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Belief in a Norm-Consistent Climate Policy Conspiracy Theory and Non-Normative Collective Action

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ABSTRACT

Believing in conspiracy theories is connected to support for non-normative collective action. One explanation might be that this is due to both being non-normative. Alternatively, it might be the case that non-normative action appears justified based on what conspiracy theories alleging harm to a personally relevant group due to powerholders' secret actions imply about social reality. To test this assumption, we focus on the belief in a norm-consistent (i.e., popular and plausible) climate policy conspiracy theory alleging that powerful groups (i.e., politicians and the business sector) act without public oversight, leading to climate policies that suit their interests but are harmful to the public. Across three studies—one using a quota-based German sample and two preregistered replications ($N_{total} = 1257$)—we investigate how the belief in such a theory relates to the endorsement of non-normative collective action, and test whether this relationship also emerges for the belief in a norm-inconsistent (i.e., implausible and unpopular) climate policy conspiracy theory suggesting a similar social reality (Study 3). Our data show that beliefs in both norm-consistent and norm-inconsistent climate policy conspiracy theories correlate positively with support for non-normative collective action, while only the belief in a norm-consistent climate policy conspiracy theory was related to normative collective action. In contrast, a stronger predisposition to believe in conspiracy theories (i.e., conspiracy mentality), albeit positively correlated with belief in a norm-consistent climate policy conspiracy theory, was related to lower support for non-normative collective action serving climate protection.

Recent years have seen a surge in public and scholarly interest in conspiracy beliefs—beliefs in explanations for important events which suggest that powerholders act in secret, suiting their interests at the expense of others (Uscinski 2018). These beliefs are often (but not necessarily) inconsistent with societal norms by virtue of being implausible (i.e., inconsistent with norms of how knowledge should be established) and unpopular (i.e., inconsistent with what most people believe; e.g., Brotherton 2013; Douglas and Sutton 2023). Crucially, such beliefs can have far-reaching societal implications since they appear to be associated with behavior that falls outside the boundaries of what would be deemed socially acceptable by the majority of society members: the march to the U.S. Capitol on January 6, 2021 has been linked to beliefs in the QAnon conspiracy and protestors' beliefs in election fraud (e.g., Greenspan 2021; Sardarizadeh and Lussenhop 2021), as has a similar attempt in Brazil 3 years later (Darcy 2023). Beliefs that governments intended to use the pandemic for a "great reset," in turn, have been linked to (violent) protests against COVID-19 restrictions (Slobodian 2020). Scientific work backs up this anecdotal evidence, indicating that conspiracy beliefs can be related to non-normative behaviors (Bonetto et al. 2022; Imhoff

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et al. 2021), such as lower adherence to prosocial norms (Pummerer et al. 2023), more willingness to engage in "white crimes" (Jolley et al. 2019), and lower adherence to measures against COVID-19 during the pandemic (e.g., Allington et al. 2021; Alper et al. 2020; Bertin et al. 2020; Bierwiaczonek et al. 2020; Pummerer, Böhm et al. 2022; Pummerer, Winter et al. 2022; van Mulukom et al. 2022). Additionally, exposing participants to a conspiracy theory about foreign powers starting a wildfire in their country increased their intentions to engage in non-normative collective action (Gkinopoulos and Mari 2023). Naturally, this begs the question of how these associations might be explained.

On the one hand, one might assume that this link is driven by the shared non-normativeness of beliefs and behavior. Most conspiracy beliefs studied so far reflect beliefs in explanations that are (a) (scientifically) "implausible" (Alper and Yilmaz 2023), that is, the underlying explanations are inconsistent with norms prescribing how knowledge should be established, and (b) unpopular (i.e., rejected by the mainstream; Brotherton 2013; Douglas and Sutton 2023), making them inconsistent with norms describing what most people do believe. In other words, one might conjecture that whatever drives people to disregard norms by believing in conspiracy theories will also drive them to disregard norms regulating social behavior.

On the other hand, one might also assume that there is something unique about the social reality implied in conspiracy theories emphasizing harm against a personally relevant group that makes people feel justified in engaging in non-normative action. Regardless of whether this theory is norm-consistent or norm-inconsistent, perceiving such unjust harm to a personally relevant group should motivate confrontational tendencies (e.g., Frijda et al. 1989; Mackie et al. 2000). These, in turn, may be expressed through endorsing non-normative behavior.

Given that prior research has mainly focused on conspiracy theories that are both norm-inconsistent AND imply that a personally relevant group is harmed, it does not allow pinpointing which of these two aspects is the core "active ingredient" explaining the association between the belief in conspiracy theories and non-normative action. As a first step towards closing this research gap, we herein take a novel approach by studying the link between the endorsement of collective action and beliefs in a norm-consistent conspiracy theory, that is, a conspiracy theory that does not contradict mainstream opinion (i.e., that is relatively popular) and is in line with norms for establishing knowledge (i.e., relatively plausible), but implies that the secret activities of powerholders are harming a personally relevant group. Specifically, we first test how such beliefs relate to the endorsement of non-normative collective action. In the final study, we then broaden our scope by additionally considering beliefs in a norm-inconsistent conspiracy theory as a predictor and the endorsement of normative collective action as an outcome.

1 | Approaches to Studying Conspiracy Beliefs

Prior work has largely focused on theories such as that the Apollo moon landing was staged in a film studio, that Princess Diana did not die in a car crash, or that the US government orchestrated 9/11 (e.g., Lewandowsky et al. 2015; Wood et al. 2012). Such conspiracy beliefs go against societal norms in two regards. First, they are usually only shared by a minority of the population (Lewandowsky et al. 2015; Sutton and Douglas 2022). Second, they do not align with societal norms prescribing how knowledge and truth should be established. For instance, many conspiracy theories studied so far do not give equal weight to all possible explanations (including randomness) but favor dispositional attributions (Clarke 2002; Van Prooijen and Van Dijk 2014). Moreover, they are based on strong yet improbable assumptions, such as that a large number of people are involved in the direct conspiracy or its cover-up (making it extremely unlikely for the secret not to be exposed by mistake or a whistleblower; Grimes 2016) or that the whole population is gullible, including the institutions in an open society that are explicitly designed to uncover wrongdoings (e.g., checks and balances through the political and judicial system, free press, or the work of NGOs; Douglas and Sutton 2023). These characteristics render frequently studied conspiracy theories norm-inconsistent by making them relatively implausible. This aspect of norm-inconsistency aligns with the more lay understanding of what constitutes a conspiracy theory, as this term is mostly used to derogate and dismiss theories people see as false and illogical (Daniel and Harper 2022; Douglas et al. 2021; Lantian et al. 2018) and which are seen as "epistemically risky" (Douglas and Sutton 2023).

However, the widely used definition of conspiracy theories as explanations for important events which suggest that powerholders act in secret, suiting their interests at the expense of others (e.g., Uscinski 2018) does not imply that this explanation must necessarily be unpopular or implausible (see also Dentith 2014; Nera and Schöpfer 2023; Swami and Coles 2010). Consequently, researchers have recently begun to also examine plausible conspiracy theories and beliefs (see e.g., Alper and Yilmaz 2023; Frenken et al. 2024; Hattersley et al. 2022; Stojanov and Halberstadt 2019). The explanations these theories imply fit the above-mentioned definition of conspiracy theories but are based on what could be considered "suggestive evidence" (see e.g., Frenken et al. 2024; Hattersley et al. 2022; Imhoff et al. 2022). This can include evidence of secret and harmful acts of powerful groups in the past uncovered by journalists and scientists, such as the tobacco industry hiding evidence of a link between smoking and lung cancer (Francey 2000), exxon mobile suppressing information suggesting that burning fossil fuels drives climate change (Supran et al. 2023), and Wirecard lying about its biggest clients to create higher revenue, ultimately causing financial losses for many, and undermining trust in corporate governance and financial regulation (Taub 2023).

Notably, while often investigated in categorical terms (e.g., comparing plausible against implausible theories), a theory's plausibility is conceptualized as falling on a continuum, with conspiracy theories becoming more plausible, for example, if a historical precedent exists or when secret collusions of powerholders are common in a social system such as in countries with higher corruption (e.g., Alper and Imhoff 2023; Alper and Yilmaz 2023; Hornsey et al. 2023). This implies that a theory's plausibility is not static and universal but may change if new

evidence comes to light or it is viewed in a different context. Moreover, it suggests that in contexts in which norms for establishing knowledge involve gathering supportive evidence for a claim, such plausible conspiracy theories will also be norm-consistent by aligning with these norms.

With mounting evidence in its favor, a specific conspiracy theory may also gain in norm-consistency in a second regard: It may become more popular (i.e., consistent with mainstream opinion)—even if there is not yet conclusive evidence for it. Naturally, this relationship between plausibility and popularity is not deterministic—even highly plausible conspiracy theories need not be believed by the majority and not all popular conspiracy theories need to be (scientifically) plausible. Nonetheless, the two should be at least positively correlated in many countries.

One example of an explanation for current events that fits the definition of a norm-consistent conspiracy theory in terms of being both relatively plausible and popular is the theory that specific climate policies harming the population and future generations are the outcome of a conspiracy between policymakers and industry representatives. While widely considered a legitimate means of influencing politics and society, meetings between these powerful groups happen "behind closed doors" and often lead to agreements unknown to the public (i.e., the powerful act in secret). The conclusion that the powerful act at society's costs, in turn, may be drawn from a ruling of the Federal Constitutional Court of Germany (German: *Bundesverfassungsgericht*), which declared the German government's plans regarding the reduction of greenhouse gas emissions to violate future generations' rights of freedom (1 BvR 2656/18, 1 BvR 288/20, 1 BvR 96/20, 1 BvR 78/20; Bundesverfassungsgericht 2021). As there is prior evidence of close ties between the automobile industry and politicians (e.g., reports on personnel decisions, meetings, and donations; Reh 2018; Richter and Smith Stegen 2022), this "climate policy conspiracy theory" is consistent with normative ways of establishing knowledge (in many contexts), rendering it relatively plausible (in Germany, but potentially also elsewhere, see e.g. https://influencemap.org/In-The-Media). Likely by virtue its their plausibility, this theory also descriptively is relatively popular: In a representative survey, 67.3% of respondents agree that lobbyism strongly influences EU climate politics, while 47.9% think that lobbyism is detrimental to pro-environmental policymaking (Epperson et al. 2019). We propose that focusing on such norm-consistent (plausible and popular) conspiracy theories will be beneficial to better understand the link between the belief in conspiracy theories and the endorsement of non-normative (and normative) behavior, as they allow separating conspiracy theories' norm-inconsistency from what they imply about the social reality.

2 | Conspiracy Beliefs and Non-Normative Action

Prior research has demonstrated a robust relationship between the belief in conspiracy theories and the endorsement of non-normative behavior (e.g., Jolley et al. 2019; Jolley and Paterson 2020; Pummerer, Böhm et al. 2022; Pummerer et al. 2023). Considering that this work has mainly focused on beliefs in norm-inconsistent (implausible and unpopular) conspiracy theories, one may suspect that this relationship exists simply because both the belief and the behavior go against the societal norm. People believing in (norm-inconsistent) conspiracy theories may "pay back" the rejection by the majority they face due to their beliefs (see, e.g., Lantian et al. 2018) by rejecting this uncaring majority's norms. Disregarding norms might also become a "habit" that spreads from attitudes to behavior and certain individual characteristics that predispose individuals to exhibit norm-inconsistent conspiracy beliefs might also predispose them to break behavioral social norms.

Alternatively, it might be the case that conspiracy beliefs are related to non-normative collective action due to the social reality that conspiracy theories imply when they suggest that the powerful do not adhere to societal rules (through engaging in secret collaborations) and violate moral standards by harming a personally relevant group's welfare. When emphasizing such harmful behaviors of the conspirators directed towards a personally relevant group and when perceiving that the actions could (collectively) be stopped, conspiracy beliefs should evoke anger and confrontation (Pummerer et al 2024). This is in line with models of collective action, in which perceived violations of moral standards of conduct and justice (e.g., Agostini and Van Zomeren 2021) and are linked to anger and contempt (e.g., Becker and Tausch 2015). Perceived threat—which is inherent in secret and harmful acts against personally relevant groups—constitutes a second elicitor of these emotions (e.g., Ditrich et al. 2022; Stephan and Stephan 2017). Crucially, anger and contempt not only correlate with (support for) non-normative collective action (Becker and Tausch 2015; Tausch et al. 2011) but also with conspiracy beliefs (Gkinopoulos and Mari 2023; Jolley and Paterson 2020). Thus, on a theoretical level, there are good reasons to assume that conspiracy theories emphasizing harmful behaviors of the conspirators directed towards a personally relevant group are associated with non-normative action based on what these theories imply about social reality—regardless of whether they are norm-consistent or norm-inconsistent. Initial empirical evidence supports this conclusion.

In an experimental study, Imhoff and colleagues (2021) tried to explicitly recreate the social reality implied by such conspiracy theories by instructing their participants to imagine a specific situation. Participants who imagined that the society they live in *might* be governed by secret collaborations of the powerful manipulating the population and those who imagined being *sure* that this is the case were more likely to engage in non-normative collective action than participants who imagined believing that society is *not* governed by secret collaborations of the powerful. Given that these imagined views on social reality were decoupled from normativity, these findings support the idea that such views may indeed contribute to the link between conspiracy beliefs and (support for) non-normative collective action to a relevant extent. Naturally, the authors relied on participants' imagination here, which affords them a high level of control but may not create the same involvement and personal relevance as asking individuals about events happening in their own lives. Therefore, we herein put the "social reality" explanation to a further test in a real-world context. If it is

correct, we should find a positive correlation between the belief in a norm-consistent (i.e., plausible and popular) conspiracy theory and the endorsement of non-normative collective action.

3 | The Current Research

In the current study, we examined the relation between support for non-normative collective action and belief in the norm-consistent conspiracy theory that German politicians engage in secret talks with business representatives, resulting in decisions regarding climate policies that harm the population and future generations. In the first two studies, we focus specifically on the link between belief in this norm-consistent conspiracy theory and *support for non-normative collective action* of a climate activist group in Germany called "Last Generation" (in German: Letzte Generation). Similar to other activist groups such as "Extinction Rebellion" (Lu 2022; Watts and Gayle 2019) or "Just Stop Oil", this group has been involved in political actions that go against the law and social norms (McGuiness and Kirby 2023), most prominently in the form street blockades, and the targeting of artworks in museums [for a summary, see https://en.wikipedia.org/wiki/Last_Generation_(climate_movement)]. Thus, their behavior fits the definition of non-violent, non-normative collective action (Shuman et al. 2021). In Study 3, we applied a more inclusive approach, testing the relations between the belief in norm-consistent as well as norm-inconsistent conspiracy theories and normative as well as non-normative collective action.

Next to examining whether support for different types of collective action is linked to belief in specific climate policy conspiracy theories, we also include conspiracy mentality as a potential predictor in Studies 1 and 2. This measure targets individuals' general propensity to believe that conspiracies exist (Imhoff and Bruder 2014), which should predispose individuals to believe in any specific conspiracy theory (Imhoff et al. 2022). Hence, individuals with a higher conspiracy mentality should also be more likely to believe in the norm-consistent climate policy conspiracy theory.

In addition, we included general dissatisfaction with governmental climate policies as a predictor in our analyses (Studies 1 and 2). While it is difficult to imagine a conspiracy theory that emphasizes harm towards a personally relevant group and does not include dissatisfaction with the current status quo, we were interested in whether the belief in a norm-consistent climate policy conspiracy theory and conspiracy mentality would predict non-normative collective action above and beyond dissatisfaction with governmental climate policies.

Study 3, then, takes a broader approach to investigating the link between the belief in conspiracy theories and collective action. It (a) uses a more general operationalization of non-normative collective action, (b) includes a measure for the endorsement of normative collective action, and (c) includes an additional predictor: the belief in a norm-inconsistent conspiracy theory regarding climate policy-making. Like the norm-consistent conspiracy theory, this theory also portrayed current climate policies as insufficient but alleged that this was due to nefarious interests driving political action (e.g., politicians deliberately wanting to cause harm to poorer countries). The relative norm-(in)consistency of the two conspiracy theories was confirmed in a pilot study in which we collected data on each statement's perceived plausibility (alignment with injunctive norms for establishing knowledge) and popularity (alignment with descriptive norms of what many people believe; for details, see Supporting Information S1) and allowed us to explore which belief more strongly correlated with the endorsement of non-normative collective action.

Overall, we hypothesized that the belief in a *norm-consistent* climate policy conspiracy theory predicts support for non-normative collective action, possibly even beyond general dissatisfaction with the government. We further hypothesized that the belief in *the norm-inconsistent* climate policy conspiracy theory would also correlate positively with the endorsement of non-normative pro-environmental collective action (replicating prior research, e.g., Imhoff et al. 2021; Jolley and Paterson 2020). Moreover, we also explored how the beliefs in both types of conspiracy theories correlate with the endorsement of normative collective action, for which prior research obtained mixed findings (Gkinopoulos and Mari 2023; Imhoff et al. 2021; Jolley and Douglas 2014; Marques et al. 2022; Pantazi et al. 2022; van Der Linden 2015; Winter et al. 2023), and whether conspiracy mentality correlates with support for non-normative action beyond the belief in a climate policy conspiracy theory, dissatisfaction, and political orientation.

In addition to our core predictions, we also tested whether political orientation moderates the association between the conspiracy beliefs assessed herein and non-normative (as well as normative) collective action (preregistered as hypothesis for Study 2). This was driven by Beer's (2022) finding of a more left political orientation predicting support for radical forms of climate protest, and our suspicion that the specific conspiracy theories we investigate might appeal more to people with a more leftist political orientation. Two of the three studies testing these predictions and research questions were preregistered (see https://aspredicted.org/2R9_XFJ[1] and https://aspredicted.org/4j5c-jh2d.pdf).

Data and code are available at https://researchbox.org/1660&PEER_REVIEW_passcode=NWYWWP for reviewing and editorial purposes. They will be made available in a public repository with a DOI to be added here in case of the publication of the manuscript. The first study was not preregistered because the data was collected as part of a more extensive study that mainly served another purpose. Ethical approval for the general study setup and the measures used has been provided by the local ethics committee (LEK 2019/001).

4 | Study 1

4.1 | Methods

4.1.1 | Design and Participants

We conducted a cross-sectional correlational study via the panel provider Gapfish with 501 participants, sampled quota-based to mirror the age and gender distribution of the German

population based on data from the German National Office of Statistics (Statistisches Bundesamt). Participants were invited from the provider's panel, whose members mirror the distribution of the German population regarding income, household size, and education (with a slight bias towards higher education; for details, see https://gapfish.com/wp-content/uploads/2021/04/Gapfish-Panelbook-2021-ENG.pdf). Data was collected May 10–16, 2023. Based on an a priori power analysis for a single regression coefficient in a multiple regression analysis with four predictors (power = 0.80, $\alpha = 0.05$, $f^2 = 0.02$), we aimed at a sample size of $N = 396$ and recruited 25% more to make up for exclusions. Sixty-eight participants failed one or both attention checks and were, thus, excluded from the analysis reported below. Including them did not change the reported results substantially. The final sample amounted to $N = 433$ (female: 222, male: 210, other: 1; age: 18–29 years: 16.2%, 30–39: 15.9%; 40–49: 21.5%; 50–59: 19.9%; 60 and older: 26.6%). All differences in group size between the targeted and the actual quota in the final sample are $< 1\%$ for gender and $< 2\%$ for age. The exclusions did not substantially undermine the quota-based sampling.

4.1.2 | Procedure and Measures

Participants were recruited from the provider's panel based on the quotas for age and gender. We advertised the study as concerning climate policies and directed participants to an online questionnaire implemented in Qualtrics. After providing consent, participants worked through several questionnaires (see online Supporting Information S1 for an overview of all measures and items). The constructs relevant to the current research question were assessed in the order presented below. Unless indicated otherwise, responses to all items used a 7-pt scale ranging from 1 *do not agree at all* to 7 *totally agree*. Ratings were averaged and coded so that higher values indicate a stronger manifestation of the concept named in the respective label.

4.1.2.1 | Dissatisfaction. Dissatisfaction with governmental climate policies was assessed with six items. The item-total correlation of one item was close to 0. Therefore, the index was formed based on the remaining five items (e.g., "In current politics, climate protection receives sufficient attention." [reversed], $\alpha = 0.86$).

4.1.2.2 | Belief in Norm-Consistent Climate Policy Conspiracy Theory. Nine items assessed the belief in a norm-consistent conspiracy theory regarding the secret agreements between politics and business resulting in potential harm, especially regarding future generations (e.g., "Discussions between politics and business on climate issues take place behind closed doors," $\alpha = 0.91$). Reflecting their norm-consistency (and, in contrast to many other previous measures of beliefs in implausible conspiracy theories; Imhoff et al. 2022), the mean of this scale was above the scale midpoint ($M = 4.45$, $SD = 1.34$).

4.1.2.3 | Support for Non-Normative Collective Action. We used nine items to assess the support for non-normative collective action (e.g., "I support the decision of some climate activists to engage in civil disobedience for more climate protection," $\alpha = 0.95$). The introduction of these items mentioned the Last Generation as an example, given that this organization had received substantial media coverage in the months before the study was conducted and should have been well-known among our participants.

4.1.2.4 | Conspiracy Mentality. We measured conspiracy mentality with the frequently applied scale by Imhoff and Bruder (2014), which consists of 12 items (e.g., "Politicians and other leaders are only puppets of the powers behind them," $\alpha = 0.94$).

4.1.2.5 | Political Orientation. We assessed political orientation with the question, "Please indicate your political orientation on the following scale," followed by a 7-pt scale anchored 1: *left* and 7: *right*. We inverted this scale for our analyses so that higher values represent a more leftish political orientation.

4.2 | Results

4.2.1 | Descriptive Statistics

Descriptive statistics and correlations of all measures can be found in Table 1. Average support for non-normative collective action was low, but 16.2% of our participants indicated at least some support (scored 4 or higher on a 7-pt scale). Conspiracy mentality and the norm-consistent climate policy conspiracy belief were substantially correlated, but their respective correlations with other measures differed. Support for non-normative collective action, for instance, correlated negatively with conspiracy mentality but positively with the belief in the norm-consistent climate policy conspiracy theory. The different correlations stress the relevance of including both conspiracy belief measures in the analyses.

4.2.2 | Main Analysis

We predicted that the belief in the norm-consistent climate policy conspiracy theory would correlate positively with support for non-normative collective action beyond the other measures. To test this prediction, we regressed support for non-normative collective action on belief in the norm-consistent climate policy conspiracy theory, dissatisfaction with climate policies, conspiracy mentality, and political orientation as parallel predictors. In line with our prediction, a stronger belief in the norm-consistent climate policy conspiracy theory predicted greater support for non-normative collective action, $B = 0.27$, $SE = 0.060$, 95% $CI = [0.152; 0.388]$, $t(428) = 4.50$, $p < 0.001$, $r = 0.29$. In contrast, conspiracy mentality was negatively related to support for non-normative collective action, $B = -0.20$, $SE = 0.055$, 95% $CI = [-0.308; -0.091]$, $t(428) = -3.62$, $p < 0.001$, $r = -0.20$. In both cases, these effects go beyond the mere dissatisfaction with governmental climate policies, which in itself correlated positively with support for non-normative collective action, $B = 0.13$, $SE = 0.049$, 95% $CI = [0.036; 0.227]$, $t(428) = 2.70$, $p = 0.007$, $r = 0.18$. A more left political orientation correlated with higher support for non-normative

TABLE 1 | Descriptive statistics and intercorrelation (internal consistencies on the diagonal) between variables, Study 1 ($N = 433$).

	M	SD	(1)	(2)	(3)	(4)
(1) Belief in norm-consistent climate policy conspiracy theory	4.45	1.34	(0.91)			
(2) Support for non-normative collective action	2.16	1.49	0.15**	(0.95)		
(3) Dissatisfaction	4.10	1.42	0.30***	0.25***	(0.86)	
(4) Conspiracy mentality	3.92	1.46	0.56***	−0.14**	0.08	(0.94)
(5) Political orientation (right- left)	4.16	1.12	−0.08	0.39***	0.21**	−0.29***

Note: *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$. Political orientation has been inverted so 1 = right, 7 = left.

collective action, $B = 0.43$, SE = 0.061, 95% CI = [0.309; 0.550], $t(428) = 7.02$, $p < 0.001$, $r = 0.37$ (for a test of the potential moderating effect of political orientation, see Supporting Information S1: Table S5). When this regression was computed without political orientation as a predictor, results remained the same, and effects size were descriptively larger, all $|B|$s > 0.2, all $|t|$s > 4.20, all ps < 0.001.

In sum, the findings support our prediction: Belief in the norm-consistent climate policy conspiracy theory was related to greater support for non-normative collective action beyond dissatisfaction and conspiracy mentality. Notably, conspiracy mentality was negatively linked to support for non-normative collective action—although both types of conspiracy beliefs were substantially positively related. Furthermore, people with a left political orientation supported the non-normative protest more.

4.3 | Discussion

Study 1 provided initial evidence that the belief in a norm-consistent climate policy conspiracy theory predicts more support for non-normative collective action beyond dissatisfaction with governmental climate policies, political orientation and conspiracy mentality. Suggesting that we are actually dealing with a conspiracy theory here, we found a substantial positive correlation between the belief in the norm-consistent climate policy conspiracy theory and conspiracy mentality. In contrast to prior research (Imhoff and Bruder 2014; Jolley and Paterson 2020), however, we found that conspiracy mentality was negatively rather than positively correlated with support for non-normative collective action. This could be due to the specific type of non-normative collective action focused on climate protection (for a discussion, see below). Given that these findings only provide a first test of our predictions, we aimed to replicate them in a second independent sample.

5 | Study 2

5.1 | Methods

Study 2 was a preregistered replication of Study 1 with the following alterations: (1) It made use of a non-representative sample but collected more detailed information about participant demographics, and (2) it included two indices of dissatisfaction: One consisting of the five reverse-coded items of Study 1, one adding five statements explicitly measuring dissatisfaction.

5.1.1 | Design and Participants

We conducted a cross-sectional correlational study among the German participant pool of Clickworker. The study took on average 6 min and participants were compensated with €1.50. Data was collected on August 7–9, 2023. Based on the minimum effect size in Study 1 ($r = 0.15$) and an a-priori power analysis (single predictor in a multiple regression with seven predictors, $\alpha = 0.05$, power = 0.80), we aimed for a sample size of 316 and collected 510 responses to account for exclusions. The preregistered exclusion criteria (sufficient command of the German language, 18 years or older, agreement that the data is used for scientific purposes, and not missing one of two attention checks) as well as the exclusion of participants who indicated in a self-report that they participated multiple times, resulted in a final sample of $N = 462$. The sample had a wide age range (18–74 years, $M = 38.63$), 50.4% self-identified as female, 48.9% as male, and 0.6% as non-binary. Participants' subjective socio-economic status ($M = 5.69$, SD = 1.75)—assessed with the McArthur scale—covered the whole range from 1 to 10. Our sample was more highly educated than the German average (10.2% completed 9 or 10 years of education, 26.0% were qualified to get access to higher education (Hochschulreife), 43.7% had a higher education degree, 19.3% had vocational training, and 0.9% another degree) and less frequently reported having a migration background (17.3% compared to 27.8% in the German population; BAMF, 2021). Participants' distribution across the 16 German federal states mirrored the current distribution of the population—with substantial deviations only for Baden-Württemberg (−4%) and Saxony (+4%). Overall, the sample was diverse, albeit biased towards higher education and an under-representation of people with a migration background.

Next to basic demographics, we also assessed prior climate movement participation. One person reported that they had participated in protests organized by the Last Generation, 13.6% reported that they had taken part in climate actions (demonstrations and signing petitions), and three people were members of a pro-environmental NGO. The number of activists in the sample, thus, was too small to allow for analysing their data separately.

5.1.2 | Measures

An overview of all measures and items included in the analyses can be found in the Supporting Information S1. The constructs relevant to the current research question were assessed in the same order and with the same items as in Study 1, except for

additional items assessing dissatisfaction with climate policies. Ratings were again averaged and coded so that higher values indicate a stronger manifestation of the concept named in the respective label.

5.1.2.1 | Dissatisfaction. One limitation of Study 1 is that dissatisfaction was measured exclusively with reversed coded items (stating satisfaction). Therefore, we added items that actually stated dissatisfaction to this scale. In line with our preregistration, we formed two indicators of dissatisfaction. The first contained the five items from Study 1 to allow for a close replication of the analysis in said study (called "dissatisfaction" below). The second one included those five items and five additional items directly expressing dissatisfaction via negative statements (e.g., "The German government does too little for climate protection"). Given that the positive and negative items did not load on separate factors in an EFA, they were summarized in one index labeled "dissatisfaction long" below. We preregistered to do the analyses with each of the two scales.

5.2 | Results

5.2.1 | Descriptive Statistics

Descriptive statistics, internal consistencies, and correlations of all measures can be found in Table 2. Means and correlations are similar to Study 1 with slightly higher, but still low, support for non-normative collective action. Again, the belief in the norm-consistent climate policy conspiracy theory has a mean above the scale's mid-point, suggesting its norm-consistency. Notably, it correlates very highly [$r(462) = 0.56$] with the long dissatisfaction scale.

5.2.2 | Main Analysis

We hypothesized and preregistered that (a) the belief in a norm-consistent climate policy conspiracy theory predicts higher support for non-normative action beyond dissatisfaction with governmental climate policies, conspiracy mentality and political orientation, and (b) the effects of a belief in a norm-consistent climate conspiracy theory and dissatisfaction are stronger the more individuals hold a politically left orientation. To test these predictions and replicate the findings from Study 1, we conducted two multiple regression analyses. Replicating Study 1, regressing support for non-normative collective action on our predictors revealed that a stronger belief in a norm-consistent climate policy conspiracy theory, $B = 0.35$, SE = 0.072, 95% CI = [0.210; 0.494], $t(457) = 4.87$, $p < 0.001$, $r = 0.31$, a stronger dissatisfaction with governmental climate policies, $B = 0.13$, SE = 0.067, 95% CI = [0.001; 0.265], $t(457) = 1.98$, $p = 0.048$, $r = 0.15$, a lower conspiracy mentality, $B = -0.20$, SE = 0.062, 95% CI = [−0.323; −0.079], $t(457) = -3.24$, $p = 0.001$, $r = -0.16$, and a more left-wing political orientation, $B = 0.44$, SE = 0.065, 95% CI = [0.311; 0.566], $t(457) = 6.75$, $p < 0.001$, $r = 0.35$, correlated with more support for non-normative collective action. Given that we found a moderation of effects by political orientation in Study 1 (see Supporting Information S1), we also preregistered to test the moderation by political orientation for Study 2. As the interaction between the belief in a norm-consistent climate policy conspiracy theory and political orientation, as well as conspiracy mentality and political orientation did not replicate and since it is not focal to the current research question, we present the respective results in the Supporting Information S1.

Taken together, belief in a norm-consistent climate policy conspiracy theory, dissatisfaction with governmental climate policies, conspiracy mentality, political orientation (main effect), and the political orientation by dissatisfaction interaction replicated the results of Study 1.

5.2.3 | Additional Analyses

Given that the dissatisfaction measure in Study 1 (i.e., the one also used in the preceding analyses) consisted only of five reversed coded items expressing satisfaction, we extended this measure by adding five items expressing dissatisfaction. We repeated the analysis above with this extended scale. Given the high collinearity between the belief in a norm-consistent climate conspiracy theory and the extended dissatisfaction scale, indicated by the worryingly low tolerance for the former (0.46), the results of these analyses should be interpreted cautiously.

The analyses revealed that a stronger belief in the norm-consistent climate policy conspiracy theory, $B = 0.14$, SE = 0.079, 95% CI = [−0.017; 0.239], $t(457) = 1.74$, $p = 0.082$, $r = 0.15$, weaker conspiracy mentality, $B = -0.11$, SE = 0.062, 95% CI = [−0.237; 0.009], $t(457) = -1.83$, $p = 0.069$, $r = -0.09$, stronger dissatisfaction (measured with the extended scale), $B = 0.45$, SE = 0.078, 95% CI = [0.295; 0.600], $t(457) = 5.77$, $p < 0.001$, $r = 0.36$, and a more left-wing political orientation,

TABLE 2 | Descriptive statistics, internal consistencies in brackets, and intercorrelation between variables, Study 2 ($N = 462$).

	M	SD	(1)	(2)	(3)	(4)	(5)
(1) Belief in norm-consistent climate policy conspiracy theory	4.44	1.24	(0.90)				
(2) Support for non-normative collective action	2.66	1.66	0.25***	(0.96)			
(3) Dissatisfaction	4.06	1.19	0.46***	0.27***	(0.79)		
(4) Dissatisfaction long	4.26	1.15	0.56***	0.44***	0.83***	(0.87)	
(5) Conspiracy mentality	3.67	1.32	0.49***	−0.08	0.09*	0.03	(0.93)
(6) Political orientation (right–left)	4.42	1.12	0.08	0.37***	0.22***	0.31***	−0.19***

Note: *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$. Political orientation has been inverted so 1 = right, 7 = left.

$B = 0.36$, SE = 0.064, 95% CI = [0.236; 0.489], $t(457) = 5.64$, $p < 0.001$, $r = 0.29$, went along with greater support for non-normative collective action, albeit the first two effects were only marginal. The main effects were not moderated by political orientation, all $|t(454)| < 1.3$, all $ps > 0.2$.

In addition to replicating Study 1, we also planned to explore a potential explanation for the link between belief in a norm-consistent climate policy conspiracy theory and support for non-normative collective action: reciprocity in norm violations, as specified as exploratory analysis in the preregistration. That is, if the social reality implied in a specific conspiracy theory suggests that powerholders violate norms, people may feel justified in reciprocating by violating the norms as well. Our results suggest that participants who believed more strongly in a norm-consistent climate policy conspiracy theory were also more likely to argue that policy makers' non-normative behavior legitimizes protesters' use of non-normative means ($r = 0.30$), which in turn correlated positively with support for non-normative collective action ($r = 0.85$). However, the strong correlation between reciprocity beliefs and support for non-normative collective action as well as the correlational nature of the data render a mediation analysis uninformative.

5.3 | Discussion

The main results of Study 2 replicated the key findings of Study 1 and were consistent with the preregistered hypothesis: A stronger belief in a norm-consistent climate policy conspiracy theory, a stronger dissatisfaction with governmental climate policies, lower conspiracy mentality, and a more left-leaning political orientation predicted more support for non-normative collective action. Differing from Study 1, political orientation moderated only the correlation between dissatisfaction and support for non-normative collective action. Hence, the results seem to be contingent on political orientation to a lesser extent than the results of Study 1 suggested. Unfortunately, the extended measure of dissatisfaction correlated even more strongly with the belief in the norm-consistent climate policy conspiracy theory than the original one. Based on this correlation, we assume that the marginal relation between both measures of conspiracy beliefs and support for non-normative collective action found in the analyses using the extended scale should rather be interpreted as an outcome of the collinearity than as lack of evidence for the relevance of conspiracy beliefs in the context of support for non-normative collective action.

6 | Study 3

So far, we have shown that, as predicted, participants who believed more strongly in a norm-consistent conspiracy theory expressed stronger endorsement of non-normative, pro-environmental collective action. This begs the question of whether the belief in norm-inconsistent conspiracy theories also correlates positively with endorsing such action, which would also confirm our specific operationalisation of support for non-normative action. Thus, in Study 3, we included beliefs in both norm-consistent and norm-inconsistent conspiracy theories regarding climate policymaking.

While there are existing norm-inconsistent conspiracy theories about climate change (e.g., "Climate change is a hoax.", "Scientists just claim that there is climate change due to self-interest."), they all imply that less (rather than more) action to encourage stricter climate policymaking is needed—which would contradict our measure for non-normative collective action and, thus, represent a potential confound. Therefore, we developed new items to assess the belief in a norm-inconsistent (i.e., implausible and unpopular) climate policy theory that suggests insufficient action is taking place and explains this by nefarious interests driving political action (e.g., politicians deliberately wanting to cause harm to poorer countries). We pre-tested several candidate statements along these lines in an independent sample to ensure that they are indeed norm-inconsistent in the sense that they are perceived as less plausible and less popular than our focal items (see supplement for detailed results and information on scale development in Supporting Information S1: Tables S1 and S2). Moreover, we included the endorsement of normative collective action as a secondary dependent variable in this study, allowing us to explore its correlation with the belief in both norm-consistent and norm-inconsistent climate policy conspiracy theories.

6.1 | Methods

6.1.1 | Design and Participants

We conducted a cross-sectional correlational study among the German participant pool of Clickworker, excluding participants who had taken part in Study 2 or the pilot study. The study took on average 6 min and participants were compensated with €1.30. Data was collected from November 29 to December 8, 2024. We conducted an a priori power analysis with G*Power (correlation: point biserial model) to determine the sample size necessary to find relationships of $r = 0.15$ (the smallest correlation of interest in the previous studies) with 80% power ($\alpha = 0.05$). This analysis suggested collecting 343 participants. To account for exclusions, we oversampled and planned to recruit 400 participants. Of those who completed the study and agreed to their data being used for scientific purposes ($N = 404$), we excluded all who failed at least one of the two attention checks ($n = 42$). This led to a final sample of 362 participants ($M_{age} = 38.10$, SD = 11.83, 18–72; 155 female, 195 male, 2 gender diverse, 9 self-identified, 1 did not indicate their gender).

After we had obtained participants' informed consent, they indicated their agreement with statements assessing the belief in the norm-consistent and norm-inconsistent climate policy conspiracy theory. Then, we collected information on their endorsement of normative and non-normative collective action. Finally, we collected demographic data and debriefed our participants.

6.1.2 | Measures

6.1.2.1 | Belief in Norm-Consistent and Norm-Inconsistent Climate Policy Conspiracy Theories. To assess participants' belief in a norm-consistent and norm-inconsistent climate policy conspiracy theory, we used 12 items in total, six items per construct. As preregistered, we conducted a

confirmatory factor analysis with correlated factors. To this end, we used Mplus (Muthén and Muthén 1998) with maximum likelihood estimation. We initially specified two factors with six items each, freeing the loading of all items and setting the factors' variances to 1. The modification indices suggested including five cross-loadings (two items a priori defined as norm-inconsistent also loaded on the other factor and three items a priori defined as norm-consistent also loaded on the other factor). We retained all items that had an unstandardized loading on their originally assigned factor (a) above 0.40 and (b) 0.15 larger than their cross-loading on the other factor. This led us to drop two items intended to assess the belief in norm-inconsistent climate policy conspiracy theories (i.e., "Polls in the Bundestag that slow down climate protection are significantly influenced by purchased votes." and "The world's powerful have collectively decided not to fight climate change.") and three items intended to assess belief in a norm-consistent climate policy conspiracy theory ("When it comes to climate protection, politicians do what they want without considering the interests of future generations.", "Discussions between politics and business about climate issues take place behind closed doors", "Politicians act like puppets controlled by industry when it comes to climate change."). Thus, the final scale operationalising the belief in norm-inconsistent conspiracy theories consisted of 4 items ($\alpha = 0.78$), and the scale assessing belief in norm-consistent climate policy conspiracy theories consisted of 3 items ($\alpha = 0.75$). The plausibility judgments from our pilot study confirm that the statements assigned to the "belief in a norm-inconsistent conspiracy theory" scale were seen as less plausible ($M = 39.65$, SD = 21.05) than those assigned to the "belief in a norm-consistent conspiracy" scale ($M = 60.93$, SD = 22.31, $M_{Diff} = -21.27$, SD = 23.15, $t(150) = -11.29$, $p < 0.001$, $d = -0.92$, 95% CI = [−1.11, −0.73]), and as less popular (norm-inconsistent: $M = 45.74$, SD = 19.71; norm-consistent: $M = 59.44$, SD = 17.36, $M_{Diff} = -13.70$, SD = 18.51, $t(150) = -9.09$, $p < 0.001$, $d = -0.74$, 95% CI = [−0.92, −0.56]). We also report results based on our scales as defined a priori in the Supporting Information (see Supporting Information S1: Tables S3 and S4).

6.1.2.2 | Endorsement of Normative and Non-normative Collective Action. We used a self-developed scale inspired by previous research to assess endorsement of non-normative collective action (e.g., Becker et al. 2011; González et al. 2021; Tausch et al. 2011). The nine items ($\alpha = 0.92$) tapped into similar behaviors as those shown by the"Last Generation" (e.g., blocking roads, disturbing public events) but did not mention the organization specifically to gain a somewhat broader impression. To assess the endorsement of normative collective action, we used a scale adapted from the work of Schmitt and colleagues (Schmitt et al. 2019). The eight items ($\alpha = 0.93$) tapped into participants' support for people who engage in several forms of normative pro-environmental collective action (e.g., organizing protests, writing letters, signing petitions).

6.1.2.3 | Political Orientation. We assessed political orientation with the same one-item measure as before. Table 3 displays descriptive statistics and correlations for all variables.

6.2 | Results

In line with our predictions and replicating Studies 1 and 2, we found a positive correlation between the belief in a norm-consistent climate policy conspiracy theory and the endorsement of non-normative pro-environmental collective action, $r(362) = 0.35$, $p < 0.001$. Further in line with our predictions, we also found a positive correlation between the belief in a norm-inconsistent climate policy conspiracy theory and endorsement of non-normative pro-environmental collective action, $r(362) = 0.14$, $p = 0.010$.

6.3 | Exploratory Analyses

6.3.1 | Normative Collective Action as the Criterion

In a first step, we explored the simple correlations between beliefs norm-consistent and norm-inconsistent conspiracy theories and the endorsement of normative collective action. We found that the endorsement of normative pro-environmental collective action was positively, yet weakly, linked to the belief in the norm-consistent climate policy conspiracy theory ($r(362) = 0.26$, $p < 0.001$) but was largely independent of the belief in a norm-inconsistent climate policy conspiracy theory, $r(362) = -0.09$, $p = 0.097$.

6.3.2 | Controlling for the Other Belief and Political Orientation

In a second step, we ran regression analyses analogous to our analyses in Studies 1 and 2. Specifically, we entered the (grand mean-centered) beliefs in norm-consistent and norm-inconsistent conspiracy theories as well as political orientation as simultaneous predictors of either the endorsement of non-normative collective

TABLE 3 | Descriptive statistics, internal consistencies in brackets, and intercorrelation between variables, Study 3 ($N = 362$).

	M	SD	(1)	(2)	(3)	(4)	(5)
(1) Belief in a norm-consistent climate-policy CT	4.73	1.38	(0.75)				
(2) Belief in a norm-inconsistent climate-policy CT	3.20	1.34	0.34***	(0.78)		†	
(3) Endorsement of non-normative pro-environmental collective action	3.00	1.47	0.35***	0.14*	(0.92)		
(4) Endorsement of normative pro-environmental collective action	5.23	1.40	0.26***	−0.09	0.53***	(0.93)	
(5) Political orientation (righ - left)	4.31	1.23	0.16**	−0.05	0.45***	0.40***	—

Note: ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, †$p < 0.10$. Political orientation has been inverted so 1 = right, 7 = left.
Abbreviation: CT, conspiracy theory.

action or normative collective action (for analyses testing for a moderation by political orientation, see Supporting Information S1: Table S6).

We found the endorsement of *non-normative collective action* to be stronger the more participants believed in the norm-consistent climate policy conspiracy theory ($B = 0.28$, SE = 0.051, 95% CI = [0.176; 0.378], $t(358) = 5.39$, $p < 0.001$, $r = 0.31$) and the more politically left they were ($B = 0.50$, SE = 0.054, 95% CI = [0.389; 0.603], $t(358) = 9.15$, $p < 0.001$, $r = 0.47$). The effect of the belief in a norm-inconsistent conspiracy theory on the endorsement of non-normative action was no longer significant ($B = 0.07$, SE = 0.052, 95% CI = [−0.029; 0.176], $t(358) = 1.41$, $p = 0.159$, $r = 0.12$). Regarding the belief in the norm-consistent climate policy conspiracy theory and political orientation, these results are in line with Studies 1 and 2. That the effect of the belief in the norm-inconsistent conspiracy theories turned non-significant, in turn, may be due to its correlation with the belief in the norm-consistent climate policy conspiracy theory. Naturally, this would need to be replicated in future work before definite conclusions can be drawn.

For the endorsement of *normative collective action*, a slightly different pattern emerged. While it was stronger the stronger participants' belief in the norm-consistent climate policy conspiracy theory ($B = 0.26$, SE = 0.051, 95% CI = [0.158; 0.359], $t(358) = 5.05$, $p < 0.001$, $r = 0.30$) and the more leftist their political orientation ($B = 0.40$, SE = 0.054, 95% CI = [0.294; 0.506], $t(358) = 7.42$, $p < 0.001$, $r = 0.40$), it was weaker the more participants believed in the norm-inconsistent climate policy conspiracy theory ($B = -0.16$, SE = 0.052, 95% CI = [−0.265; −0.061], $t(358) = -3.14$, $p = 0.002$, $r = -0.16$).

6.4 | Discussion

Study 3 once more shows that, as predicted, the belief in a norm-consistent climate policy conspiracy theory is associated with a stronger endorsement of non-normative collective action aimed at promoting a change in climate policymaking (even when controlling for political orientation and the belief in a norm-inconsistent conspiracy theory). Crucially, the present study shows that this is also true for the belief in a norm-inconsistent climate policy conspiracy theory, suggesting that the belief in norm-consistent conspiracy theories does indeed have similar correlates as the belief in norm-inconsistent conspiracy theories. This strengthens our argument that this link is driven by what a conspiracy theory implies about social reality rather than the shared non-normativity of conspiracy beliefs and the action. Moreover, the present study showed that conspiracy beliefs were associated less strongly with the endorsement of normative than non-normative action. This is in line with prior research showing that inducing a conspiratorial mindset in participants or confronting them with a specific conspiracy theory affected their endorsement of non-normative action more strongly than their endorsement of normative action (Gkinopoulos and Mari 2023; Imhoff et al. 2021). Our finding of a significant positive association between the belief in a norm-consistent conspiracy theory and the endorsement of normative action paired with this association being non-significant (or even negative) for the norm-inconsistent conspiracy theories likewise represents a relevant addition to research on the consequences of conspiracy beliefs. To date, research has produced heterogeneous findings regarding the link between conspiracy beliefs and normative forms of political action (e.g., voting; for discussions, see Bierwiaczonek et al. 2022; Jolley et al. 2020, 2022; Pantazi et al. 2022). While certainly requiring replication, our findings tentatively suggest that this heterogeneity may be partially due to the varying norm-consistency of the targeted conspiracy theories. This appears to be the case to a lesser extent for non-normative action as the criterion.

7 | General Discussion

Prior research that has established a link between conspiracy beliefs and (support for) non-normative collective action mainly relies on measures of conspiracy mentality or beliefs in norm-inconsistent (i.e., implausible and unpopular) conspiracy theories. We herein took a first step towards better understanding the potential reasons for this link. Putting the "social reality" explanation under scrutinyt, we tested whether support for non-normative collective action would also be related to the belief in a norm-consistent (i.e., plausible and popular) conspiracy theory that suggests a social reality similar to those suggested by norm-inconsistent conspiracy theories. Our results show that the belief in a norm-consistent conspiracy theory regarding the impact of secret collaborations between politicians and businesses on climate policies significantly correlates with support for non-normative collective action (Studies 1–3) and also normative collective action (Study 3). The former relationship remained significant even when controlling for dissatisfaction with governmental climate policies (Study 1; Study 2 when using the short dissatisfaction scale, but only marginally when using the longer scale), conspiracy mentality, and political orientation. In Study 1 (though not Study 2), beliefs in this norm-consistent climate policy conspiracy theory predicted support for non-normative collective action only among those with a more leftist (but not rightist) political orientation, while Study 3 showed that the link is especially pronounced among those with a more leftist political orientation but not absent among those with a more rightist political orientation.

These results indicate for the first time that beliefs in norm-consistent (plausible and popular) conspiracies correlate with support for non-normative collective action. Hence, the present findings suggest that non-normativity of conspiracy beliefs is not necessary for them to correlate with support for non-normative action. Rather, they are in line with the idea that conspiracy theories include assumptions about social reality that make non-normative action more likely. The current data, however, do not allow drawing definite conclusions on which aspects of conspiracy theories are particularly relevant here. As outlined in a recent theory paper (Pummerer et al. 2024), support for confrontative non-normative collective action should be especially likely for conspiracy beliefs that emphasize harm towards one's own group and where an individual perceives that the actor can be (collectively) stopped. In line with this argument, perceived threat towards one's own group has been shown to justify actions otherwise seen as non-normative in other domains (e.g., Chan et al. 2023; Packer 2008;

Riek et al. 2006). The perceptions that an outgroup is depriving a relevant (in)group and that this deprivation violates moral standards (i.e., is illegitimate) are also two central correlates of engagement in collective action (Agostini and Van Zomeren 2021). In addition, recent studies suggest that conspiracy beliefs relate to collective action intentions if the content of the former aligns with the goal of the latter and that this relationship is partly explained by the perceived illegitimacy of those in power (Thomas et al. 2024). Finally, a conspiracy theory might also imply that powerful others do not abide by laws and regulations (cf. Imhoff et al. 2021), giving individuals leeway to pay them back in kind ("If the politicians do not comply with the rules, I can do the same."). More specifically, individuals might perceive low political control via traditional and normative means (see e.g., Imhoff and Bruder 2014; Jolley and Douglas 2014), motivating them to engage in non-normative actions as they might be perceived as more effective. Future research addressing these possibilities will be helpful in further disentangling the link between conspiracy beliefs and support for non-normative action.

Interestingly, the belief in a norm-consistent conspiracy theory was positively related to normative collective action, while the belief in the norm-inconsistent conspiracy theory was not. When considered in parallel, the first relationship remained significant and positive, while the second one even turned negative. This result pattern may have emerged not based on differences in plausibility of the two conspiracy theories or what they imply about social reality but rather based on the theories' differential popularity. That is, perceiving a conspiracy theory as being held by a majority of the populace may lead to the expectation that others will join normative efforts (such as voting or participating in legal demonstrations) at achieving desired change. Perceiving it as being held only by a minority, on the other hand, should reduce such expectations—with detrimental outcomes of engagement in normative collective action. In other words, the link between conspiracy beliefs and normative collective action may be dependent on the perception of the social norm rather than generalizable across conspiracy theories. This could also be one explanation for the so far mixed findings regarding the link between conspiracy beliefs and normative collective action (Gkinopoulos and Mari 2023; Imhoff et al. 2021; Jolley and Douglas 2014; Marques et al. 2022; Pantazi et al. 2022; van Der Linden 2015; Winter et al. 2023) that future research could address by explicitly studying the popularity (next to the plausibility) of different conspiracy theories.

Future work may also continue to include conspiracy mentality as a predictor to shed light on a puzzling finding in the current studies: Conspiracy mentality was negatively related to support for non-normative collective action in bivariate analyses and multiple regressions (in Study 1, especially among the politically left), although prior research would have suggested a positive correlation (Imhoff et al. 2021). One reason for this difference may be that the relationship between conspiracy mentality and support for non-normative collective action is curvilinear rather than linear (Imhoff et al. 2021). Tests for quadratic relations did not yield evidence for this idea in Studies 1 and 3, but in Study 2 (see Supporting Information S1: Tables S7–S9 and Figure S1–S6). Alternatively, we might be dealing with an issue-specific relationship here: Prior work already shows that conspiracy mentality is associated with negative attitudes towards climate-protective measures (e.g., Winter et al. 2022). Thus, conspiracy mentality might be associated with a negative attitude towards climate policies in general. This is consistent with the finding that (generic) conspiracy beliefs are correlated with the rejection of climate science—at least in some countries (Hornsey et al. 2018; Lewandowsky et al. 2013). Future research might test which of these alternatives best explains the negative relation between conspiracy mentality and support for non-normative collective action.

Finally, our analyses indicate that climate policy conspiracy beliefs (Studies 1 and 3) and dissatisfaction with climate policies (Studies 1 and 2) correlated more strongly with support for non-normative collective action among the politically left than among the politically right. This is consistent with data from the European Social Survey showing that the politically left are more worried about climate change and attribute a larger impact to it (Gregersen et al. 2020). Thus, the politically left seem to attach more relevance to the topic, which could explain why the variables we assessed are more substantially correlated among these people. However, given that we did not find this interaction effect in Study 2, additional research is needed to draw ultimate conclusions regarding this moderation.

7.1 | Strengths and Limitations

The current research is the first to shed light on the link between beliefs in a norm-consistent (plausible and popular) conspiracy theory and support for non-normative collective action. It did so by exploring the link between both constructs when controlling for other relevant variables. Our work demonstrates that the belief in a norm-consistent conspiracy theory, dissatisfaction with policies, and conspiracy mentality each explain independent parts of the variance in support for non-normative collective action. The main finding of a link between the belief in a norm-consistent climate policy conspiracy theory and the endorsement of non-normative collective action replicated across three studies. Two additional strengths of the current work are that one of our samples was quota-based and, thus, close to representative, and that all three studies were highly powered.

Finally, our work focused on conspiracy theories that are consistent with norms for determining knowledge (i.e., plausible) and with descriptive norms of mainstream beliefs (i.e., popular). This allowed us to "subtract" from conspiracy beliefs their non-normative element that plagues research on beliefs in implausible conspiracies typically only believed by a minority, but—at first glance—comes with a downside: Based on Studies 1 and 2, we cannot rule out that non-normativity contributes to the correlation between beliefs in norm-inconsistent conspiracies and non-normative action beyond what conspiracy theories emphasizing harm towards a personally relevant group imply about the social reality. Study 3, however, suggests that this contribution—at least in the context studied herein—may be small if it exists. Specifically, we found that the correlation between the belief in a *norm-inconsistent* conspiracy theory

regarding climate policymaking and the endorsement of non-normative collective action was weaker than the one between the belief in a *norm-consistent* conspiracy theory regarding climate policymaking and the endorsement of non-normative collective action. As we have focused on one context only, future research is needed to test whether this result pattern generalizes. In testing this generalizability, future research may also want to explore whether interindividual differences in need for uniqueness or impulsivity, two constructs known to correlate with beliefs in norm-inconsistent (i.e., implausible and non-mainstream) conspiracy theories (Bowes et al. 2021; Imhoff and Lamberty 2017; Lantian et al. 2017; Swami et al. 2016) also explain a part of the relation between the belief in norm-consistent conspiracy theories and non-normative behavior.

One limitation is that our studies have limited generalizability. We recruited respondents only from one country, suggesting the need to extend the range of societies from which participants are sampled in future work. In addition, we focused only on one topic: climate policies. Thus, specific aspects of the topic of climate policies—including its relation to political orientation—might have also shaped the results (however, the correlation between the belief in a norm-consistent climate policy conspiracy theory and political orientation was only significant, albeit weak, in Study 3). Moreover, we have herein studied a conspiracy theory that is norm-consistent in two regards: It aligns with norms for establishing knowledge and is consistent with descriptive norms of societal beliefs (i.e., relatively popular). This positive association between plausibility and popularity as two facets of normativity may, however, not be observed in all contexts. In fact, it is likely to be absent in societies shaped by propaganda, restriction of free press, and low trust in science (Alper 2023; Alper and Imhoff 2023; Alper and Yilmaz 2023). Given that we conflate these two aspects of norm-consistency, we cannot draw conclusions on which of the two is more relevant. Thus, future research might disentangle the two aspects of norm-consistency, for example, by examining theories that align with the societal norm of establishing knowledge (i.e., plausible conspiracy theories) but not with the majority opinion, or by examining conspiracy beliefs that are shared by the majority but do not align with societally accepted ways of establishing knowledge.

Related to this avenue for future research is an issue with our operationalisation of support for non-normative collective action. In our work, we primarily focused on *non-violent* non-normative collective action. This form of collective action is also considered "constructively disruptive," meaning that it causes just enough disruption to evoke a reaction by outsiders, while still being acceptable enough for this reaction not to be outright dismissal (Shuman et al. 2021). Thus, future researchers may also want to include measures of support for a broader range of behavior—from socially accepted (i.e., normative), over non-violent non-normative, up to extreme (i.e., violent non-normative) forms of collective action. With Study 3, we have taken a first step in this direction, which we encourage future research to expand upon.

Two methodological considerations warrant discussion as well. First, the self-developed (ad hoc) measures could be criticized. However, given that beliefs in norm-consistent conspiracy theories about climate policies have not been addressed in earlier research, we could not rely on existing measures. Second, due to the correlational design, the current studies do not allow for the drawing of any conclusion about causality. With regard to the specific example chosen herein, longitudinal studies are challenging due to the massive media coverage of non-normative (climate) protests that might influence participants between waves and distort effects. In more general terms, however, experimental studies (including those that prime participants with conspiracy theories) and more work using other methods and designs would be highly desirable to better understand the similarities and differences between the beliefs in norm-consistent and norm-inconsistent conspiracy theories, the appraisals they imply, and the behavioral responses they are associated with.

The current studies are only a first step into this new area of research, but already advance theorizing on conspiracy beliefs by purposefully examining the belief in a norm-consistent conspiracy theory. While other studies have tapped into considerations of plausibility and implausibility, for example, by pointing to corruption scores as indicators that actual conspiracies might be likely to happen in a country (e.g., Alper and Imhoff 2023; Hornsey et al. 2023), no studies known to the authors have specifically considered aspects of norm-consistency (which does not necessarily align with plausibility in all cases). Our results show that at least some of the effects examined so far regarding beliefs in norm-inconsistent (i.e., implausible and non-mainstream) conspiracies also transfer to norm-consistent (i.e., plausible and mainstream) conspiracy theories, suggesting that it is something about the social reality implied by conspiracy theories emphasizing harm towards personally relevant groups rather than their non-normativity alone that drives their relation to non-normative behavior. At the same time, it questions whether the often claimed aspect of the underlying conspiracy theories being "epistemically risky" (Douglas and Sutton 2023) or non-normative (Brotherton 2013) is a necessary feature of conspiracy beliefs to explain their societal consequences.

In addition to being less ethically problematic for experimental studies, examining belief in norm-consistent conspiracies could even become a less biased way to study psychological features of conspiracy beliefs, as they could potentially be less confounded with cognitive biases (Biddlestone et al. 2025) or through having spread in specific online circles (Frischlich et al. 2022). Overall, more nuance in the study of conspiracy beliefs, for example, regarding aspects of norm-consistency (i.e., plausibility and popularity), is needed.

8 | Conclusion

Climate policy conspiracy beliefs are related to non-normative collective action, even if the underlying conspiracy theory is plausible and shared by most of the population. This relation holds when controlling for dissatisfaction with governmental climate policies, conspiracy mentality and political orientation. Our findings, thus, suggest that the social reality implied in conspiracy theories is at least one part of the explanation of why those who believe in conspiracies take to the streets in

protest—even if this protest is frowned upon by the majority. In other words, radicalization of protest, in this case, climate protest, can be motivated by the impression that governments act half-heartedly and are steered by influences not subject to public oversight while harming the population—an impression politicians may want to avoid (be it right or wrong).

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this work are openly available from psycharchives at https://doi.org/10.23668/psycharchives.16188 (data) & https://doi.org/10.23668/psycharchives.16189 (code).

Endnotes

[1]The original wording of hypothesis in the preregistration is "Stronger (a) dissatisfaction with the governmental climate policies and (b) belief in a climate policy conspiracy theory predict higher support for disruptive climate protest. (c) Both relationships are stronger the more individuals hold a politically left orientation." We have chosen to reword this hypothesis in line with the present manuscript's focus. Nonetheless, all analyses follow the preregistered analysis plan.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section.