Social Sentiment in Times of Crises

FZI

Proceedings of the SOSEC Academic Conference

HOW ARE YOU, DEMOCRACY?

June 25, 2026

Edited by Morgan Le Corre Juratic, Ina Ni, Jonas Fegert



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HOW ARE YOU, DEMOCRACY?

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Introduction

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Since its launch in the fall of 2022, the SOSEC project, motivated by a series of interconnected societal crises, has investigated how citizens respond to challenging times. Have the aftermath of the Covid-19 pandemic, Russia's invasion of Ukraine, the resulting inflation and energy crises, the October 7th Hamas terrorist attack against Israel, and the subsequent war in Gaza contributed to polarization, societal conflict, and irreconcilable divisions in Western societies? In this context of rapidly changing media consumption habits and the emergence of generative artificial intelligence, do these crises ultimately undermine democratic resilience by increasing exposure to disinformation and eroding political trust? Building on four years of research into social sentiments in times of crises, drawing on bi-monthly representative panel survey data comparing Germany and the United States, the SOSEC project brought together researchers to address this overarching central question, „How Are You, Democracy?", at an academic conference held in Karlsruhe on June 25th, 2026.

The conference proved highly successful, featuring 23 poster presentations that addressed this question. Reflecting the inherently interdisciplinary nature of research on polarization, social sentiments, and digital democracy, the event brought together scholars from political science, sociology, computational science, linguistics, and information systems, who employed a wide range of methodological approaches, including quantitative survey analysis, artificial intelligence, machine learning, and natural language processing. This interdisciplinary dialogue was structured around four poster sessions on democratic resilience, chaired by four established researchers from KIT and the FZI (Jonas Fegert, Michael Mäs, Christof Weinhardt, and Achim Rettinger). The sessions focused on four major topics: democratic trust and discourse (1); online platforms, conspiracy theories, and polarization (2); the role and consequences of crises (3); and opportunities and challenges presented by NLP, AI, and computational methods and technologies (4). These scientific contributions, collected in these proceedings, provide new insights into the challenges facing contemporary democracies and the factors that sustain their resilience.

A first group of studies examines both established and emerging determinants of political trust, widely regarded as a key indicator of democratic resilience. The findings highlight the importance of perceived, rather than objective, economic hardship, competing narratives of state loyalty, patterns of alternative versus traditional media consumption, and the need to examine these dynamics at a more granular level, for example, across age groups or within local contexts. Complementing this perspective, several studies investigate the sources and drivers of conspiracy beliefs, consistently shown to be negatively associated with political trust. Focusing in particular on patterns of alternative and social media consumption, their findings highlight the central role of platform algorithms in steering users towards alternative media sources, and examine both the short and long-term determinants of alternative news consumption and conspiracy beliefs.

A second, and the largest, body of work investigates social sentiments and citizens‘ responses in the aftermath of crises. These studies examine shifting determinants of solidarity towards the war in Ukraine and of support for climate policies, revealing a gradual erosion of support for both issues over time. The broader societal implications of these changing attitudes emerge most clearly in two areas. On the one hand, the findings identify young adults as a particularly vulnerable group, suggesting that they experienced the highest levels of mental health distress following the COVID-19 pandemic and expressed the greatest concern about the war in Ukraine and the environmental crisis. On the other hand, several contributions focus on the evolution and implications of societal polarization. Beyond measuring polarization, these studies devote considerable attention to defining the concept itself and, in some cases, to nuancing its democratic implications. For instance, several analyses move beyond traditional survey indicators by relying on fine-tuned large language models to demonstrate how multimodal and emotionally charged content on YouTube Shorts related to the Israel–Hamas war, as well as specific communicative stances in the context of gender debates in Germany, can intensify polarization, particularly in its affective dimension. Other findings reveal a nuanced relationship between ideological polarization and political engagement. At the same time, previous research on the democratic risks associated with polarization is further corroborated, for instance, through evidence of its role in encouraging democratic trade-offs, where partisan and identity-based loyalties take precedence over democratic principles, as illustrated in the aftermath of recent authoritarian attempts in South Korea.

Finally, a third set of contributions explores the potential and pitfalls of digital democratic tools at a time of rapid advances in computational methods and artificial intelligence. For instance, one contribution highlights how voting advice applications (VAA) can exacerbate citizens’ polarization unless carefully (re)designed. Another illustrate how analyzing social media platforms can provide researchers and practitioners with valuable insights into public opinion, online networks, and dominant narratives, particularly where traditional survey data are unavailable. This third stream of contributions not only identifies emerging risks but also highlights concrete ways of placing AI and computational methods in the service of democratic resilience. For instance, one study shows that data donations can help reduce discriminatory biases embedded in hiring algorithms by correcting the under-representation of minority groups. Two promising projects presented at the conference further illustrate the potential of AI not only to detect patterns of disinformation but also to employ explainable AI (XAI) as a foundation for developing educational and learning tools.

Beyond fostering research exchange and advancing democratic research, the 2026 SOSEC Academic Conference also fulfilled several broader objectives. It promoted long-term interdisciplinary collaborations in social sentiment analysis, strengthened regional research networks investigating polarization and democratic challenges, and expanded the dissemination of research findings and scientific tools through engagement with civil society.

The organization of the conference by the SOSEC project team also helped raise awareness within the research community of the project‘s unique panel dataset and its considerable potential for studying polarization, disinformation, media use, and societal crises. Nine poster presentations relied on SOSEC panel data to address a wide variety of research questions, thereby demonstrating the value of high-frequency comparative panel data for investigating contemporary societal and political developments.

These presentations also laid the foundations for future collaborations while reinforcing research networks within Baden-Württemberg and strengthening links with research institutions in Berlin through the FZI. Approximately half of the participants represented neighboring institutions, including the University Hospital of Ulm, the University of Mannheim, the University of Konstanz, Heidelberg University, Goethe University Frankfurt, the University of Freiburg, as well as the Hertie School in Berlin. Beyond fostering a strong regional network, the conference also welcomed international scholars from the University of Indiana. Moreover, the conference‘s comparative perspective on the United States—one of the defining features of the SOSEC project—was further reinforced by an invited impulse talk delivered by Steve Kimbrough of the University of Pennsylvania.

Finally, bridging research with civil society constituted another major objective of the conference. This was achieved by embedding the SOSEC Academic Conference within the fifth edition of the Days of Democracy, held from June 23rd to June 27th in Karlsruhe. Alongside the numerous talks, workshops, and events organized by KIT Triangel around the theme of democracy, the SOSEC project invited Oliver Nachtwey from the University of Basel to present and discuss his latest work, *Destructive Desires – Elements of Democratic Fascism,* during a public talk and Q&A session following the conference. Lastly, the conference was followed by a hands-on lab session, during which Democracy Days participants without an academic background received a first-hand introduction to the SOSEC public opinion dataset and the analytical tools developed within the project, allowing them to explore questions and crises that mattered most to them.

Taken together, the contributions collected in these proceedings offer no single answer to the question „How are you, democracy?“. What they do show is that democratic resilience is neither self-evident nor already lost, but depends on the attention, trust, and analytical tools that societies are willing to invest in it. We thank all presenters, session chairs, and participants who made this exchange possible, and we look forward to continuing this conversation in the years to come.

I Gotta Feeling: From Economic Hardship to Political Trust, the Mediating Effects of Anomie and Self-Efficacy

Background & Motivation

In times of crisis, debate about the stability of democratic systems intensifies. Political trust is a key pillar of democratic systems. Erosion of this trust can have far-reaching consequences, potentially endangering institutional stability and the functioning of democracy. This is why it is crucial to us to examine the social sentiments that prevail among people in times of crisis, and whether these sentiments threaten political trust.

What do we know about political trust?

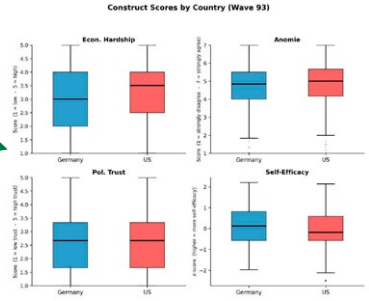
- Steady decline over the last decades [1]
- Arises from a process of socialization & evaluation [2]
- Economic evaluations play a crucial role [3]

***BUT**: the subjective perception rather than the objective reality is the decisive factor* [4]

Research Gap

- A socio-psychological pathway that focuses solely on the subjective perception of the economic crisis
- Evidence of the mediating influence of social sentiments on political trust
- Cross-national analyses in how these sentiments translate into political trust

Fig. 1: Construct Score Distributions by Country, Germany: N = 1,327, US: N = 1,260



Variables
Anomie (6 items, Likert scale 1-7), Self-Efficacy (2 items)
Political Trust (3 items, 1-5), Economic Hardship (2 items)
SES (manifest composite of household income & educational attainment)

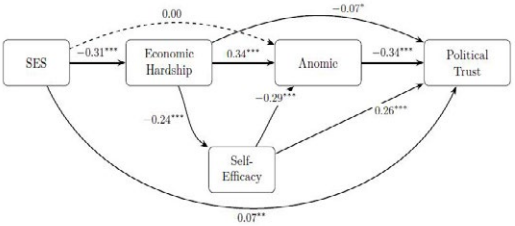
Key Findings: A socio-psychological pathway

The subjective perception of a crisis (economic hardship) reduces self-efficacy and increases perceived anomie.

Reduced self-efficacy and higher anomie both have an independent negative effect on political trust.

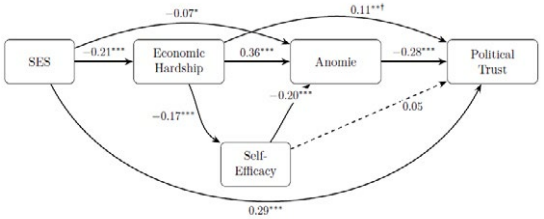
This applies to both national contexts, regardless of objective socioeconomic status.

The effects are weaker in the US, which could suggest that personal experiences are becoming less connected to societal crises.



Notes. Standardized path coefficients from SEM (N = 1,327, Germany, Wave 93; CFI = .965, RMSEA = .058). Dashed arrow = non-significant effect ($p > .05$). $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$.

Fig. 2: Estimated SEM; Germany, Standardized path coefficients



Notes. Standardized path coefficients from SEM (N = 1,260, USA, Wave 93; CFI = .941, RMSEA = .066). Dashed arrow = non-significant ($p > .05$). †Direction contrary to H5 (positive instead of negative). $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$.

Fig. 3: Estimated SEM; USA, Standardized path coefficients

Conclusion

In times of economic crisis, the erosion of political trust is not primarily a rational response to institutional performance. Broader perceptions of societal and personal breakdown drive it.

Limitations

A cross-sectional design supports no proof of causality.

Self-efficacy was specified as a manifest variable.

Other influencing factors on political trust, such as single emotions or different policies, were left out.





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I Gotta Feeling: From Economic Hardship to Political Trust, the Mediating Effects of Anomie and Self-Efficacy

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The global impact of the COVID-19 pandemic, the climate crisis and the enduring military conflicts, as well as other geopolitical and economic crises, have put our democratic structures under pressure. In these times of crisis, debates about the stability of democratic systems intensify. The focus is particularly on political trust, which is widely considered to be a vital component of a stable democracy.[1] It is a crucial component of the effective functioning and for pursuing political objectives in a democratic system[2]. Beyond this, it also shapes people's attitudes towards different policies[3], their political behaviour[4], their voting preferences[5] and, ultimately, their overall attitude towards the political system.[6] In light of the significant impact of political trust on the functioning of democracy and the empirical studies on the development of political trust, there is cause for concern.[7]

Given the significance of this general and fundamental decline of trust, it is unsurprising that there is considerable academic interest in finding explanations for this phenomenon. So far, two main lines of explanation have emerged. While some authors argue that political trust is a relatively stable attitude formed through socialisation, other authors claim that it is instead formed through evaluating the actual or perceived performance of political institutions.[8] For the latter, the economic performance serves as the key evaluation criterion.[9] This aspect, in turn, comes under particular pressure in times of crisis. Therefore, it can be assumed that confidence in political institutions declines when they underperform economically or when there is a perception of underperformance.

It is precisely this subjective level that plays a key yet often underestimated role in building trust, since social relationships, perceptions and feelings might be more important than objective conditions alone.[10] If it is not objective conditions that are the decisive factor but their subjective perception, then the question of how economic hardship translates into a loss of political trust arises. Especially, a particular focus on moderators between the subjective evaluations of the economy and political trust needs to be taken into account.[11] Against this background, this piece aims to demonstrate the extent to which economic hardship influences one's subjective perception of society and oneself, and how this perception in turn affects political trust. For this reason, we examine the mediating effects of self-efficacy and anomie on the relationship between perceived economic hardship and political trust. Self-efficacy is understood here as an individual's "assessments of their effectiveness, competence, and causal agency"[12] and thus expresses an individual dimension of perception during economic hardship and its influence on political trust. Additionally, anomie can be described as „the perception that social and political conditions in society are crumbling"[13] and is used as a measure to show how economic hardship affects people's perceptions of society.

Based on our theoretical considerations, we have developed a socio-psychological pathway model that illustrates how crises erode political trust independently of objective socioeconomic factors. We tested the validity of the model using a sample from the SOSEC project in December 2025. Structural equation modelling (SEM) was carried out using samples from the USA (n = 1,260) and Germany (n = 1,327) and proved to be applicable across these different cultural and geographical contexts. In Germany, the SES had a non-significant effect on anomie, while in the United States, a small but significant negative effect exists. This suggests a modest direct association between socioeconomic status and anomic perceptions in the US. However, in both countries, the main pathway operates indirectly through economic hardship. In both countries, the subjective perception of an economic crisis reduces self-efficacy and increases perceived anomie. Both reduced self-efficacy and higher anomie have an independent negative effect on political trust.

In summary, it can be said that, in times of economic crisis, the erosion of political trust is not primarily a rational response to institutional performance. Rather, it is driven by broader perceptions of societal and personal breakdown. Nevertheless, our results also reveal important cross-national differences that highlight the role of institutional and social contexts in shaping these pathways. This is particularly relevant in terms of the effect of self-efficacy on political trust, which is one of the strongest predictors in the German model but insignificant in the US model. This may be due to the different ideological orientations of the two societies. In the USA, in particular, there is a stronger cultural emphasis on individual responsibility, which might decouple self-efficacy from institutional trust.

Beyond the theoretical debate, our findings also have practical implications for political actors, policy-makers, and researchers. If political disillusionment is not automatically caused by economic crises, but rather by citizens‘ experiences of, and interpretations of, those crises, then policies that reduce subjective economic distress and improve personal agency may be more effective in strengthening the resilience of our democratic system than improving material conditions alone. In this sense, investing in community work and participation might help to strengthen the personal and societal sentiments, especially during times of crisis.

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Polarization as the Problem, Participation as the Cure?

Social Engagement and Political Diversity in the Public Sphere

Political polarization is one of the central nodes structuring the public and academic discourse around democratic decline and the rise of authoritarian forces in liberal democracies. The erosion of participatory, integrative social and political institutions is often thought to contribute to a fragmented social landscape populated by alienated, individualized subjects and where extreme political forces set the tone. Yet, existing literature on the relationship of engagement and polarization, indicates a more complex relationship.

Research Design

Political engagement is measured across engagement groups: (1) disengaged, (2) civic organizations, (3) unions, (4) other political organizations, (5) party membership, and (6) multiple forms. Ideological polarization is assessed using three indicators: (1) ideological self-placement, (2) attitudes toward refugees, (3) attitudes toward climate protection, and (4) solidarity with Ukraine. Mutually exclusive groups are created based on engagement type. Polarization is calculated for each groups and each indicator with bootstrapped Van der Eijk index (VDE) (1,000 samples). For the issue-based questions, multiple items were combined in a sum score.

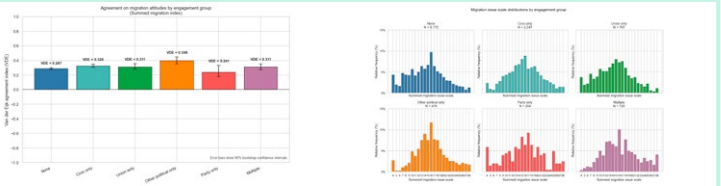
Left-right-self-placement.
Politically engaged prove most diverse in their ideological self-placement.



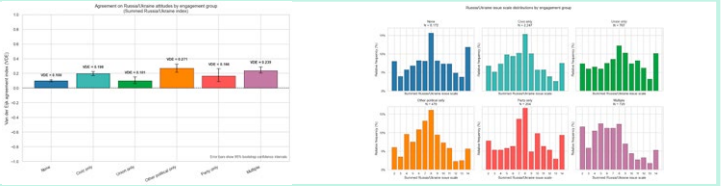
Responses are rather concentrated towards **agreement with climate action**. Again, members of political parties are most diverse.



Responses are rather concentrated and slightly skewed towards **rejection of migration**. Again, members of political parties are most diverse.



Attitudes towards **solidarity with Ukraine** prove most **contentious**, particularly among union members and the disengaged.



Results and Discussion

No evidence of substantial ideological polarization was found. But different engagement forms exhibit distinct relationships with ideological diversity. Partly in line with existing literature, politically engaged individuals show most diverse ideological self-placement, and are diverse in their response patterns for the issue-based items. Members of other political organizations and civic associations prove most homogenous across all engagement groups. Note: Ideological diversity should not be conflated with polarization.

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Polarization as the Problem, Participation as the Cure? Social Engagement and Political Diversity in the Public Sphere

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The presented research investigates the effects of social and political engagement on ideological polarization based on the SOSEC panel survey data. Polarization is one of the central nodes structuring the public and academic discourse around democratic decline and the rise of authoritarian forces in liberal democracies, including Germany. The erosion of participatory, integrative social and political institutions is often thought to contribute to a fragmented social landscape populated by alienated, individualized subjects and where extreme political forces set the tone.[1] And new forms of online engagement are restructuring the communicative patterns of democratic discourse amplifying emotionally charged speech and extreme positions. At the same time access to social and political engagement is highly unequal and determined by socio-economic resources.[2] Furthermore, research shows that political engagement in political parties is linked to more ideological polarization rather than less of it.[3] Therefore, we ask: How do varying modes of social and political engagement affect ideological polarization? We hypothesize that varying forms of engagement have different effects on ideological polarization.

Rather than clustering respondents into groups with similar response patterns across issues, we follow the conception of Mau et al. who identify a number of emotionally and politically charged "trigger points" rather than a conclusive division of German society along coherent ideological lines.[4] Thus, we approach polarization not as a given feature of current political publics. Instead we seek to provide empirical insight into the relationship of different forms of engagement with ideological polarization. The SOSEC panel survey allows us to distinguish between different forms of social and political engagement as well as polarization and represents a unique opportunity to investigate the relationship of these phenomena. In the survey we distinguish between social and political engagement along the following groups: (1) unengaged, (2) civic organizations, (3) unions, (4) other political organizations, (5) political parties, and (6) multiple forms. Ideological polarization is measured by calculating the polarization around key dividing political issues covered in the survey and the ideological self-placement of respondents. To that end we selected items covering climate action, attitudes related to migration, and solidarity with Ukraine in the Russian war of aggression.

After positive consistency checks we aggregated these items into sum scores for the three issues. We then continue to calculate Van der Eijk Indices (VDE) which serves as an indicator as a measurement for ideological polarization.[5] We calculate bootstrapped confidence intervals and pairwise comparisons to quantify differences between groups.

No evidence of substantial ideological polarization was found. VDE values ranged above zero without fail. Generally, distributions were (to differing extends) skewed towards agreement with climate action and more restrictive attitudes towards migration, while solidarity with Ukraine proved relatively divisive. However, different engagement forms exhibit distinct relationships with this ideological diversity. Partly in line with existing literature, politically engaged individuals show more diverse ideological self-placement,

and are diverse in their response patterns for the two issue-based items.

Members of other political organizations and civic associations prove most homogenous across all engagement groups. Politically engaged people are particularly diverse in their self-characterization on the left-right scale, while less engaged or individuals engaged in associations and unions tend to be more centrist in their distribution on the scale. Looking at concrete issues, these relationships change markedly. Disengaged and union members seem to overstate their centeredness in the self-placement, but are comparatively divided over solidarity with Ukraine. Meanwhile, members of other political organizations, civic organizations and multiply engaged prove most homogenous and tend to adopt slightly more progressive positions. Members of political parties, on the other hand, are diverse in their self-placement and with regard to climate and migration issues, but a little less concerning solidarity with Ukraine. Overall, those in civic organizations and non-party political organizations were most likely to take progressive stances on migration and climate action and display solidarity with Ukraine. Party members were most eager to identify with the most-right response option of the left-right self-placement.

Reviewing normative reflections on polarization in democratic systems we caution readers against employing polarization as a "catch-all" category for perceived democratic dysfunctions and paint a more nuanced picture of current developments of liberal democracies.[6] Ideological diversity should not be conflated with polarization as the concept frequently has negative connotation, referring to pathological longstanding and intense political conflict.[7] Given that in our data VDE scores never cross the threshold towards polarization, we do not employ that term to describe ideological relations concerning the investigated issues. Given its prevalence in public and academic discourse, and the contrast with the present results, one may ask whether polarization is a suitable concept to describe current political conflicts in Germany.

The judgement of certain forms of engagement and polarization ultimately hinges on normative assertions about democratic order. While some perspectives problematize excessive conflict, others argue in favor of agonistic pluralism.[8] In this reading ideological disparity and passionate political conflict are essential elements of lively pluralistic democracies. This theoretical understanding, appears particularly convincing, as far-right forces are on the rise in Germany and democratic opposition to this trend appears desirable. Polarization can yield substantial analytical merit if it is re-oriented towards its conceptual origins. Rather than simply measuring the mere distance between ideological (or affective) positions, polarization then entails a conflictual relationship between imagined communities which concerns the very basic principles of democracy. Understood in this sense, polarization no longer remains neutral about the objects of political conflict and shakes off simplifying associations with a linear left-right-spectrum.[9]

These reflections impact the evaluation of the role of engagement in structuring ideological and political conflicts and fostering democratic resilience. While some forms of engagement may be linked to more homogenous and slightly more progressive positioning, other forms of political engagement may also be associated with the formation of more firm far-right, potentially anti-democratic, positioning.[10] So, a firm rooting in democratic principles appears imperative for any organization enabling social and political engagement. This should include dismantling socio-economic barriers to engagement to reduce the link between individual social status and involvement in public and political life.[11]

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A LITMUS TEST FOR STATE LOYALTY

ASSESSING THE FEDERAL REPUBLIC'S SOCIETAL BINDING RESOURCES IN TIMES OF CRISIS

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Living in a state is no bed of roses. States continuously depend on citizens' willingness to pay taxes, obey laws, and support public institutions. In times of crisis, they may demand much more, including risking one's life in defence of the state. State loyalty becomes visible in how citizens respond to such claims. **The project develops a litmus test that examines narratives in public discourse as indicators of the predispositions shaping these responses.**

RESEARCH DESIGN

The research proceeds in three steps:

1. **Conceptual inquiry:** Why do states depend on loyalty as a societal binding resource?
2. **Empirical access:** In which discourses and cultural artefacts do narratives of loyalty and disloyalty become visible?
3. **LLM-assisted analysis:** How can these narratives be identified and compared across a large and heterogeneous corpus?

LLM-ASSISTED LITMUS TEST

The project develops a scalable approach to qualitative narrative analysis. Applied to a large and heterogeneous corpus, LLMs connect interpretive close reading with systematic large-N comparison and enable the monitoring of shifts in loyalty, narrative fragility, and competing attachments.

MATERIAL AND CASE SELECTION

The corpus covers discursive and cultural artefacts in which state, nation, democracy, obligation, belonging, and refusal are negotiated:

- political speeches and campaign materials
- statements by movements, associations, and subcultures
- social media content from YouTube, TikTok, Reddit, and other platforms
- lyrics, music videos, film, and popular culture
- interviews with selected professional groups

PRELIMINARY OBSERVATIONS: GERMANY

- local and regional frames of reference are narrated more affirmatively than Germany as a whole
- eastern Germany emerges as a strong affirmative reference point, while western Germany has little independent narrative salience
- affirmative references to Germany often shift from the contemporary state toward cultural or national understandings of Germany
- after 2022, negative and conflict-oriented references increase across most collective levels



Conceptual illustration of Germany highlighting federal and historical divisions. AI-generated with ChatGPT.

Future Democracies
Karlshochschule International University
Goethe Universität Frankfurt am Main
Friedrich Naumann Stiftung Für die Freiheit.
Gefördert durch: Bundesministerium für Forschung, Technologie und Raumfahrt

A Litmus Test for State Loyalty: Measuring the Federal Republic's Societal Binding Resources in Times of Crisis

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When we think about democracy, elections, rights, institutions, and political participation usually come first. Yet these democratic practices depend on a condition that often remains implicit: a state capable of guaranteeing the institutional and procedural order of democracy, enforcing collectively binding decisions, and providing the framework within which political conflict can unfold. Democratic institutions remain resilient only when citizens recognise this state as a legitimate framework of collective responsibility and are willing to sustain it under pressure. Effective statehood and a minimum degree of state loyalty are therefore preconditions of democratic resilience. This contribution starts one analytical step before the measurement of democracy itself and examines the societal binding resources on which democratic statehood depends.

The security policy Zeitenwende of 2022 has placed new expectations on German society. Citizens are increasingly addressed through concepts such as resilience, defence readiness, robustness, and, in the extreme, war readiness. These concepts invoke questions of collectivity, obligation, and societal cohesion that have long been treated with caution in the Federal Republic. As the debate on conscription illustrates, questions of defence are also questions of shared responsibility. They raise the issue of whether citizens are willing to support, sustain, and defend the state when political order can no longer be taken for granted.

State loyalty is understood here not as blind obedience to a government, but as a socially produced relationship between citizens and the state. States depend on citizens' willingness to pay taxes, obey laws, accept sanctions, support public institutions, and, in extreme cases, risk their lives in defence of the state. State loyalty becomes visible in how citizens respond when the state makes such claims on them. For social scientists, this relationship becomes observable through acts of support, critical commitment, resistance, withdrawal, or refusal.

The project develops a litmus test that examines how narratives circulating in public discourse shape citizens' predispositions and how these narratives are activated, contested, or reshaped when the state makes claims on them. They provide interpretive repertoires through which citizens understand the state, its institutions, and the obligations associated with political membership. The litmus test identifies the societal resources and fault lines that shape how state demands are interpreted, justified, contested, or rejected.

Methodologically, the project combines interpretive close reading with LLM-assisted qualitative narrative analysis. Large language models support the identification and comparison of references to the state, its institutions, and competing collective attachments, together with evaluative stances, justifications, and narrative fragments across a large and heterogeneous corpus. The material includes political speeches and campaign materials, statements by movements, associations, and subcultures, social media content from platforms such as YouTube, TikTok, and Reddit, lyrics, music videos, film and popular culture, as well as interviews with selected status groups.

Complementing the corpus analysis, a survey will examine whether the identified narrative patterns are reflected in individual attitudes toward state institutions, obligations, and collective responsibility. This scalable approach connects qualitative interpretation with systematic large-N comparison and makes societal binding resources empirically observable across different discursive arenas and levels of analysis.

Using the German case, the contribution examines narratives of loyalty, alienation, institutional distrust, and competing attachments. Preliminary findings indicate that local and regional frames of reference are narrated considerably more affirmatively than Germany as a whole. References to Germany as a political and institutional order are frequently shaped by critique, rejection, and distrust, while affirmative references are more often anchored in cultural or national understandings of Germany. The findings also reveal a striking asymmetry between eastern and western Germany. Eastern Germany functions as an independent and strongly affirmative narrative reference point sustained by nostalgia, regional identity, recognition, and defiant pride. Western Germany, by contrast, has little independent narrative relevance. After 2022, the material does not show a broad increase in affirmative narratives about the state or collective responsibility. Negative and conflict-oriented references become more prominent across most levels of collective reference, while eastern Germany remains the main exception.

These discursive predispositions matter for democratic resilience because they shape how citizens interpret far-reaching state demands during crises. The proposed litmus test can monitor shifts in loyalty and alienation over time, detect early signs of narrative fragility, identify competing collective attachments, and inform evidence-based democratic and institutional communication. It therefore offers a diagnostic approach to assessing the societal binding resources and fault lines on which democratic statehood depends.

Digital Guides or Polarization Accelerators?

Question Selection in Voting Advice Applications and Its Effects on Favoring the Political Extremes

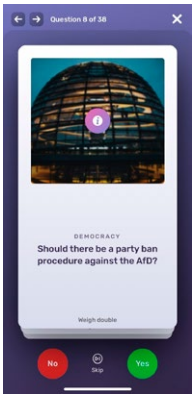
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Background

Voting Advice Applications (VAAs) reached a new scale in Germany's 2025 federal election, with about 26 million uses of the Wahl-O-Mat and 3.5 million of the WahlSwiper (Wagschal 2025). Far from being mere information tools, VAAs mirror and potentially amplify societal cleavages.

There is broad consensus that VAAs increase political knowledge, especially among younger and decided voters (Schultze 2013; Kamoen et al. 2015; Munzert et al. 2020). Effects on turnout are ambivalent (Munzert & Ramirez-Ruiz 2021; Wagschal 2025). A critical strand shows that statement selection is decisive and that emphasizing cultural conflicts tends to favor the fringes (Lefevere & Walgrave 2014).



Screenshot 1. WahlSwiper 2025; German Federal Election.

Designs that maximize answer variance across parties based on binary (yes/no) questions to mostly controversial questions structurally over-present fringe parties as matches while disadvantaging more centrist parties. Fröhle et al. (2026) find that VAAs can actively foster electoral polarization: 95.7% of original AfD sympathizers found the party among their top-3 matches, versus only 52.3% (SPD), 50.9% (Greens) and 38.5% (FDP). When a user's originally preferred party is absent from the top matches, the probability of an at least short-term switch in voting intention triples (Wagschal 2025, 797). This raises the urgency of rethinking question selection so that VAAs serve democratic education without distorting the party system.

Data and methods

We use the parties' answers to the full questionnaire of 65 questions put to all parties before the final selection of 38 questions for the WahlSwiper 2025 (Reinbold & Schleehauf 2026, forthcoming). Five criteria are applied in a multi-stage procedure to derive an alternative short questionnaire that better differentiates the parties:

- (1) absolute answer variance across all 26 parties (baseline);
- (2) each of the seven relevant parties answers one question uniquely;
- (3) each party differentiates itself within its left or right bloc (7–n times), with n being the number of parties within their bloc;
- (4) pairwise comparisons: each of the seven parties differs from every other at least ten times;
- (5) thematic breadth: all topics with more than three questions in the pre-selection remain represented.

Combining the criteria yields eight scenarios (A-H, see Figure 2 for included criteria), compared with the status quo (WahlSwiper 2025) via an agreement matrix and hierarchical cluster analysis.

Results

Selecting questions purely by overall variance (Scenario A) reproduces or even increases agreement on the right of the spectrum; AfD and FDP rise to about 75% agreement (see Figure 1) (Reinbold & Schleehauf, forthcoming).

Differentiation improves only once pairwise comparison (criterion 4) is included. In Scenarios D, F, G and H the AfD-Union distance first exceeds its WahlSwiper-2025 level, and agreement between Die Linke and SPD/Greens drops well below the initial 78.9%.

The hierarchical cluster analysis (Figure 2) shows the left and right blocs moving closer while within-bloc distances grow. Notably, the BSW shifts from the left bloc into a right cluster (with AfD, Union, FDP) in every scenario containing criterion 4.

A hard limit remains: SPD and Greens cannot be separated, they differ in only 5 of 65 questions, so their agreement cannot fall below about 86%.

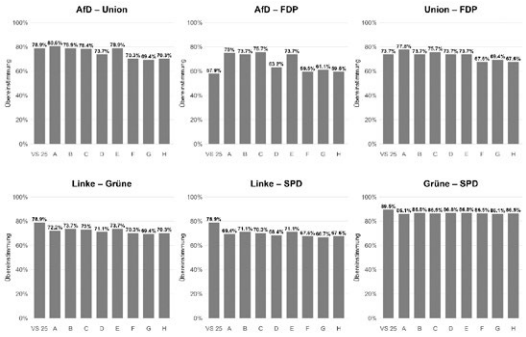


Figure 1. Percentage match between the parties for six selected pairings, by scenario. Source: Reinbold & Schleehauf (forthcoming). Eight question selection scenarios based on the combination of five party differentiation criteria (see Data and methods).

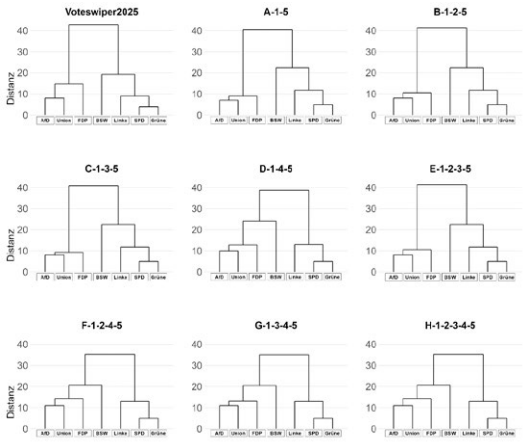


Figure 2. Hierarchical cluster analysis of parties for all questions and by scenario (Ward D², binary voting data). Source: Reinbold & Schleehauf (forthcoming). Eight question selection scenarios based on the combination of five party differentiation criteria (see Data and methods).

Discussion and conclusion

1. Question selection is an effective lever, yet the dominant logic of maximizing variance across all parties does not reduce and may even worsen the diagnosed distortions (Reinbold & Schleehauf, forthcoming).
2. Pairwise differentiation within blocs is the most effective tool against systematically polarized mismatches (ibid.).
3. Where parties programmatically converge strongly (SPD/Greens), no optimized VAA can or should manufacture distance.

The recommendation is therefore a multi-stage selection that treats variance as a starting point and thematic breadth as a minimum, complemented by systematic within-bloc and pairwise differentiation strengthening the *filtering function* of VAAs (Isotalo 2021) instead of providing only a vague bloc recommendation.

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Digital Guides or Polarization Accelerators? Question Selection in Voting Advice Applications and Its Effects on Favoring the Political Extremes

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Voting Advice Applications (VAAs) have become a central feature of modern electoral campaigns. In Germany alone, the 2025 federal election saw approximately 26 million uses of the Wahl-O-Mat and 3.5 million uses of the WahlSwiper[1]. While decades of research have emphasized the positive contribution of these tools to political education[2] [3] [4], a more critical strand of scholarship has recently drawn attention to their potentially unintended consequences[5]. In particular, Fröhle et al.[6] and Wagschal[7] demonstrate that VAAs may actively amplify electoral polarization by systematically favoring parties at the ideological extremes. We take up this concern and examine whether alternative approaches to question selection could mitigate such polarizing effects.

The currently dominant logic of question selection in VAAs seeks to maximize response variance across all parties and to cover a broad range of salient political topics. Binary answer formats (yes/no), without a neutral option, force users into clear-cut positions that often align more closely with the profiles of ideologically sharp-edged parties. As a result, parties such as the AfD and Die Linke receive a disproportionately high share of "matches," while centrist parties are structurally disadvantaged. The AfD, for instance, appeared in the top-three matches of 95.7% of its original sympathizers; by contrast, the FDP achieved this for only 38.5%, the SPD for 52.3%, and the Greens for 50.9%[8]. Critically, when a user's preferred party does not appear among the top matches, the probability of a short-term shift in voting intention triples[9]. This raises the urgency of rethinking question selection so that VAAs serve democratic education without favoring fringe parties.

Against this backdrop, we analyze whether a redesigned question selection process could produce a more balanced distribution of matches; one that better differentiates between parties within the same ideological camp and thereby reduces the structural advantage currently enjoyed by the political extremes. The empirical basis is the full questionnaire of the WahlSwiper for the 2025 Bundestag election, comprising 65 questions that all participating parties answered prior to the final selection of 38 items[10].

We develop a multi-stage selection framework built around five criteria. Building on the binary answer pattern with yes as 1 and no as 0, Criterion (1) selects questions according to the highest overall variance across all parties. Criterion (2) ensures that each of the seven electorally relevant parties (CDU/CSU, SPD, AfD, FDP, Greens, Die Linke, BSW) is represented by at least one question to which it gives a unique answer. Criterion (3) requires that each party is differentiated from others within its own ideological camp a minimum number of times. For this sake we divided the seven parties into two camps; a left-of-center camp comprising SPD, the Greens, the Left and the BSW and a right-of-center camp consisting of the Union parties, the FDP and the AfD[11] [12]. Criterion (4) introduces pairwise comparisons across all seven parties, stipulating that each pair must differ on at least ten questions. Criterion (5) guarantees thematic breadth by ensuring that all major policy areas are represented.

From these criteria, eight scenarios of different configurations are constructed[13]: Criteria (1) and (5) are applied in every scenario, with criterion (1) serving as the baseline and as the tiebreaker when selecting questions that satisfy criteria (2), (3), or (4). If a given criterion is underrepresented in the initial selection, questions with the weakest overall variance (criterion 1) are dropped and replaced by those with the highest variance among questions meeting the relevant criterion. Criterion (5) is applied last. This logic yields scenarios, which vary in which criteria are active and differ slightly in question count (36–38) due to tied variance values. All scenarios are then compared against the actual 2025 WahlSwiper as a status quo benchmark, using three methods – percentage agreement matrices, hierarchical cluster analysis, and multidimensional scaling (MDS) – to assess whether individual parties are better or worse differentiated than in the original tool, for which Fröhle et al. found at least short-term polarization effects.

The findings are consistent across all three approaches. Scenarios relying solely on general variance or adding only criteria (2) and (3) produce only modest changes relative to the actual WahlSwiper of 2025 and in some cases even increases agreement between liberal center right FDP and the far right AfD . Substantive improvements emerge primarily from criterion (4), the pairwise comparison. In scenarios incorporating this criterion, agreement between AfD and Union parties drops and the distance between Die Linke on the one hand and the SPD and the Greens on the other hand increases markedly. The cluster analysis shows the left and right blocs moving closer while within-bloc distances grow. Notably, the BSW shifts from the left bloc into a right cluster (with AfD, Union, FDP) in every scenario containing criterion 4. The MDS confirms that pairwise comparisons generate a broader spread of party positions while preserving the overall position structure. Regardless of the criteria used to differentiate parties, SPD and Greens cannot be separated, they differ in only 5 of 65 questions, so their agreement cannot drop below about 86%.

The paper recommends a multi-stage selection procedure in which variance serves as the starting criterion and thematic coverage as a minimum requirement, both supplemented by criteria ensuring differentiation within camps and between similar party pairs. Such an approach would strengthen what Isotalo (Isotalo, 2021) calls the “filtering function” of VAAs: rather than merely recommending a broad ideological camp, the tool would also help users to filter between more and less fitting options by increasing the distance between moderate and extreme options within that camp. Such a design improvement could meaningfully reduce the unintended polarizing effects of VAA designs.

VAAs aim to inform: Which options align with users’ positions? Do people’s positions match those of their previous voting intentions? We cannot verify whether the observed polarization merely reveals existing issue-based polarization or is VAA-induced. If the alignment alone leads to more polarized voting intentions within the democratic spectrum, that should not be normatively problematized. However, since we do not know to what extent question selection and other design choices contribute to polarizing vote choices (literature provides indications of this), we should at least reduce the risk of VAA-induced “mechanical” polarization, when we observe that part of the effect benefits anti-democratic or illiberal-democratic parties.

The intent of our analysis is thus to react in an exploratory way to evidence that tools designed to educate citizens in democracies about their electoral options could

accidentally undermine (liberal) democracy. It contributes to democratic resilience ex negativo, by neutralizing this potentially damaging side-effect of VAAs. A more thorough response to the observed polarizing effect of VAAs requires empirical exploration of design effects beyond our partly arbitrary criteria and especially a deeper understanding of what drives the observed polarization – users' enlightenment about their preexisting issue polarization or the bias of question selection. Future studies into different VAAs and their designs and diachronic comparisons of VAAs at different points in time are key to detecting some of the mechanisms underlying electoral polarization.

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Karlsruhe Institute of Technology

Institute for Information Systems

Feeds, Facts and Feelings: News Consumption and Its Association with Political Trust and Social Attitude

Evidence from Germany and the United States

Authors: Abel Rebekka , Pörtner Sarah

Supervisor: Dr. Jella Pfeiffer

Background & Motivation

As the media increasingly serves as the primary source of information about political events, social developments, and cultural debates, it has the potential to influence not only how individuals evaluate political institutions, but also how they perceive and engage with society. Understanding these relationships is particularly important in an era characterized by increasing political polarization, fragmented information environments, and growing concerns about misinformation and declining social cohesion.

Research Questions:

- Is the use of alternative news sources associated with lower political trust compared to traditional media?
- How are different sources of information connected to social attitudes?

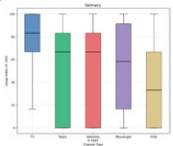
Data, Methods & Variables

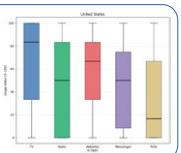
Data: SOSEC Panel Data – weighted
16th-21st of April 2026
Method: WLS Regression

Germany
$N_{Germany}$ = 2082

US
N_{US} = 2096

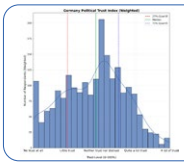
News Consumption Index

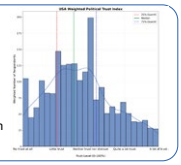




Traditional Media Index:
Sources: Family, public and private media
Channels: TV, radio, print
Alternative Media Index:
Sources: Alternative providers, influencers, ...
Channels: Social Networks, Messenger Services

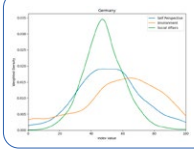
Political Trust Index

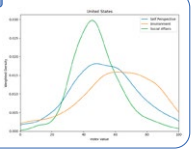




Comprised of:
- Trust in Congress
- Trust in Government
- Trust in Legal System
- Trust in Constitutional Court
- Trust in Public Administration
- Trust in Political Parties

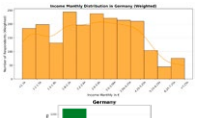
Social Attitudes Index



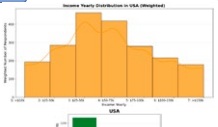


Comprised of three subindices:
- Self-perspective Index
- Environment Index
- Social Affairs Index

Control Variables

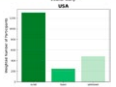


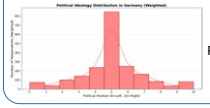
Income Distribution



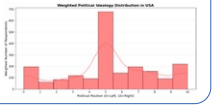


Residency Distribution



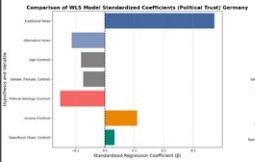


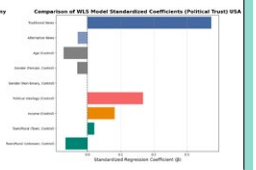
Political Ideology Distribution (10-left to 10-right)



Results

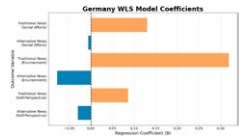
Political Trust

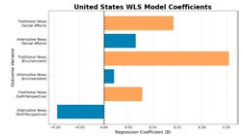


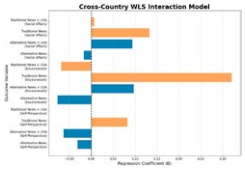


- The use of traditional media is positively associated with political trust ($b_{Germany}$ = 0.37, b_{US} = 0.35, both $p < .001$), with no significant country difference (interaction: $p = .471$).
- Greater reliance on alternative media for political news is associated with lower political trust, but only significantly in Germany ($b_{Germany}$ = -0.09, $p < .001$ vs. b_{US} = -0.02, $p = .304$) ($p_{Country\ Interaction} = .052$).
- Political ideology predicts trust in opposite directions (b_{US} = 1.40, $b_{Germany}$ = -1.71, both $p < .001$), a reversal formally confirmed by a highly significant country interaction ($b = -3.07$, $p < .001$).
- Women reported lower political trust than men in Germany ($b_{Germany}$ = -3.53, $p < .001$), but not significantly in the US (b_{US} = -1.41, $p = .130$) - difference was not formally confirmed by the interaction model ($p = .137$).

Social Attitudes







- Traditional news consumption is associated with more positive social attitudes across both countries
- Contrary to the hypothesis, alternative news consumption shows no consistent negative association with social attitudes (H2.1)
- The strongest positive associations were observed between traditional news index consumption and the Environment index (*Germany: B = 0.32; USA: B = 0.26*).
- Cross-country differences are generally small, indicating similar relationships between news consumption and social attitudes in Germany and the United States (H2.2)

Feeds, Facts and Feelings — News Consumption and Its Association with Political Trust and Social Attitudes

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Sarah Pörtner · sarah.poertner@gmail.com
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Increasing diversification of news consumption has raised important questions about its consequences for political trust and broader social attitudes. Levy [1] finds that social media news consumption leads to more ideologically segregated news exposure than other forms of media use, while Kleinnijenhuis et al.[2] demonstrates that traditional mass media continues to exert substantial effects on political perceptions even after accounting for social media influence. Building on these previous findings, the present study examines the association between traditional and alternative (encompassing social media) news consumption, political trust and social attitudes across Germany and the United States, using panel survey data from the Social Sentiment in Times of Crisis (SOSEC) project (N = 2,082 and N = 2,096, respectively). Comparing the two countries provides an opportunity to examine whether these relationships are context-specific or whether they remain consistent across countries with different media systems and institutional contexts. This contributes to a broader understanding of the generalizability of media effects. Furthermore, the social attitudes construct in this study was developed specifically for the present analysis and therefore provides an opportunity to explore association with the distinct dimensions of self-perspective, environment and social affairs that have received less attention in previous research. However, the construct represents simplified operationalization. In particular, the social affairs dimension encompasses a broad range of societal issues that could have been further differentiated into several more specific subdimensions. Such a more fine-grained classification was beyond the scope of the present study and should be considered in future research.

Traditional media use was positively associated with both political trust and social attitudes across both countries. Alternative media use was negatively associated with political trust only in Germany, while political ideology showed a robust, sign-reversing effect between the two countries (positive in the U.S., negative in Germany) representing the clearest evidence of country-level moderation in this study. Alternative media use showed no consistent association with social attitudes. Cross-country analyses revealed only small differences in the relationship between news consumption and social attitudes between Germany and the United States. These findings suggest that traditional media use is robustly associated with institutional political trust across two structurally different media systems. This is consistent with the idea that traditional media may play a stabilizing role in political trust[3] , though the cross-sectional design does not allow conclusions about the underlying mechanism or causal direction. Furthermore, the findings also suggest that media effects on broader social attitudes are more nuanced than previously assumed. Although traditional news consumption was consistently associated with more positive social attitudes, the expected negative effect of alternative news consumption was not observed. Rather than media use alone, Arias[4] argues that media influences social norms through the content of information and the creation of shared expectations. The present findings support this perspective by suggesting that variation in broader social attitudes is likely influenced by additional contextual factors beyond the type of news sources or the including controlling variables but also by the content, framing and social context in which the information is received.

To summarize, the consistent positive association between traditional media use, political trust and social attitudes suggests that it may play a role in sustaining institutional trust and social attitudes; a important prerequisite for citizens willingness to engage with and support democratic institutions. Future research should move beyond the cross-sectional design used here to establish the causation in these associations; For instance, through longitudinal panel designs or mediation analyses that examine whether trust in institutions and social attitudes are consequence or a precursor of media use patterns. Given that both political trust, social attitudes and reliance on alternative media may be particularly volatile during periods of heightened political salience, future studies could also focus on specific critical moments, such as national elections or periods of political crisis, to examine whether the observed associations are amplified or weakened under conditions of societal uncertainty.

[1] Levy, R. (2021). Social media, news consumption, and polarization: Evidence from a field experiment. American Economic Review, 111(3), 831-870.

[2] Kleinnijenhuis, M., van Hoof, A. M. J., & van Atteveldt, W. (2019). The combined effects of mass media and social media on political perceptions and preferences. Journal of Communication, 69(1), 1-24.

[3] Levy, R. (2021). Social media, news consumption, and polarization: Evidence from a field experiment. American Economic Review, 111(3), 831-870.

[4] Arias, E. (2019). How does media influence social norms? A field experiment on the role of common knowledge. SSRN Electronic Journal.

HOW ARE YOU, DEMOCRACY? · Academic Conference on Sentiment & Polarization in Times of Crises · Karlsruhe, 25 June 2026

Mannheimer Zentrum für Europäische Sozialforschung
Research on Politics and Societies

Populist Alternative News, Platform Gatekeeping, and Democratic Sentiment across Three German Election Campaigns

Ruben L. Bach University of Mannheim · Mannheim Centre for European Social Research (MZES)
r.bach@uni-mannheim.de · *A multi-study synthesis combining web-tracking (digital trace) data with multi-wave panel surveys*

The question

Do **populist alternative news media (PANM)** erode trust, deepen polarization, and fuel the rise of the radical right or do they mainly *reflect* convictions people already hold?

- **Most evidence is weak:** it rests on self-reported media use (notoriously inaccurate) and cross-sectional designs.
- **The hard problem:** separating the effect of exposure from the dispositions that draw people to these outlets.
- This work pairs an objective measure of behaviour with attitudes over time.

Data & design

Three German election campaigns, each combining fine-grained web-tracking with multi-wave panel surveys:

2017	2019	2021
Bundestag	European Parl.	Bundestag
N = 1,523	N = 1,009	N = 2,112

- **Outlets:** an exhaustive, pre-classified list of populist alternative news domains.
- **Behaviour:** every PANM page visit, plus the referring URL (Facebook, search, web-mail, direct).
- **Content:** topic modelling + named-entity recognition on the articles people actually read.
- **Effects:** within-between (fixed-effects) panel models, where each person serves as their own control and we can estimate both within and between effects.

WHY IT MATTERS

Behaviour is **measured, not self-reported**, so exposure can be separated from the dispositions that lead people to seek these outlets, and tracked **within the same person over time**.

A niche, concentrated audience

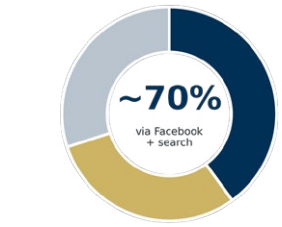
1 in 6 internet users visited a PANM site at least once, even in the mobilizing 2017 campaign. Fewer did in 2019.

>90% of 2021 panelists registered no visit at all. PANM remain a fringe of the information diet.

~80% of all 2021 visits were generated by just the ten heaviest consumers. Use is extremely skewed.

Attention is platform-gated

Exposure is structured *less by deliberate seeking* than by platform gatekeeping. About 40% of visits came from Facebook alone and a further third from search engines.



→ *Unchanged across 2017 & 2019. A large share of exposure sits inside the algorithms of a few intermediaries, raising questions of* ***algorithmic accountability****.*

~40% of all PANM traffic came from **Facebook alone** and roughly another third from search engines.

A distinct attitudinal profile

Across all three campaigns, PANM users differ sharply from non-users:

- **Lower trust** in politics and in mainstream media
- **Stronger populist attitudes**
- **More sympathy for the AfD** : even occasional, incidental contact tracks higher AfD vote likelihood
- **More climate-skeptical** issue positions

PANM act as ***partisan selective exposure*** *embedded in a broader diet. PANM complement to legacy news, but do not replace them.*

Distinct content, modest effects

- **Less diverse, more politicized:** alternative outlets cover far fewer topics and politicize even valence issues.
- **Climate framed as elitist:** environment coverage is dominated by party politics and anti-mainstream actors: a nationalist "nature-conservation" frame, less "climate change."
- **Climate framed as politics:** PANM focus much more on the politics of climate change than legacy media.

DOES IT CHANGE MINDS? Within-person evidence

- **Mostly null short-term effects** on populist attitudes, trust, democracy support, immigration, climate, polarization.
- **Differences are between users and non-users** — not heavy vs. light — and they largely predate the campaign.
- **Two exceptions:** lower satisfaction with democracy over time, and, paradoxically, somewhat greater environmental concern.

Take-aways

1. Dramatic short-term narratives overstate PANM's persuasive power; dynamics look slow & reinforcing.
2. The strongest leverage for democratic resilience lies with the intermediaries that route attention and less with the audiences.
3. Pairing behavioural traces with panels validly captures exposure and sentiment. Small high-exposure samples, untracked apps & short windows remain real limits.

The three studies behind this poster — *scan to read the full papers*

mzes

Populist alternative news use and its role for elections: Web-tracking and survey evidence from two campaign periods. (with P. Müller)
New Media & Society

Alternative News, Alternative Views? How populist alternative news consumption contributes to political attitudes (2021 German federal election). (with J. Areal and P. Müller)
Working paper · OSF preprint

Environmental Topics on the Alternative Agenda: Content and Effects of Alternative Media Coverage. (with J. Areal, D. Lajić, and J. Behnert)
Int. Journal of Public Opinion Research

Populist Alternative News, Platform Gatekeeping, and Democratic Sentiment across Three German Election Campaigns

Ruben L. Bach · r.bach@uni-mannheim.de
University of Mannheim

Concerns that populist alternative news media (PANM) erode trust, deepen polarization, and fuel the electoral rise of the radical right have become central to debates about democratic resilience. Yet much of the evidence rests on self-reported media use, which is notoriously inaccurate, and on cross-sectional designs that cannot separate the effects of exposure from the dispositions that drive people toward these outlets in the first place. This contribution synthesizes a research program that addresses both problems by combining fine-grained web-tracking (digital trace) data with multi-wave panel surveys collected during three German election campaigns — the 2017 Bundestag election, the 2019 European Parliament election, and the 2021 Bundestag election. Together, these data allow us to ask, with an objective measure of behavior, how PANM use relates to citizens' attitudes toward the political system, the media, and salient crisis issues.

A first set of findings concerns reach. Even when an exhaustive list of outlets is considered, PANM remain a niche phenomenon: roughly one in six internet users visited such a site at least once during the highly mobilizing 2017 first-order campaign, fewer did so during the 2019 second-order election, and in 2021 more than nine in ten panelists registered no visit at all. Consumption is heavily skewed among a small group of intensive users who account for the bulk of traffic (in 2021, the ten heaviest consumers generated roughly 80% of all visits). Crucially, however, attention is structured less by deliberate seeking than by platform gatekeeping: about 40% of visits to PANM originated from Facebook and roughly another third from search engines, together channeling around 70% of all traffic. This pattern was essentially unchanged between the 2017 and 2019 campaigns. This locates a substantial share of exposure within the algorithmic infrastructure of a few large intermediaries, raising pointed questions of algorithmic accountability.

Who is reached, and with what consequences? Across all three campaigns, PANM use is robustly associated with a coherent "alternative" attitudinal profile: lower trust in politics and in mainstream media, stronger populist attitudes, greater sympathy for the radical-right AfD, and more climate-skeptical issue positions. Exposure is a strong correlate of populist vote choice. Even occasional, incidental contact is associated with a higher likelihood of voting for the AfD. This is consistent with the idea that PANM function as a form of partisan selective exposure embedded within broader information diets rather than as a replacement for legacy news.

What is actually consumed, and does it change minds? Content analysis of the articles people read (using topic modeling and named-entity recognition) shows that alternative outlets are far less topically diverse than mainstream media and politicize even ostensibly valence issues: environment-related coverage, a prominent issue during the 2021 election, is dominated by party politics and anti-mainstream actors, framing climate protection as an elitist, economically harmful, and internationally driven project. Despite this distinctive content, the longitudinal evidence on persuasion is sobering. Within-person models, in which individuals serve as their own controls, yield mostly null short-term effects of changes in PANM consumption on populist attitudes, trust, support for democracy,

immigration, climate, and affective polarization.

The clear and consistent differences are between consumers and non-consumers, not between heavier and lighter users, and they largely predate the campaign. Two exceptions recur: exposure is associated with lower satisfaction with democracy over time and, counterintuitively, with somewhat greater stated concern for environmental protection. This paradox may be explained by issue salience and by a nationalist "nature-conservation" framing distinct from "climate change.“

Taken together, the picture is one of a small, platform-amplified, and attitudinally distinctive audience whose convictions appear more plausibly reinforced and maintained than abruptly converted by alternative news. For the study of democratic sentiment in times of crisis, three implications stand out. First, dramatic short-term narratives likely overstate PANM's persuasive power. Media effects are generally modest and tend to accumulate gradually rather than appear abruptly; while PANM's distinctive content makes somewhat stronger effects plausible, our findings are more consistent with slow, reinforcing dynamics than with rapid persuasion. These dynamics are poorly suited to conventional panel windows. Second, the most promising leverage point for democratic resilience may lie less with audiences than with the intermediaries that route attention to them. Third, and methodologically, pairing behavioral trace data with panel measurements offers a validated way to jointly capture exposure and sentiment, while also exposing real limits (small high-exposure subsamples, untracked apps and offline sources, short electoral windows) that crisis-period research must confront. The poster invites cross-disciplinary discussion of both the substantive and the measurement challenges this raises.

Karlsruher Institut für Technologie

Why Conspiracy Theory Communities Endure:
Feedback, Habits & Community Context

Veronika Batzdorfer veronika.batzdorfer@kit.edu

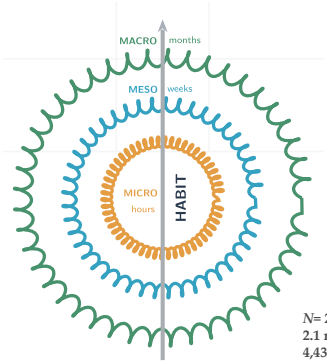
The gap: Prior work examines *single timescales* — content, motivation, or network structure — but misses the **temporal architecture** of engagement.

Habit as mechanism: Connects reinforcement learning (short-term) with social identity theory (long-term) through a measurable behavioral construct.

Platform Intervention
Remove upvotes
Delay feedback
Content moderation

×

CT Community
Continues posting
Maintains cohesion
Resilient to exclusion



N= 2,711 users
2.1 milion Voat[2] posts
4,435 subverses

Pipeline

1. Behavioral Embedding[1]

User–subverse matrix → Word2Vec → PCA. Continuous ideological scores validated against human labels (AUC 0.80).

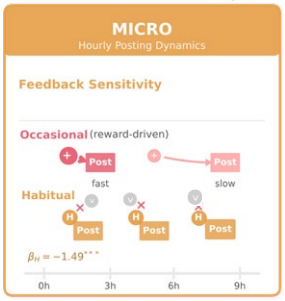
2. Evolutionary Features

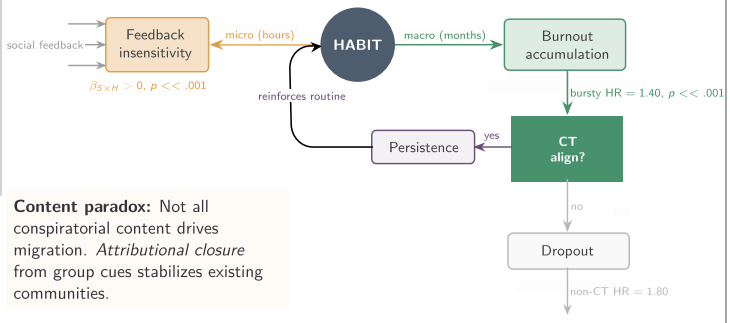
Five theory-driven narrative features (Secrecy, Pattern, Threat, Actor, Action) via fine-tuned BERT. Grounded in cognitive evolution.

Conditional resilience: Community persistence is not about reward maximization but about **ideological buffering** against punishment.

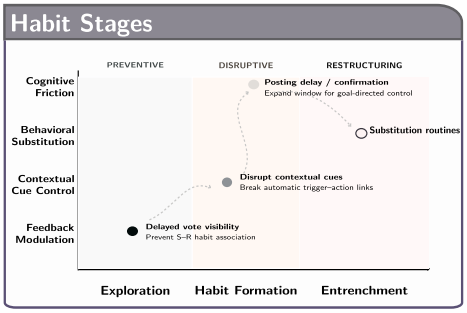
[1]Waller, I., & Anderson, A. (2021). Quantifying social organization and political polarization in online platforms. *Nature*, 600(7888), 264-268.
[2]Mekacher, A., & Papasavva, A. (2022, May). "I Can't Keep It Up." A Dataset from the Defunct Voat. co News Aggregator. In *Proceedings of the International AAAI Conference on Web and Social Media* (Vol. 16, pp. 1302-1311).

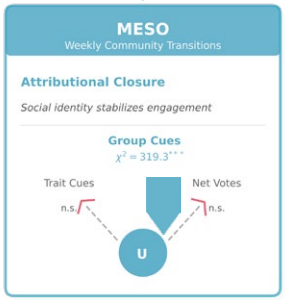
The Conditional Habit Loop

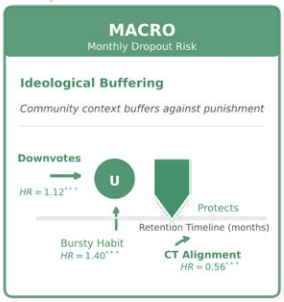




Content paradox: Not all conspiratorial content drives migration. *Attributional closure* from group cues stabilizes existing communities.







Funding: Social Media for Democracy (SoMe4Dem), EU Horizon Europe

Why Conspiracy Theory Communities Endure: Feedback, Habits & Community Context

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Karlsruhe Institute of Technology (KIT)

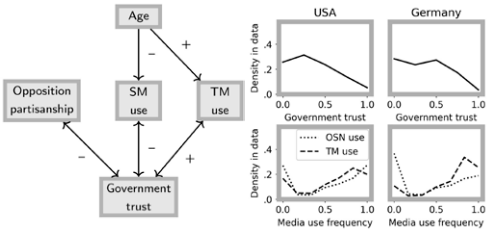
We investigate the behavioral mechanisms that sustain participation in online conspiracy theory (CT) communities, analyzing 2.1 million posts from 2,711 users across 4,435 subverses on Voat. Using survival analysis and hierarchical mixed-effects models, we examine how social feedback, content characteristics, and posting habits drive long-term engagement. Crucially, we find that habitual posting reduces sensitivity to social reinforcement, decoupling user participation from upvotes and downvotes. While group-oriented CT signals decrease community engagement, trait-oriented signals—such as allegations of secrecy—have little effect. Furthermore, ideological alignment within CT subverses mitigates the disengagement typically associated with habitual posting. These results reveal that the structural resilience of fringe online spaces is driven by an interaction between habit formation, reinforcement dynamics, and community context.

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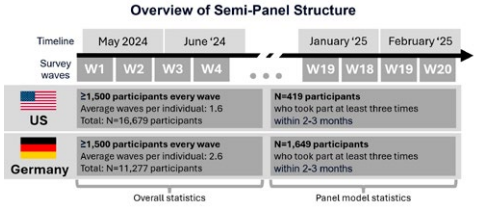
Diverging associations of traditional versus social media with government trust

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Trust in government and institutions is a cornerstone of functioning representative democracies. While previous research documented negative associations between social media use as a news source and institutional trust, temporal dynamics and even basic moderating factors remain underexplored. We ask: How is the media use-trust association shaped by moderators like traditional media use, age and partisanship, and does it have a time component? A deeper understanding of these dynamics and heterogeneities is essential for democracies worldwide, particularly in the context of increasing social media use.



Methods



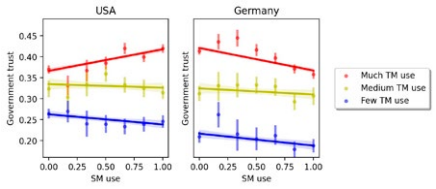
We analyze the Social Sentiments in Times of Crises (SOSEC) dataset comprising 20 representative panel waves in the United States and Germany, each consisting of at least 1,500 participants (totaling in N = 16,679 in the US, N = 11,277 in Germany). Specifically, this investigation relies on 20 waves conducted biweekly from 2024-05-23 through 2025-02-02, in parallel in both countries. The below table shows the survey items on media use:

Subitems for "How often do you get news from sources, such as...?"	Response options: 7-point Likert scale
"...public media institutions (National Public Radio (NPR), Public Broadcasting Service (PBS), and local public broadcasting services)"	"Several times a day" "Once a day" "3-4 times a week" "1-2 times a week" "3-4 times a month" "1-2 times a month" "Less frequently"
"...privately established media companies (Fox Broadcasting Company (FOX), American Broadcasting Company (abc), National Broadcasting Company (NBC), The Wall Street Journal, New York Times, US Today)"	
"...messenger services (e.g. Telegram, WhatsApp, Signal)"	
"...social networks (e.g. X/Twitter, Facebook, Instagram)"	
"...video platforms (e.g. YouTube, TikTok)"	

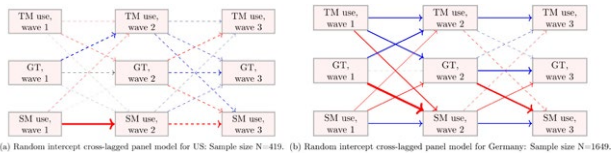
Government trust, frequently used as a proxy for measuring institutional trust, was measured via the following survey item: "Please take a look at the list below. How much trust do you have in each of the institutions mentioned?", one of the institutions listed being "The government". Responses were recorded on a 5-point Likert scale: "A lot of trust, Quite a lot of trust, Neither trust nor distrust, Little trust, No trust at all". Like related studies, we model trust as an exogenous variable predicted by media use in regression analysis. Further, we used the random intercept cross-lagged panel model (RI-CLPM), a type of structural equation model designed to detect and describe bidirectional associations in time series data for individuals.

Results

H1: Government trust is positively associated with news consumption via traditional media (H1.1), and negatively related to the use of social media (H1.2), especially in persons who consume little traditional media (H1.3).

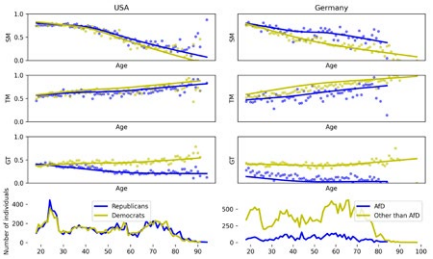


H2: An increase in social media use for news temporally precedes a decline of government trust in a mutually reinforcing feedback loop.



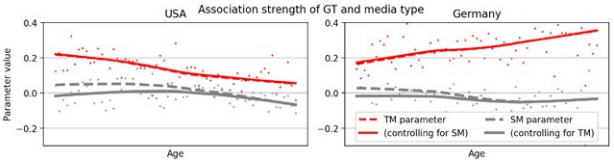
(a) Random intercept cross-lagged panel model for US: Sample size N=419. (b) Random intercept cross-lagged panel model for Germany: Sample size N=1649.

H3: Higher age is negatively associated with social media (H3.1) and positively with traditional media use for news (H3.2). This holds independently of partisanship (H3.3).



- Differences in media use and govenent trust between partisans increase with age.
- The difference is greater for AfD and non-AfD supporters in Germany than for Republicans and Democrats in the US.

H4: Opposition partisanship is associated with a stronger negative relationship between government trust to social media use (H4.1). The association strength of government trust and traditional media (H4.2) as well as social media (H4.3) do not depend on age.



Conclusion

When differentiating participants by levels of TM consumption, negative associations in the lower TM consumption groups hold in the US and across all groups in Germany. Age differences profoundly moderate the studied associations. Also, we demonstrate the central role of trust in the SM-GT relationship by determining its temporal primacy. This knowledge provides valuable context for efforts aimed at countering trust erosion, particularly among groups most affected: Individuals, who are already critical of the government, rely on SM for news and do not additionally consume TM, as well as older generations who use SM.

Diverging associations of traditional versus social media with government trust

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Functional democracies rely on citizens' trust in their institutions. Previous research showed that social media use for news is negatively associated with institutional trust. Yet, it is unclear whether there is a temporal ordering to this relationship and to what degree it is connected between generations and political leaning. This motivates the following research questions: How are the associations of social media use, traditional media use and institutional trust moderated by age and partisanship? Do they have a time component? To address this, 20 biweekly waves of a longitudinal survey dataset sampled in the United States and Germany are used. The analysis reveals that for younger people, the use of traditional media is on average connected to a positive association of social media use and institutional trust. Younger people using few traditional media, on the other hand, exhibit a negative association of social media use and trust. Further, in Germany, lower trust tends to manifest in participants 4-6 weeks earlier than higher levels of social media use appear. Habits of media use also diverge between supporters of government and opposition parties in both the United States and Germany. This divergence significantly increases with greater age. Lastly, the connection of social media use and government distrust is strongest in older participants and opposition partisans. Particularly in the context of increasing use of social media as a news source, understanding the variable role of media in different groups is crucial to resilient information ecosystems within democratic societies.

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Social Sentiment in Times of Crises

Institute for Information Systems

When Power Changes Hands

Event-Specific Reversals in Conspiracy-Related Beliefs During Trump's Early Second Administration

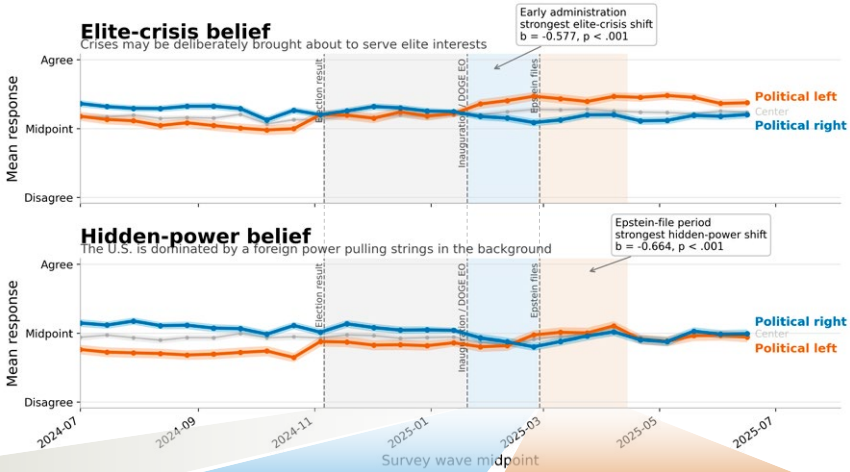
Conspiracy-related beliefs are often treated as stable dispositions or ideological traits.
We argue that they can also shift with political power: groups newly outside governing power may become more receptive to selected claims about hidden, illegitimate, or elite control.
We assume that different event phases activate different frames.

RQs

Do conspiracy-related beliefs shift among respondents newly positioned in- and outside governing power in the US?
Are those shifts specific to the type of power made salient by different events?

Design
Staged difference-in-differences
$Y^{cgt} = \alpha + \beta_5 (Post^t \times Left^g \times US^c) +$ *lower order terms* $+ \varepsilon^{cgt}$
Negative estimates = stronger relative endorsement among outside-coalition U.S. respondents

Robustness checks
Extensive sensitivity analyses across specifications:
· window stability
· placebo events
· phase-specific exclusions
· confounding-event exclusions
· FDR correction



Election-result shock / transition

Left respondents show an initial shift toward stronger endorsement of both conspiracy-related frames.

Early administration phase:
Inauguration + elite integration + DOGE-centered restructuring

The strongest and most stable shift – current crises may be brought about to serve elite interests.

Epstein-file period:
Hidden-power / accountability salience

Left-side endorsement of hidden-power dynamics increases after earlier right-side decline following inauguration.

Political power position matters.
Power change repositions groups as insiders or outsiders, shaping which frames become plausible

Event meaning matters.
Different events made different dimensions of power salient:
Early administration → elite integration / restructuring → elite-crisis belief
Epstein files → hidden networks / accountability → hidden-power belief

When power changes hands, conspiracy-related beliefs do not change uniformly.
Instead, different events coincide with different frame activations in different groups.



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When Power Changes Hands: Event-Specific Reversals in Conspiracy-Related Beliefs During Trump's Early Second Administration

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Conspiracy-related beliefs are commonly studied as stable psychological dispositions, ideological correlates, or consequences of misinformation exposure. This study instead asks whether endorsement of specific conspiracy-related beliefs changes when governing power shifts and whether different political events make different interpretations of power salient. We propose the concept of power-contingent frame activation. The argument is that citizens' receptivity to claims about hidden, illegitimate, self-interested, or elite power depends partly on their position relative to the governing coalition: electoral defeat may make such interpretations more resonant among those newly outside power, while event content determines which particular frame becomes salient. This perspective connects winner–loser research on institutional trust and democratic support with framing research showing that events make some considerations more accessible and applicable to political judgment.[1]

The contribution therefore goes beyond showing that electoral losers become more receptive to conspiracy-related beliefs. It proposes that changes in governing power alter the political relevance of particular interpretations, while the content of subsequent events determines which interpretation is activated. This combination helps explain why conspiracy-related attitudes may shift across ideological groups without assuming that underlying psychological predispositions change equally rapidly.

The empirical case is the transition into Donald Trump's second administration. We distinguish three phases that foregrounded different dimensions of power: (1) the election-result shock and transition following Trump's reported victory on November 6, 2024, which made the incoming governing coalition publicly determinate; (2) the early administration beginning with the January 20, 2025 inauguration and formal establishment of the Department of Government Efficiency, a period characterized by visible economic-elite integration and administrative restructuring; and (3) the Epstein-file period beginning with public claims about Epstein-related files on February 21 and followed by the first release of declassified files on February 27, which made hidden networks, information control, and elite accountability salient.

We analyze bi-weekly repeated cross-sectional survey data from the United States and Germany. Across the main analysis period from September 11, 2024, to April 24, 2025, the sample contained, on average, 1395 respondents per bi-weekly wave in the United States and 1546 in Germany after validity restrictions. Political orientation is measured using an 11-point left–right self-placement scale. Descriptive analyses include left-, center-, and right-oriented respondents; the inferential analyses contrast left- and right-oriented respondents as broad indicators of opposition to versus alignment with the incoming U.S. administration. The outcomes are two separately analyzed conspiracy-related items: an elite-crisis belief that current crises may be deliberately brought about to realize elite interests, and a hidden-power belief that the United States is dominated by

a foreign power pulling strings in the background. Trust in government is examined as a secondary indicator of perceived institutional legitimacy.

For each phase and outcome, we estimate a staged difference-in-differences-in-differences model. The estimand is the event-related change in the U.S. opposition–administration gap relative to the contemporaneous change in the German left–right gap. Germany is therefore a comparison trend rather than a fully untreated control. The German comparison is useful because it captures contemporaneous changes in ideological polarization and international exposure to the same news environment. The design does not assume that Germany was unaffected by U.S. politics; rather, it asks whether the U.S. left–right gap changed beyond the corresponding German trend. Responses are aggregated to country-by-orientation-by-wave means and estimated by weighted least squares, weighted by cell size, with survey-wave fixed effects, wave-by-left interactions, and standard errors clustered by survey wave. The design identifies changes in repeated cross-sectional group patterns, not within-person attitude change.[2]

The results are selective and frame-specific. During the election-result shock and transition, opposition-aligned U.S. respondents shifted toward stronger endorsement of both frames relative to administration-aligned respondents and the German comparison trend. The shift was statistically clear for the hidden-power belief ($b = -0.625$, $p = .017$, false-discovery-rate-adjusted $p = .035$) and directionally similar, although less precise, for the elite-crisis belief ($b = -0.478$, $p = .054$, adjusted $p = .080$). This initial reconfiguration is consistent with research showing that electoral outcomes can alter conspiracy-related beliefs and institutional evaluations among political winners and losers.[3]

During the early administration, the largest and most stable change occurred for the event-congruent elite-crisis frame ($b = -0.577$, $p < .001$, adjusted $p < .001$), whereas the hidden-power estimate was small and not statistically significant ($b = -0.102$, $p = .382$). Opposition-aligned respondents also became relatively less trusting of government during this phase ($p = .003$), indicating that stronger elite-crisis interpretations coincided with a broader deterioration in perceived governmental legitimacy. During the Epstein-file period, the pattern changed: the strongest shift occurred for the hidden-power belief ($b = -0.664$, $p < .001$, adjusted $p < .001$), while the elite-crisis estimate was weaker and not statistically significant ($b = -0.386$, $p = .196$). The longer descriptive trajectory suggests that this hidden-power shift was more temporally bounded than the early-administration elite-crisis shift.

The central findings remain directionally consistent across alternative temporal windows, event-study diagnostics, placebo dates, exclusions of major overlapping events, and alternative U.S. alignment measures based on vote choice and party affect. Nevertheless, the results should be interpreted as evidence consistent with power-contingent, event-congruent activation rather than as proof of a causal psychological mechanism. The event phases bundle several developments; the two principal outcomes are single items; the number of survey-wave clusters is limited; and the design cannot determine whether individuals changed their views or whether the composition of repeated cross-sections changed.

The findings have direct implications for democratic resilience. Conspiracy-related interpretations and institutional distrust are not confined permanently to one ideological camp; they may be re-sorted when power changes hands. Democratic transitions may

therefore create recurrent periods of interpretive vulnerability among electoral losers, especially when elite influence, institutional restructuring, secrecy, or accountability controversies become salient. Resilience strategies should consequently avoid treating conspiratorial sentiment as a fixed attribute of particular groups. Greater attention is needed to the event-specific narratives through which citizens interpret newly empowered actors, alongside transparent communication about administrative change, elite access, institutional safeguards, and accountability. Methodologically, high-frequency comparative surveys are particularly valuable because they can detect rapid, frame-specific changes that cross-sectional snapshots or annual surveys would obscure. Future research should analyze multi-item measures for each frame and direct indicators of media attention and perceived event salience to distinguish temporary activation from durable attitudinal change.

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Beyond the ban: co-engagement network signals on Nepali Reddit in the run-up to the Sep 8 Gen Z protest

Social Sentiment in Times of Crises

Nima Thing[1] (Independent Researcher) How are you, democracy? – KIT / FZI, Karlsruhe, 25 June 2026

Background

In September 2025, Nepal saw its largest youth-led protest in years. For weeks, young Nepalis online had been calling out "nepo kid" - the children of powerful politicians or elites flaunting while the country faced unemployment, inequality, and entrenched corruption. On 28th Aug. the Nepal Government gave 26 media platforms a one-week registration ultimatum; when it lapsted it blocked all of them on 4th September.

On 8 September, thousands gathered at Maitighar in Kathmandu; the state responded with lethal force and 19 young people were killed, and the government fell soon after. This poster asks a narrow, measurable question about the run-up: in the weeks before people filled the streets, did the public online conversation visibly reorganize? Reddit is small in Nepal, but unlike most platforms its communities are clearly bounded and its users carry the same pseudonym across them — so we can actually measure how a cohort moves between communities over time.

Research Questions

RQ1: How did the cohort's community network change from baseline → pre-ban → ban-peak?

RQ2: Did connectivity across regions (Nepal / India / global) widen or contract as the ban approached?

RQ3: Which communities held or gained bridging (brokerage) roles, and how stable were they?

Data & cohort

- 5185 authors
- r/Nepal, r/NepalSocial, r/Nepal360

A (baseline) 15-27 Aug (13d)
B (pre-ban) 28 Aug - 3 Sep (7d)
C (ban-peak) 4 Sep - 8 Sep (09:00 NPT) (4.4d)

Unit of analysis:

- *the sub-reddit network built from where these co-post.*
- *Public post only;*
- *authors anonymised, reported in aggregate*

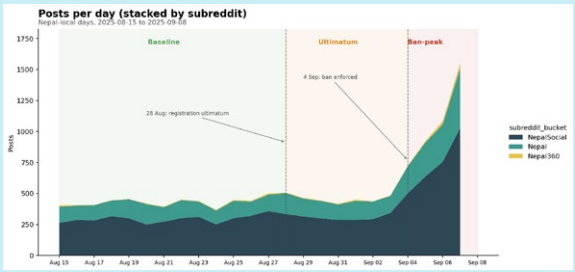
Methodology

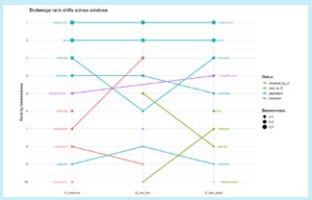
1. **Network Construction**
   - **Links:** Connected two subreddits if they shared >= 3 authors
   - **Weights:** Weighted by **Jaccard Similarity** (proportional user overlap) to prevent massive subreddits from dominating the map.

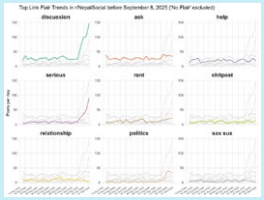
2. **Statistical Validation**

- **Randomized networks:** The observed networks are more structured than chance, so the pattern is not just random noise.
- **Equal-time check:** The windows are unequal in length. A 13-day baseline naturally captures more subreddits than a 4.4-day ban-peak window. After matching the baseline to the same 4.4-day exposure, most raw shrinkage disappears, so we treat contraction as modest.
- **Threshold Sensitivity:** We chose >=3 because one or two shared users can easily be accidental or idiosyncratic. Three shared users is a conservative minimum for saying two subreddits are meaningfully connected by the cohort, while still keeping enough of the network to analyze.

Results

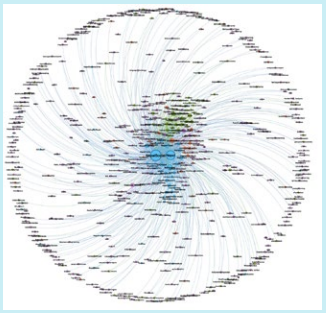




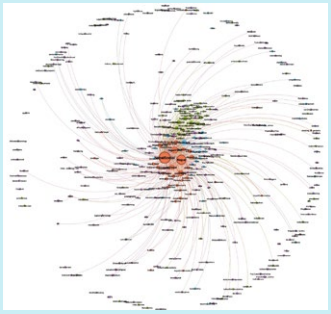


Main finding:
The Reddit network did not simply get louder before the protest. Around the ban window, it became more politically concentrated. Raw network counts shrink sharply, but most of that shrinkage is explained by unequal observation windows. After correcting for this, the safer finding is compositional: bridging roles move away from meme and entertainment subreddits and toward India-facing political spaces and Nepali student/engineering communities.

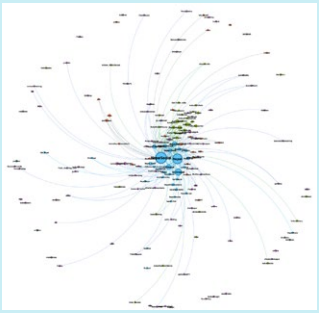
Did the network really shrink?



Baseline window



Ultimatum Window



Ban-Peak

How to read the maps.
The maps show raw observed networks across the three event windows. Because the windows are unequal in length, the large visual shrinkage should be read cautiously. A duration-matched check shows that most of the shrinkage comes from observing the baseline for longer. After correction, the network still narrows, but modestly.

What this shows

Around the ban, this Reddit cohort's public conversation shifted toward politics. Serious, discussion, and politics flairs rose; and bridging roles rotated from meme/entertainment communities toward India-facing political and Nepali student/engineering spaces. These are public-layer indicators of discursive reorganization, not proof of coordination or prediction.

What it can't show

Three subreddits are not Nepali public opinion. The cohort likely skews urban, young, digitally fluent, and English/Roman-Nepali literate. The dramatic raw network contraction is mostly an artifact of unequal observation windows; the corrected effect is modest. The analysis cannot observe private coordination on WhatsApp, Messenger, Signal, Viber, Telegram, or Discord, and it should not be read as causal evidence.

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Beyond the ban: co-engagement network signals on Nepali Reddit in the run-up to the Sep 8 Gen Z protest

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On 4 September 2025, the Government of Nepal blocked 26 major social-media platforms – including Meta, YouTube, and X – after a seven-day registration deadline passed. On 8–9 September, a youth-led "Gen Z" protest filled Kathmandu's streets; police responded with lethal force, and the government fell within 48 hours. While journalists thoroughly documented the aftermath of the protests, quantitative social science research is limited. Existing literature has heavily focused qualitative aspects of the movement's agendas[1], networked legitimacy[2], political windows[3], platform-governance failures[4]. This body of work tells a unified story: deep-seated frustration with established parties has propelled anti-elite figures/groups in recent years, such as former independent mayor and current Prime Minister Balen Shah, or alternative political forces such as Rastriya Swatantrata Party (RSP) into power. More importantly, however, existing literature overlooks how social media discourse evolved before the unrest began. Specifically, to the best of my knowledge, no studies have mapped engagement volume and the shift of decentralized collectives in terms of their distinct clusters, density, and structure.

Collective-action research has long argued that mobilization follows a "tipping point" pattern: people decide whether to join partly based on how many others they believe are already involved, so a shift among a few well-connected people can flip a quiet situation into a moving one[5]. Network research adds that this depends on the network's shape, not headcounts: behavior spreads more easily along ties connecting separate communities than within one tightly-knit group[6]. This motivates looking at which communities bridge others, not only at posting volume: near a tipping point, bridging position should shift before volume does. This framework is used only as a lens for the findings below.

While data published in Meta's advertising resources indicate that Facebook had 14.8 million users in Nepal in late 2025—cementing its status as the country's most-used platform—newer political ripples have found a home elsewhere[7]. Prior to the state's suspension of 26 digital networks, a viral online trend centered around the #NepoBaby and "nepokids" campaign began—exposing how politicians and elite youth benefited from corrupt funds—before spreading broadly across Facebook, Instagram, and TikTok[8]. This mobilization followed a regional pattern of youth-led digital unrest previously seen across Bangladesh as well as Southeast Asian nations like Indonesia and the Philippines[9]. Due to research API access limitations, the author relied on Reddit's third party tooling, in compliance with ethical guidance. Existing accounts describe what happened on the street, not how preceding online conversations about small, isolated grievances were gradually amplified to connect with broader systemic discontent. This leaves a testable problem: whether change in the structure of public discourse, not merely its volume, is observable ahead of an offline mobilization, and can be told apart from a measurement artifact. RQ1: Before the protest, did the conversation change in kind – shifting toward different communities engaging with one another – rather than simply growing louder? RQ2: Did such a shift precede the visible rise in posting activity, or emerge only alongside it? RQ3: Because the periods compared are of unequal length, some differences may just reflect that one period was observed longer – which patterns remain once this is accounted for?

The cohort comprises 5,185 Reddit users active in three Nepal-focused communities (r/Nepal, r/NepalSocial, r/Nepal360) between 15 August and 8 September 2025, collected via Arctic Shift, a public mirror of Reddit's Pushshift archive, and split into three windows: a 13-day baseline (15–27 August); a 7-day ultimatum window before the block took effect (28 August–3 September); and a 4.4-day ban-peak window, ending just before the protest (4–8 September). For each window I build a subreddit co-participation network: two subreddits are linked if at least three cohort members posted in both, with tie strength given by the Jaccard index (share of shared users, so large subreddits are not automatically treated as more connected). Bridging position – which communities sit between otherwise separate parts of the network – is weighted betweenness centrality, compared against a configuration-model null of 100 randomly rewired versions preserving community size.

Comparing a 13-day window with a 4.4-day one raises an obvious confound: the longer a period is observed, the more communities and connections are captured by construction, even absent real behavioral change – which alone could produce a misleading appearance of contraction. To rule this out, the two longer windows were reanalyzed as though observed for only 4.4 days: a matching short slice of each user's activity was resampled and the network rebuilt under identical rules, three hundred times per window.

Two patterns remain robust after this check. First, daily posts (excluding comments) barely moved between the ultimatum and the block, then rose about 2.3-fold once the block took effect; including comments, the rise is smaller, about 1.5-fold. Posts and comments using ban- and protest-related terms, meanwhile, rose roughly 12.5-fold over the same period – conversation shifted well before its volume did, on either measure. Second, the communities bridging otherwise separate parts of Reddit changed: entertainment and meme communities, the principal early bridges, dropped out of the leading ranks, replaced by India-focused political communities and one engineering-student community – a change in which communities connect the conversation, not how much conversation there is, that survives the check and matches the framework above, though one case cannot confirm a general theory. A smaller, genuine effect also survives: matched for observation length, communities

reached still decline by roughly 30 percent by the block, and the network becomes somewhat more tightly connected, not looser. The fixed set of 123 communities present in all three windows appeared to grow less interconnected over time – but on the ban-peak window's timescale, this reverses. The conversation also appeared to turn inward toward Nepal-only communities – but controlling for observation length eliminated roughly 85% of this apparent shift, leaving any remaining change too small to separate from statistical noise.

Reddit is a narrow slice of Nepal's information environment: roughly 16.6 million Nepalis use the internet (56 percent of the population), but Reddit reaches only 557 thousand – 1.9 percent of the population, 3.4 percent of the internet-user base[10]. Its demographic skew (younger, urban, more English- or Roman-Nepali-literate) means this cohort speaks for a specific civic stratum, not Nepali public opinion.

VPN use complicates this further, in a direction that is not obvious: reaching blocked platforms plausibly narrowed the cohort to users already comfortable circumventing

restrictions, but reporting also documented an 8,000 percent surge in VPN sign-ups once the block took effect[11], suggesting the ban itself drove many first-time users toward VPNs rather than selecting only the tech-savvy. The net effect on sample composition is uncertain. Two further limitations are methodological. The data source misses content removed by moderators or automated filters, so all counts are lower bounds. Private coordination spaces – WhatsApp, Messenger, Signal, Viber, Telegram, Discord – sit outside this study; fieldwork on this case identifies these as where coordination occurred once platforms were blocked. Most importantly, structure changing ahead of the volume surge is consistent with a link to offline mobilization but does not establish one; a single case cannot support a causal claim.

Public platform data show a change in who connects the conversation and what it is about, ahead of where a simple post-count would show the same change. For democratic resilience, this matters less as an early-warning tool than as a caution: shutting down platforms to restrict speech can reshape which communities carry conversation across group lines, in ways a state — or researcher — watching only overall volume would miss until much later. The Social Network Analysis method framing here is particularly relevant because most Global-South democratic stress events occur precisely where standard measurement tools – affective-polarization surveys, long-running media-trust panels – are unavailable. The bipartite-projection and degree-preserving null design used here shows that cohort-level discourse restructuring can still be characterized from public, observable traces alone. Future work should extend this event-anchored design comparatively, across multiple platforms and other Global-South cases of platform disruption paired with mobilization.

Ethics Note: This project was conducted independently, without institutional ethics review. It uses only public, non-interactive data collected via Arctic Shift; no individual usernames or verbatim posts are reproduced, and all reported results are aggregate network and keyword statistics.

AI Disclosure: Generative AI and proof-reading tools were used in some limited parts of text in order to turn my writing concise and coherent.

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Cara Bengfort, Sophia Ernst

Patterns and Limits of Individual Solidarity with Ukraine

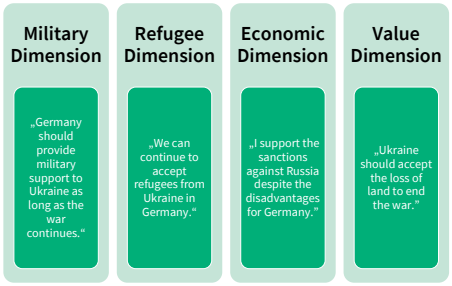
A multidimensional analysis of demographic factors and perceived individual costs in Germany

RQ: How are economic, refugee, military, and value-driven dimensions of individual solidarity distributed across demographic subgroups and how do they correlate with personal perceptions of economic concerns and fear of military escalation?

Motivation:

In democratic states, expressions of state-level solidarity require public support in order to be both legitimate and maintainable. Individuals must **be willing to bear personal cost for the benefit of another, that he or she perceives as similar in a certain, relevant regard** (Prainsack & Buyx, 2016). We theorise that thereby, such **individual-level solidarity** is likely restricted by the extent of that cost. In the context of the full-scale invasion of Ukraine, this analysis compares existing **levels of solidarity across four dimensions for different demographic groups** and **contrasts them to personal cost** both through **1) energy concerns and 2) fear of military escalation**.

Dimensions of Solidarity:



Hypotheses:

***H1a**. Perceived personal exposure to the energy crisis is associated with lower support for sanctions against Russia, even after controlling for income.*

***H1b.** The negative association between energy crisis exposure and sanction support is moderated by household income, with stronger effects among lower-income respondents.*

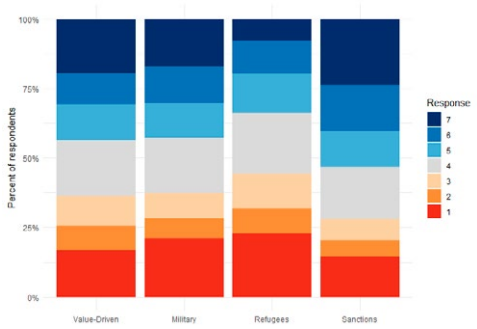
***H2.** A higher fear of military escalation is associated with lower support for military assistance to Ukraine across all four dimensions*

SOSEC-Data:

This analysis uses data from the ***Social Sentiments in Times of Crises*** project, which provides longitudinal semi-panel data about **individual feelings, attitudes and beliefs** in current times of overlapping crises. We compare responses from participants across all years captured by SOSEC data, starting in November 2022 and including data up to April 2026. The survey is conducted biweekly with roughly 1.750 participants across Germany.

Methodology:

Our analysis proceeds in two steps. 1) We explore the distribution of 1-7 Likert scale responses **of the solidarity dimensions across demographic subgroups** to assess baseline levels and change over time. 2) Using **linear regression models, we explore associations between sociodemographic factors and the solidarity dimensions**, as well as their relationship to cost factors**, including economic concern and fear of military escalation** to evaluate whether they constitute relevant limitations to our solidarity conception. We control for time and test interactions between income and economic distress indicators. Finally, we assess whether solidarity could be explored in an index.



Findings:

Women and men display comparable levels of solidarity, except for military solidarity, with is negatively correlated for female respondents. **Older individuals show greater support for sanctions and military assistance**, whereas **18-24 year olds express the greatest support for refugee reception**. For economic, military and refugee solidarity, **individuals with higher incomes and higher education levels are generally associated with higher levels of solidarity**. Education and age demonstrate no clear pattern for value-driven solidarity. **Western federal states and urban areas are associated with higher levels of solidarity than Eastern federal states and rural areas**, with the East-West differences appearing considerably more pronounced.
Perceived exposure to the **energy crisis**, as well as concerns about **paying bills, limiting consumption and job loss**, are associated with **lower support for sanctions** , even after controlling for income.
Fear of military escalation emerges as the strongest cost-related predictor, showing a particularly **strong negative association with military solidarity**, but remaining both significant and pronounced for the other dimensions.

Sources:

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Patterns and Limits of Individual Solidarity with Ukraine in Germany

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On February 24, 2022, Russia launched its full-scale invasion of Ukraine, which was, in Germany, subsequently characterized as a “Zeitenwende”, altering the geopolitical landscape of Europe. Demonstrations of country-level solidarity throughout the following years of war are well documented, including public declarations of solidarity, military and refugee support, and joint sanctioning efforts. In democratic state systems, long-term country-level solidarity rests on public support. This paper contributes to a comprehensive understanding of solidarity at the individual level within the German population and discusses the possibilities and limitations of individual solidarity with Ukraine.

The concept of solidarity is embedded in academic discussions of the term and summarised in a conceptualization by Prainsack and Buyx (2016), which centers on the acceptance of personal costs for the benefit of others. The SOSEC dataset allows to explore the distinction between four different dimensions of solidarity, 1) the support for sanctions against Russia despite disadvantages for Germany (economic dimension), 2) the acceptance of further Ukrainian refugees in Germany (refugee dimension), 3) the approval of German military support for Ukraine (military dimension) and 4) a rejection of the cession of territory to end the war (value-driven dimension). An overview of related studies allows for distribution assumptions about each dimension, which are tested against and extended by the SOSEC longitudinal semi-panel data between November 2022 and April 2026.

This analysis proceeds in two steps. Firstly, we explore the distribution of responses across demographic factors (age, education, gender, income, place of residence). Secondly, linear regression models show correlations between the solidarity dimensions and demographic factors, as well as their relation to cost factors, namely fear of military escalation and energy concerns. Interaction terms are included to account for potential connections between income and economic distress indicators. We control for time and other economic distress indicators. Finally, we explore whether solidarity could alternatively be explored as an index.

It is expected that solidarity dimensions manifest themselves differently across different demographic groups. Higher perceptions of personal affectedness by energy concerns, particularly among lower-income groups, are expected to be negatively correlated with support for sanctions. We further expect a higher fear of military escalation to correlate with lower solidarity across all dimensions.

The solidarity dimensions were measured on a 1-7 Likert scale. In response percentage shares, the top two responses were initially more prominent among male respondents, among older individuals, individuals with higher education levels and higher incomes, as well as for individuals from Western federal states and urban areas. However, these groups also experienced the greatest declines in top-two responses with time, mostly to the benefit of mid-range categories. Regression analyses showed a similar pattern: education is a particularly impactful predictor, with rising solidarity for higher education levels. Age is also significant, though the pattern is less consistent

The youngest cohort displays the greatest solidarity with refugees, whilst other solidarity dimensions increase with older age brackets. Place of residence, meaning East/West and urban/rural divides, is a consistent predictor, with higher solidarity in Western federal states and urban areas, though the East/West variable is the more relevant predictor. Personal exposure to energy concerns is negatively associated with economic solidarity with Ukraine. Greater perceived exposure to the energy crisis and related concerns about being able to pay bills, limitations on shopping and concerns about job loss were associated with lower support for sanctions against Russia. These results remained statistically significant even after controlling for income. Fear of military escalation is the strongest predictor among the included cost factors. It has the strongest negative association for military solidarity, but is significant across all dimensions.

This paper thereby refines conceptions of individual solidarity in the context of the war in Ukraine and can inform democratic state-level solidarity policies, further research on the conceptualization of individualized solidarity, and practical applications to security and energy policy.

Selective Democratic Vulnerability:

Affective Cleavages and Democratic Restraint among Young South Koreans

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BACKGROUND & DESIGN

When do post-democratization citizens endorse restrictions on opposition rights, accept non-electoral authority, or treat democracy as contingent under crisis?

- Standard AP research often misses how identity depth shapes democratic consequences.
- Key design: AP × identity attachment identifies when AP erodes democratic restraint.

Theoretical framework

- Svolik (2019): partisan conflict leads citizens to trade democratic principles for partisan protection
- Extends the argument beyond electoral choice; adds gender as a politically activated non-partisan identity.
- Predicted asymmetry: male grievance mobilization and conservative institutional-threat perception.

Identity Attachment
centrality · solidarity · commonality
↓
Affective Polarization
camp-aligned in-group favoritism (0–10)
↓
Democratic Vulnerability
protest · leadership · regime

Hypotheses

- **H1** Identity attachment → matched AP (diagnostic stage)
- **H2** AP → protest restriction (asymmetric; male/cons. side)
- **H3** AP → leadership tolerance (asymmetric; cons. side)
- **H4** AP → regime-preference vulnerability (asymmetric)

Predicted vulnerable side:
Male · Conservative · PPP-aligned †

† People Power Party (PPP) holds only via within-camp identity depth (secondary analysis), not the main asymmetry test.

Data & methods

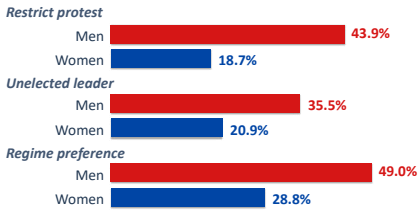
- Original online quota survey, Feb–Mar 2025
- N = 545, born 1987–2007
- Identity domains: Gender N = 545 | Ideology N = 343 | Partisan N = 176
- Three identity domains × three democratic vulnerability outcomes
- OLS + HC3 SEs; Δ = vulnerable camp − other camp

EMPIRICAL RESULTS

Descriptive: democratic vulnerability in cohort (N = 294)

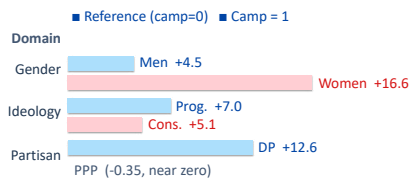
28.6%	32.0%	39.5%
Openness to unelected leader	Support restricting anti-gov. protest	Regime-preference vulnerability

Gender gap (unadjusted percentages):



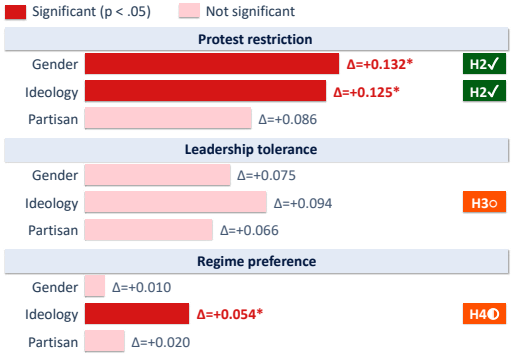
Stage 1 (H1): identity attachment → affective polarization

- All three domains confirmed.
- Gender shows the clearest asymmetry: the attachment–AP slope is steeper for women, consistent with defensive identity consolidation.



Bars show the marginal effect of 1-SD identity attachment on the AP gap, not AP levels.

Stage 2 (H2–H4): AP–vulnerability asymmetry (Δ = AP_vulnerable − AP_other)



DV: protest/leadership 1–4; regime 0/1. Δ = effect per 10-point AP gap.

Camp-sorting on regime vulnerability (independent of AP intensity):

PPP vs. DP	Cons. vs. Prog.	Men vs. Women
+0.438***	+0.186*	−0.150*

Coefficients are net of AP. The gender sign reverses once men's higher AP is held constant.

SECONDARY ANALYSIS

Does identity depth amplify AP's democratic consequences?

- In South Korea's weakly institutionalized partisan domain, AP varies in how identity-grounded it is.
- Among PPP-aligned respondents, deeper identity investment should amplify the AP–vulnerability link.

Interaction asymmetry test:

Δ = (att×AP_PPP) − (att×AP_DP)

Protest | PPP	**Δ=+0.069***
Leadership | PPP	**Δ=+0.101****
All gender domain cells	Δ ≈ 0 (n.s.)
All ideology domain cells	Δ ≈ 0 (n.s.)

Interpretation

- In **gender** and **ideology**, camp structure is sufficient; identity depth adds little.
- In **partisanship**, identity depth matters: AP becomes consequential when it reflects genuine identity formation.

HYPOTHESIS OUTCOMES

- **H1** ✓ **Confirmed** — Across all three domains
- **H2** ✓ **Confirmed** — Gender Δ=+0.132*, ideology Δ=+0.125*; partisan n.s.
- **H3** ○ **Inconclusive** — Direction correct; asymmetry below threshold at N=192–294
- **H4** ◐ **Partial** — Ideology Δ=+0.054*; camp-sorting prominent

KEY CONCLUSIONS

- Selective by mechanism: protest is affect-driven; regime vulnerability is more identity-sorted than AP-driven.
- Partisan identity depth amplifies AP's consequences within the PPP camp.
- KEY: Identity attachment + AP reveal democratic vulnerability better than AP alone.
- For democratic resilience: main risk is a targeted erosion of tolerance for opponents' rights under crisis, not outright authoritarianism (easy to miss when monitoring only regime-level support for democracy)

⚠ Limitations & scope:

- All associations are correlational (cross-sectional).
- Fielded just after the Dec 2024 martial-law crisis and impeachment: attitudes may be reactive, not stable dispositions.
- Nine asymmetry tests; p-values near .05; treat as exploratory.

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Selective Democratic Vulnerability: Affective Cleavages and Democratic Restraint among Young South Koreans in Times of Crisis

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When does affective polarization weaken citizens' commitment to democratic procedures, and among whom? South Korea's December 2024 martial-law episode, in which conservative president Yoon Suk Yeol – of the governing People Power Party (PPP) – briefly banned protest and party activity and placed the media under state control, made this question newly urgent. This contribution asks whether identity based affective polarization among young South Koreans, that is, the post-1987 cohort socialized entirely under democratic institutions, is associated with crisis-conditional democratic vulnerability: a greater willingness to narrow opposition rights, accept unelected crisis leadership, or treat support for democratic rule as contingent when politics is framed as emergency. The post-democratization cohort is a deliberately demanding case. If democratic vulnerability appears among citizens with no direct experience of authoritarian rule, it cannot be attributed to authoritarian nostalgia and instead points to conflict dynamics operating within democracy itself.

The study builds on the "democratic tradeoff" mechanism – the finding that under sufficiently charged conflict, citizens sacrifice procedural commitments to protect their own side or exclude threatening opponents.[1] It departs from that literature in two ways. First, rather than treating polarization as ideological distance, it follows work distinguishing affective polarization, understood as emotionally charged in-group favoritism and out-group dislike, from issue disagreement,[2] and grounds it in Social Identity Theory, which holds that group membership becomes politically consequential when it is experienced as meaningful and identity-grounded rather than merely categorical.[3] Second, it extends the mechanism beyond partisanship to non-partisan identity cleavages, most importantly gender, which has become a defining political divide among younger Koreans through anti-feminist mobilization and gendered grievance.[4] This extension matters because South Korea's party system is weakly institutionalized, yet affective polarization can still shape democratic attitudes where partisanship is weak.[5]

Evidence comes from an original nationwide online quota survey (N = 545 for the post-1987 cohort) fielded February–March 2025, in the immediate aftermath of the martial-law crisis. Identity attachment in the gender, ideological, and partisan domains is measured through parallel three-item batteries; affective polarization through 0–10 feeling thermometers coded as camp-aligned in-group favoritism; and three democracy-relevant outcomes capture support for restricting anti-government protest, tolerance for unelected crisis leadership, and regime-preference vulnerability. A two-stage design (ordinary least squares with HC3 heteroskedasticity-robust standard errors) first tests whether attachment predicts matched affective polarization, then whether that polarization predicts democratic vulnerability, with direct tests of whether the associations run asymmetrically across political camps. Because the sample is non-probability and cross-sectional, and attitudes were measured under acute crisis, the results are interpreted as covariate-adjusted associations rather than causal or population estimates.

The results show that the pattern is selective and asymmetric rather than uniform. Identity attachment is systematically associated with stronger affective polarization across all three domains, most clearly

in the gender domain. But the democratic implications are outcome-specific. Explicitly illiberal attitudes are far from dominant in this cohort, as only roughly a third support restricting protest and under a third accept unelected leadership, yet they are not negligible, and they run consistently higher among men than women. The strongest and most consistent association is with support for restricting anti-government protest, and it is significantly concentrated on the male side of the gender cleavage and the conservative side of the ideological cleavage.[6] Tolerance for unelected leadership shows weaker, inconclusive evidence, and among respondents aligned with the liberal opposition Democratic Party (DP) stronger partisan affect predicts less tolerance for unelected leadership. This opposition-side pattern is not anomalous: because the martial-law declaration was an act of the incumbent conservative administration, affectively polarized opposition partisans have both a partisan and a principled reason to defend democratic constraints, consistent with evidence that affective polarization bolsters support for constitutional protections among out-of-power partisans even as it erodes it among those whose side holds power.[7] Regime-preference vulnerability is structured less by affective intensity than by camp membership itself: conservative and especially PPP–aligned respondents are independently more vulnerable, pointing to identity-based sorting as a distinct mechanism. Where partisanship is concerned, the depth of identity investment matters: within the People Power Party camp, stronger partisan attachment amplifies the link between affect and vulnerability, a conditioning effect absent in the gender and ideological domains and consistent with the weakly institutionalized character of Korean partisanship.[8]

These findings carry a specific implication for democratic resilience. The principal risk they reveal is not a generalized slide into authoritarianism or wholesale rejection of democracy, but a narrower, procedurally targeted erosion of democratic restraint: a reduced willingness to extend rights and legitimacy to opponents precisely when crisis raises the perceived stakes of conflict.[9] Three consequences follow. First, this form of vulnerability is easy to miss. Aggregate support for "democracy" can remain high while tolerance for opposition protest quietly contracts among specific groups under specific conditions; resilience-monitoring frameworks that track only regime-level support will understate the threat. Second, vulnerability is camp- and issue-specific rather than diffuse. It concentrates where opponents carry the highest threat salience – here, the male and conservative sides of politically activated cleavages – so interventions that protect protest rights, de-escalate group threat, or contest grievance narratives are likely to be most effective when targeted at the cleavage and the outcome where erosion actually appears, rather than applied uniformly.[10] Third, the results identify a protective as well as a corrosive dynamic: the opposition-side pattern, in which affect reinforces democratic norms, suggests that identities anchored in a democratic-protest tradition can buffer resilience rather than undermine it. Because these attitudes were measured under acute crisis and among a digitally networked youth cohort in which gendered grievance circulates largely online, the analysis also underscores that democratic resilience in the digital age depends on understanding how identity-based affect is mobilized and framed in real time.[11] The broader lesson for the question "How are you, democracy?" is that the health of a post-authoritarian democracy may hinge less on whether young citizens endorse democracy in the abstract than on whether they will

extend its protections to opponents when doing so is most costly. These conclusions are associational and drawn from a single crisis moment; whether the patterns persist outside acute crisis, and across cohorts, is the central task for future research.

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Four Years of War Later

Lines of Partisan Conflict and Consensus on the Ukraine War in Germany and the United States

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Social Sentiment in Times of Crises

Partisan Polarization or Consensus?

Alternative mechanisms : rally around the flag, war fatigue, or partisan cue-taking and polarization?

Data
SOSEC bi-monthly panel data 11.22 – present; Germany and the United States; representative in gender, age, and region (DE) / race (US)

Method
Quantitative longitudinal and comparative analysis of the **partisan polarization index** (Dalton 2008, Reiljan 2020)

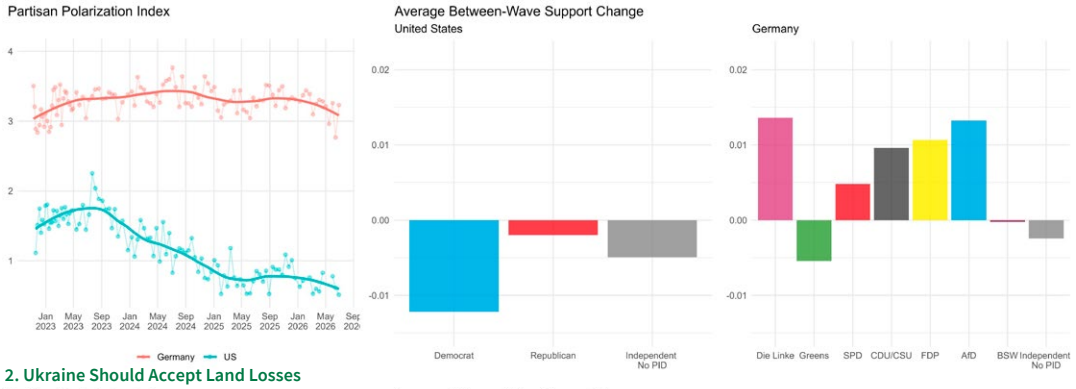
Partisan Polarization Index

$$PI = \sum_{i=1} (wi * \frac{pi - \overline{p}}{5})^2$$

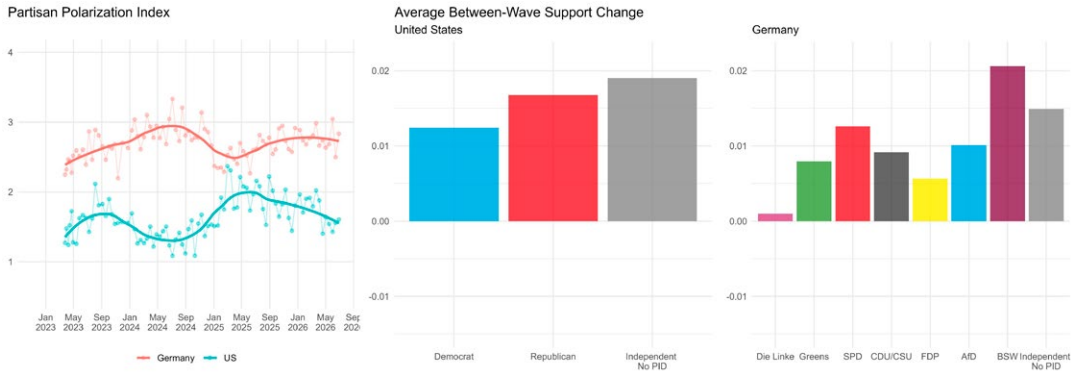
Where i = party, w = share of party i supporters, and $p = pi$ supporters' issue position

Findings

1. Support for Sanctions Against Russia



2. Ukraine Should Accept Land Losses



→ Across four Ukraine war issues, including support for sustained military aid and concerns about involvement in the war :
(1) **Stability** or **depolarization** toward **less support for Ukraine**
(2) **Depolarization** toward less support, driven **by both left- and right-party supporters**
(3) For support for **Ukrainian territorial losses** to end the war, **opposed trends of partisan polarization in the US and Germany**

Potential Expansions

- Identify **short/long term effects** and **critical junctures** of (de)polarization: Using a **causal inference** / Unexpected Event During Survey Design (UESD) Approach (Muñoz et al. 2020, Schleehauf et al. 2025) with known limitations (e.g. non-random sampling timing, simultaneous events with causal effects on PO distribution) and **links to (social) media events**.
- **Assess a Trump's „noise" effect**: how does Trump's **dense agenda setting and shifts to competing issues** (Venezuela, Greenland, Iran war…) relates to levels of salience/polarization on the Ukraine issue domestically and abroad?

Four Years of War Later: Lines of Partisan Conflict and Consensus on the Ukraine War in Germany and the United States

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FZI Research Center for Information Technology

Russia's invasion of Ukraine in February 2022 brought war back to the European continent. Four years after the start of the war, how has public opinion polarized or found consensus on this issue? In particular, has this issue crystallized another line of conflict across partisan groups? Stepping back and assessing political divisions in public opinion on the Ukraine war is key at a time when a negotiated resolution of the conflict remains unclear, economic distress and inflation related to its consequences weigh ever more heavily, and sustained support for Ukrainian military efforts depends on strong supporting majorities within the civil societies of Ukraine's allies.

Early Political Science literature has identified that in context of wars, an initial consensus and "rally around the flag" mechanism is usually followed by partisan cue-taking and polarization.[1] On the other hand, decreased salience of the conflict in a crisis-heavy context, as well as "war fatigue" mechanisms, could also lead to increasing consensus over time within public opinion.

This paper investigates these alternative hypotheses using unique, fine-grained, comparative panel data to compare partisan polarization on the war in Ukraine among US and German citizens from 2022 to 2026. Using Dalton's established polarization index adapted to public opinion data[2], preliminary findings reveal either stable or growing consensus toward lower levels of support for Ukraine across two items, as well as declining levels of concern regarding the war in Ukraine over the observed period. Interestingly, this consensus is driven by supporters of parties on both the left and the right of the political spectrum in the two countries. By contrast, support for accepting territorial losses displays dynamic and opposing trends in partisan polarization in the US and Germany.

This poster identifies several avenues for future research. First, future works could causally link critical events to divisions in public opinion, for instance by using a Unexpected Event during Survey Design (UESD) approach[3]. Second, Trump's "noise" effect could be assessed by analyzing whether Trump's regular shifts in the international agenda since his election affect levels of polarization and concern regarding the longstanding war in Ukraine, linking its social media communications to levels of partisan polarization.

1 Zaller, J. R. (1992). The Nature and Origins of Mass Opinion. Cambridge University Press.

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3 Muñoz, J., Falcó-Gimeno, A., & Hernández, E. (2020). Unexpected Event during Survey Design: Promise and Pitfalls for Causal Inference. Political Analysis, 28(2), 186–206. https://doi.org/10.1017/pan.2019.27; Schleehauf, R., Fröhle, M., Reinbold, J., & Jäckle, S. (2025). The Trump treatment: a natural experiment in German public perception of the US. Political Research Exchange, 7(1). https://doi.org/10.1080/2474736X.2025.2557309

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Generation Z in Crisis? Persistent Symptoms of Depression and Anxiety Among Young Adults in Germany After the Pandemic

Lena Peter, Emily Sitarski, Jasmin Hammann, Franziska Köhler-Dauner, Jörg M. Fegert & Jonas Fegert

Theoretical Background

Adolescence and young adulthood are critical periods for identity development[1] and the establishment of health-related behaviors and attitudes.[2] At the same time, these life stages are associated with increased psychological vulnerability, as most mental disorders emerge before the age of 25.[3] The current generation of young people faces heightened risks to mental well-being due to multiple, overlapping crises, including the COVID-19 pandemic, climate change, and ongoing economic and geopolitical instability.[4] These stressors may disrupt normative developmental processes and contribute to rising levels of anxiety and depressive symptoms.[5]

Against this background, the present study aims to investigate the long-term trajectories of anxiety and depressive symptoms across four generational cohorts.

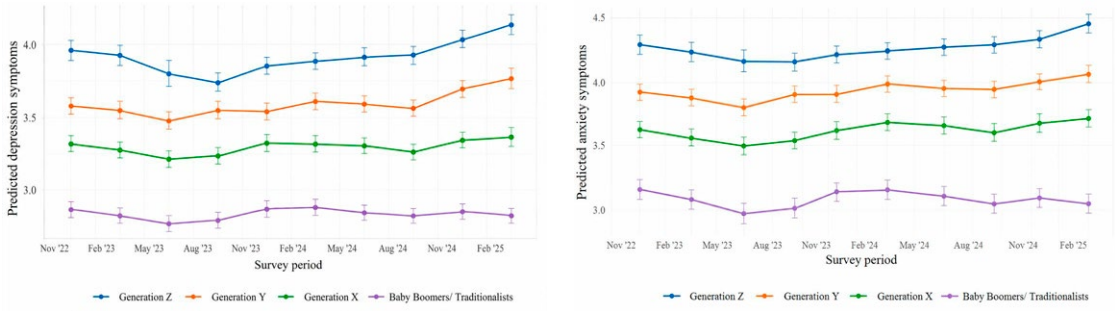
Method

Study design: data from SOSEC (Social Sentiment in Times of Crises), an ongoing German nationwide longitudinal panel study, using assessments collected between April 2023 and January 2026

Sample: 112,858 surveys from 25,143 different individuals (ages 18–100) across 75 survey waves

Data Analysis: Classification by Generation[6]; Linear Mixed Effects Model to examine symptoms of anxiety and depression as a function of generation, survey period, gender, and employment status, including analysis of interaction effects and post hoc comparisons across generations

Results



Discussion

Key Findings

Generation Z exhibited significantly more severe and persistent symptoms of depression and anxiety than all older generations across all survey periods.

Women reported significantly more symptoms than men, and employment was associated with lower symptom severity.

Limitations

- It is not possible to distinguish between generational and contextual effects
- Self-report data (potential for bias due to social desirability or response patterns)
- Only about 40% of participants were surveyed more than once
- Heuristic classification into generations
- Small number of items to assess symptoms of depression and anxiety

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Generation Z in Crisis? Persistent Symptoms of Depression and Anxiety Among Young Adults in Germany After the Pandemic

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Adolescence and early adulthood are crucial periods marked by identity formation and increased vulnerability to mental health issues, with most mental disorders beginning before the age of 25. Today's youth face amplified risks during a period characterized by multiple societal crises like the COVID-19 pandemic, climate change and economic instability, potentially disrupting age-typical developmental tasks and contributing to rising rates of anxiety and depression. This study aimed to investigate the longitudinal development of anxiety and depression symptoms across four generational cohorts.

This study drew on data from the German subsample of the ongoing "SOSEC – Social Sentiment in Times of Crises" project. In total, 25,143 individuals contributed 112,858 survey entries, responding to items on depression and anxiety symptoms based on modified versions of the PHQ-9 and GAD-2. Generational groups were defined based on year of birth (Generation Z: 1995–2007; Generation Y: 1980–1994; Generation X: 1965–1979; Baby Boomers/Traditionalists: 1925–1964). Linear mixed-effects models were applied to assess how generation, survey period, gender, and employment status were associated with lower levels of mental health symptoms. The analysis also included interaction terms and post-hoc comparisons between groups. Generation Z showed significantly higher and stable levels of depression and anxiety symptoms than all older generations across all survey periods (all $p < .001$). Women reported more symptoms than men and employment was associated to lower symptom levels.

The findings indicate persistently elevated levels of self-reported depressionand anxiety symptoms among younger respondents, particularly those belonging to Generation Z, underscoring the need for early intervention, stepped-care approaches, and targeted prevention strategies during this life stage. Employment appears to have a protective effect, which highlights potential entry points for indicated prevention, while broader support during key life transitions, such as entering the workforce or higher education, can serve as universal preventive measures. Implementing multi-level, stepwise care and preventive interventions is crucial to mitigate long-term mental health consequences, strengthen resilience, and promote adaptive coping among young people facing ongoing societal crises.

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Young Adults Between Climate Change and Geopolitical Conflict: Environmental Concerns and War-Related Fears in Germany

Lena Peter, Emily Sitarski, Franziska Köhler-Dauner, Eckart von Hirschhausen
Jörg M. Fegert & Jonas Fegert

Theoretical Background

Over the past decade, young people have increasingly been exposed to multiple and overlapping societal crises such as climate change, geopolitical conflicts, and economic instability. These developments have coincided with a growing global mental health crisis among younger generations. From a psychological perspective, concerns about large-scale societal threats represent emotional and cognitive responses to perceived uncertainty. Persistent worries may contribute to elevated stress levels and poorer mental well-being. Among the most salient societal threats are climate change and armed conflicts. While both remain highly relevant, recent public discourse has increasingly focused on geopolitical tensions.

Against this backdrop, the present study examines whether this shift in public attention is reflected in the prevalence of individual concerns. We further investigate temporal trends as well as differences by age group and educational attainment.

Method

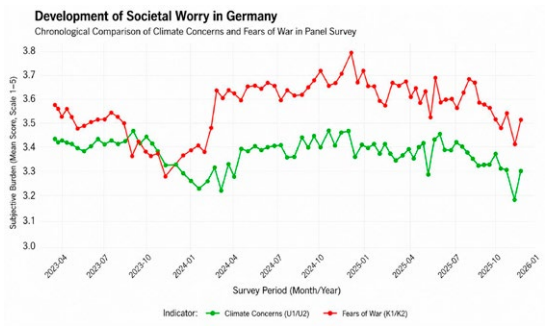
Study Design:
data from SOSEC (Social Sentiment in Times of Crises), an ongoing German nationwide longitudinal panel study, using assessments collected between April 2023 and January 2026

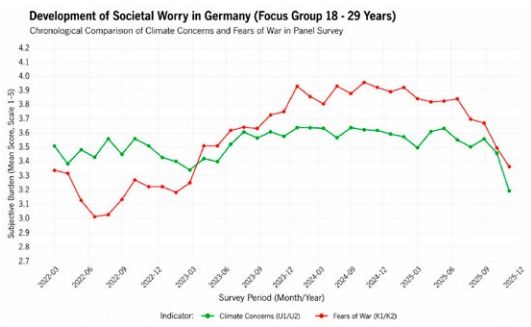
Sample:
above 112000 respondents, grouped according to gender, age and educational attainment

Measures:
one item each to assess environmental concerns and war-related fears on a 5-point Likert scale

Analyses:
descriptive statistics, Spearman rank correlations, Kruskal-Wallis tests, longitudinal trend analyses across survey waves

Results





- Environmental and war-related concerns followed a pronounced U-shaped pattern, with the highest levels observed among younger and older respondents. → **Young adults aged 18 - 29** reported the highest levels of environmental concern.
- **Women** reported significantly higher levels of concern than men across both domains. This difference was more pronounced regarding war related fears.
- Individuals with **lower educational attainment** reported significantly higher levels of war-related fears than individuals with higher educational attainment. By contrast environmental concerns were distributed relatively evenly accross all educational groups.

Take-away

Young adults are not only highly concerned about climate change but also report elevated fears regarding geopolitical conflict. The co-occurrence of these concerns suggests a broader burden of crisis-related stress, which may be linked to poorer mental well-being and a higher risk of mental health problems.

references

Young Adults Between Climate Change and Geopolitical Conflict: Environmental Concerns and War-Related Fears in Germany

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Growing evidence points to a global youth mental health crisis, with increasing levels of psychological distress among young people reported across many countries. Climate change, geopolitical conflicts, economic uncertainty, and other large-scale societal challenges may contribute to this development by fostering persistent perceptions of threat and uncertainty about the future. The present study examined environmental concerns and war-related fears as indicators of crisis-related psychological burden in the German population, with a particular focus on younger adults.

Data were obtained from the ongoing German panel study SOSEC – Social Sentiment in Times of Crises. More than 112,000 respondents repeatedly reported their levels of environmental concern and war-related fear between 2023 and 2026. Descriptive analyses assessed overall concern levels and temporal developments. Associations between concern domains were examined using Spearman rank correlations. Differences by age, gender, and educational attainment were analyzed using Kruskal–Wallis tests.

War-related fears were significantly higher than environmental concerns in the overall sample ($M = 3.55$ vs. $M = 3.37$). Both concern domains were moderately positively associated ($P = .25$, $p < .001$), suggesting a shared vulnerability to societal threat perceptions. Environmental concerns remained comparatively stable across the observation period, whereas war-related fears showed substantial fluctuations over time. Younger adults (18–29 years) reported the highest levels of environmental concern and, together with adults aged 65 years and older, the highest levels of war-related fear. Compared with middle-aged adults, younger respondents consistently exhibited elevated concern levels across both domains. Women reported significantly higher levels of concern than men, while higher educational attainment was associated with lower war-related fears.

Young adults appear to carry a disproportionate burden of concerns related to both environmental and geopolitical threats. Notably, environmental concerns remained persistently elevated among younger respondents despite changing societal circumstances, suggesting that climate-related worries constitute a chronic rather than situational stressor.

Together with elevated war-related fears, these findings support the notion that younger generations are exposed to a cumulative psychological burden arising from multiple concurrent crises. Monitoring societal concerns may therefore provide valuable insights into population-level mental health risks and inform preventive approaches aimed at strengthening resilience and reducing long-term psychological distress among young people.

Karlsruhe Institute of Technology

Institute for Information Systems

When Climate Concern and Support Lose Salience

Tracking Germany's Climate-Orientation Groups Amid Overlapping Crises

Christina Speck · Philipp Fritz · Ina Ni · David Borukhson

MOTIVATION

Public acceptance, perceived fairness, and citizens' willingness to engage are central for climate and energy-transition policies [1,2].

However, citizens do not encounter climate policy from equal social positions. Income, housing tenure, infrastructure, and household constraints shape both the ability to act and the way climate-policy burdens and benefits are perceived [3].

Aggregate opinion trends hide distinct climate-orientation profiles that matter for socially responsive policy design and communication [4,5].

Social Sentiment in Times of Crises

Bi-weekly panel survey, Germany, waves **12–102** (**2023–2026**)

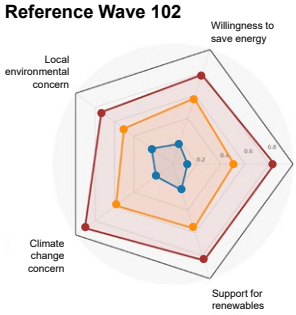
ANALYSIS PIPELINE

Key Findings
Three climate orientation groups - shaped mainly by politics and trust.

Methods
Weighted k-means clustering → Reference wave cluster assignment → Multinomial logit profiling

RQ1
What groups of climate orientation exist in Germany and who belongs to them?

Reference Wave 102



37% **High Climate Orientation**
Most strongly associated with **left political orientation** and **high institutional/media trust**, slightly more common among women.

47% **Middle Climate Orientation**
Reflects a more moderate position and is most typical among respondents in the **political centre/right**, with relatively limited social-structural differentiation.

16% **Low Climate Orientation**
Mainly associated with **low trust, older age, and male gender**, while left-leaning respondents are least likely to belong to it.

Key Findings
The high climate oriented group declined twice, each time around major political or geopolitical events.

Methods
Mann-Kendall Test → Pettitt-test → Welch-t-test

RQ2
How do climate orientation group structure and membership change over time?

Overall monotone downward trend for high climate orientation cluster.
Mann-Kendall $z = -8.85$, $p < 0.001$
Sen's slope = −0.13 pp/wave

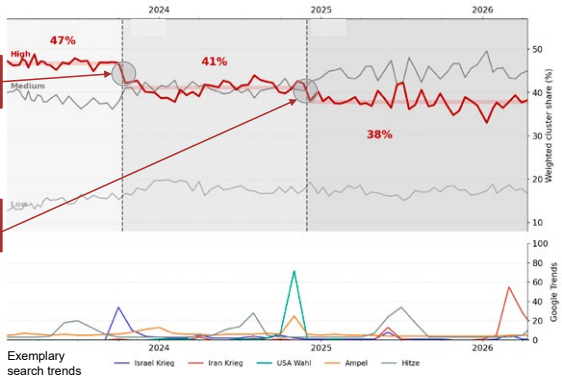
Change-Point 1
Oct' 23: -6pp.
Start of Middle East War

Among high cluster participants,
16.3% switched "down" (207 of 1,271)
- Pettitt: p = 0.001; - 6.0 pp
- Welch-t: t = 7.98; p < 0.001

Change-Point 2
Nov' 24: -3pp.
German gov. collapse · US election · COP29

Among high cluster participants,
19.7% switched "down" (180 of 915).
- Pettitt $p < 10^{-10}$; - 3.5 pp
- Welch-t: t = 7.36, p < 0.001

Cluster Shares, Jan 23 - Apr 26 (Wave 12 - Wave 102)



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When Climate Concern and Support Lose Salience : Tracking Germany's Climate-Orientation Groups Amid Overlapping Crises

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Public acceptance and citizens' willingness to engage are central to a successful climate and energy transition. Yet average levels of support reveal little about whether environmental concern, policy priority, and willingness to act are held by the same people or how these orientations are distributed across political and social groups. Aggregate trends can therefore conceal distinct constituencies that matter for the durability, legitimacy, and communication of climate policy.[1]

This study asks two linked questions: What climate-orientation profiles exist in Germany, and who belongs to them? How do the structure and membership of these profiles change over time, and which components of climate orientation account for the principal changes? Rather than treating single survey items as interchangeable measures of support, we examine how climate concern, climate-related policy priority, and willingness to act sustainable combine within heterogeneous publics. Five questions capture this climate orientation: support for climate protection in Germany, willingness to reduce personal energy consumption, concern about the local environment, concern about climate change, and the priority given to renewable-energy expansion.

We use SOSEC, a bi-weekly German online panel survey that repeatedly measures social and political sentiment. The climate-orientation analysis covers 154,400 respondent-wave observations from waves 12–107, spanning early 2023 to June 2026. We identify three clusters - low, medium, and high climate orientation - using survey-weighted k-means cluster analysis over the last five waves of the panel data. The clustering is calibrated on the pooled data from waves 103 to 107, using a common standardization, and weighing each wave equally. The resulting scaler and cluster centers are held fixed when classifying earlier waves, ensuring that changes in profile shares are not artifacts of redefining the clusters over time.[2]

At the latest wave (107), in June 2026, 14.2% of the weighted sample belonged to the low-orientation profile, 43.9% to the medium profile, and 41.9% to the high profile. The middle is therefore not a small residual group. It is the largest part of the public and represents people whose concern, policy priority, and willingness to act are consistently more moderate.

We next estimate a survey-weighted multinomial regression of wave-107 profile membership using a common complete-case sample of 1,468 respondents. Political orientation and confidence in political and state institutions provide considerably greater explanatory leverage than the demographic and socioeconomic blocks: political orientation increased McFadden's pseudo-R^2 from .033 to .089, while institutional trust raised it further to .140; both additions were jointly significant ($p<.001$). We use average adjusted probabilities to estimate how the population would be distributed across the

three profiles at a specified political position or trust level, while retaining and averaging over the other observed characteristics. High orientation is estimated at 69.4% on the political left, 38.6% in the center, and 26.9% on the right, while low orientation rises from 4.5% on the left to 26.1% on the right. The implied medium-profile probability is about 26% on the left but 47-48% in the center and on the right. Trust produces a different redistribution: from the lower to the upper trust quartile, low orientation falls from 21.3% to 5.9% and high orientation rises from 34.2% to 50.2%, while the medium probability remains close to 44%. Political position therefore differentiates both strongly supportive and low-oriented constituencies, whereas trust primarily separates low from high orientation.

Finally, we examine changes in the distribution of the three fixed profiles over time using multiple change-point analysis. This approach identifies periods in which the balance between low, medium, and high climate orientation shifts, rather than assuming one continuous trend across the entire observation period. The analysis distinguishes changes in the overall profile distribution from changes specifically affecting the high-orientation group. To understand what lies behind the main change points, we then examine the five underlying attitude items and compare within-person changes among respondents initially closest to the high-orientation profile. Robustness checks assess whether the identified changes depend on weighting, the choice of calibration period, seasonal patterns, or the survey's changing fieldwork frequency.[3]

The most robust change point occurs around October 2023. Relative to the preceding period, the high-profile share fell by 5.3 percentage points, while the low and medium profiles each grew by approximately 2.5-2.9 points. The item analysis shows a broad-based weakening rather than a change driven by one question. In the population trajectories, the largest immediate decrease occurred in climate-change concern, followed by willingness to reduce energy consumption and support for climate protection. Among paired respondents initially closest to the high profile, all five components declined, with the largest changes in the priority assigned to renewable-energy expansion and support for climate protection. The timing overlaps with the Hamas-led attacks on Israel on 7 October and the ensuing war in Gaza. This coincidence is compatible with climate issues losing relative salience during an acute geopolitical and humanitarian crisis, but the design cannot identify the conflict as the cause of the change.

The late-2024 change point has a different substantive signature. The high profile fell by 3.1 points and the medium profile grew by 4.2 points, with little expansion of the low profile. At the population level, the two largest immediate item decreases were nearly identical declines in climate-change and local-environment concern. Among paired respondents initially close to the high profile, local-environment concern declined most, followed by renewable-energy priority, support for climate protection, and climate-change concern; the change in willingness to reduce energy consumption was smaller and statistically uncertain. This period followed the US presidential election, the collapse of Germany's governing coalition, and COP29, but also overlaps partly with seasonal movement; these events provide context rather than causal explanations. The possible spring-2024 change point is less stable across specifications and combines increased local-environment concern with reduced willingness to save energy among initially high-oriented respondents. Its internally mixed item pattern further argues against presenting it as a coherent event-related loss of climate orientation.

Taken together, the findings show that climate orientation in Germany is neither a single continuum nor a stable average. It is organized into distinct groups whose size and composition shift under changing political and crisis conditions. The most consequential movement is not a wholesale transition from support to rejection, but an erosion from from high to medium orientation in the period from early 2023 to June 2026: many citizens may continue to endorse climate goals while assigning them less priority, expressing weaker concern, or showing less willingness to bear costs. This matters for democratic resilience because implementation of necessary climate policies depends on more than nominal agreement. It requires institutional credibility and a sufficiently committed climate orientation group that remains mobilizable when geopolitical, economic, and domestic crises compete for attention. High-frequency, multidimensional monitoring can therefore provide an early warning of when broad acceptance is becoming shallower and less actionable.

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EKILED – Explainable AI for Learning about Digital Disinformation

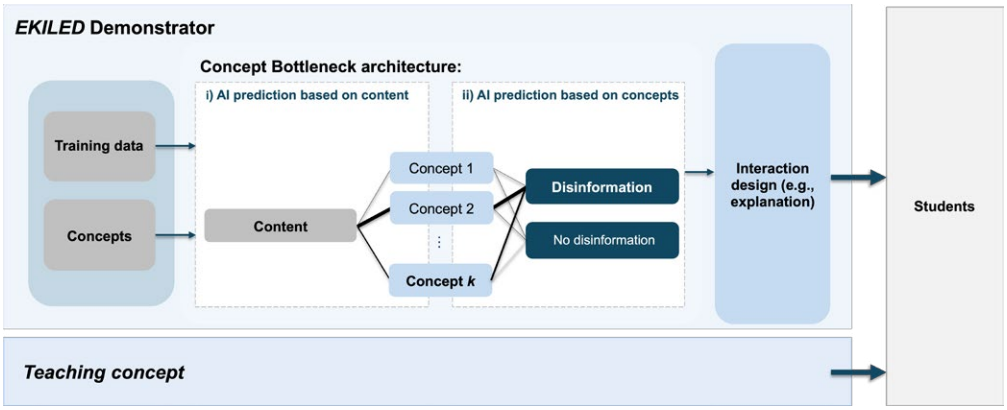
Motivation

- Digital disinformation is a growing threat to **democratic institutions and public trust**
- **Citizens, especially young people**, often lack the skills to recognize and critically assess it
- AI-powered tools can **generate and spread disinformation** at unprecedented scale
- **AI can also be part of the solution**: AI models reliably detect disinformation in text, images, and video
- But current AI detectors are **"black boxes"** that don't explain why content is suspicious; **Explainable AI (XAI)** makes their implicit knowledge transparent and educationally valuable

Goals

- Develop an **interactive XAI demonstrator** that helps students learn *from* AI — not just receive a verdict
- Make AI's implicit knowledge **didactically accessible**, turning the tool into a **reflection partner**
- Strengthen **media literacy, societal resilience, and trust in democracy** by starting in schools

Methodology



Open Questions – Let's Discuss

- **Which concepts are suitable?** Both detectable by AI *and* meaningful for students to learn from?
- **How does it work in multimodal settings?** Can text, image, and video share one explanatory language?
- **What should explanations look like?** Designed to foster reflection and learning, not just a verdict?
- **How do students learn best from AI?** Through explanations, exploration, or active disagreement?

Project Overview

- **Project Coordination:** University of Ulm (UUL)
- **Partners:** University of Ulm (UUL) , KIT , University of Bamberg (UBA), DASU,· Eduversum GmbH
- **Funding:** Federal Ministry of Research, Technology and Space (BMFTR)
- **Duration**: April 2026 – March 2029

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Funded by Federal Ministry of Research, Technology and Space

KIT – The Research University in the Helmholtz Association

EKILED – Explainable AI for Learning about Digital Disinformation

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Digital disinformation poses a growing threat to democratic discourse and to public trust in state and democratic institutions, and it does so largely by exploiting the same dynamics that shape contemporary digital communication: polarizing framing, emotionally charged rhetoric, and one-sided narratives. AI models can now detect such content with high accuracy, using transformer-based language models that capture these linguistic patterns and deep-learning architectures that flag manipulated imagery. Yet these models remain "black boxes": they can register that content is disinformative, or polarizing, or sentiment-laden, but they cannot show which patterns drive that assessment. This opacity is a missed opportunity, because the features a model relies on to detect disinformation overlap substantially with the patterns through which polarization and affective manipulation operate in digital discourse.

This contribution presents the EKILED project (Explainable AI for Learning about Digital Disinformation), which sets out to develop interactive Explainable AI (XAI) approaches that surface the implicit knowledge of detection models in a didactically meaningful way. Rather than verifying factual truth, often impossible for newly emerging information, the project focuses on the syntactic, semantic, and pragmatic patterns that characteristically co-occur with disinformation: sensationalism, polarization, one-sided framing, evidential gaps, and affective intensity in text, alongside anatomical inconsistencies and stylistic artifacts in images. EKILED operationalizes these patterns through a Concept Bottleneck architecture that establishes interpretable concepts as a shared language between AI and human. Interactive explanation methods are then intended to let users interrogate the model directly, asking on which concepts a prediction is based and what would need to change for it to differ. By manipulating inputs and observing how the model's signals shift, users are meant to build an intuition for how polarization and manipulation are constructed in language and imagery, rather than merely receiving a verdict.

Embedded in an Experiential Learning framework and deployed as a classroom demonstrator, the approach positions the AI as a reflection partner: students explore content from their own digital realities and learn, interactively, to recognize the very patterns that sentiment and polarization analyses detect. We argue that making these patterns explainable, rather than treating detection as an opaque output, matters on two fronts: it strengthens the interpretability of computational measures of sentiment and polarization, and it cultivates the media and digital competencies that underpin societal resilience and trust in democratic information environments. Future work will need to evaluate interactive, conceptbased explanations both as instruments for human understanding of polarization and sentiment, and as tools for building critical engagement with digital media.

Affective Polarisation in the German Gender Debate

A hybrid NLP & Corpus Linguistics Approach to Social Media Discourse

Andressa Costa (KIT)

Polarisation is a dynamic process emerging in and through communication.
(Brüggemann & Meyer 2023)

Why text, not only survey

Survey instruments	Social-media corpus
maps attitude distributions at the macro level – but misses situational dynamics, interactional escalation and platform-specific sub-publics.	Captures the highly engaged, self-selecting actors for whom gender becomes a symbolic battleground – where polarisation is performed through stance, moral evaluation and out-group construction.

Research Questions

Q1 How do users define the number of sexes, and what justification do they invoke?

Q2 How do users position themselves within ideological camps?

Q3 How do emotions shape stances and drive in-group/out-group dynamics?

Q4 Which rhetorical-linguistic markers polarise the debate?

One comment, all five levels

„ … immer wieder wird Voss zitiert und jener Voss als „die Biologie" dargestellt. Der ist mit seiner Meinung aber ziemlich alleine. Klassische false balance, die man doch sonst bei „den anderen" immer so lautstark kritisiert."

L1 Metadata	L2 Stance	L3 ABSA	L4 Group
lang de platform facebook on_topic yes	A binary-biological B gender-critical valence dismissive	Aspect-category: scientist Aspect-term: Voss polarity negative emotion contempt modality assertion implicit no	positioning out-group (voss-citing side) scare quotes „die Biologie" legitimation scientific consensus

Data: KoKoKom Corpus (https://kokokom.de/)

21,000 German social media comments from Facebook, Instagram, Reddit, X, YouTube (Feldmüller et al. 2025)

Methodological Framework

Stance detection, Aspect-based sentiment analysis (ABSA) and Concordance analysis.

Levels 1 to 3 are **pre-annotated by claude.ai**. L4 ist **human-annotated only**.

The five-level annotation pipeline

binary biological
gender-critical pole

spectrum diverse
trans-inclusive pole

L1
- **Pre-filter & metadata**
- Unit: comment
- Language, platform, on-topic, interpretability, irony_flag, quote status

L2
- **Stance**
- Unit: sentence
- A ontology (sex/gender model), B alignment (political camp) + valence (e.g. hostile) + sarcasm

L3
- **ABAS quadruplet**
- Unit: target-opinion pair
- Aspect category, Aspect term, Opinion span, polarity, intensity, emotion, modality, implicit

L4
- **In-/Out-group construction**
- Unit: target + comment
- Group positioning, markers of polarising language

Preliminary Findings

Five dominant ideological frames

Biological determinism. Appeals to „objective" science – chromosome, reproduction – to justify a binary sex model.

Binary gender model. Insistence on two sexes, framed as „natural" or „evolutionary".

Sex-gender distinction. Separation of biological sex from social gender/identity, sometimes used to dismiss non-binary identities.

Delegitimation of social sciences. Portrayal of social sciences, gender studies, or queer theory as "unscientific" or "ideological".

Non-binary /spectrum model. Support for fluid or multidimensional gender concepts, often countered with accusations of "ideology".

How affect polarises?

Naming the Out-group
Collective nominalisation – Genderideologie, TERFs – to erase individuality.

Derogatory Language
Pathologisation – Störung, Fehlbildung – to frame opponents as deviant.

Good/evil moral representation
Good/devil moral representation – Abschaffung der Demokration, menschenverachtend – to frame the outgroup as morally deficient.

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Feldmüller, T., Costa, A., & Kupietz, M. (2025). Specifics of language use in a polarized discourse on sex and gender: A distributional approach. In Corpus Linguistics 2025. The Thirteenth International Corpus Linguistics Conference. Birmingham, UK. 30th June—3rd July 2025. Book of abstracts (p. 275). University of Birmingham. https://www.cl2025.co.uk/programme

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Affective Polarisation in the German Gender Debate: A Hybrid NLP and Corpus Linguistics Approach to Social Media Discourse

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A previous corpus analysis of social media comments has revealed that the debate over sex and gender in German-speaking digital spaces is a critical arena of democratic conflict, characterised by ideological divisions and increasing emotion-driven polarisation . As citizens debate the legitimacy of binary versus non-binary sex/gender models, the discourse often escalates beyond mere disagreement, evolving into hostile contention that challenges the authority of opposing epistemologies. Brüggemann and Meyer define polarisation not just as a static state, but as a dynamic process emerging in and through communication. Despite this, empirical research has largely overlooked the analysis of actual media content and user interactions. To address this gap, the authors propose a framework by integrating the multidimensional facets of polarisation that both structure and potentially fragment the public sphere. This study builds on this framework to examine affective polarisation in content related to polarised groups on social media.

The poster presents a novel analytical pipeline designed to capture the nuances of polarisation within the KoKoKom corpus — a dataset comprising German-language social media comments from platforms such as YouTube, Facebook, Instagram, X and Reddit . Based on a preliminary quantitative-qualitative analysis of ideological frames in this discourse , the poster describes the development of a multilayered annotation pipeline that combines stance detection, aspect-based sentiment analysis (ABSA) and corpus linguistics methods (concordance analysis). This approach systematically captures the language and emotional aspects of polarisation. It moves beyond traditional surveys by mapping how digital communication drives affective polarisation and social fragmentation.

The motivation for this corpus-linguistic and NLP-driven approach becomes apparent when its findings are compared with representative survey data. Survey instruments such as MIDEM's Polarisation Barometer model polarisation using representative samples, scalar self-reports and generalised items on values, discrimination and pride symbols. This captures the distribution of attitudes and the perceived divisiveness of topics at a macro level, but necessarily overlooks situational dynamics, interactional escalation and platform-specific sub-publics. In contrast, a corpus of social media comments highlights precisely those highly engaged, self-selecting actors and contexts in which gender becomes a symbolic battleground. Here, affective polarisation is performed through stance-taking, moral evaluations and the construction of hostile out-groups in specific sequences of interaction. From a methodological perspective, this discrepancy is not a contradiction, but rather a sign that polarisation should be studied as both a structural phenomenon in opinion distributions and a form of communication that emerges in specific media environments. Therefore, a hybrid NLP–corpus linguistic pipeline is not just a technical choice, but a conceptual necessity. It enables us to link survey-based, issue-level measures of ideological and affective polarisation with detailed, text-based evidence of how these conflicts are enacted, intensified and amplified in everyday digital communication.

This project provides a data-driven analysis of how gender debates on social media reflect societal divisions, connecting computational social science with qualitative discourse analysis to enrich our understanding of democratic deliberation in digital spaces. The pipeline can be adapted to other polarised discourses (e.g. climate change and migration), offering a reusable framework for studying affective polarisation in social media.

[1] Costa, A. (2025). Discursive Polarisation and the (Non-)Binary Spectrum: Social Media Debate on Gender Diversity. Proceedings of the 12th International Conference on Computer Mediated Communication and Social Media Corpora for the Humanities, 128. https://doi.org/10.5445/IR/1000184941

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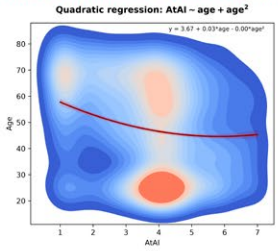
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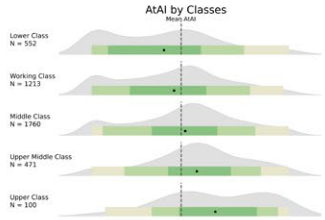
Who Trusts Artificial Intelligence

How Literacy, Social Class, and Trust Shape Attitudes towards AI

AtAI by		N	Mean	Mean Diff	P
Country	US	2274	3.55	0.34	<0.001
	DE	1956	3.89		
Gender (only Binary)	Female	2260	3.50	0.46	<0.001
	Male	1953	3.96		

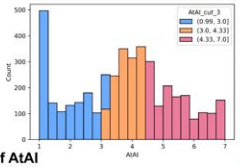
How is Attitude towards AI distributed in the population?





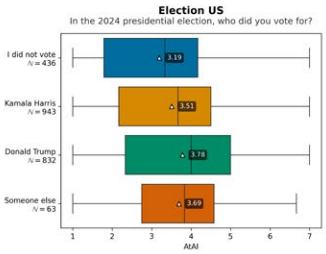
Attitude towards AI (AtAI)

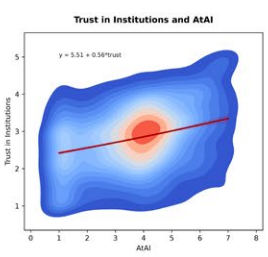
AtAI is linked to
- trust in AI systems
- acceptance of AI technology
- willingness to use AI-based tool

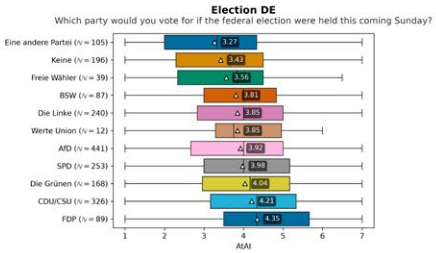


Conceptualizations of AtAI
- Distinction as people (a) can see AI as useful or promising but (b) may still feel concern, distrust, or fear
- Research suggests that AtAI is not necessarily bipolar
- We use a general AtAI scale by Novotny et al. (2025)
  - Cognitive, Affective and behavioral components

Does the party you vote for shape your opinion of AI?

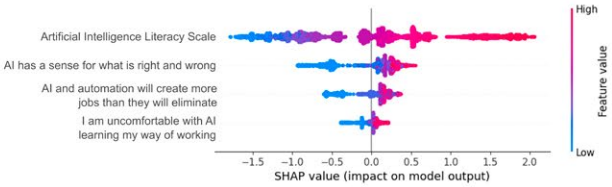






What does explain Attitude towards AI?

- We used a Random Forest with a maximum depth of four and 100 trees
- The trees had demographic variables and constructs such as the Artificial Intelligence Literacy Scale as input variables
- We also ran simple regressions to show the robustness of our findings
- A model-based recursive partitioning approach highlights the same important factors as the random forest



Low SHAP values decrease AtAI, vice versa.
The height of the SHAP Value indicates the effect size.

Results

- We can idenitfy some patterns based on demographics
  - Germans attitude towards AI is higehr than americans
  - Females show less attitude towards AI
  - People in higher classes have much higher attitudes and and are not presented in the low AtAI group
- Not demographics but other scales are more important for predicting AtAI
  - AI Literacy explains most of the Attitude towards AI
  - If people beliefe that AI can make moral decisions they are more averse



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Who Trusts Artificial Intelligence?

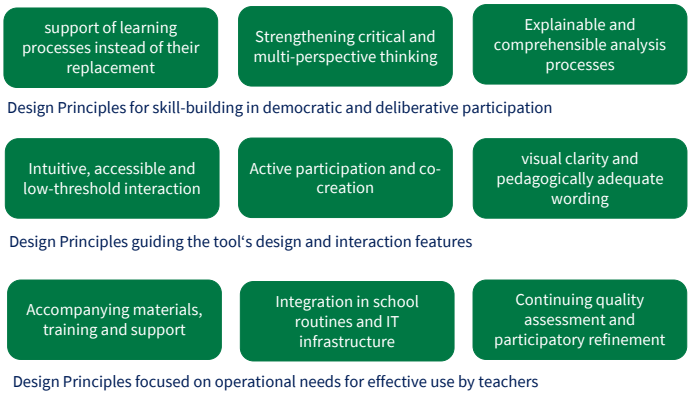
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Attitudes towards artificial intelligence (AI) in the public sphere are far from uniform, ranging from pronounced skepticism to strong enthusiasm. These differences become particularly visible and consequential in times of societal crisis. Using the 'Social Sentiment in Times of Crisis' dataset, we investigate the extent to which different levels of attitude towards AI can be identified and predicted based on demographic characteristics, social status and related factors. Our results show that AI literacy substantially explains the variance in attitudes towards AI, highlighting the impact of educational for policy interventions. We also find that people in higher social classes and trust into institutions have higher attitudes towards AI than those in lower classes or less trust. Notably, respondents who believe that AI can make moral decisions are not more favorable towards AI; instead, they tend to be more skeptical. Raising the questions, in which areas AI should be used. Finally, people who believe that AI and automation will eliminate more jobs than they will create show greater aversion to AI. These findings underscore that, for policymaking, it is crucial to understand what drives attitudes toward AI (ATAI) and which specific levers can be adjusted to effectively shape them.

From Disinformation Detection to Democratic Resilience: Participatory Design of XAI Tools for Youth Media Literacy

Automated disinformation detection and events-based fact-checking alone is not sufficient for strengthening youth media literacy, as they do not help young people develop transferable skills for critically evaluating information beyond a specific case. Explainable AI tools offer a promising alternative because they can make different types of information manipulation visible and thus open space for reflection and skill-building. However, their educational value depends on how they are designed, as trust in XAI tools increases when they are context-dependent (Schmitt et al. 2025). This is where participatory design with teachers and subsequently young people, becomes central.

Key Findings The requirements analysis with teachers reveals three categories of design principles: principles foundational for building skills relevant to deliberative participation, principles that guide the tool's design and interaction features, and principles that define the operational needs for effective use in school settings. All are relevant in strengthening youth media literacy and democratic resilience.



Methodology Requirement Analysis within a Design Science Research (DSR) project in an iterative process (Hevner et al. 2004)

1. Qualitative data from two workshops with teachers and pedagogical multipliers using methods such as prototyping
2. Formulation of requirements through qualitative content analysis and operationalization of requirements in preliminary design principles
3. *Subsequent testing of requirements with students (upcoming)*

How can participatory design of XAI-based media literacy tools support young people's democratic resilience against disinformation?

Targeted refinement of requirements with youth through first analyzing the possible scope of usage in school contexts and the educational frameworks the tool must complement.

Ensuring intrinsic motivation and enjoyment when critically engaging with the material, making a successful education intervention with the tool more likely.

Designing XAI tools relevant for the context of the target groups supports the effectiveness of the tool in furthering youth media literacy. It also allows for reflection on automated AI tools already in the design process.

Further Research and Next Steps The preliminary requirements will be extended through data collection with students. Subsequently, the XAI dashboard will be developed based on the requirements and tested in practice. Future research should evaluate the tool's effectiveness in fostering media literacy and democratic and examine which factors shape students' and teachers' trust in XAI-based explanations.



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Schmitt V, Bezzaoui I, Jakob C et al (2025) Beyond Transparency: Evaluating Explainability in AI-Supported Fact-Checking. In: Proceedings of the 4th ACM International Workshop on Multimedia AI against Disinformation.
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From Disinformation Detection to Democratic Resilience: Participatory Design of XAI Tools for Youth Media Literacy

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Disinformation, targeted manipulation of information and algorithmic amplification of affective content are increasingly shaping our digital information environments. This impacts our perception of political and societal crises; influences trust in government and institutions and can further increase the risk of polarization in society. Furthermore, with artificial intelligence, disinformation campaigns have become more deliberately targeted and scalable. As democratic deliberation is dependent on the information available to us, deliberative processes are increasingly dependent on citizen's ability to detect disinformation and manipulative content.

Fact-checking and automated detection of disinformation hold an important space in protecting digital information environments; however, they fall short in several aspects. On a content level, events-based disinformation detection is useful for specific scenarios and less adaptable when disinformation campaigns change course. On a technical level, automated AI detection of disinformation remains in a black box, risking opaque assessments and mere consumption of results instead of critical engagement.[1]

Young people, generally less set in their belief system and with frequent usage of online social networks, are especially vulnerable to disinformation and manipulative content online.[2] They furthermore have less experience in critical engagement with digital information. Furthering young people's media and data literacy impacts their opportunities for democratic deliberation, participation, and democratic resilience.[3] Automated disinformation detection and events-based fact-checking alone are not sufficient for strengthening youth media literacy, as they do not help young people develop transferable skills for critically evaluating information beyond a specific case. Explainable AI tools offer a promising alternative because they can make different types of information manipulation visible and thus open space for reflection and skill-building. However, their educational value and effectiveness in building youth's democratic resilience depends on how they are designed, as trust in XAI tools increases when they are context-dependent.[4] This is where participatory design with teachers and subsequently young people, becomes central.

This poster presents early-stage work from DisCoBoard, a project focused on building a dashboard that utilizes Explainable AI (XAI) to help young people recognize and understand online disinformation and strengthen media literacy through practical, interactive, and school-based learning. Rather than merely flagging content as misleading, the dashboard is designed to make classification processes understandable by showing which features contribute to an assessment. In this way, XAI is approached not only as a technical transparency mechanism, but as a pedagogical resource for reflection, discussion, and critical engagement.

The poster focuses firstly on the project's initial empirical phase: a requirements analysis with teachers and educational multipliers, showing how educators' pedagogical expectations can inform the participatory development of XAI-based media literacy tools with students.

The poster subsequently investigates the following research question:
How can a participatory design of XAI-based media literacy tools support young people's democratic resilience against disinformation?

Methodologically, the results are based on a requirement analysis, conducted in a Design Science Research (DSR) project. In Information Systems this refers to building and evaluating an artifact and generating design principles in an iterative and systematic manner.[5] The requirements are formulated through a qualitative content analysis of data from two workshops with teachers and pedagogical multipliers and subsequently operationalized in preliminary design principles. The requirements will be tested and refined with students in upcoming workshops and evaluation cycles.

The requirements analysis with teachers reveals three categories of design principles: principles foundational for building skills relevant to deliberative participation (e.g. the tool should support learning processes instead of replacing them), principles that guide the tool's design and interaction features (e.g. pedagogically adequate wording), and principles that define the operational needs for effective use in school settings (e.g. continuing quality assessment and participatory refinement).

I argue that participatory technology development is central to realizing the democratic potential of XAI-based media literacy tools. Involving teachers and young people in the design process can help ensure that AI-generated explanations are not only technically accurate but also pedagogically meaningful and effective in strengthening youth media literacy. Participatory development enables the initial teacher requirements to be later refined with young people, first examining potential use cases in schools and identifying the educational frameworks, learning objectives, and classroom practices that the tool must complement. It can also help create engaging and intrinsically motivating forms of interaction that encourage young people to critically examine digital content. Designing XAI tools around the contexts and needs of their intended users may therefore increase their educational effectiveness in building democratic resilience while simultaneously creating opportunities to critically reflect on automated AI systems during the design process itself.

The preliminary requirements will be extended through data collection with students. Based on the resulting requirements, the XAI dashboard will subsequently be developed and tested in educational practice. Future research should evaluate its effectiveness in strengthening media literacy and democratic resilience and examine which factors shape students' and teachers' trust in XAI-based explanations.

The contribution connects media literacy, explainable AI, and democratic resilience by examining how educational AI tools can support young people in recognizing patterns of disinformation and manipulation while fostering critical reflection on the role of AI in digital information environments.

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Multimodal Political Communication and Affective Polarization on YouTube Shorts During the Israel–Hamas War

Daniel Miehling, Indiana University, USA

Background

Online Political Communication in the Age of Polycrises

- The October 7 Hamas attacks triggered a dramatic increase in online news coverage and user-generated discussions across social media platforms.
- Political communication surrounding the conflict became highly polarized, with competing narratives emerging across news organizations and their audiences.
- Short-form video platforms increasingly shape how users encounter, interpret, and discuss geopolitical events.

Research Gap

- Existing research on online reactions to the Israel–Hamas war has focused primarily on platforms such as X/Twitter and fringe online communities.
- Comparatively little attention has been paid to YouTube Shorts, despite YouTube being the world's second most visited website and a major venue for algorithmically mediated political communication.
- Large-scale studies rarely combine textual and visual modalities when examining audience reactions to political crises.

Contributions

- Construct a large-scale multimodal dataset of YouTube Shorts, comments, and replies related to the Israel–Hamas war[1].
- Apply Aspect-Based Sentiment Analysis (ABSA) to measure attitudes toward multiple geopolitical actors in user-generated content[2].
- Integrate automatic speech recognition, semantic scene classification into a unified framework for studying short-form political communication.
- Provide longitudinal evidence of audience polarization across videos and discussion threads over a 12-month period[3].

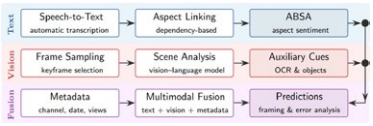
Methodology

Corpus

- The dataset was constructed using the official YouTube API beginning two weeks after October 7, 2023.
- It comprises:
  - 2.370 YouTube Shorts
  - 3.44M comments and replies
  - 12-month collection period
  - Conversations of 887K unique users

  Across four news outlets (AJ, BBC, DW, TRT World)

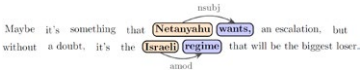
Multimodal Pipeline



Linguistic Analysis

- Whisper large-v3 generated video transcripts, while dependency parsing supported aspect extraction.
- A manually annotated corpus of 6,980 aspect instances was used to fine-tune ABSA models.
- RoBERTa, DeBERTa-v3, and Qwen models were evaluated, selecting the highest-performing architecture for each modality.
- DeBERTa-v3-large-absa-v1.1 performed best on comments and replies (Macro F1 = 77.9), whereas DeBERTa-v3-base achieved the highest transcript classification accuracy (Marco F1 = 81.9).

Dependency Parsing



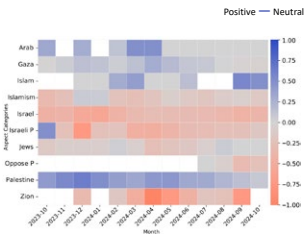
Semantic Scene Analysis

- 1 FPS from 2,370 'Shorts' (> 94k frames).
- Qwen3-VL-4B assigned frames to seven semantic scene categories.
- Seven categories captured recurring informational, conflict-related, and protest-related visual contexts.
- Manual evaluation (n = 799) yielded 86.9% accuracy.

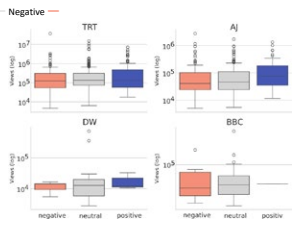


Results

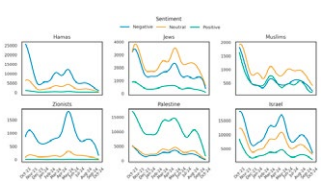
Emotive Signals in ASR Transcripts



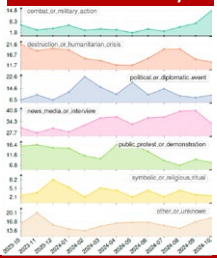
View Counts Across Media Outlets



Emotive Signals in Comments/Replies



Semantic Scene Analysis



What we can learn from Aspect-based Sentiment Analysis

- Negative evaluations of Israel and Zionists remain stable over 12 months.
- Positive sentiment toward Palestine and Palestinians contrasts with persistently negative evaluations of Israel-related aspects.
- Major events drive short-term fluctuations, but overall polarity patterns remain stable.
- Content referencing civilian victims and humanitarian suffering receives the highest engagement, suggesting empathy-driven responses.

State-funded media outlets often incorporate on-site footage from protesters into their coverage:

"The majority of Israelis support this Zionist, genocidal, apartheid, racist, colonial takeover of all Palestine, with extreme brutality to civilians."

What we can learn from Semantic Scene Analysis

- A substantial share of frames contained acute situational triggers, including military action (12.5%) and humanitarian crises (16.4%).
- Public demonstrations (13.4%) and political events provided recurring ideological cues linked to collective identities and political grievances.
- Visual coverage repeatedly exposed audiences to emotionally charged scenes of violence, destruction, mourning, and protest activity.
- Scene distributions suggest that conflict reporting combines informational contexts with recurring situational and ideological triggers.

Over 40% of classified frames contained acute situational or ideological triggers, including humanitarian crises, military action, and public demonstrations.

Discussion

- **Linguistic Analysis** reveals persistent polarization toward geopolitical actors across videos, comments, and replies, enabling actor-specific analysis beyond traditional sentiment classification. Fine-tuned ABSA captures affective polarization, including hostile rhetoric, coded language (dog whistles), and expressions of support for militant actors in user-generated discussions.
- **Semantic Scene Analysis** provides scalable insight into the visual contexts accompanying political communication, distinguishing between acute situational and ideological triggers and institutionalized regulated contexts.
- The framework **is transferable to other platforms** and supports large-scale multimodal analysis of political communication.

Ongoing work extends this framework to TikTok and evaluates recent state-of-the-art models.

References:
(1) Miehling, D., & Kuebler, S. (2026). Multimodal Analysis of State-Funded News Coverage of the Israel-Hamas War on YouTube Shorts. In *LREC Proceedings. Workshop on Political NLP. Access arXiv preprint arXiv:2604.00994.*
(2) Miehling, D., Dakota, D., & Kübler, S. (2025). Investigating Polarization in YouTube Comments via Aspect-Based Sentiment Analysis. In *Proceedings of the 15th International Conference on Recent Advances in Natural Language Processing-Natural Language Processing in the Generative AI Era* (pp. 718-728).
(3) Miehling, D. (in press). Mapping affective polarization in YouTube Shorts: A data-driven analysis of political communication during the 2023–2024 Israel–Hamas war. *Digital Hate Review.*

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Multimodal Political Communication and Affective Polarization on YouTube Shorts During the Israel–Hamas War

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Short-form video content plays an increasingly important role in how social media users engage in digital discourse. This format increasingly shapes how political crises are communicated, perceived, and debated online. Despite its prevalence across Web 2.0 and on all major social media platforms, the impact of short-form video content has barely been researched through a quantitative computational social science lens. This poster sheds light on empirical data from YouTube, the second most visited website worldwide, examining crisis communication related to political and affective polarization in the aftermath of October 7, 2023.

Our multimodal pipeline combines automatic speech transcription, aspect-based sentiment analysis (ABSA), dependency parsing, and semantic scene classification. This enables us to systematically examine the textual and visual dimensions of crisis communication while tracing audience-level responses on a longitudinal scale. Using this multimodal computational framework, the poster examines how geopolitical actors and conflict-related events are represented and debated within short-form video environments during an era of polycrises. It further traces political communication across a large-scale dataset analyzing both state-funded news content and user-generated reactions over a 12-month period. The analysis combines two complementary datasets and analytical layers. The first consists of over 2,300 conflict-related YouTube Shorts published by major state-funded international broadcasters. The second dataset consists of over 3.4 million comments and replies in reaction to these videos

Our findings show that, at the level of media content, the data reveals notable differences in the representation of geopolitical actors and conflict-related events across outlets and over time. The sentiment expressed toward specific actors varies substantially between broadcasters. Meanwhile, semantic scene classifications indicate recurring visual framing patterns that align with real-world developments during the conflict. Our findings further demonstrate that smaller transformer models can outperform large language models (LLMs) when domain adaptation is focused, allowing us to draw fine-grained inferences on sentiment classification tasks within politically charged discourse.

At the audience level, analysis of comments and replies reveals that video content triggering empathy and solidarity receives more views and engagement. However, such content also triggers persistent negative emotional responses toward geopolitical actors, indicating strong polarization toward Israel and Zionism. In contrast, Palestine and Palestinians consistently receive more positive evaluations. Our findings therefore suggest that affective polarization on YouTube Shorts emerges not only through user interaction itself, but also through the circulation of emotionally charged institutional media narratives within algorithmically curated environments. More broadly, the findings highlight the capacity of Shorts to condense complex multimodal signals and contribute to the circulation and normalization of political polarization within digital mainstream media.

Alongside its empirical findings, the poster presents a scalable multimodal framework for analyzing political communication across emerging video-centric social media platforms, which can also be applied to platforms such as TikTok and Instagram.

Karlsruhe Institute of Technology

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Institute for Information Systems

Data Donation: A First Step Towards Improving Representativeness in Algorithmic Hiring Datasets[1]

1 - Lack of representativeness

Algorithmic hiring systems are increasingly used in application processes — influencing access to employment. However, there are documented cases of biases and discriminatory outcomes. One important reason for this is the lack of representativeness in training data sets[2]. Furthermore, the near absence of real-world CVs paired with self-reported demographic and sensitive information makes robust fairness evaluations nearly impossible, especially for marginalized groups.

To address the representativeness gap, we propose a digital data donation designed to collect real-world CVs from a representative sample of individuals in the EU workforce.

2 - Digital data donation procedure

(1) Outreach via multiple channels; (2) onboarding via landing page; (3) instructions to remove identifiable data; (4) donation of CV(s) and (5) responses to questions on demographic and (optionally) sensitive category data; (6) submission and instructions for later removal.

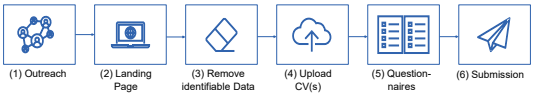


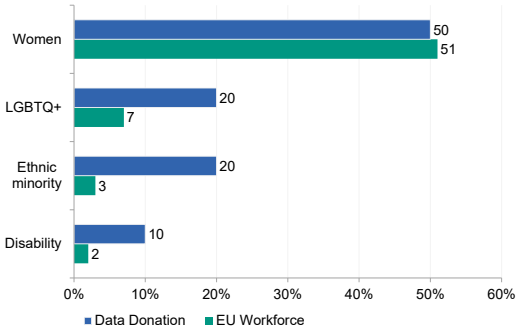
Fig. 1: Data donation process

Key design decisions

- **Trust & Transparency**: campaign embedded in official project website with information about the partners, data processing, ethical approval and GDPR-compliance.
- **Inclusion & Diversity**: best practices for collecting equality data; multilingual survey; open text fields as CV alternatives.
- **Broad Outreach**: simple language for purpose and impact; outreach via social media, partner networks and community meetings with marginalized groups.

3 - Representativeness compared to EU workforce

Between June 2023 and May 2024, a total of 1,211 CVs were collected in 1,139 valid submissions. Most submissions were made in Spanish (78%). Representativeness in the donated data compared to the EU workforce[3, 4, 5, 5]; focus on marginalized groups:



4 - Key findings & Lessons learned

- Reasonable Representativeness of EU workforce in donated data with an **overrepresentation of marginalized groups** — LGBTQ+, ethnic minorities, people with disabilities.
- Lessons learned: defining **representativity as a main objective** and allocating time to trust-building, transparent communication, community partnerships, and multilingual materials are critical success factors.
- Limitation: highly qualified, office-based professionals dominate. **Manual workers remain underrepresented** — further research necessary on effectively engaging communities that are less familiar with digital technologies.

Literature: **1** This poster is based on: **Saldivar**, J., Wulf, J., & Castillo, C. (2026). Data Donation: A First Step Towards Improving Representativeness in Algorithmic Hiring Datasets. *Social Science Computer Review*, 08944393261441840. | **2 Barocas**, S., & Selbst, A. D. (2016). Big data's disparate impact. *California law review*, 671-732. | **3 UN DESA.** (2024). World Population Prospects 2024. In:Statistical Papers - United Nations (Ser. A), Population and Vital Statistics Report. UN-iLibrary. | **4 Arora, P.** (2024). Rainbow operations: Let's add LGBTQ+ colors to "Doing Good with Good Operations.". Production and Operations Management, 34(4), 804–811. | **5 European Union**. (2019). Discrimination in the European Union. Publications Office of the European Union.



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Funded by the European Union

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Data Donation: A First Step Towards Improving Representativeness in Algorithmic Hiring Datasets

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The use of algorithmic hiring is on the rise, becoming more and more common due to its capacity to process a large number of applications with efficiency. Despite the advantages of this approach, there have been numerous cases of discriminatory hiring outcomes. A significant contributing factor to such outcomes is the lack of representativeness in the data used to develop these systems. This results in a significant decline in performance for underrepresented groups, disproportionately impacting marginalized communities. Addressing bias in algorithmic hiring requires access to comprehensive datasets that include curriculum vitae (CV) and demographic information reflecting diverse backgrounds. Unfortunately, there is a lack of datasets that serve such a purpose. This paper introduces a data donation campaign designed to collect real-world CVs, including demographic and sensitive information, from a representative sample of individuals in the EU workforce. The paper discusses the design decisions underpinning the campaign, along with the challenges encountered during its deployment and execution. Finally, it offers lessons learned and practical solutions to overcome these challenges, thereby contributing valuable insights for future efforts in this domain.

Based on: Saldivar, J., Wulf, J., & Castillo, C. (2026). Data Donation: A First Step Towards Improving Representativeness in Algorithmic Hiring Datasets. Social Science Computer Review, 08944393261441840.

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