

Responding to the Socio-Ecological Crisis: Activism and Collective Action

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*This has to be the decade of decisive climate action. That means trust, multilateralism and collaboration. We have a choice. **Collective action or collective suicide.** It is in our hands.* (António Guterres, UN Secretary-General, 18th July 2022).

Humanity currently faces multiple crises in which social and ecological aspects are strongly intertwined (e.g., climate change, loss of biodiversity, food security, resource shortages, migration, and extreme weather). This special issue explores the psychological, emotional, or societal antecedents and consequences responding to the socio-ecological crisis with a focus on effecting change on local or global level.

Psychological research on climate and environmental activism and collective action has explored various factors to understand the determinants and motivations behind pro-environmental behaviour. Most of these factors are related to a person's self-concept like values, problem perceptions, emotions, identities, attitudes, norms, efficacy beliefs, and habits (e.g., Bamberg & Möser, 2007; Klöckner, 2013). On a political level this individualistic research focus corresponds with the concept of "green consumerism"—substituting unsustainable consumption styles by green consumption will solve the socio-economic crisis. Considering the collective level, Fielding and Hornsey (2016) emphasise the need to focus on collective dimensions such as group identities and norms (see e.g., dual chamber model; Agostini & van Zomeren, 2021; EMSICA; Thomas et al., 2009; SIMCA;



van Zomeren, 2013; van Zomeren et al., 2008). Furthermore, collective responses and actions can have a reciprocal relationship (e.g., Drury et al., 2003; Drury & Reicher, 2000, 2005): engaging in activism and collective action can increase individuals' involvement in groups and strengthen their social identity, which, in turn, can further motivate and sustain collective action. This highlights the importance of creating and facilitating opportunities for collective action and fostering a sense of collective efficacy to promote sustained pro-environmental action.

Furthermore, there is agreement that the understanding of the socio-ecological crisis as a problem of individual behaviour is too narrow. Interdisciplinary sustainability research (e.g., Loorbach et al., 2017; Ockwell et al., 2009; Uzzell & Rätzzel, 2009) focus on unsustainable production and consumption systems as causes of the socio-ecological crisis. Accordingly, the sustainable transformation of these systems represents the central political challenge—away from individualistic environmental behaviours to actions that affect, or are part of, a greater societal transformation (see also Barnes, 2024, and Fritsche, 2024).

The socio-ecological crisis is not only a global crisis but a conflict in which most of us (especially in the Northern hemisphere) are both victims and perpetrators. This ambivalence distinguishes the socio-ecological crisis from other “classic” social conflicts. Thus, one can observe a strong drive to develop models which fit the features and ambivalences associated with the global socio-ecological crisis (e.g., SIMPEA; Fritsche et al., 2018; MOBILISE; Thomas et al., 2022). We are pleased to present papers that document the innovative potential of transformative pro-environmental collective action. In addition to their theoretical creativity and methodological rigor, they are all characterized by a strong socio-political connection. The papers can be grouped into four themes: crafting climate activism's motivational tapestry; illuminating the impact of disruptive tactics; connecting the personal and the political; and taking a comparative approach.

Crafting Climate Activism's Motivational Tapestry

Building on previous findings of the importance of media frames and representations, Loy et al. (2024) investigated whether using inclusive vs. exclusive language in climate activism messages influences global identity, climate engagement, and denial. In an online experiment with 307 participants, they compared exposure to placards with inclusive “we” language, exclusive “you” language, or no placards (control). They found no significant differences between the language conditions on the outcome measures; taken at face value, this suggests language does *not* matter. However, higher global identity was associated with stronger climate activism intentions, policy support, and less denial of personal climate impact. Overall, this initial study did not find clear impacts of inclusive

messaging but supports past findings on the importance of global identity for climate engagement.

Related to communication through language the next two papers focus on communication and vision. There is an emerging line of experimental research (see Fernando et al., 2018) on the role of utopian and dystopian future visions on people's intentions to personally engage in pro-environmental actions. The two papers of Daysh et al. (2024) and Bosone et al. (2024) deepen and extend this research line. In two studies ($n_1 = 413$; $n_2 = 444$), Daysh et al. (2024) manipulated utopian and dystopian thinking in the context of climate action. More specifically, Daysh et al. examined the impact of utopian and dystopian thinking on collective climate action intentions, mediated by emotions of hope and fear. Study 1 found that utopian thinking positively influenced action intentions through increased hope, while dystopian thinking reduced action intentions indirectly by decreasing hope. However, dystopian thinking did not significantly increase fear or have an indirect effect on action through fear. Study 2 added an active control condition (where participants were asked to imagine present day reality in relation to climate change, and then asked about the utopian/dystopian qualities of present reality), which yielded similar results to the passive control condition (in which participants did not ruminate about climate change). Daysh et al.'s studies suggest that utopian thinking enhances collective action intentions by fostering hope, while dystopian thinking can promote action intentions by eliciting fear.

Like Daysh et al. (2024), Bosone et al. (2024) report results of an experimental study ($N = 300$), testing whether being exposed to positive visions (eco-sufficiency vs. eco-efficiency) of a decarbonized future influences individuals' perceived ability to imagine environmental cognitive alternatives as well as efficacy beliefs, and intention to engage in climate change mitigation behaviour at an individual and collective level. Results confirmed that being exposed to a positive vision increases individuals' perceived ability to imagine the future, perceived collective efficacy, and intention to engage in individual pro-environmental consumption behaviours, technology-use behaviours, and collective behaviours. Furthermore, the effect of exposure to a positive vision seems to increase the more climate change is perceived as a close threat, and the stronger environmental self-identity is. Again (see Daysh et al., 2024) providing empirical evidence that positive visions are one factor motivating people to participate in collective pro-environmental actions. Surprisingly, Bosone et al.'s study demonstrates that the effects of exposure to a positive vision does not vary depending on focus: no differences were found between individuals presented with a positive vision focused on eco-sufficiency or on eco-efficiency. Hence, exposure to any kind of positive vision could be effective in influencing individuals' perception of their ability to imagine the future.

Finally, Landmann and Naumann (2024) investigated the predicting role of emotions for collective action participation. Through surveying activists and non-activists ($n = 233$) involved in Fridays for Future (FFF), they found that being positively moved predic-

ted intentions to engage in normative collective action, while negative emotions did not predict collective action intentions. Furthermore, the authors suggest that it is the perception of FFF's actions as ineffective, rather than being moved emotionally, that predicts support for more non-normative actions such as street occupations and damage to property. Through their dual sample (consisting of both activists and non-activists) the authors argue that it is not pro-environmental identity, but activist identity, that differentiates non-activists from activists engaged in FFF.

The papers from Loy et al. (2024), Bosone et al. (2024), Daysh et al. (2024), and Landmann and Naumann (2024) delve into the role of communication, emotions and future-oriented thinking in shaping collective action intentions. Positive future-thinking and emotions increase intentions for collective climate action, while the influence of negative emotions and future-oriented thinking, such as fear and dystopian thinking, are less clear. This suggests the importance of further analyses in the area, and the importance of considering emotional responses and future outlooks in designing effective communication and mobilisation strategies.

Illuminating the Impact of Disruptive Tactics

While most previous research focus on the antecedents of action, the outcomes of action matter and should be more common (Louis, 2009; Louis et al., 2020, Vestergren et al., 2019) while also placing the collective action in a context that includes actions of other groups (e.g., Lizzio-Wilson et al., 2022). Collective action as problem-focused action often seeks tangible material and social changes (Gulliver et al., 2022). For example, collective action for climate change aims to see policy changes and lower carbon emissions. There is a great diversity of tactics available, from conventional protests and advocacy to more disruptive means (Gulliver et al., 2021). The present special issue offers two important empirical contributions to the question, "What works?"

Kenward and Brick (2024) report a longitudinal survey of U.K. public opinion across the April 2019 Extinction Rebellion ($N = 832$), which heavily disrupted London. Effects of media reporting about the rebellion were studied in experimental research ($N = 1441$). The campaign was associated longitudinally with national increases in environmental concern. Furthermore, participants exposed to activist coverage of the protests on social media reported increased dissatisfaction with government action. Importantly, depending on the media source, activism intentions and support moved in different directions, contributing to longitudinally increased polarisation in attitudes to activism. Further, there was no overall change in collective efficacy and support for a Citizens' Assembly (a demand of the Rebellion), and no major growth in collective mobilisation or improved environmental policy. The authors take an important step forward in understanding the nuanced impact of disruptive protest across a range of outcome variables and in relation to different media representations.

Similarly, Dasch and colleagues (2024) present two studies, manipulating how intentions to participate and donate for environmental action change after exposure to a moderate collective action group paired with a radical group (i.e., a radical flank condition), compared to exposure to two moderate groups or two radical groups alone. In Study 1 ($N = 485$), moderate advocates for sustainable catering at a university gained identification and support when paired with a radical group compared to when they were paired with another moderate comparison target; evaluations of the radical group did not change. In Study 2 ($N = 455$), evaluations of a moderate anti-fracking group were unaffected, but the radical flank was judged more harshly and lost support when paired with a moderate group compared to when it was paired with another radical group. The effects were also dependent upon the observers' sympathy for the movement's cause: sympathizers were more sensitive towards the chosen tactics of the activists.

Together, the two papers identify important insights for understanding the impact of collective actions in mobilising and engaging others. First, the impact of any one group's action depends upon the actions of others (Dasch et al., 2024). Second, the two papers emphasise the point that media representations of collective protest moderate the impact of protest (Kenward & Brick, 2024). We echo the authors' claim that media representations should be more focal to the study of collective action. The importance of media representations also raises the question of journalists' roles and motives, a topic of too few papers in collective action research at present (cf., Gulliver et al., 2023).

We draw from these two papers the opportunity to note an obvious but often neglected point: that for the same independent variables, different dependent variables move in different directions, and effects may be unstable across studies. For example, unstable moderating effects of environmentalist identity are reported in the supplemental materials by Kenward and Brick (2024). In that case, beneficial effects of exposure to disruptive collective action were more marked for those with a high environmentalist identity, and backlash more apparent for those with a low environmentalist identity. In the Dasch et al. (2024) paper, sympathisers were more reactive to the radical flank effect and non-sympathisers were less responsive to tactical nuances. More broadly, Dasch et al. found that in movements that use diverse tactics, evaluations of the moderates are sometimes boosted; and other times that of the radicals are depressed. Such ephemeral or complex effects are of great theoretical interest and applied importance, but they are often less orderly and robust than direct associations; we need to make room in our articles and journals to engage these findings too.

We would argue, it is open science in collective action research that is essential and neglected. Open science, by promoting transparent disclosure of unstable results is immense and effect sizes in the published literature are less likely to be inflated by publication bias. More importantly, open science means that new moderators are more likely to be identified and understood. We also underline the importance of looking at diverse outcomes: attitudinal variables, such as support for a cause, and more behavioural

outcomes, such as changing support for action, as well as concrete actions, as distinct from intentions, and mobilisation outcomes that change sympathisers or supporters individually, compared to policy changes or system change.

Connecting the Personal and the Political

Beyond the themes of effectiveness, communication, and vision, two papers directly explored the relationship between personal experiences or perceptions of grievance and injustice, and collective responses such as political action. Ettinger et al. (2024) used qualitative methods to study 33 Australian adults, engaged in climate activism, who had experienced bushfires (wildfires). Bushfire experiences altered participants' climate change perceptions, increasing perceived vulnerability and urgency to act. Personal experiences were connected and attributed to climate change, influencing their activism. Some bushfire survivors increased efforts to advocate for climate action and cope with trauma, while others maintained or reduced activism due to recovery needs. The study emphasises the importance of personal experiences in shaping climate change perceptions and activism, considering emotional and psychological aspects in engagement. Perceived risk magnitude from climate impacts like raising sea level or heat waves affects climate activism (van Zomeren et al., 2010). Direct experience of threats may increase both the magnitude of risk perceptions and their relevance, in both cases building motivation for action. Contexts with higher vulnerability to climate change foster collective efforts to mitigate risk (e.g., Vestergren & Drury, 2022). Incorporating threat exposure and risk perception contexts aids understanding of when action emerges.

Jansma et al. (2024) conducted 106 qualitative interviews with protesters to explore injustice perceptions and justifications for civil disobedience in Extinction Rebellion Netherlands. Results showed various forms of perceived injustice: personal (concerns for own and loved ones' futures), group (police maltreatment during protests), social (global inequalities), and systemic (fossil fuel industry influence). Protesters justified civil disobedience due to ineffective conventional approaches, historical civil rights movements, moral arguments, and the urgency of the climate crisis. Nonviolence varied, some distinguishing between violence to people and property for corporate responsibility awareness. The study sheds light on diverse perspectives of injustice and civil disobedience justifications in Extinction Rebellion Netherlands, offering insights into climate activists' motivations.

These two papers emphasise a need to focus on the connection between personal and political in relation to climate action and include identity-related factors such as place and space. Bonds between people and places impact civic engagement on local environmental issues (Devine-Wright, 2009), motivating place-protective action. Further research could consider place meanings and relations with collective identities (e.g., Dixon, 2001; Hopkins & Dixon, 2006) as context for climate activism and collective action.

Taking a Comparative Approach

In a final study, using data of $N = 18,746$ participants from 12 countries, Uysal et al. (2024) test the power of environmental concern and collective efficacy as predictors of self-reported collective pro-environmental behaviour. The new aspect of this research consists in using a multi-level approach for testing whether the association between environmental concern, collective efficacy and individual participation in collective pro-environmental behaviour is moderated by two macro-structure variables, use-of-force (as a proxy for state repressive methods, such as whether the population is subject to internal repressive methods by state forces) and environmental governance (such as how effective the country's environmental policies and efforts to mitigate climate change are). As expected, higher environmental concern and higher environmental efficacy are associated with higher environmental collective action. Moreover, countries with higher use-of-force score (less repressive measures used against the people), had stronger relationship between environmental concern and collective action. Similarly, countries with higher environmental governance score had stronger relationships environmental concern, collective efficacy, and collective action. These study results provide impressive first empirical evidence that the relationships of individual level predictors of collective pro-environmental behaviours and participants' actual performance of these behaviours are moderated by a society's macro-structural features. This article is a first example of a new kind of environmental psychological research which aims to systematically study the influence of macrostructural variables on psychological processes. This is not only a fascinating approach to examining psychological processes in their context, but also enables bridging the gap between environmental psychology and other social science disciplines such as environmental policy or sociology. As big data sets become more available, this will become a more important area of scholarly research.

As emphasised in several of the papers included in this special issue, the wider context needs to be acknowledged in collective action and activism research. Uysal and colleagues (2024) argue that there is a need to consider the state context in terms of repressive tools as well as policies when considering why people take action or not. Furthermore, narrower social and systemic context has been suggested as of importance for mobilisation as joining climate activism can depend on social network connections to organisations and access to requisite resources like time, money, and civic skills (e.g., McAdam, 1986). Individuals embedded in networks promoting activism are more likely to participate in collective actions, whereas contextual constraints like lack of financial resources or civic education limit capacity for engagement. These networks can also play a part in sustained action (e.g., Louis et al., 2016; Vestergren et al., 2018).

Hence, climate activism and collective action does not occur in vacuum. Research on environmental activism and collective action demonstrates that contextual factors strongly shape if and how individuals engage in collective efforts to address the socio-ecological crisis (e.g., Hornsey et al., 2015; Uysal et al., 2024). As this field continues

to develop, there are compelling reasons for greater incorporation of contextual factors in studies of climate activism and collective action. In this context, it is important to acknowledge that structural and systematic incentives exist to prevent research that is useful to social change (Frickel & Arancibia, 2022; Hess, 2022).

Ongoing Gaps and Future Directions for the Field

Future research, we propose, needs to focus on mixed-methods, longitudinal tracking, varied samples across contexts, multilevel designs, and integration across disciplines to create large, shared datasets. The target of such interdisciplinary collaborations should be to link research insights to tangible emission reductions and policy impacts. As demonstrated through the papers included in this special issue, socio-ecological activism and collective action fundamentally depends on contextual factors like culture, identities, place meanings, networks and threat perceptions. Research needs to situate collective climate action within these contexts, rather than persistently focusing on within-context variance and treating activism as individually-driven. Comparative research across time and contexts will provide richer, more valid models of the complex psychosocial processes driving climate activism across diverse situations. This can also stimulate practical insights on how to galvanise climate engagement within specific settings and populations. Overall, accounting for contextual factors represents a critical direction for the growing field of research on socio-ecological activism and collective action.

Getting to lower carbon emissions will also require studying policy change not just policy support. This will require unpacking the state actors (e.g., left and right political parties, but also different agencies, security forces, bureaucrats, and politicians) and understanding their contestation as its own intergroup context, with group norms and identities with different levels of power, evolving over time. Understanding the relationship between political mobilisation of citizens and policy change (or lack thereof) will require us to understand the actions of state actors, including their radicalisation and corruption as they increasingly criminalise dissent, legitimise human rights abuses and violence, and lose commitment to the rule of law. We will need to understand how security and political forces sustain and grow their commitment to democracy, human rights, and the rule of law, in the face of financial incentives and partisan pressures to turn a blind eye to environmental issues. Put differently, requires us to understand the protective factors and risk factors in democracies and authoritarian states.

Understanding the social systems that create barriers to lowering carbon emissions will require multi-level models of change (including individuals, groups, states, and cross-cutting identities such as faiths and international organisations). We will need to study behaviour and policy changes, not just intentions and discourse—and because this is expensive, multi-lab collaborations will be needed to create shared, longitudinal

databases. We would call for scholars of the environment to grow their interdisciplinary networks, and to seek to form consortia with journalists, historians, and social scientists for large-scale longitudinal big databases.

With the new big data, we would argue that it will be valuable to expand the complexity of our models and the scope of our theoretical lens. Beyond the disaggregation of more conventional and radical forms of action, variation within the behaviours should be studied. Key gaps, in our view, include the spillover from easy to difficult behaviours; trajectories from first actions to identification vs disidentification from a movement; and media representations. Longitudinal research would be valuable that tracks the actions of diverse state actors; public support; and changes between moderate and radical actions of groups within a movement. This to create large-scale, shared, longitudinal databases to examine trajectories of social movement growth and decay; the impact of policy failures over time; and the evolutionary and systemic changes that do (or do not) flow on to lower carbon emissions, greater habitat protection or food security, or conservation of biodiversity.

The Complexities and Barriers Within the Academic System

Exploring the complex interactions highlighted in the papers in this special issue, across levels and disciplines, from history to psychology, holds promise for a global, historical, and social environmental psychology. However, to study these areas and develop research to inform guidance, tactics, policies etcetera we argue that the academic systems need a change.

Academic systems contain many problematic elements, including incentives for hiring, tenure and promotion that prioritise fast-track research rather than longitudinal research, or theory-building rather than working with impact and policy change. In some cases, quantity of papers may be emphasized rather than quality, or reactive research rather than proactive. These forces risk creating a field more focused on advancing models for the sake of advancing in the abstract, with less attention to advancing application, impact, and the public good (Peterson, 2009).

More broadly, institutional mechanisms such as slow ethics processes steer researchers to do retrospective designs in the lab rather than responding to events nimbly. Since funding for research projects are allocated from industry and government authorities rather than (for example) being voted on by citizens or weighted by most potential to benefit the natural world, the aims of research are biased towards meeting the needs of institutions and authorities (Louis et al., 2014). An academic system that allows and even invites research to respond to emergent phenomena and facilitate policy change and social change would create a much more diverse and impactful literature of collective action, we believe.

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