personality and Social Psychology*, 58(3), 472–486. <https://doi.org/10.1037/0022-3514.58.3.472>
- O'Gorman, M., & Jotzo, F. (2014). *Impact of the carbon price on Australia's electricity, demand, supply and emissions* (Vol. 1411, p. 17). Centre for Climate Economic & Policy Working Paper.
- Panagopoulos, C. (2013). Extrinsic rewards, intrinsic motivation and voting. *The Journal of Politics*, 75(1), 266–280. <https://doi.org/10.1017/S0022381612001016>
- Pink, S. L., Chu, J., Druckman, J. N., Rand, D. G., & Willer, R. (2021). Elite party cues increase vaccination intentions among Republicans. *Proceedings of the National Academy of Sciences*, 118(32), e2106559118. <https://doi.org/10.1073/pnas.2106559118>
- Pittman, T. S., & Zeigler, K. R. (2007). Basic human needs. *Social Psychology: Handbook of Basic Principles*, 2, 473–489.
- Prentice, M., Halusic, M., & Sheldon, K. M. (2014). Integrating theories of psychological needs-as-requirements and psychological needs-as-motives: A Two process model. *Social and Personality Psychology Compass*, 8(2), 73–85. <https://doi.org/10.1111/spc3.12088>
- Ranney, M. A., & Clark, D. (2016). Climate change conceptual change: Scientific information can transform attitudes. *Topics in Cognitive Science*, 8(1), 49–75. <https://doi.org/10.1111/tops.12187>
- Ratner, R. K., & Miller, D. T. (2001). The norm of self-interest and its effects on social action. *Journal of Personality and Social Psychology*, 81(1), 5–16. <https://doi.org/10.1037/0022-3514.81.1.5>
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3), 393–404. <https://doi.org/10.5465/amr.1998.926617>
- Sadalla, E. K., & Krull, J. L. (1995). Self-presentational barriers to resource conservation. *Environment and Behavior*, 27(3), 328–353. <https://doi.org/10.1177/0013916595273004>
- Schultz, P. W. (2014). Strategies for promoting proenvironmental behavior: Lots of tools but few instructions. *European Psychologist*, 19(2), 107–117. <https://doi.org/10.1027/1016-9040/a000163>
- Schultz, P. W., & Zelezny, L. (2003). Reframing environmental messages to be congruent with American values. *Human Ecology Review*, 10(2), 126–136.
- Schultz, P. W., Nolan, J. M., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2007). The constructive, destructive, and reconstructive power of social norms. *Psychological Science*, 18(5), 429–434. <https://doi.org/10.1111/j.1467-9280.2007.01917.x>
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25(1), 1–65. [https://doi.org/10.1016/S0065-2601\(08\)60281-6](https://doi.org/10.1016/S0065-2601(08)60281-6)
- Schwartz, S. H. (1994). Beyond individualism–collectivism: New cultural dimensions of values. In U. Kim & H. Triandis (Eds.), *Individual and collectivism: Theory, method, and applications* (pp. 85–119). Sage.
- Sexton, S. E., & Sexton, A. L. (2014). Conspicuous conservation: The Prius halo and willingness to pay for environmental bonafides. *Journal of Environmental Economics and Management*, 67(3), 303–317. <https://doi.org/10.1016/j.jeem.2013.11.004>
- Sparkman, G., & Attari, S. Z. (2020). Credibility, communication, and climate change: How lifestyle inconsistency and do-gooder derogation impact decarbonization advocacy. *Energy Research & Social Science*, 59, 101290. <https://doi.org/10.1016/j.erss.2019.101290>
- Sparkman, G., Geiger, N., & Weber, E. (2022). Americans experience a false social reality by underestimating popular climate policy support by nearly half. *Nature Communications*, 13(4779), 1–9. <https://doi.org/10.1038/s41467-022-32412-y>
- Sparkman, G., Howe, L., & Walton, G. (2020). How social norms are often a barrier to addressing climate change but can be part of the solution. *Behavioural Public Policy*, 5(4), 1–28. <https://doi.org/10.1017/bpp.2020.42>
- Stevens, L. E., & Fiske, S. T. (1995). Motivation and cognition in social life: A social survival perspective. *Social Cognition*, 13(3), 189–214. <https://doi.org/10.1521/soco.1995.13.3.189>
- Stollberg, J., & Jonas, E. (2021). Existential threat as a challenge for individual and collective engagement: Climate change and the motivation to act. *Current Opinion in Psychology*, 42, 145–150. <https://doi.org/10.1016/j.copsyc.2021.10.004>
- Swann, W. B., Gómez, Á., Huici, C., Morales, J. F., & Hixon, J. G. (2010). Identity fusion and self-sacrifice: Arousal as a catalyst of pro-group fighting, dying, and helping behavior. *Journal of Personality and Social Psychology*, 99(5), 824–841. <https://doi.org/10.1037/a0020014>
- Swim, J. K., & Bloodhart, B. (2013). Admonishment and Praise: Interpersonal mechanisms for promoting proenvironmental behavior. *Ecopsychology*, 5(1), 24–35. <https://doi.org/10.1089/eco.2012.0065>
- Swim, J. K., Fraser, J., & Geiger, N. (2014). Teaching the Choir to sing: Use of social science information to promote public discourse on climate change. *Journal of Land Use & Environmental Law*, 30, 91.

- Swim, J. K., Geiger, N., & Lengieza, M. L. (2019). Climate change marches as motivators for bystander collective action. *Frontiers in Communication*, 4, 4. <https://doi.org/10.3389/fcomm.2019.00004>
- Swim, J. K., Geiger, N., Sweetland, J., & Fraser, J. (2018). Social construction of scientifically grounded climate change discussions. In S. Clayton, & C. Manning (Eds.), *Psychology and climate change: From denial and depression to adaptation and resilience* (pp. 65–93). Elsevier.
- Teel, T. L., & Manfredo, M. J. (2010). Understanding the diversity of public interests in wildlife conservation. *Conservation Biology*, 24(1), 128–139. <https://doi.org/10.1111/j.1523-1739.2009.01374.x>
- Uslu, A., Lazer, D., Perlis, R. H., Baum, M., Quintana, A., Ognyanova, K., Druckman, J., Lin, J., Santillana, M., Green, J., Simonson, M. D., & Qu, H. (2021). The COVID States Project #63: The decision to not get vaccinated, from the perspective of the unvaccinated. *OSF Preprints*. <https://doi.org/10.31219/osf.io/fazup>
- Van Boven, L., & Sherman, D. K. (2021). Elite influence on public attitudes about climate policy. *Current Opinion in Behavioral Sciences*, 42, 83–88. <https://doi.org/10.1016/j.cobeha.2021.03.023>
- Van Boven, L., Ehret, P. J., & Sherman, D. K. (2018). Psychological barriers to bipartisan public support for climate policy. *Perspectives on Psychological Science*, 13(4), 492–507. <https://doi.org/10.1177/1745691617748966>
- van der Linden, S., Panagopoulos, C., Azevedo, F., & Jost, J. T. (2021). The paranoid style in American politics revisited: An ideological asymmetry in conspiratorial thinking. *Political Psychology*, 42(1), 23–51. <https://doi.org/10.1111/pops.12681>
- Van Lange, P. A., & Joireman, J. A. (2008). How we can promote behavior that serves all of us in the future. *Social Issues and Policy Review*, 2(1), 127–157. <https://doi.org/10.1111/j.1751-2409.2008.00013.x>
- Van Zomeren, M. (2015). Collective action as relational interaction: A new relational hypothesis on how non-activists become activists. *New Ideas in Psychology*, 39, 1–11. <https://doi.org/10.1016/j.newideapsych.2015.04.001>
- Walkey, A. J., Law, A., & Bosch, N. A. (2021). Lottery-based incentive in Ohio and COVID-19 vaccination rates. *JAMA*, 326(8), 766–767. <https://doi.org/10.1001/jama.2021.11048>
- Walter, S., Lörcher, I., & Brüggemann, M. (2019). Scientific networks on Twitter: Analyzing scientists' interactions in the climate change debate. *Public Understanding of Science*, 28(6), 696–714. <https://doi.org/10.1177/0963662519844131>
- Walton, G. M., & Wilson, T. D. (2018). Wise interventions: Psychological remedies for social and personal problems. *Psychological Review*, 125(5), 617–655. <https://doi.org/10.1037/rev0000115>
- Whitehouse, H., McQuinn, B., Buhrmester, M., & Swann, W. B. (2014). Brothers in arms: Libyan revolutionaries bond like family. *Proceedings of the National Academy of Sciences*, 111(50), 17783–17785. <https://doi.org/10.1073/pnas.1416284111>
- Whittemore, A. H., & BenDor, T. K. (2019). Reassessing NIMBY: The demographics, politics, and geography of opposition to high-density residential infill. *Journal of Urban Affairs*, 41(4), 423–442. <https://doi.org/10.1080/07352166.2018.1484255>
- Witte, K. (1992). Putting the fear back into fear appeals: The extended parallel process model. *Communication Monographs*, 59(4), 329–349. <https://doi.org/10.1080/03637759209376276>
- Wolsko, C., Ariceaga, H., & Seiden, J. (2016). Red, white, and blue enough to be green: Effects of moral framing on climate change attitudes and conservation behaviors. *Journal of Experimental Social Psychology*, 65, 7–19. <https://doi.org/10.1016/j.jesp.2016.02.005>
- Zaval, L., Markowitz, E. M., & Weber, E. U. (2015). How will I be remembered? Conserving the environment for the sake of one's legacy. *Psychological Science*, 26(2), 231–236. <https://doi.org/10.1177/0956797614561266>

AUTHOR BIOGRAPHIES

Nathaniel Geiger is an Assistant Professor of Communication Science at Indiana University Bloomington. His research focuses on barriers to engagement with collective challenges and how (mis)perceptions of others' beliefs and behaviors on these issues influence engagement.

Cameron Brick is an Assistant Professor with tenure in Social Psychology at the University of Amsterdam, Netherlands. His group studies how individuals react to collective problems such as climate change, and uses surveys and experiments to predict environmental impact behaviors from diet to activism.

How to cite this article: Geiger, N., & Brick, C. (2023). Core social motives explain responses to collective action issues. *Social and Personality Psychology Compass*, 17(3), e12732. <https://doi.org/10.1111/spc3.12732>