

Summary

The question of how to deal with impending climate change is arguably the greatest societal challenge of today. However, effective climate action will only occur on the scale that is needed if broad sections of society participate. Different societal actors have to contribute, including politicians, businesses, civil society groups and individual citizens. In other words, responsibility for climate action must be taken by everybody.

This said, accepting responsibility is not enough to initiate effective climate action. Instead, responsibility is closely intertwined with the (perceived) level of efficacy an agent holds: not everyone has the same power over climate-related outcomes or equal access to participate in climate action initiatives. Moreover, this sense of efficacy strongly relates to an agent's level of climate knowledge. These three concepts – responsibility attributions, efficacy expectations and climate-related knowing – constitute the conceptual cornerstones of this study. More precisely, the study revolves around one particular question: how do particular constellations of responsibility, efficacy and knowing among different social groups shape their members' (lack of) engagement in climate action? To answer this question, the present investigation fuses state-of-the-art research from across a range of social science disciplines such as human geography, environmental sociology, psychology and the environmental humanities.

Based on this conceptual framework, this study generated rich empirical evidence from Germany through a multi-method approach to social research. In the initial part, expert interviews with politicians, government officials, NGO executives and academics captured 'official' opinions on climate change and climate action. Experts' views on issues of responsibility, efficacy and knowledge in relation to climate action received particular attention. Not only was the narrative here quite congruent, the public was also mostly thought of as homogenous. This assumed uniformity of public opinion seemed somewhat limited, initiating a second empirical step involving an in-depth analysis of conventional and social media content. This analysis

yielded a much more diverse picture that challenged elite¹ notions of a public consensus regarding climate change and the need for action. In fact, a substantial gap emerged between groups in society whose members receive, acknowledge and internalise 'official' messages regarding climate change and climate action, and those with whom these messages do not (at all) resonate. It is shown that mainstream calls for climate action generally reflect the language and mind-set of those holding larger shares of (particularly cultural) capital, thereby eclipsing the everyday realities of large parts of the population. Observing these divergences and tensions inspired the development of a typology of climate cultures, defined as dynamic variants of social organisation that provide a framework for recognizing culturally relevant information regarding climate change and that are (re-)produced through climate-relevant everyday practices that reveal diverse forms of 'lived' responsibility and actual experiences of (in)efficacy. The latter includes responses to more abstract attributions of responsibility and efficacy in 'official' climate change discourses that may or may not clash with people's everyday experiences.

Through this typology of climate cultures, three key areas of discrepancy concerning responsibility, efficacy and knowledge were identified. First, a major gap exists between official attributions of responsibility and efficacy (often reflected in 'elite' discourses) and experiences of (ir)responsibility and (in)efficacy that people make in their everyday lives. Here, the responsabilisation of individual consumer-citizens appeared to be particularly problematic, given their limited efficacy. Second, attributions of responsibility to different societal actors and related expectations regarding their efficacy can diverge significantly. Successful climate action is unlikely when people experience these divergences. For example, individual consumers often voice demoralisation when they witness practices taking place in the realm of work that have particularly large climate impacts but are out of these individuals' control. Then, being responsabilised in numerous incremental ways in the private sphere is experienced as especially futile.

In cases where these divergences are particularly pronounced, the resulting implementation deficit can sometimes even turn into active disengagement or resistance. For instance, farmers who were interviewed felt particularly disadvantaged and unheard by current politics. They reacted almost allergically to current calls for more climate action since in their perception, the agricultural industry was being

1 It is important to highlight from the very beginning, that in this study, the labels 'elite' and 'privileged' refer to Bourdieu's understanding of those rich in cultural capital and those groups in society that hold considerably more power (e.g., in terms of education levels). It is vital to note here, that I scrutinise differences and conflicts *within* the German population (between those more and less rich in this capital). I *explicitly do not* use these terms as the opposites of 'the elites' and 'the population' as the rhetoric of the political far right frames it.

made the scapegoat (responsibility attributed) for climate issues they did not acknowledge or necessarily see as being related to farming (efficacy negated).

More of the public could be reached if research and policy recognised these substantial discrepancies. Third, it is possible to identify different types of knowledge about climate change that extend well beyond cognition to include visceral and affective aspects. This encompasses not only what is being said to a person but crucially also what swings along with messages, often on an emotional level, and is then, often subconsciously, interpreted and kept. Dropping the conception of the individual as cognitive rational entity and considering practitioners in context instead would be much more conducive to climate action.

Interestingly, different constellations of responsibility, efficacy and ways knowing do not only help to distinguish between climate cultures, they also translate into different forms of socially negotiated denial of (the urgency of) climate action. Two points stand out as particularly unexpected: first, a host of voices exists that engage in explicit denial², ranging from moderate climate-scepticism to outright renunciation. These have hitherto not been well-researched, especially in Germany. Second, it is possible to identify a more subtle form of implicit denial that manifests itself through a gap between climate concern and climate action. Here, high levels of societal awareness of the challenge of climate change are neither reflected in shifts in everyday practices nor in changing voting patterns. Perhaps surprisingly, implicit denial is also evident among the 'elite' parts of society, indicating that higher socio-economic status does not necessarily imply less denial. It is thus absolutely vital to accept these divergent forms of denial as a major source of climate inaction among both capital rich and -poorer groups in German society. This study clearly contributes to furthering scientific knowledge on this important issue.

Material emerging from the third empirical step, a series of focus group discussions, confirmed that notions of responsibility, efficacy and ways of knowing also carry different meanings in different occupational settings, highlighting the salience of organisational (climate) cultures in shaping the views and practices of their workforce. Employees of the NGO, the green startup and the (strategic sustainability division of the) mobility provider were all professionally closely connected to climate matters, yet their notions of responsibility for climate action still varied considerably: whilst the concept of climate responsibility endorsed by NGO employees was very comprehensive and included one's own everyday behaviour, other corporate cultural factors (i.e., a deep value of technological progress and travelling to see the world) stalled climate responsibility within the group of the mobility provider and the green startup.

2 Here, it should be noted that the data for this study was collected before the Covid-19 pandemic when as a society, we were much less used to people outrightly questioning scientific conclusions.

Finally, the relevance of this study for climate policy and action cannot be overestimated. Profound differences in how climate change is viewed and (not) acted upon are not yet reflected in research or policy. This is deeply problematic, as it renders climate action largely irrelevant to less privileged sections of society, perpetuating their sense of marginality and inefficacy. Moreover, the necessity to link both cognitive and emotional aspects of knowing in the context of climate debates and action also presents a key challenge to those interested in advancing climate action. Reflecting on these challenges, the study concludes with some concrete recommendations for designing climate policy and action programmes that address and involve the whole of society.