

## Identity, polarization and their societal and political consequences

**Robert Böhm**, *University of Vienna and University of Copenhagen*; **Philipp Sprengholz**, *University of Bamberg and Bernhard Nocht Institute for Tropical Medicine*; **Luca Henkel**, *University of Chicago and University of CEMA*; **Cornelia Betsch**, *University of Erfurt and Bernhard Nocht Institute for Tropical Medicine*

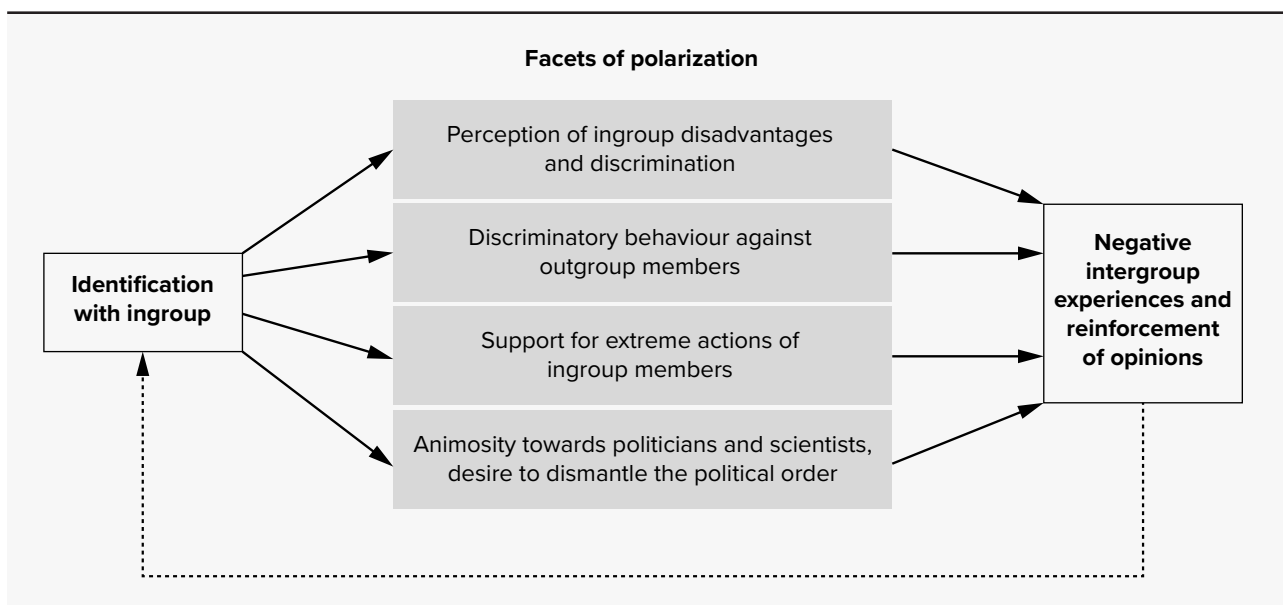
Polarization is a growing concern, affecting societies worldwide. It signifies a deepening divide between groups holding contrasting viewpoints on political matters and on approaches to addressing complex societal issues.<sup>1</sup> This polarization becomes evident in uncompromising stances on critical topics such as mitigating climate change,<sup>2</sup> controlling infectious disease<sup>3</sup> and combating misinformation.<sup>4</sup> To illustrate, discussions surrounding the adequacy of climate policies have intensified in recent years, with one faction advocating for more stringent measures and another insisting on less restrictive ones. These opinion-based groups are increasingly drifting apart, making reconciliation challenging. Nevertheless, as the global climate crisis and numerous other societal challenges require extensive and large-scale human cooperation transcending group boundaries,<sup>5</sup> polarization itself emerges as a significant societal obstacle,

hindering our ability to address pressing issues of our time.

To effectively mitigate polarization and the danger it poses to addressing societal challenges, we must understand the nature of polarization and its consequences in the first place. Specifically, what are the facilitating and diminishing factors of polarization in response to societal challenges, and what are its consequences for attitudes towards behaviours?

A wide range of literature has shown that polarization is driven partly by people incorporating opinion-based groups into their self-concept<sup>6</sup>—in their beliefs about who they are and how they relate to others. We suggest that strong identification with one's group (ingroup) can pave the way for biased attitudes and discriminatory behaviours towards people with opposing viewpoints (outgroup). In addition, polarization results in strongly identified minorities who hold

**Figure S6.1.1** How group identification might increase polarization



**Source:** Authors' creation based on Henkel and others (2023) and Sprengholz and others (2023a).

attitudes likely to undermine societal cohesion and democracy (figure S6.1.1). The rest of this spotlight reports evidence for these relations from studies on the Covid-19 pandemic and climate change.

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### From individual attitudes to opinion-based groups

Polarization frequently arises in discussions of topics central to individuals' identities when there is uncertainty surrounding available information. Consider climate change: both the adverse effects of climate change and the strategies to mitigate it hold major implications for people's lives. But predicting the exact consequences and outcomes is challenging given their inherently uncertain and multicausal nature. In social and information-rich environments characterized by such uncertainty, individuals tend to come together and form bonds. A key aspect of this shift from individual attitudes to social categorization is that people tend to identify with other people who share their beliefs, opinions and attributes, often leading to similar behaviours among them. This phenomenon of group formation and identification reflects how people seek common ground and solidarity when grappling with complex, uncertain issues of personal significance.

A large body of literature in psychology has shown that people's degree of group identification can be reliably measured using surveys.<sup>7</sup> Building on established group identification scales,<sup>8</sup> we developed a five-item survey to assess identification with opinion-based groups (for example, "I have a lot in common with people who are vaccinated" or "I have a lot in common with people who think the federal government's climate policy has gone too far"). Participants were asked to indicate their level of agreement with each item on a seven-point scale from 0, "do not agree at all," to 7, "very much agree." The items capture different dimensions of group identification.

With both Covid-19 vaccination<sup>9</sup> and climate policies,<sup>10</sup> many individuals hold high group identification (with an average level of group identification greater than 4). A December 2021 study in Germany found that 56 percent of unvaccinated participants and 67 percent of vaccinated participants reported strongly identifying with their own vaccination status. In a similar vein, a study in Germany on climate

policies found that 53 percent of people who demanded stricter climate policies and 63 percent of those who wanted policies to do less reported high group identification. About 61 percent of people who considered current climate policies about all right strongly identified with their climate policy opinion group, compared with only 35 percent of people who did not care about climate policy.

So, not only is there a considerable prevalence of individuals with strong identification across different (opposite-minded) groups, but there is also substantial variation in the degree of identification between these groups. These differences could lead to differences in perceptions, attitudes and behaviours, explored next.

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### Perceived and actual discrimination between opinion-based groups

Being a part of and identifying with opinion-based groups is not inherently negative; in fact, it can serve as a source of connection and support, particularly during uncertain and crisis-ridden periods.<sup>11</sup> Group formation may benefit both groups and their individual members. For example, in the context of health decisions, people who identify as active and sportive may find groups of likeminded people that help them maintain their physical activity plans.<sup>12</sup> But the process of social categorization, grounded in attitudes, opinions and attributes, can also have unintended consequences. It might lead to distorted perceptions and discriminatory behaviours that reinforce one's own identity by establishing a sense of superiority over others.<sup>13</sup> This dual nature of group categorization and identification—support and cooperation within but discrimination and conflict between groups—underscores the importance of understanding its dynamics in response to societal challenges to mitigate potential harms.

In the Covid-19 vaccination study mentioned above, 82 percent of unvaccinated respondents perceived public discourse around vaccination as unfair, moralistic and patronizing, compared with only 23 percent of vaccinated respondents.<sup>14</sup> Importantly, this perception was moderated by respondents' vaccination status identification. That is, higher group identification was associated with perceiving the public discourse as

slightly more positive among vaccinated respondents but with perceiving it as considerably more negative among unvaccinated respondents.

But how do such discriminatory perceptions relate to factual discrimination between opinion-based groups? To answer this question, participants had to distribute 100 euros between themselves and another person in a series of tasks. The other person was presented either as a member of the same group (same vaccination status or climate policy position—ingroup) or as a member of a different group (different vaccination status or climate policy position—outgroup). Intergroup discrimination was calculated by subtracting the amount allocated to an ingroup member in one task from the amount allocated to an outgroup member in the other task. In the vaccination study<sup>15</sup> vaccinated respondents showed larger intergroup discrimination (an average of 18.40 euros) than unvaccinated respondents (7.37 euros). That is, vaccinated respondents gave smaller amounts to unvaccinated respondents than unvaccinated respondents gave to vaccinated respondents, while the amount given to ingroup members was similar for both groups.

In the climate policy study,<sup>16</sup> there was also substantial intergroup discrimination, which varied according to the ingroup and outgroup. While people from the two extreme groups, who wanted either more or fewer climate protection policies, were most discriminatory toward each other, they discriminated equally against those who did not care about climate policy. Interestingly, those who found climate policies all right were more discriminated against by people who wanted less climate protection than by those who wanted more.

In both studies, discrimination against people in other-minded groups was strongly related to respondents' level of group identification. Specifically, the more that people identified with their ingroup, the stronger they discriminated against outgroups. These results provide support for our assumption that group identification undermines cooperative solutions across group boundaries.

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### Societal and political consequences

In the vaccination study, unvaccinated respondents were asked whether they would demonstrate or sign

a petition against mandatory vaccination in December 2021.<sup>17</sup> This intention was used to predict whether they had attended a demonstration or signed a petition when they were surveyed again in February 2022. Respondents' behavioural intention predicted actual behaviour. Importantly, the effect was moderated by self-reported group identification, with a stronger intention-behaviour link between those who reported higher identification with the unvaccinated group. In another survey, vaccination status identification related to the perceived appropriateness of political action during the Covid-19 pandemic.<sup>18</sup> Vaccinated and unvaccinated respondents who had low identification with their vaccination status rated the political actions taken during the pandemic as similarly appropriate. In contrast, having a higher identification with vaccination status was associated with a larger perceived appropriateness for vaccinated respondents, whereas appropriateness ratings decreased for highly identified unvaccinated respondents.

Moreover, data collected from 10 countries showed that those who found past Covid-19 pandemic measures inappropriate had a stronger desire to punish politicians and scientists for their handling of the pandemic and were less willing to vote, instead favouring dismantling the entire political order. This suggests that identification with opinion-based groups is associated with several societal and political consequences that go beyond the specific opinion-based context and the interactions between these opinion-based groups.

Similar effects were observed for climate policy opinion groups.<sup>19</sup> Given that societies have seen extreme forms of protest for both more and less climate protection, we investigated whether identification played a role in how extreme protests are accepted. German participants who wanted less climate protection read a short text about a hypothetical subgroup called the freedom fighters, seeking the continued use of fossil fuels and demanding that citizens be able to freely decide how they travel, heat or eat. Participants who wanted more climate protection read about the climate fighters, advocating for immediate phaseout of fossil fuel use and demanding environmentally friendly travel, heating and eating.

Both subgroups drew attention to their causes by organizing demonstrations in many cities, damaging

political party buildings and blocking roads to the parliament. About 17 percent of those wanting more climate protection and 22 percent of those wanting less showed increased support for the presented subgroup, 8 percent of those wanting more climate protection and 11 percent of those wanting less were willing to join a demonstration organized by the subgroup and 8 percent of those wanting more climate protection and 10 percent of those wanting less were willing to donate money for the defence of a subgroup member who was recently arrested and charged with criminal damage. Support for the respective subgroup increased with higher group identification, providing further evidence for the important role of group identification.

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### Potential implications

The question of how to tackle pressing societal challenges, such as climate change or global health crises, often gives rise to opposite opinions, which can lead to the formation of opposing opinion-based groups and societal polarization. Our argument, supported by evidence, suggests that as individuals increasingly identify with these groups, their attitudes and behaviours are more likely to be polarized. This creates a troubling cycle (see figure S6.1.1) where opinions

are continually reinforced, resulting in groups that are unwilling to engage in peaceful interactions or seek common ground. In essence, identifying with opinion-based groups undermines the very cooperation that is crucial for addressing societal challenges on a universal scale.

Our understanding of the intricate interplay among individual attitudes, group identification and polarization is still in its early stages. Future research endeavours are essential to delve deeper into the various causal pathways at play and to pinpoint effective interventions for mitigating polarization. Social and behavioural scientists have proposed various interventions to reduce group-based discrimination and conflict—for example, through decategorization (emphasizing the unique individual characteristics of outgroup members) and recategorization (integrating ingroup and outgroup members within a common group). Some of these might be helpful in reducing polarization of opinions, but they remain to be critically tested in these domains. Another promising avenue involves participatory approaches, where individuals from opposing opinion-based groups are actively engaged in collaborative efforts to discover common ground. These approaches hold potential for bridging divides and fostering constructive dialogue among stakeholders.

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### NOTES

1. Pew Research Center 2014.
2. Falkenberg and others 2022.
3. Bor, Jørgensen and Petersen 2023; Flores and others 2022.
4. Lazer and others 2018.
5. Van Lange and Rand 2022.
6. Ellemers, Spears and Doosje 2002.
7. Stets and Serpe 2013.
8. Doosje, Ellemers and Spears 1995; Roth and Mazziotta 2015.
9. Henkel and others 2023.
10. Sprengholz and others 2023a.

11. Hogg 2007.
12. Eys, Bruner and Martin 2019.
13. Tajfel and others 1979.
14. Henkel and others 2023.
15. Henkel and others 2023.
16. Sprengholz and others 2023a.
17. Henkel and others 2023.
18. Sprengholz and others 2023b.
19. Sprengholz and others 2023a.